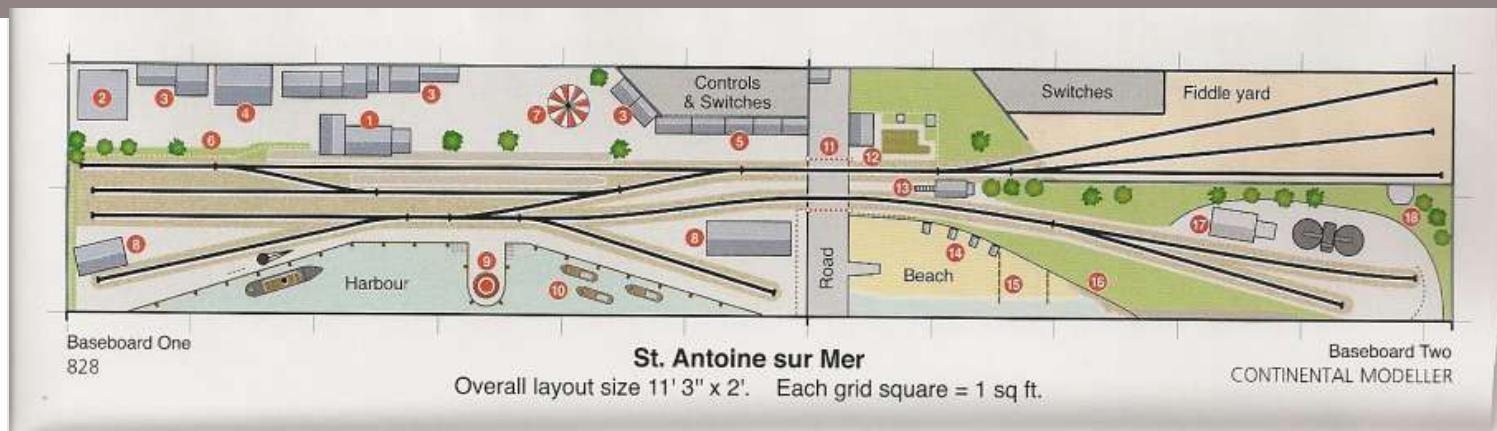


Designing small shelf Layouts for operating fun



Clinic for NMRA MCR “Rails to the Capital” Convention

April 28th to May 1st, 2016 – Columbus, Ohio

Philip Gliebe

Clinic Outline – Small Shelf Layouts

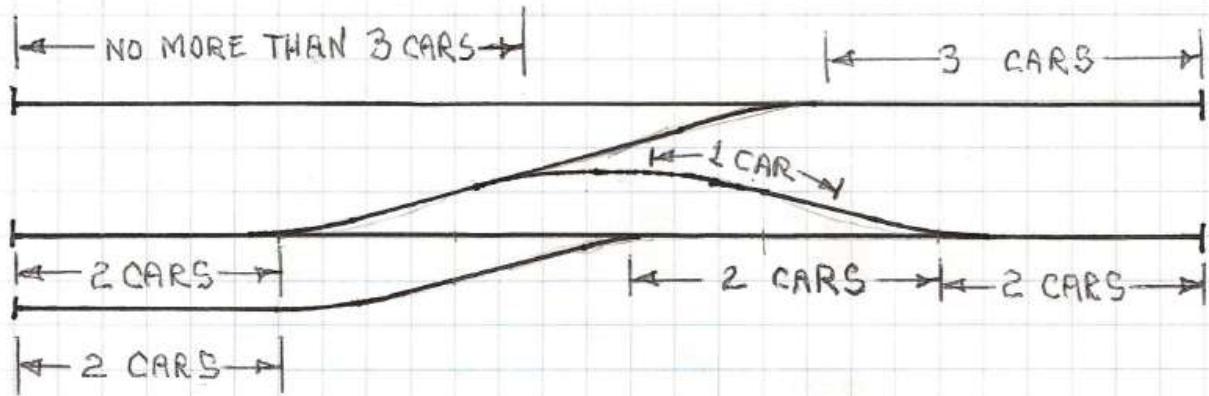
- Introduction - Motivation
- The John Allen “Timesaver” and Inglenook
- The British Scene
- Examples of British Shelf Layouts
- Examples of American Shelf Layouts
- Back to the Timesaver and the Inglenook!
- What Makes A Good Shelf Layout
- Design Study – The C&O in Columbus, 1940-1950
- Summary
- Some Good References
- Acknowledgements
- Demonstration (If there is time!)

Introduction - Motivation

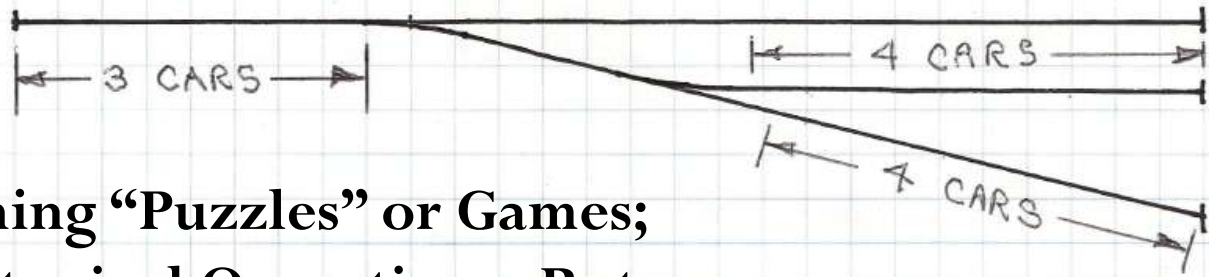
- “No Room for a Layout”
- Want more than just a diorama
- Possibly a start to a future large(r) Layout
- Want something that can be “finished” in a reasonable amount of time and money
- A small layout can be detailed more easily
- Desire Operating Realism even for a small footprint
- Experimenting with: a “new” scale or gauge, track or scenery technique
- Display your prize model locomotives and cars in action!
- Etc., etc., etc.....

Simple Historical Designs

1. The Time Saver



2. The Inglenook



**These are Switching “Puzzles” or Games;
They Lack Prototypical Operation – But
wait, There’s More!**

The British Scene

- The British (and European) Model Railroading Scene has developed the small shelf layout concept to a high degree
- Motivated by little living space for a large layout
- Emphasis on exhibition Layouts that can be brought to Model Railroad Exhibitions and Shows
- Focus on modeling one scene, specific place and time
- Operational capability very important to keep the observers' attention
- Lots of good examples published in Hornby, Railway Modeler and Continental Modeler Magazines
- We can learn from them!

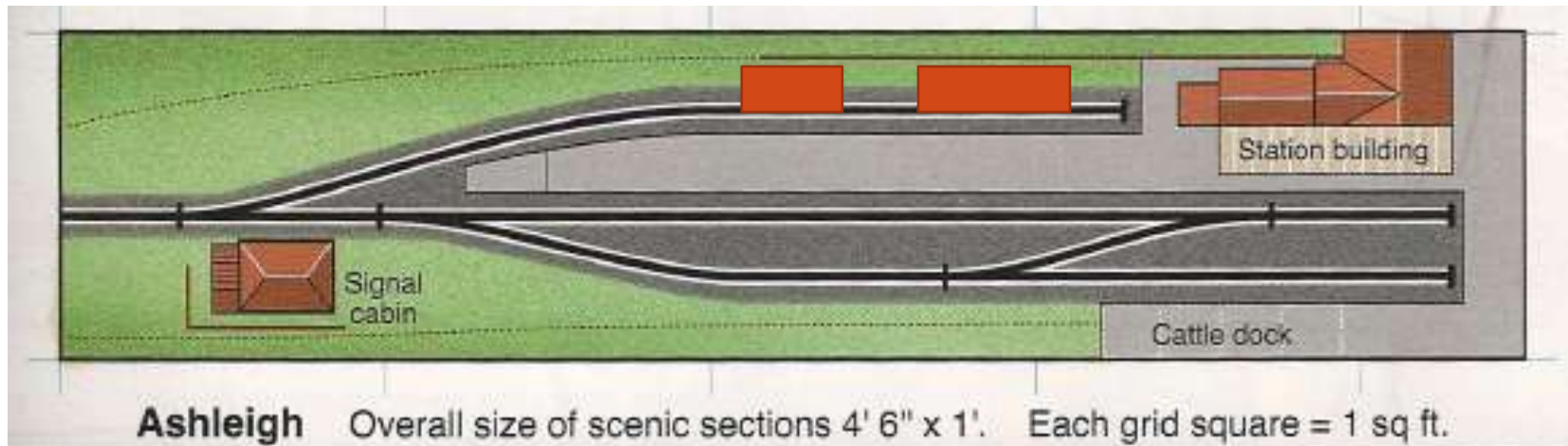
Some Examples of British Shelf Layouts

Let's Look at various Types with various features:

- **Simple Shelf Layouts**
- **Small, Medium and Large Shelf Layouts**
- **Staging and Fiddle Yards**

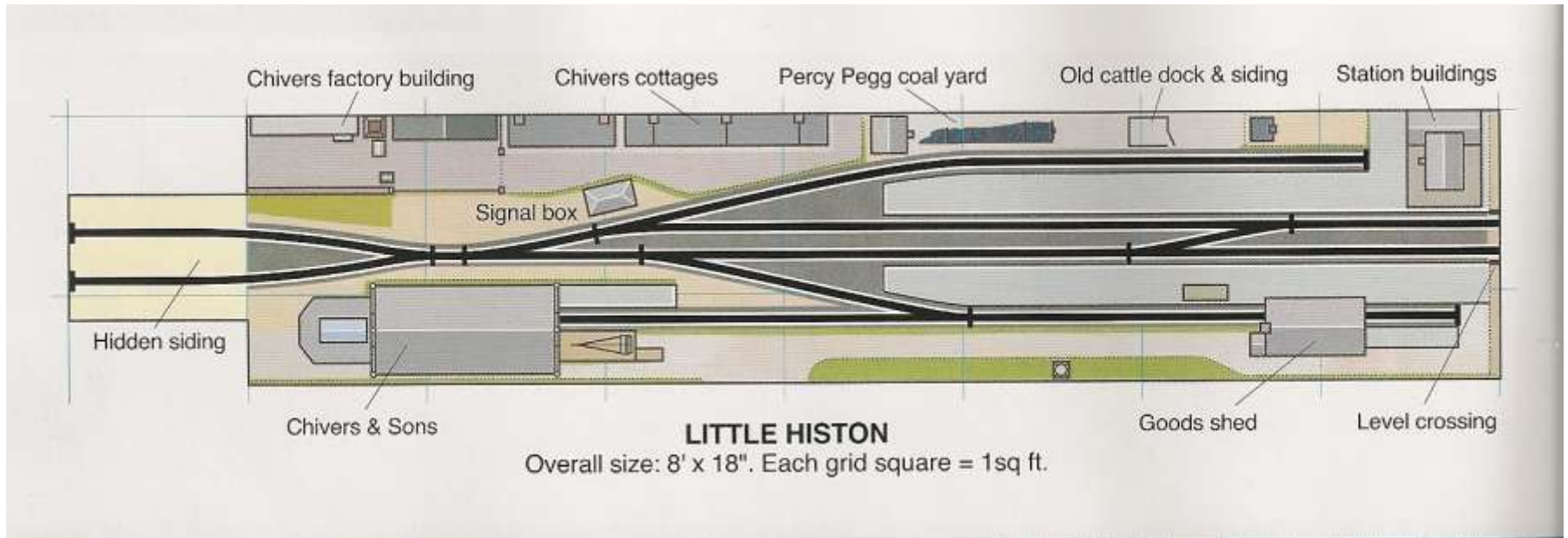
Ashleigh – 00/H0

Industries



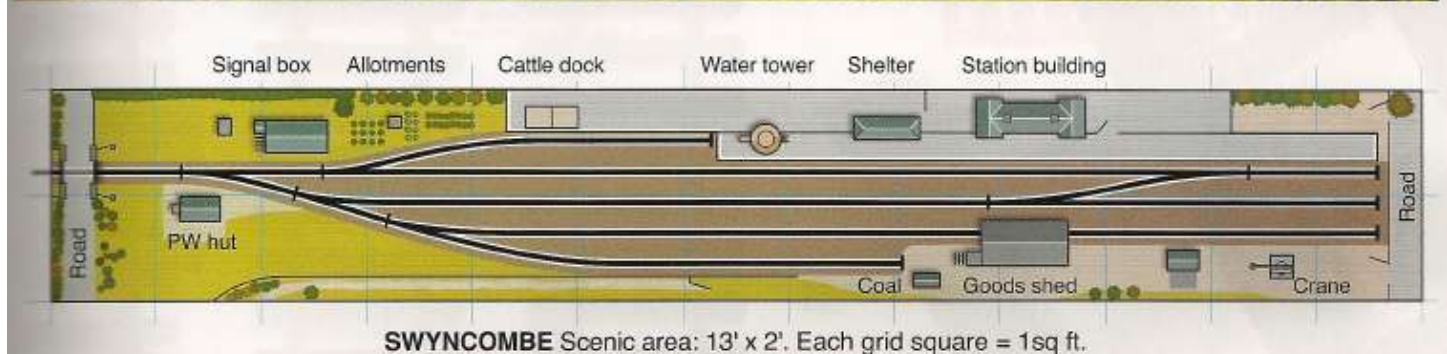
- 4.5 ft. by 12" Shelf Layout plus staging or fiddle yard
- It doesn't get much simpler or smaller than this!
- Does have both passenger and freight operating potential
- Could be up and running in a short time
- Best served as a display layout for rolling stock and locomotives
- From Railway Modeller, 09-12 (used with permission)

Little Histon – H0 (00)



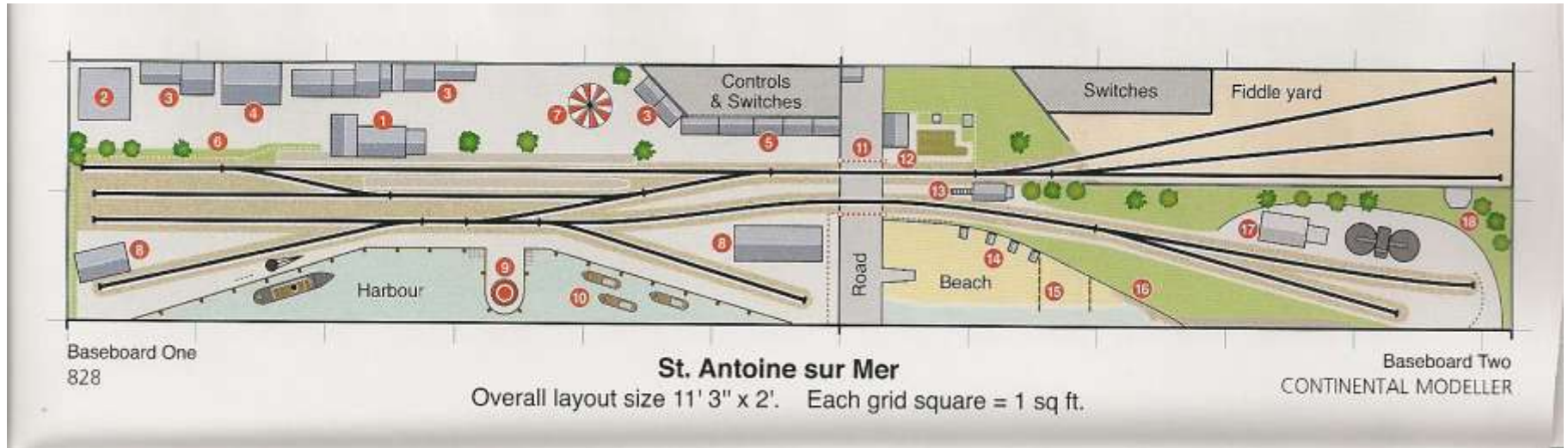
- **Branch Line Terminus** – almost like a “Time-saver” plan
- **Fiddle yard** off to the left – can be a detachable cassette
- **Both passenger and freight activity** in a small space
- **8 ft. by 1.5 ft. Shelf** plus fiddle yard
- **From Railway Modeller, Oct. 2012** (used with permission)

Swyncombe – 0 Scale



- Similar to Little Histon – Fiddle yard off to the left
- End of the line terminus – Both freight and passenger traffic
- From Railway Modeller 2012 Annual (used with permission)

St. Antoine sur Mer – H0 Scale



- **End-of-the-Line Terminus**
- **Fiddle Yard behind a backdrop** – no need to extend the total length of the layout
- **Sea side wharf/port scene** – includes rail-water interchange!
- **From Continental Modeller, Dec. 2012 (used with permission)**

One of My Favorites!

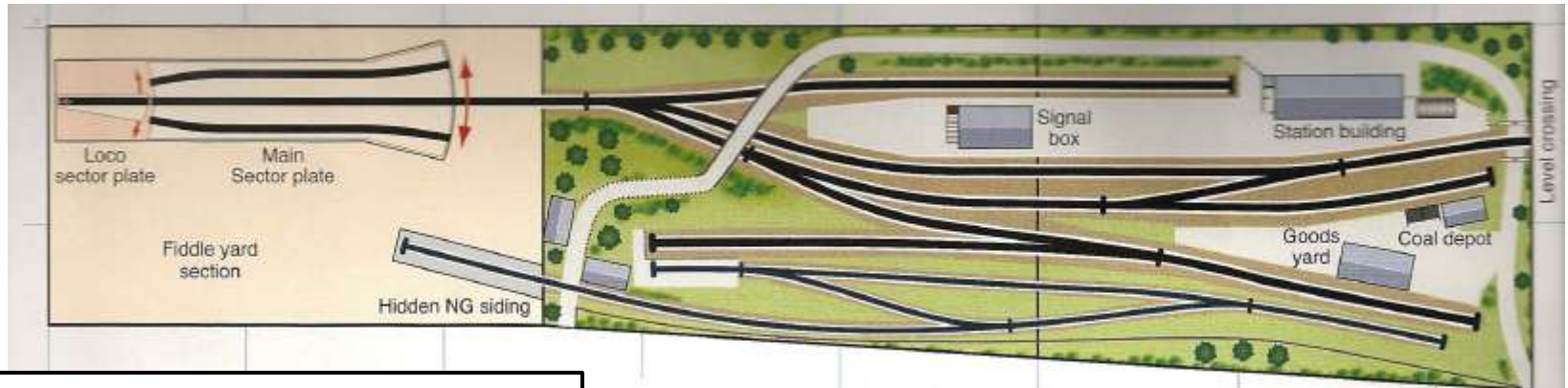
Hook Basin – Gn18 (1:25 scale, HO Track)



Hook Basin Size of scenic section 8'6" x 1'6". Each grid square = 1 sq ft.

- Industrial Narrow Gauge
- 8.5 X 1.5 ft
- Has Run-around
- Several sidings for Switching
- Railway Modeller, Oct. 2012
(used with permission)

Chewton-Mendip – 00/H0 and 009

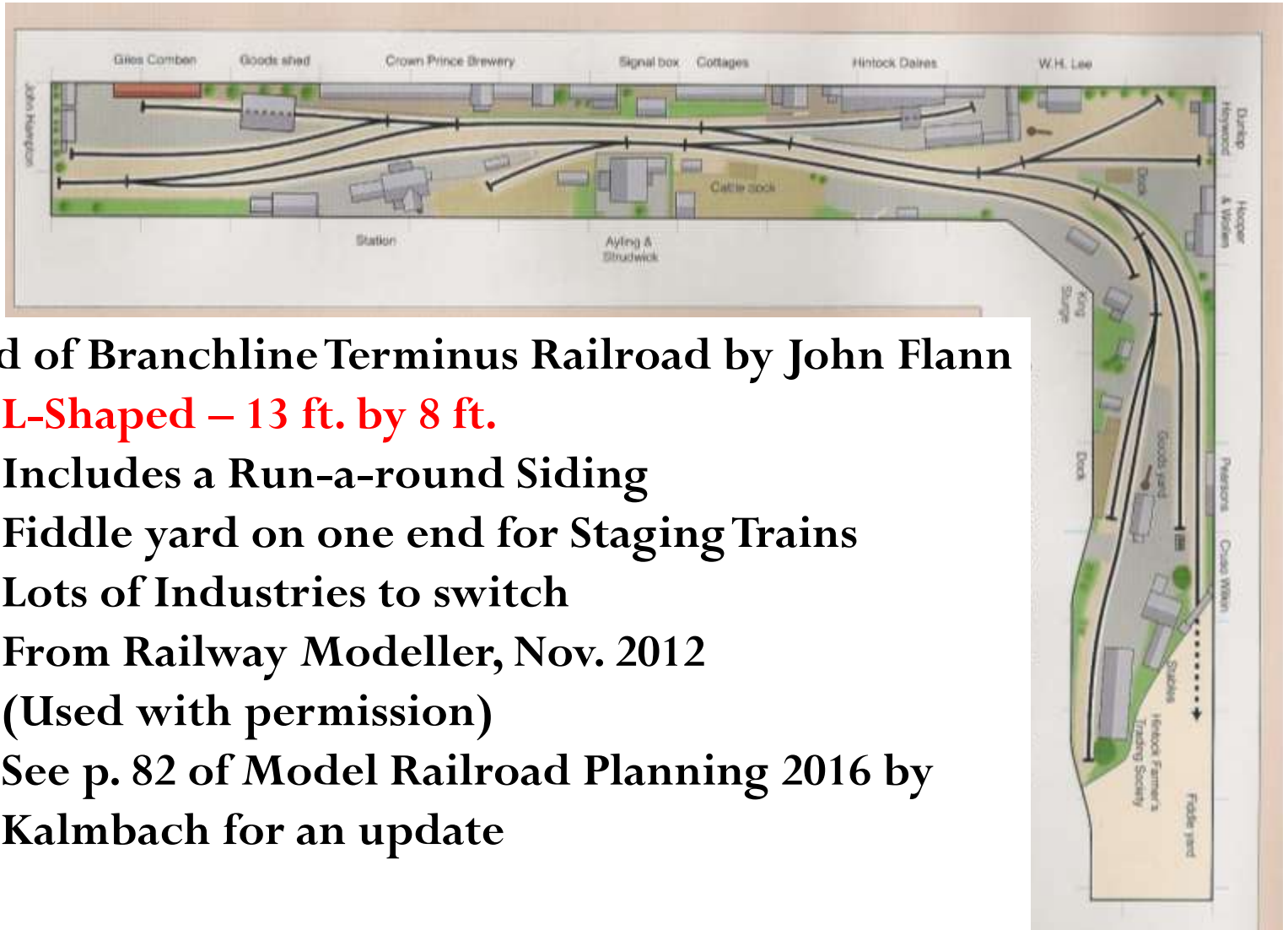


- 7.5 ft. by 18 to 22 in.
- Both standard gauge and narrow gauge (HOn30)
- Fiddle yard on left is a 3-track sector plate
- Narrow gauge industrial Ry. transfers loads to standard gauge Ry.
- From RM 12-12 (used with permission)



One of My Favorites!

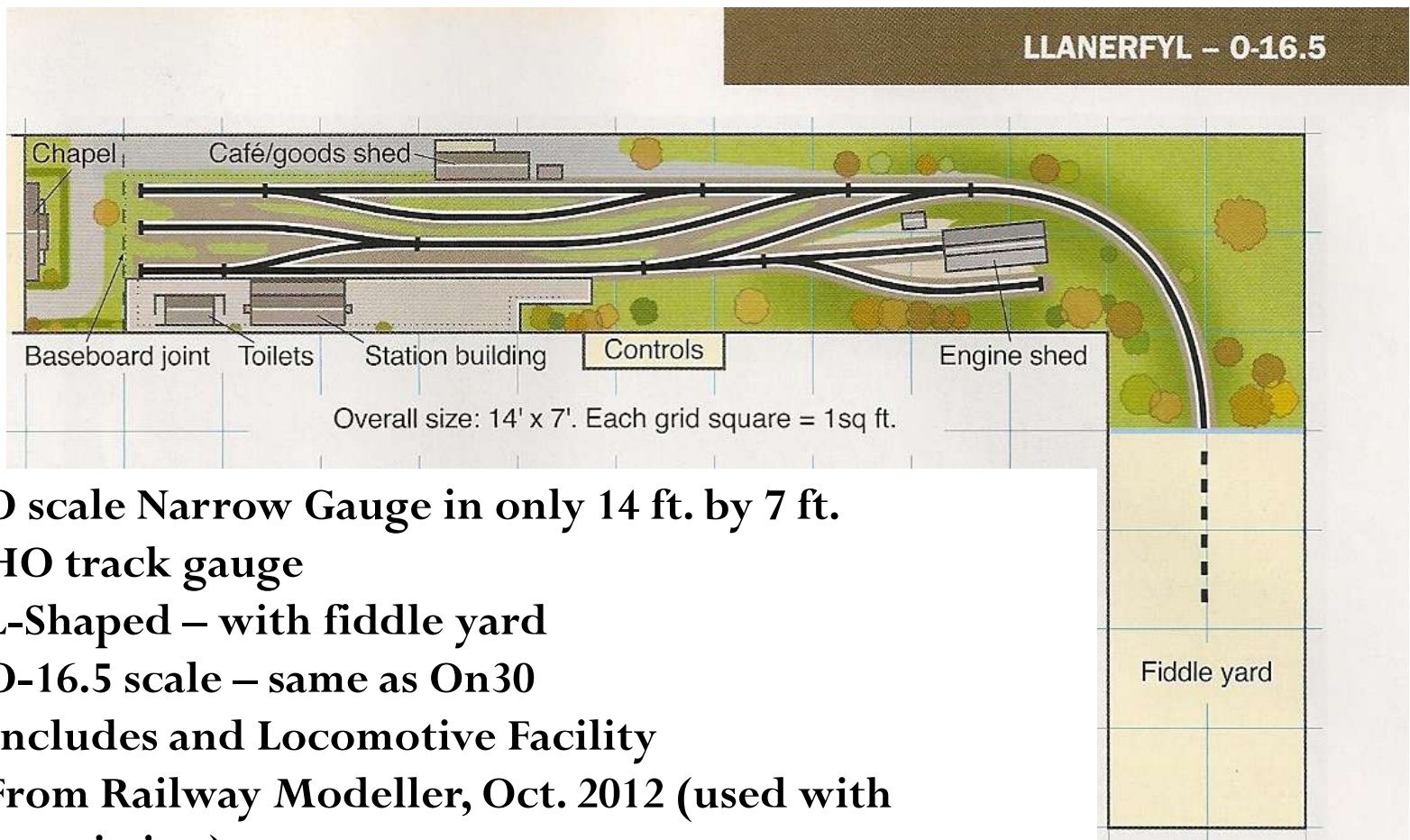
Sheepcroft Yard – HO (OO)



End of Branchline Terminus Railroad by John Flann

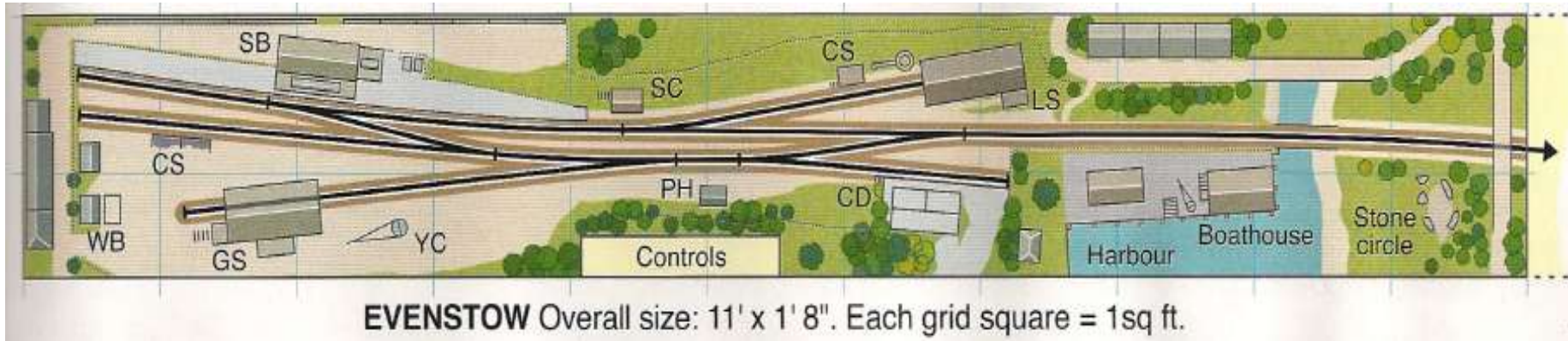
- **L-Shaped – 13 ft. by 8 ft.**
- Includes a Run-a-round Siding
- Fiddle yard on one end for Staging Trains
- Lots of Industries to switch
- From Railway Modeller, Nov. 2012
(Used with permission)
- See p. 82 of Model Railroad Planning 2016 by Kalmbach for an update

Llanerfyl – Welsh Narrow Gauge



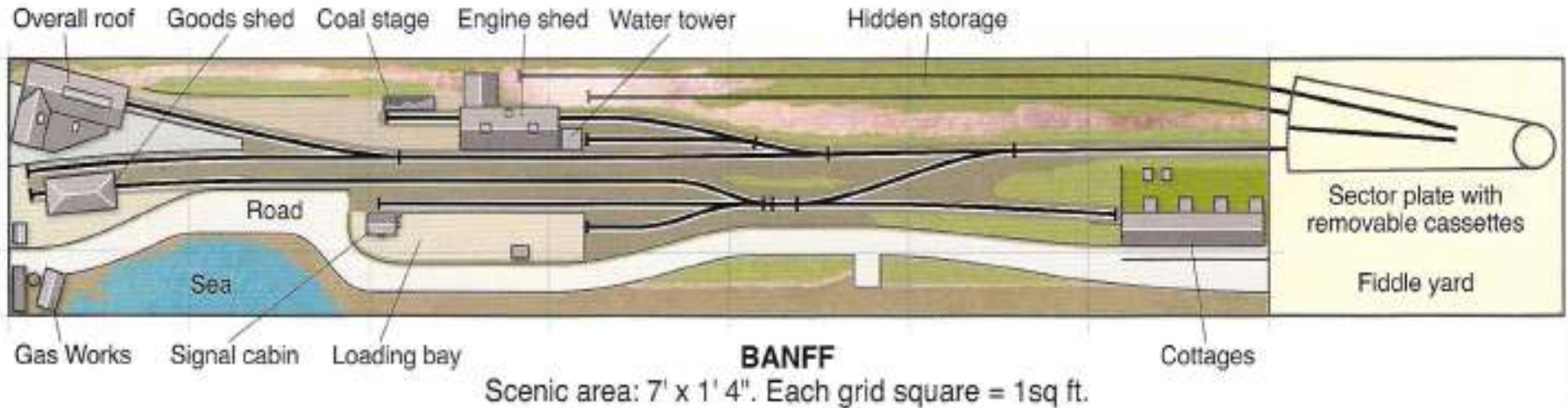
- **O scale Narrow Gauge in only 14 ft. by 7 ft.**
- **HO track gauge**
- **L-Shaped – with fiddle yard**
- **O-16.5 scale – same as On30**
- **Includes and Locomotive Facility**
- **From Railway Modeller, Oct. 2012 (used with permission)**

Evenstowe -00/H0



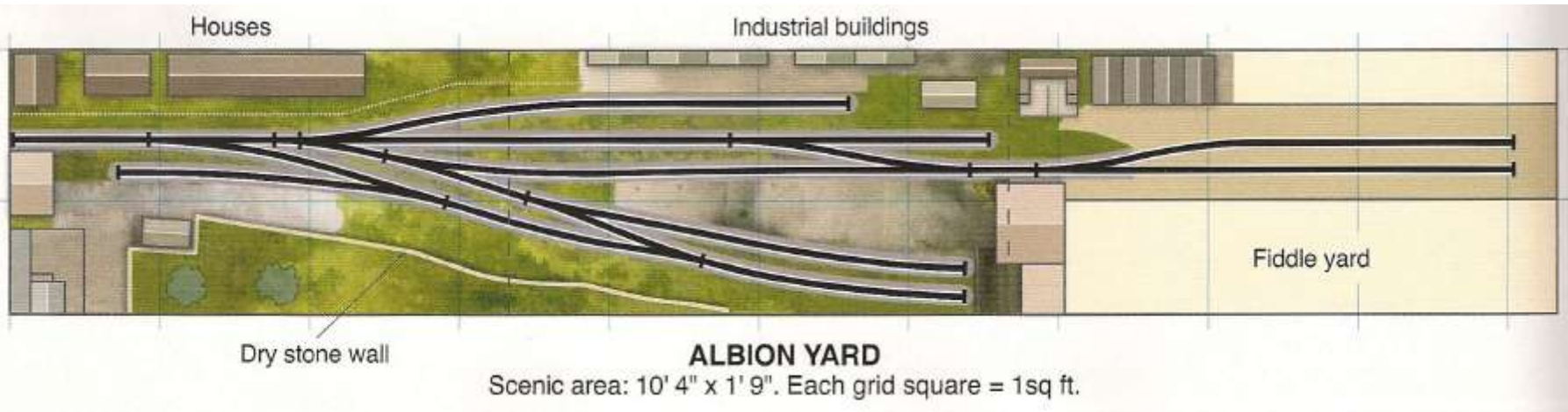
- 11 ft. by 20" Shelf
- End-of-the-line terminus
- Fiddle yard on the right – can be either a multi-track yard or sector plate or cassettes
- Harbor scene adds interest, looks like inbound trains come from somewhere else!
- Passenger and Freight operations
- Several industries – coal, cattle, general freight, etc.
- Fiddle yard additions makes it pretty long – could wrap it around in an L-Shape Footprint
- From Railway Modeller 07-12 (used with permission)

Banff – N Scale



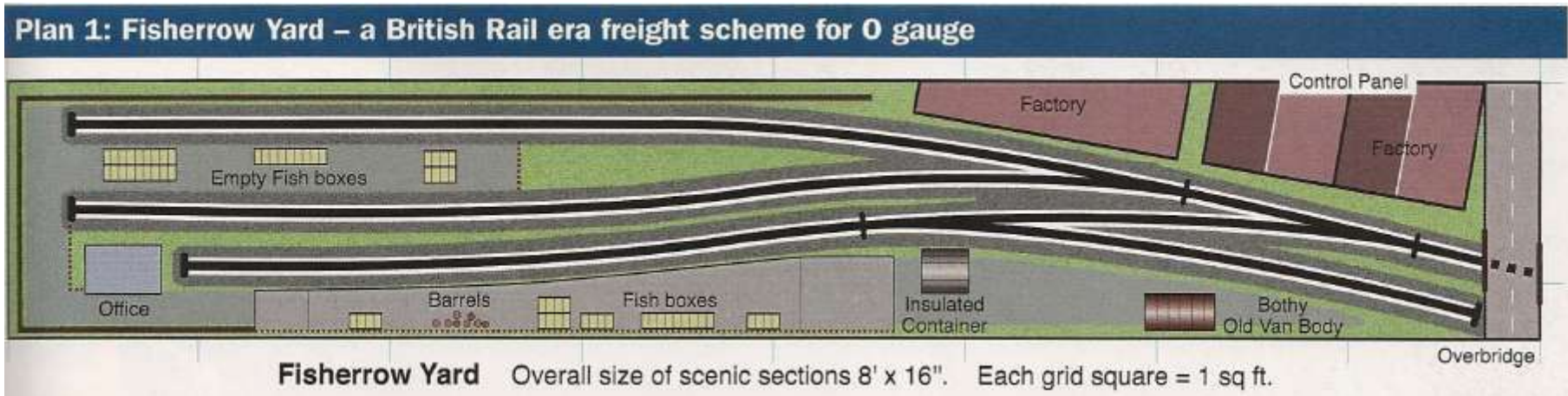
- 7 ft. by 16" Shelf Layout – end-of-the-line terminus
- Sector Plate fiddle yard – adds another 2 ft.
- Hidden storage feature (tracks behind the scenery) in combination with sector plate provides opportunity for many more trains to run in a given operating session
- Has Locomotive facilities, passenger and freight operations
- From Railway Modeller 07-12 (used with permission)

Albion Yard – 00/H0



- 10.3 ft. by 21" shelf layout – includes two-track staging fiddle yard
- Car storage tracks for make-up and break-down of trains
- Might need a detachable cassette at left end to provide a switching lead for yard tracks
- From Railway Modeller, 09-12 (used with permission)

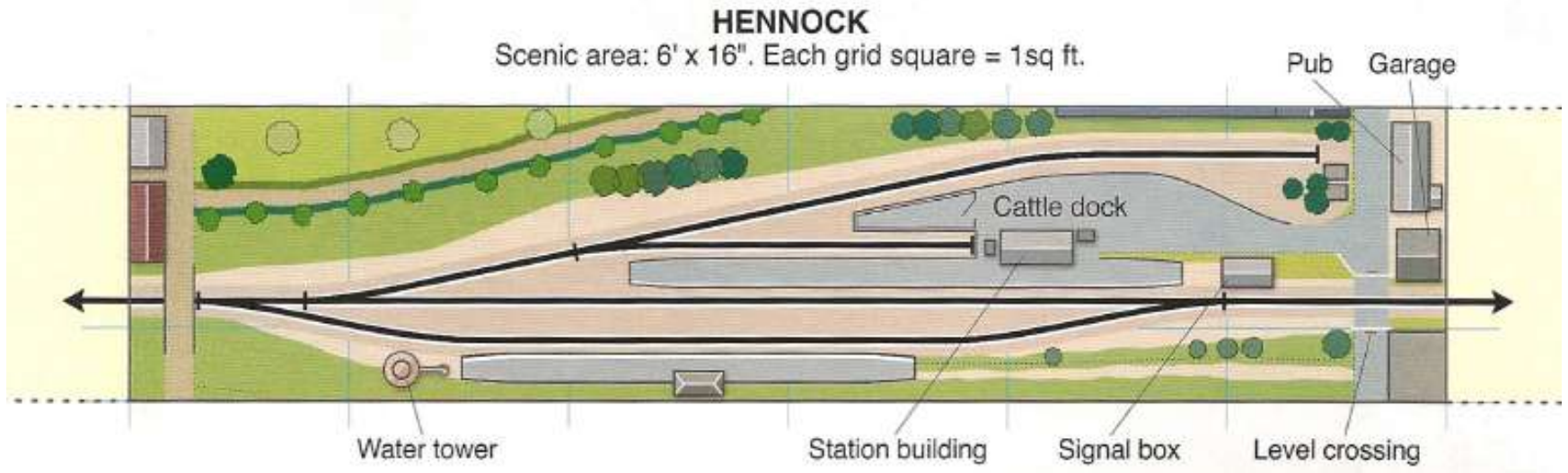
Fisherrow Yard – O Scale



- 8 ft. by 16" (O-Scale) – plus staging or fiddle yard on the right
- A “Sea Side Scene” - Fishing Industry
- Looks too simple - but looks are deceiving!
- Designed for two locomotive operation – Don’t need a runaround track!
- Great scheme for exploring O Scale or On30
- From Railway Modeller, 09-12 (used with permission)

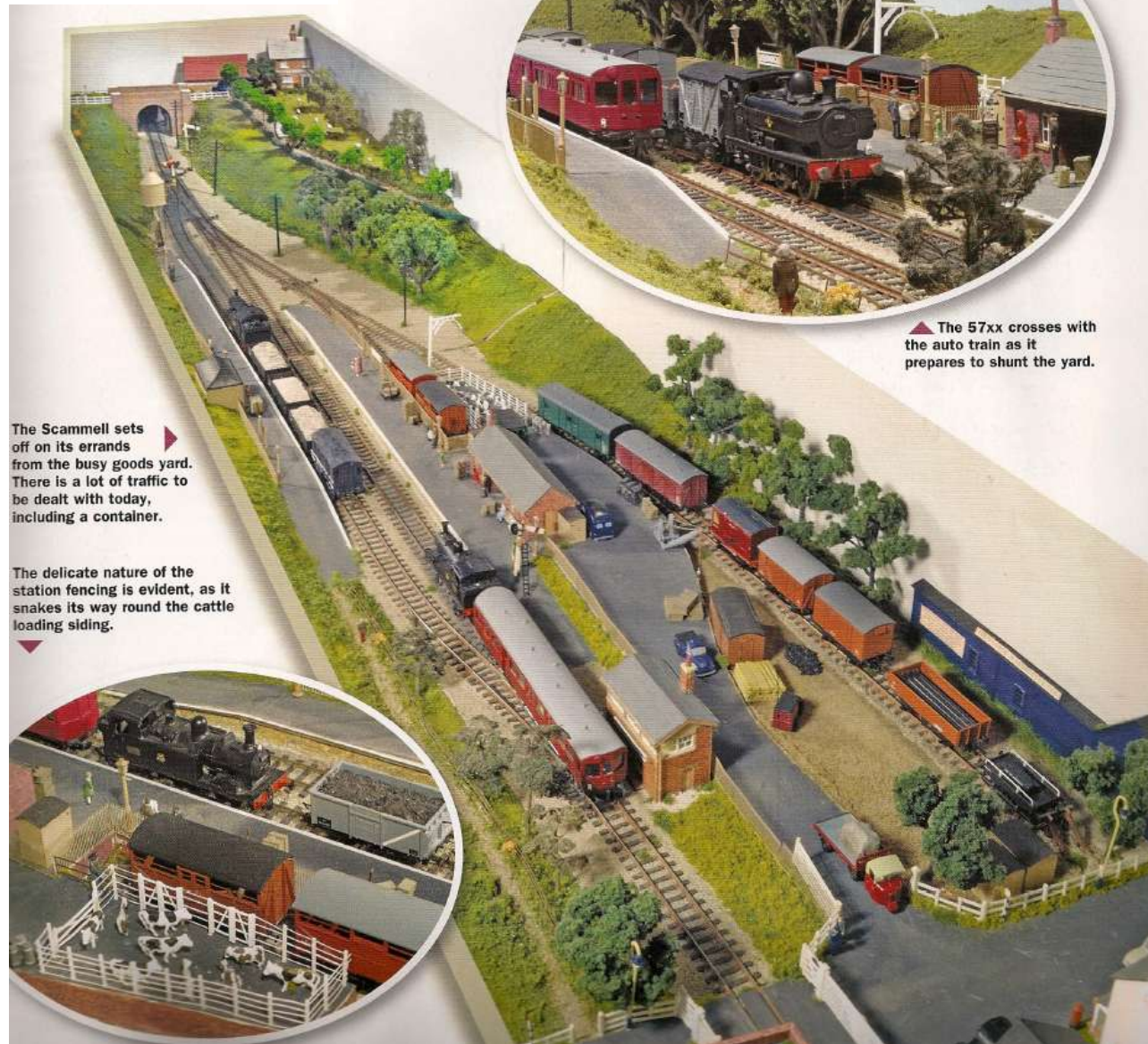
One of My Favorites!

Hennock - TT



- **Also A Through Station/Town**
- **6 ft. by 16" in TT Scale, about 8 ft. by 22" in HO Scale**
- **Needs two staging/fiddle yards, one on each end**
- **More interesting operating possibilities – “East and West bound” trains can exchange cars**
- **From Railway Modeller, 09-12 (used with permission)**

Hennock - Photos

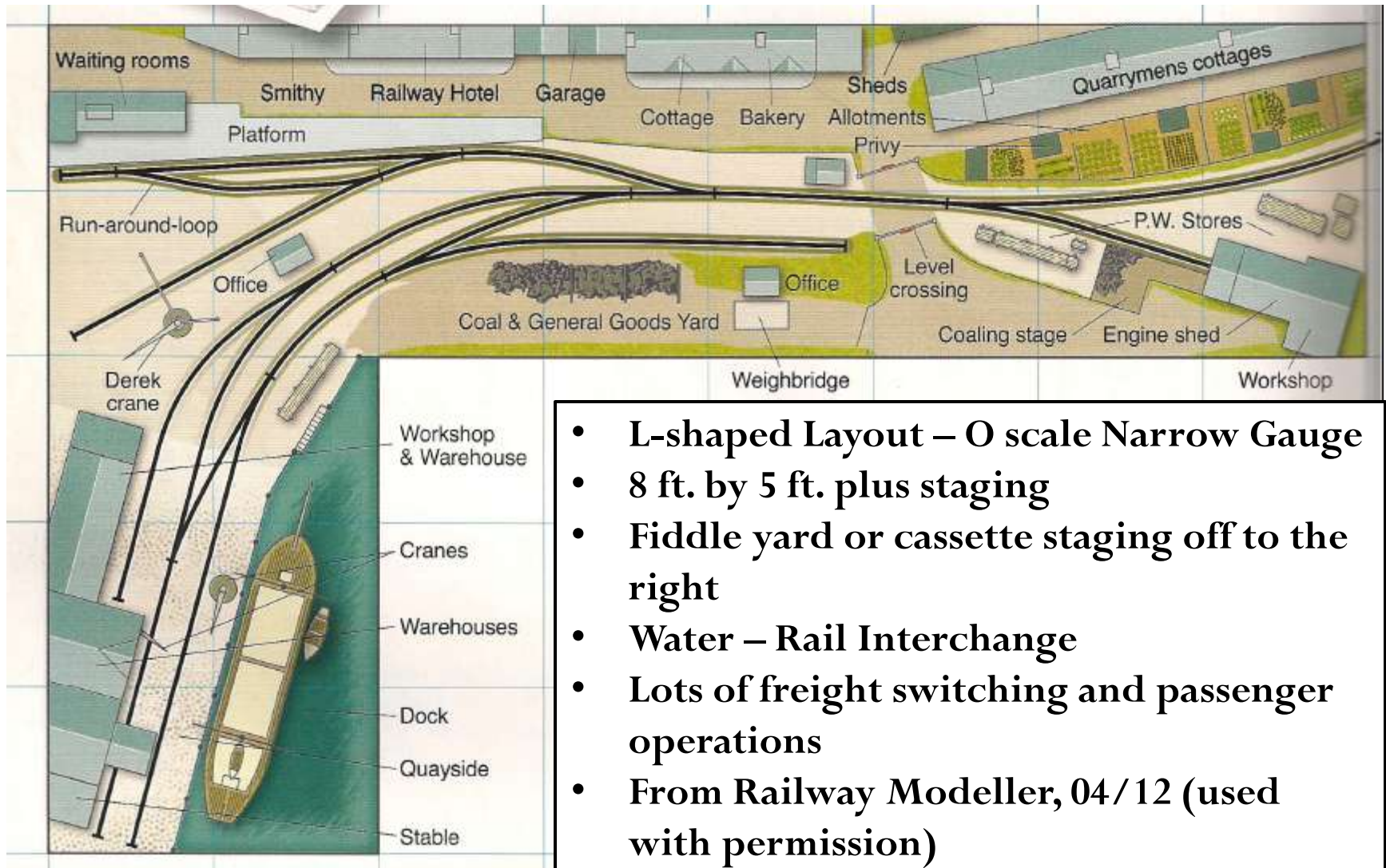


▶ The Scammell sets off on its errands from the busy goods yard. There is a lot of traffic to be dealt with today, including a container.

▼ The delicate nature of the station fencing is evident, as it snakes its way round the cattle loading siding.

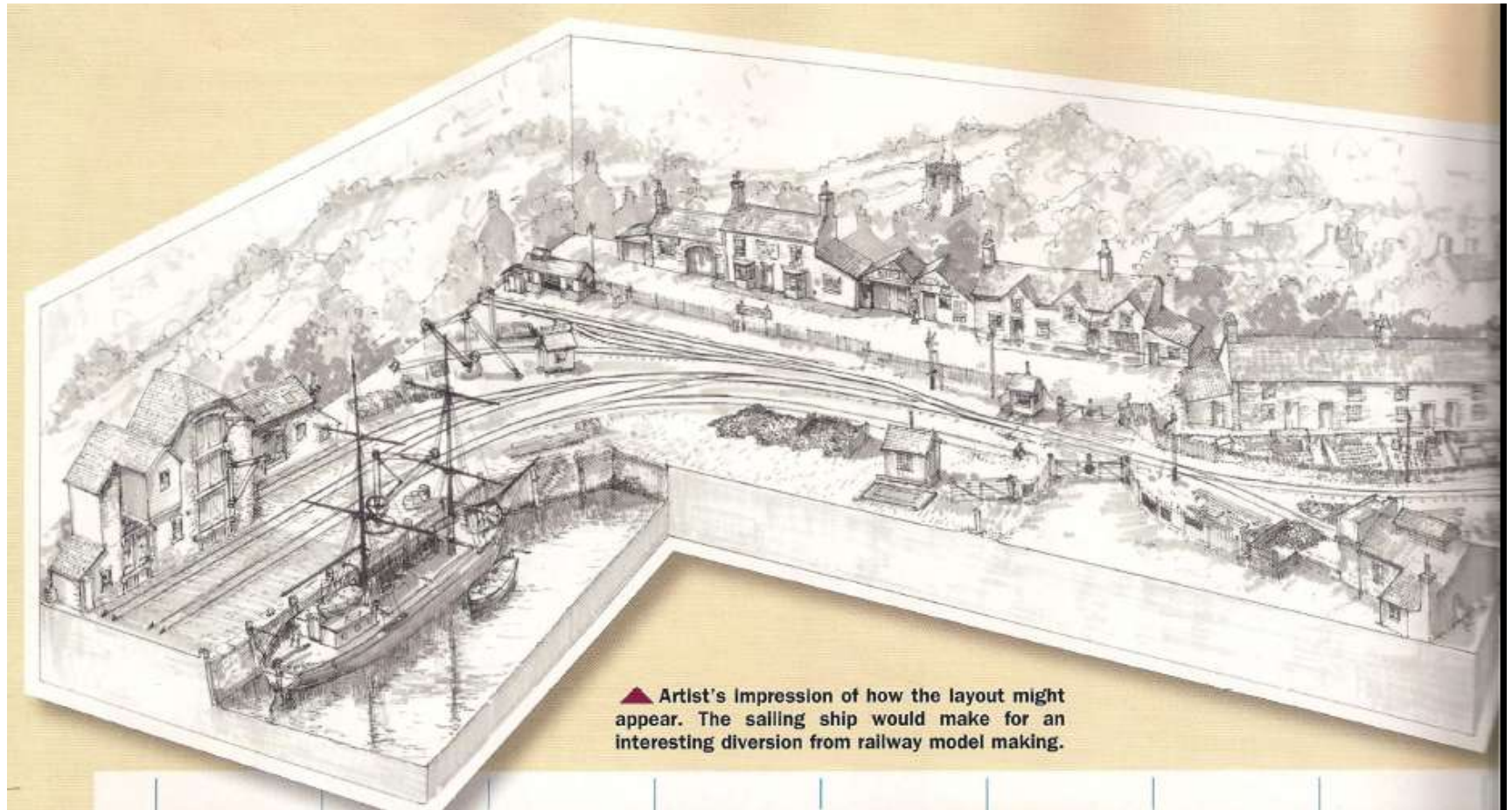
▶ The 57xx crosses with the auto train as it prepares to shunt the yard.

Porthwenn – 0 16.5/On30



- **L-shaped Layout – O scale Narrow Gauge**
- **8 ft. by 5 ft. plus staging**
- **Fiddle yard or cassette staging off to the right**
- **Water – Rail Interchange**
- **Lots of freight switching and passenger operations**
- **From Railway Modeller, 04/12 (used with permission)**

Porthwenn, Cont'd.



▲ Artist's Impression of how the layout might appear. The sailing ship would make for an interesting diversion from railway model making.

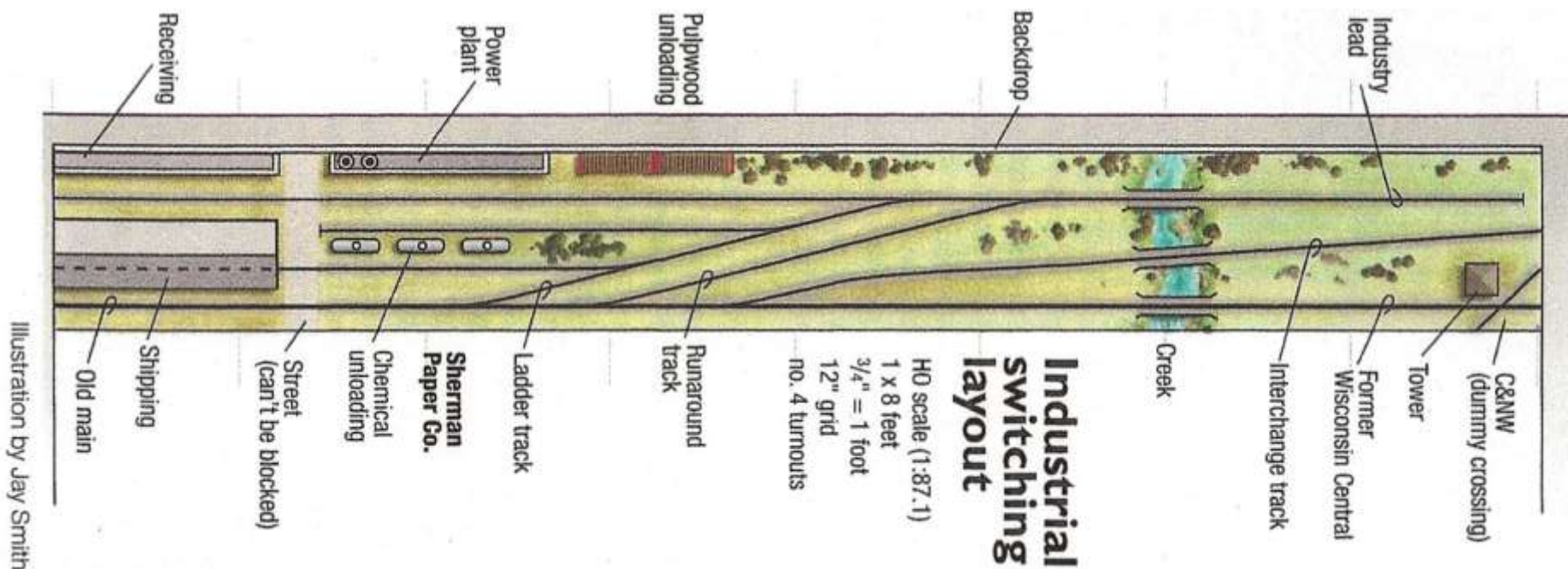
One of My Favorites!

Some Examples of American Shelf Layouts

- **Straight Shelf Layouts**
- **L-shaped Shelf Layouts**
- **With and Without Staging**

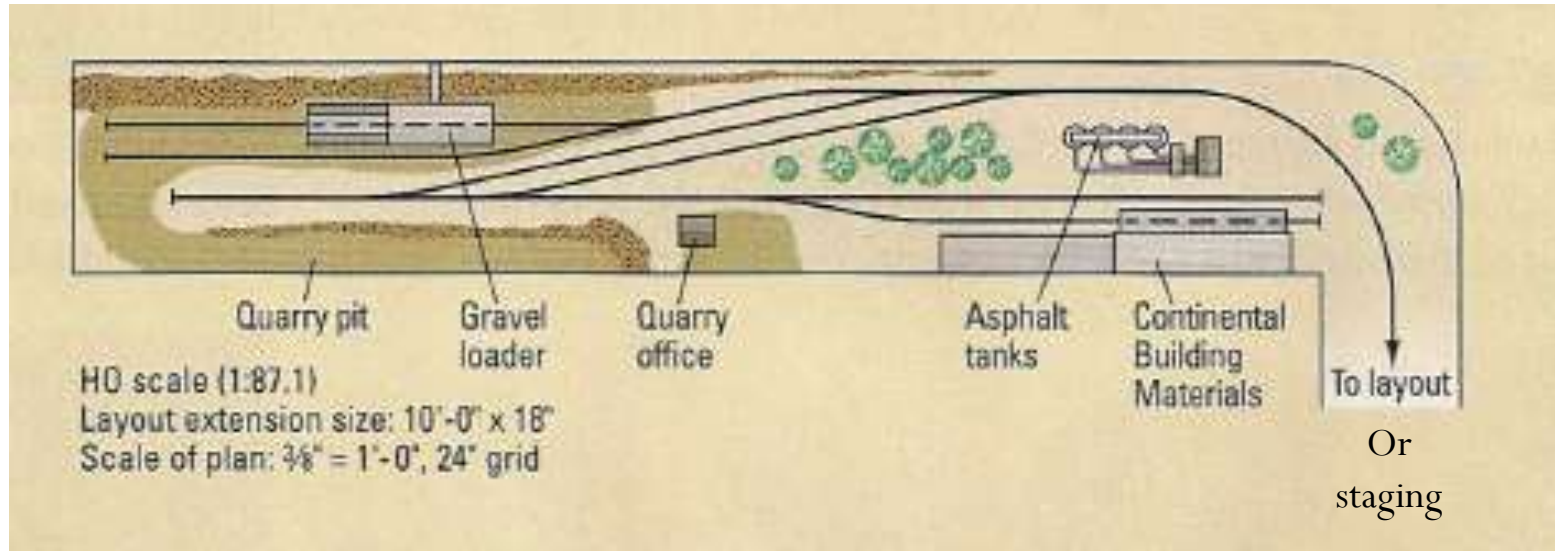
Sherman Paper Company – H0 Scale

- Single Industry Switching Layout – 8 ft. by 12 in.
- Variety of Car types
- Several car spots
- Don't need a staging or fiddle yard, but it would help



From *Model Railroad Planning*, 2006, by Linda Sand, used with permission

Winter Hill Branch - HO



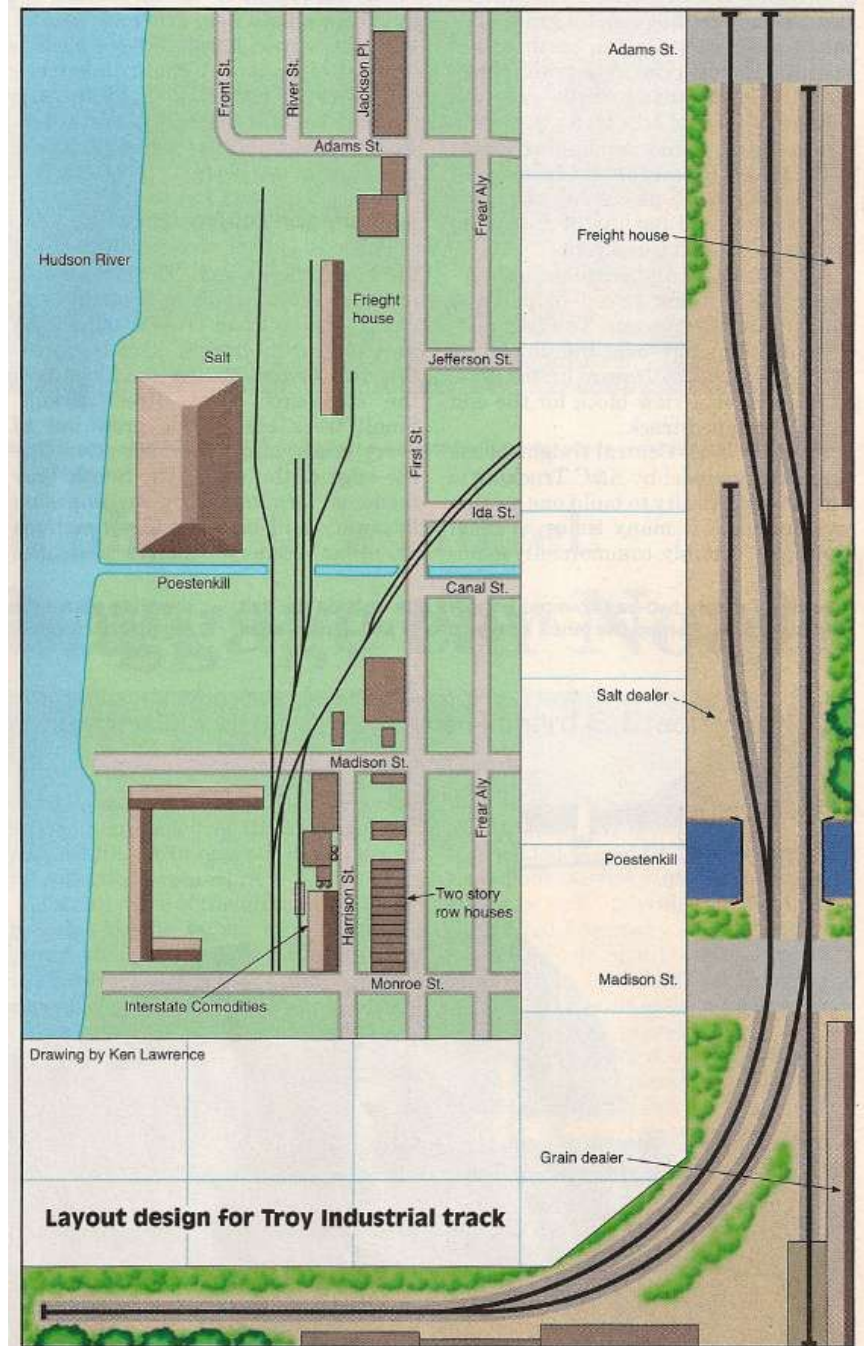
- **Three Industries in one area**
- **Variety of Car types and car spots**
- **Can have a train deliver and pick up cars, and local area switcher collect out-bounds and spot in-bounds**

Taken from Model Railroader Magazine, January 2013, Used with Permission

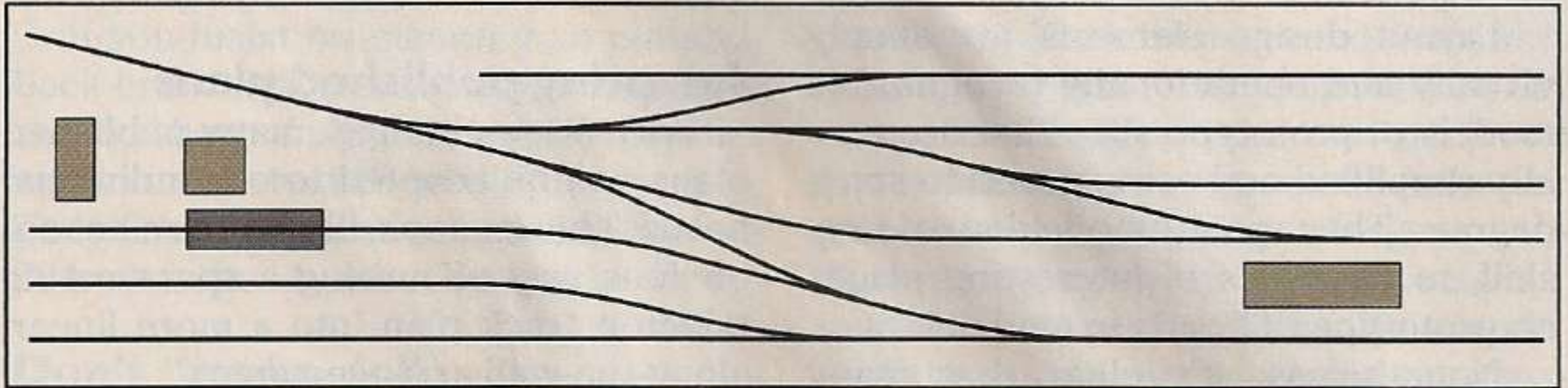
Troy Industrial Track

**Reference: Railroad Model Craftsman, November 2012, p. 68
(Used with Permission)**

- 5 ft. by 8 ft. L-Shaped Shelf, 12” deep
- patterned after prototype location in Troy, NY.
- By William Gill.



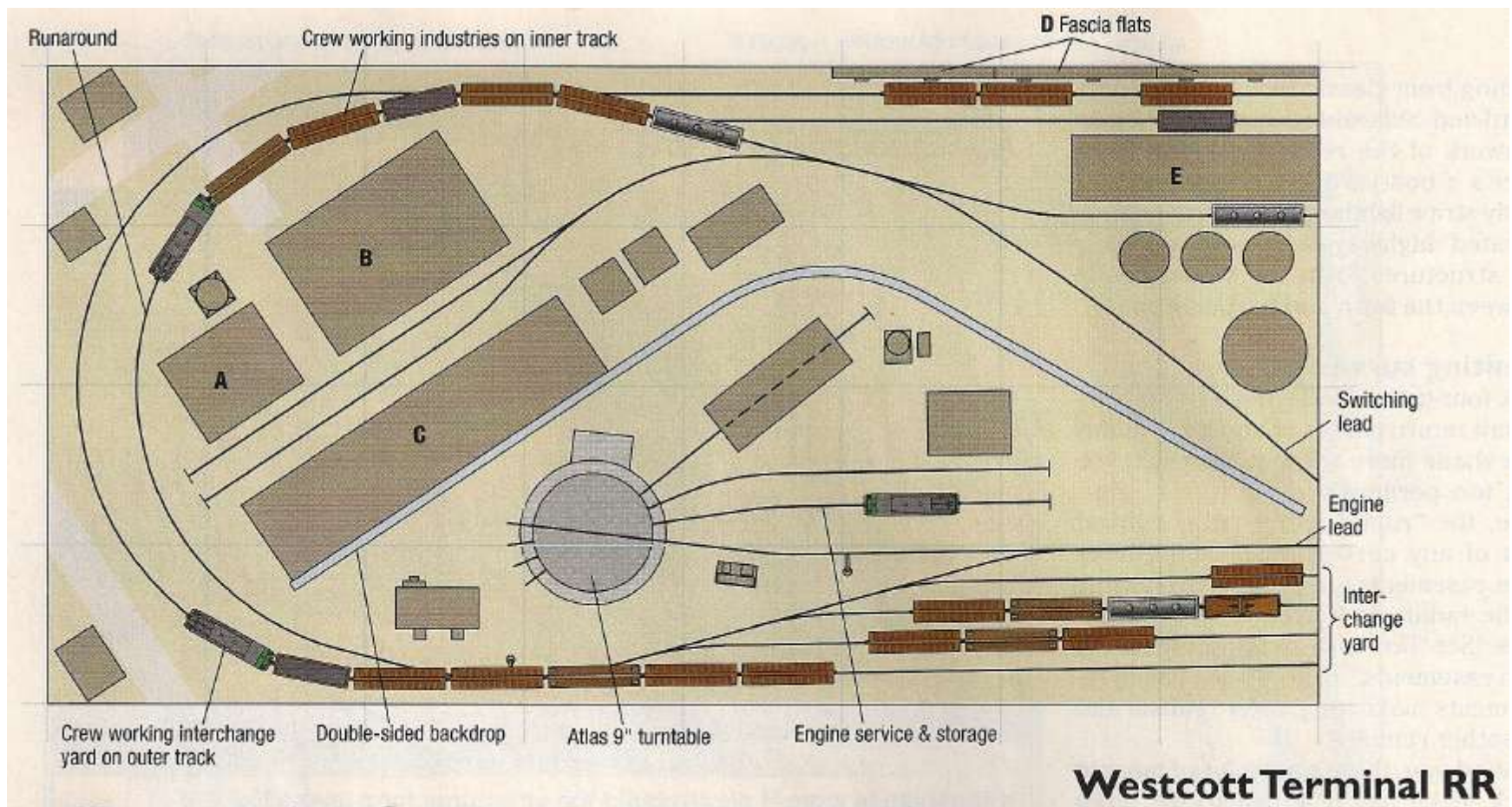
Switchman's Nightmare



Linn Westcott's classic Switchman's Nightmare track plan has all the makings of an engaging terminal railroad layout: interchange yard, industries, and a runaround tying them together. Byron used these elements in his 4 x 8 plan.

Original Plan was published in "*101 Track Plans for Model Railroaders*" by Linn H. Westcott, Kalmbach Publications, c. 1956, plan no. 6.

Switchman's Dream

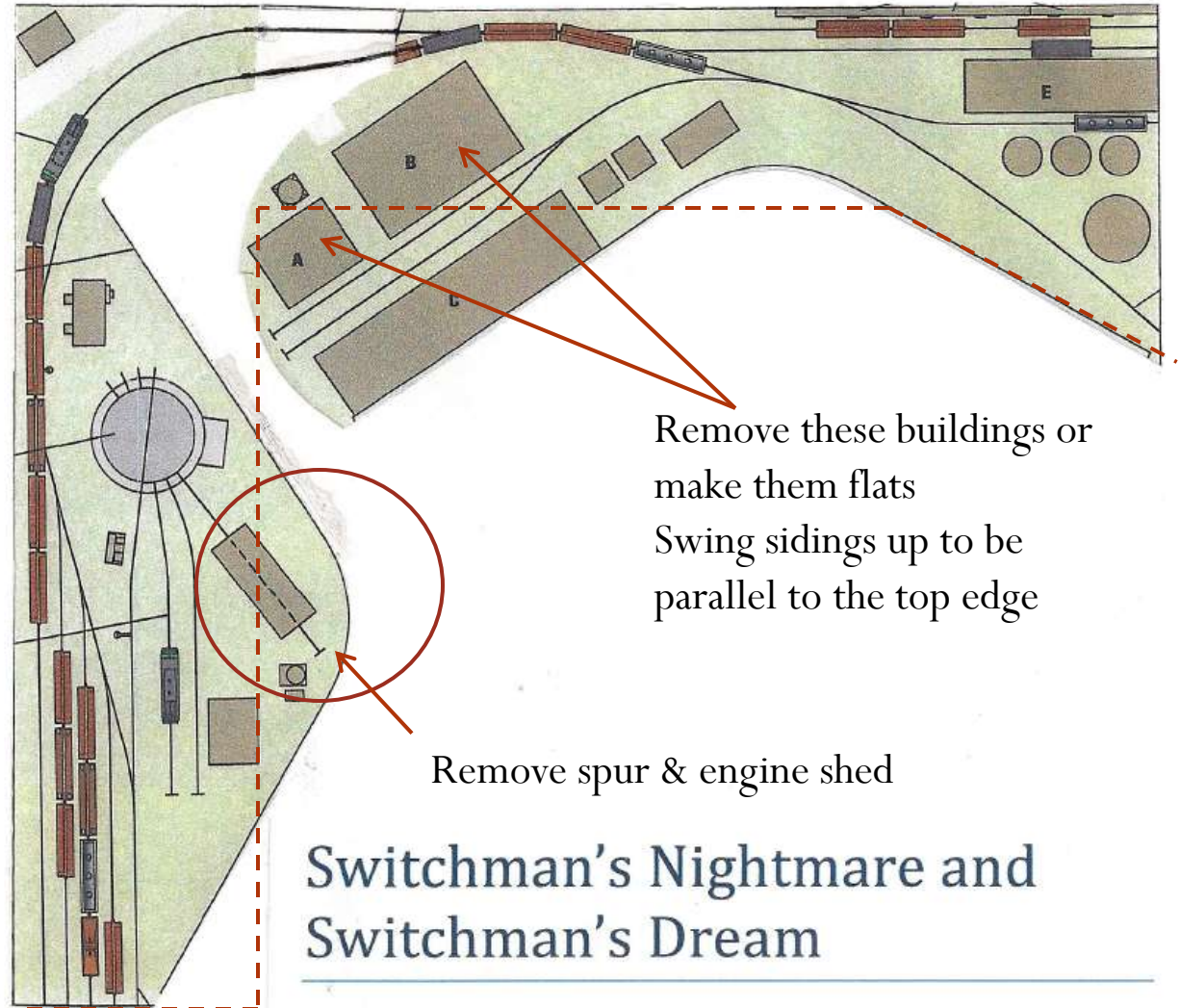


This is Byron Henderson's Redesign of the "Nightmare" into a 4 ft. by 8 ft. Layout with yard and industrial area

From Model Railroad Planning, 2011

Switchman's Dream Revisited

Using basic 4 by 8 plan by Byron Henderson (MRP 2011), and Tony Koester's "Track Planning with scissors and tape" article in MRP 2011, a nice L-shaped switching layout can be built. It is suggested that the mod's. shown be made to make the reach-in distance to the corner less than 30".

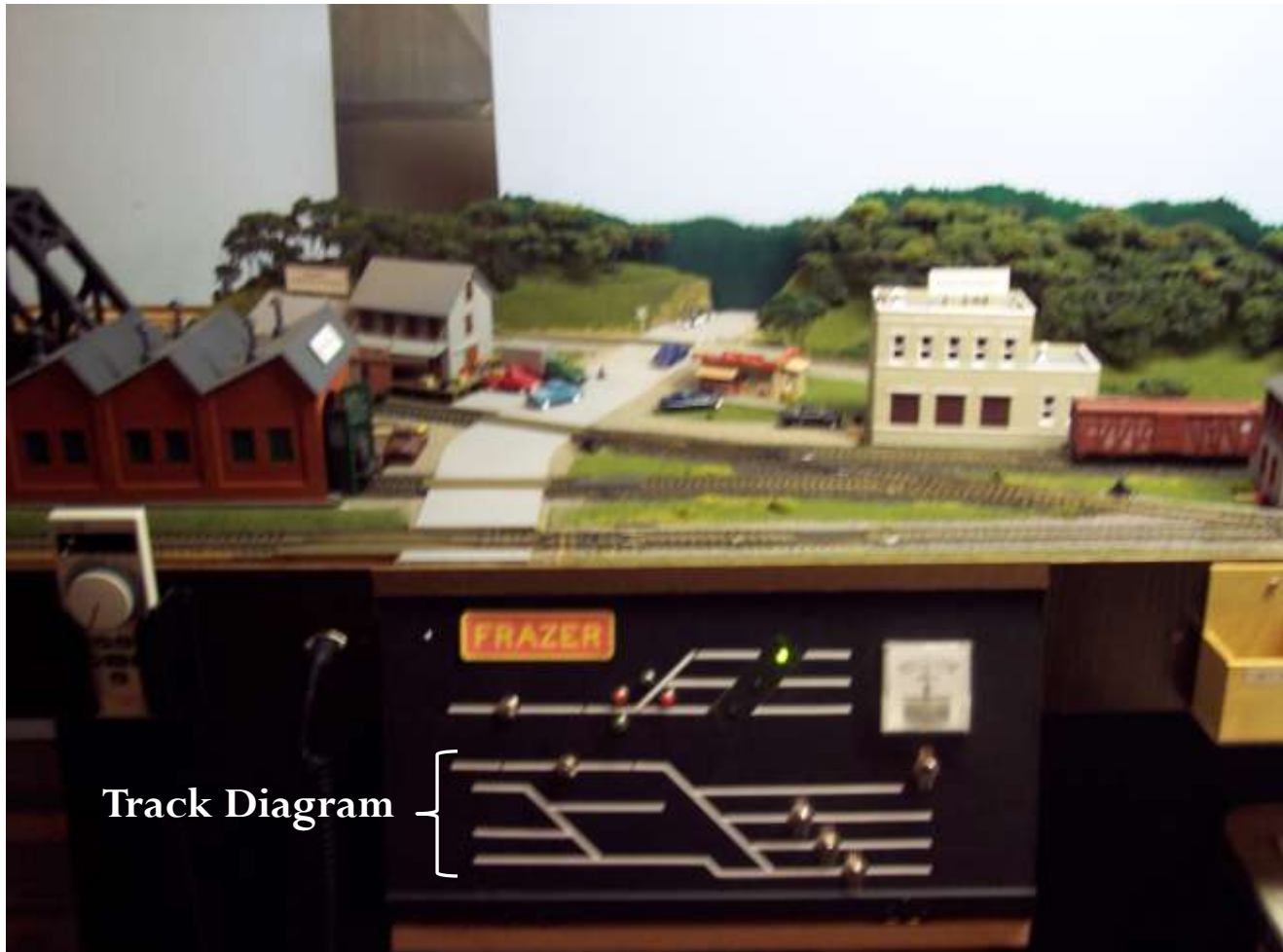


Remove these buildings or make them flats
Swing sidings up to be parallel to the top edge

Remove spur & engine shed

Switchman's Nightmare and Switchman's Dream

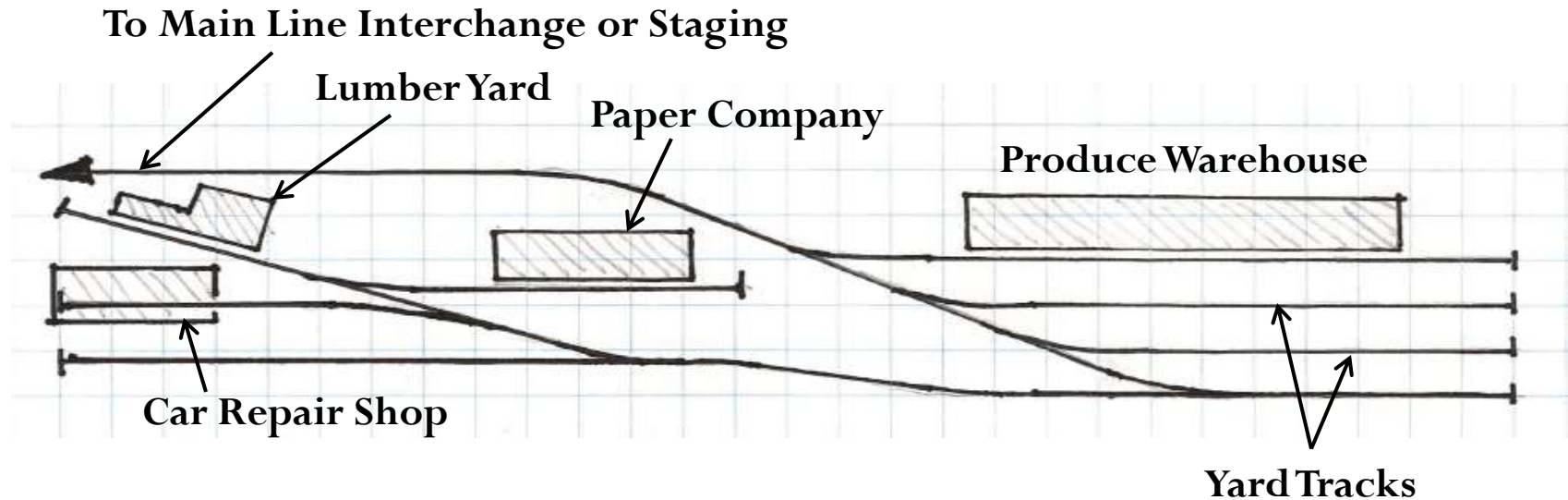
Frazer – An Industrial Switching Area



Track Diagram

**A Town on Bob MacKendrick's West Chester (PRR) Railroad:
Inspiration from a small piece of a large Model Railroad!**

Frazer Track Diagram



Bob MacKendrick's West Chester Division of the Pennsylvania Railroad was featured in *Rail Model Journal*, October 2004.

One of My Favorites!

Frazer – Yard Area

Industry

The “right” end, storage tracks and entry to switch back – serves as scenic staging for the industrial area.



Car Storage & sorting

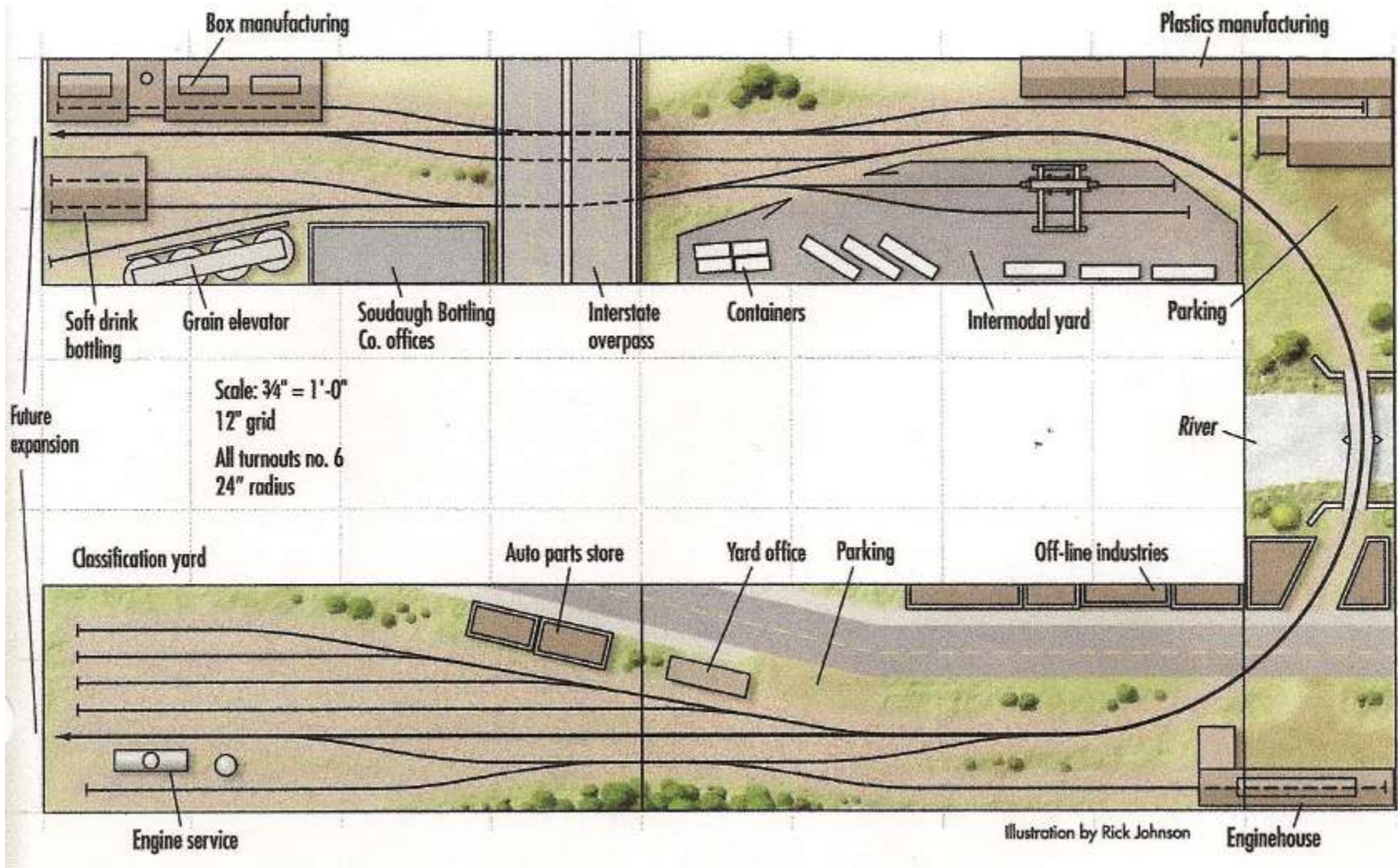
Switchback to Industries

Frazer – Industry Area



No Run-around track, but all industries can be switched using two engines or car-positioning on incoming train

Modern Industrial Layout - HO



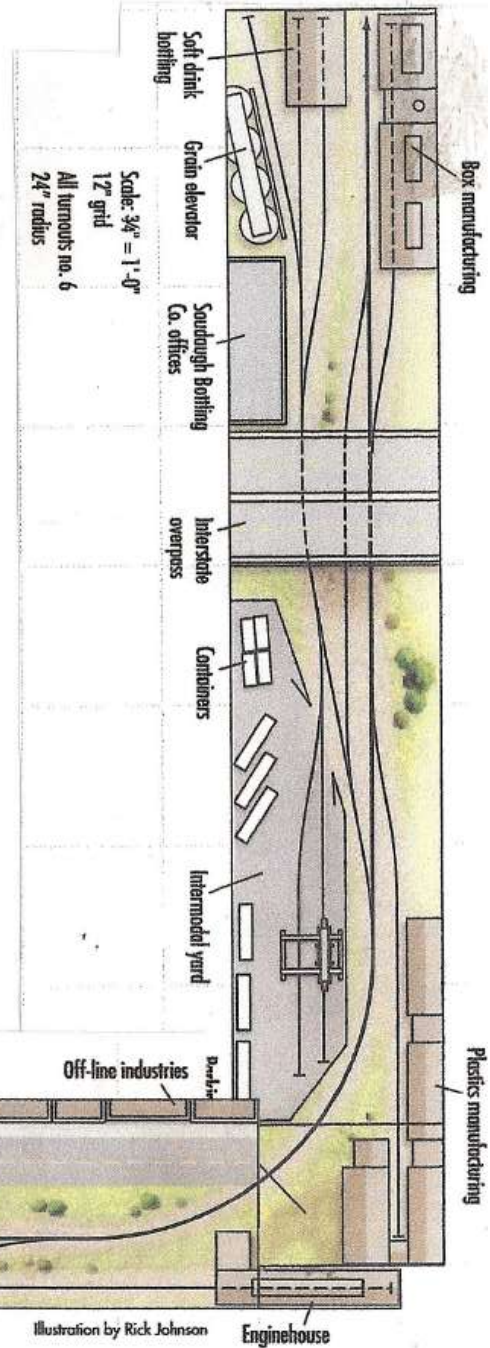
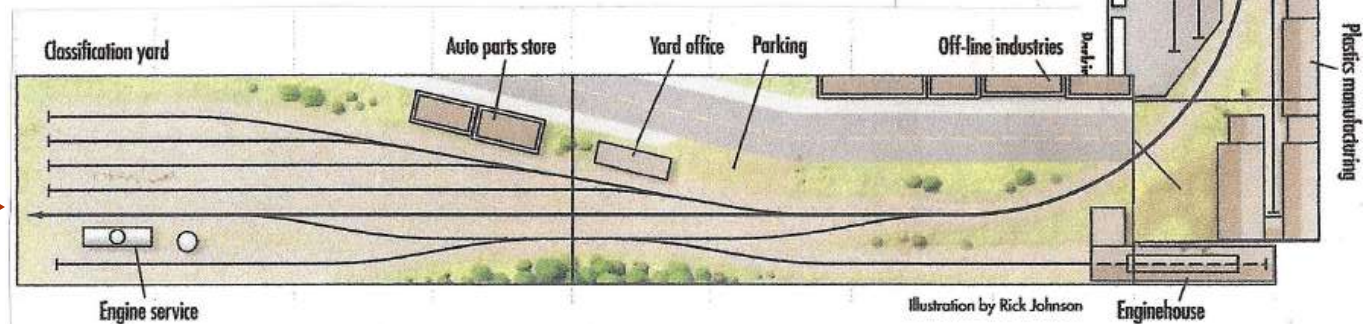
5 ft. by 9 ft. U-Shaped Layout by Linda Sand,
Model Railroad Planning 1999, used with permission

Revised Plan: L - Shaped

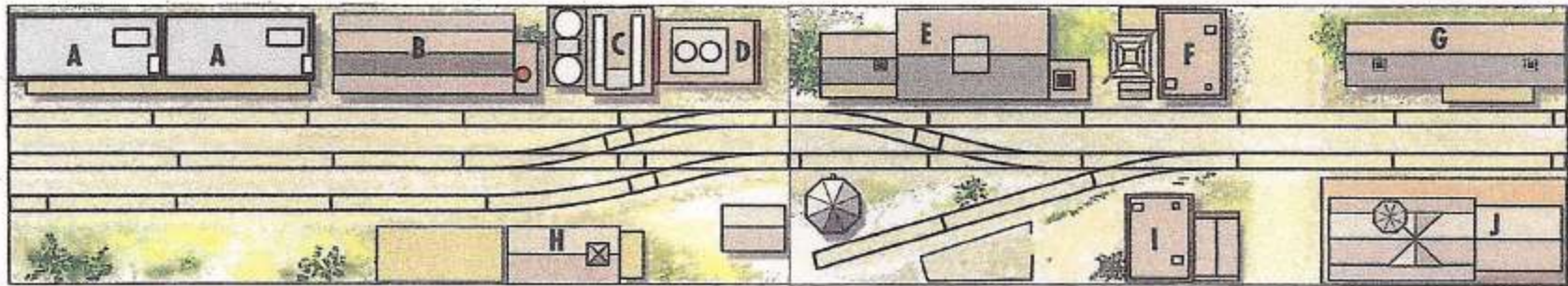
- 9 ft. by 9 ft. L-Shaped shelf Layout
- 18 in. deep shelves
- Modern Industrial Setting
- Lots of switching opportunities
- Can add cassette staging at yard leg

One of My Favorites!

Add Cassette
Here →



Back to the Time-Saver.....



- 7.5 ft. by 16" Shelf Layout
- HO Scale
- Lots of Industries to switch!

A IHC Two kitbashed Luigis Restaurants (348-910)
B IHC Factory with loading silos (348-3505)
C IHC Gruesome Casket Co. (out of production)
D IHC Machine Shop (348-47764)
E Model Power Brewery (00451)

F IHC General Store/Finance Co. (47798)
G Con-Cor Edison's Lab (out of production)
H Life-Like Church (kitbashed, 1350)
I IHC Grocery store/auto repair (348-3504)
J IHC Rico Station (348-807)

Scale: 1" = 1'-0" 6" grid End X joins End Y

Each layout half is 16" x 45"

A Revised Time Saver Plan by John Flann, *Model Railroad Planning*, 2003.
Tracks are extended to provide actual industries to pick up and spot cars. John's operational method used a random drawing of car cards to decide which cars to pick up and which cars in the train to spot. Other methods are applicable, e.g., car cards and waybills, switch lists, etc.

NEWS FLASH: See March 2016 Model Railroader Magazine article by Robert Pethoud on operating a small switching layout – similar to above track plan

Back To The Inglenook

Dawson Station



- A single-industry modeled from real life
- 4 ft. by 1 ft.
- N-scale
- Saw Mill in the woods
- See RMC, January 2014

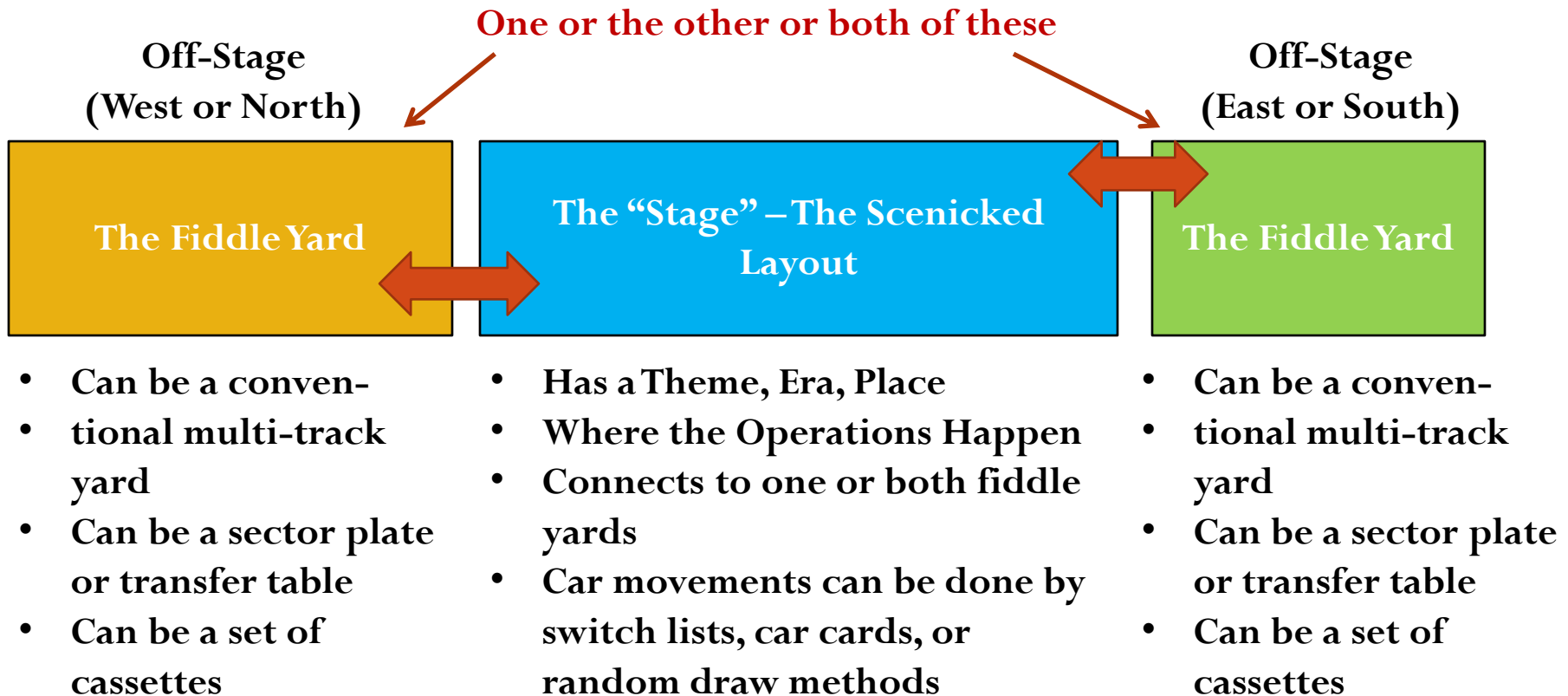


The Inglenook can be operated as a realistic industry setting, with cars in, cars out, based on real prototypes. See the Dawson Station web site, www.dawson-station.blogspot.com

What Makes a “Good” Shelf Layout?

- **Size** – Fits the area you have available!
- **Not just a Puzzle** – Realistic Operation
- **Realistic place, time, era and railroad equipment**
- **Operation with a Purpose**
- **Key Features nice to have:**
 - Locomotive Run-around Capability
 - Adequate run-around length to fit the train length
 - Siding Lengths appropriate to car traffic
 - Staging or Fiddle Yards to feed the “On Stage” Scene
- **Suggested Options for Shelf Layout Design:**
 - Through Station/Town
 - End of the Line and/or Branch Line
 - Single Industry (Quarry, Logging, Mining, Paper Mill, Brewery) with a variety of traffic – loads, empties, different car types, etc.
 - Industrial Park – Interchange with main line, variety of traffic

Generic Shelf Layout Ingredients

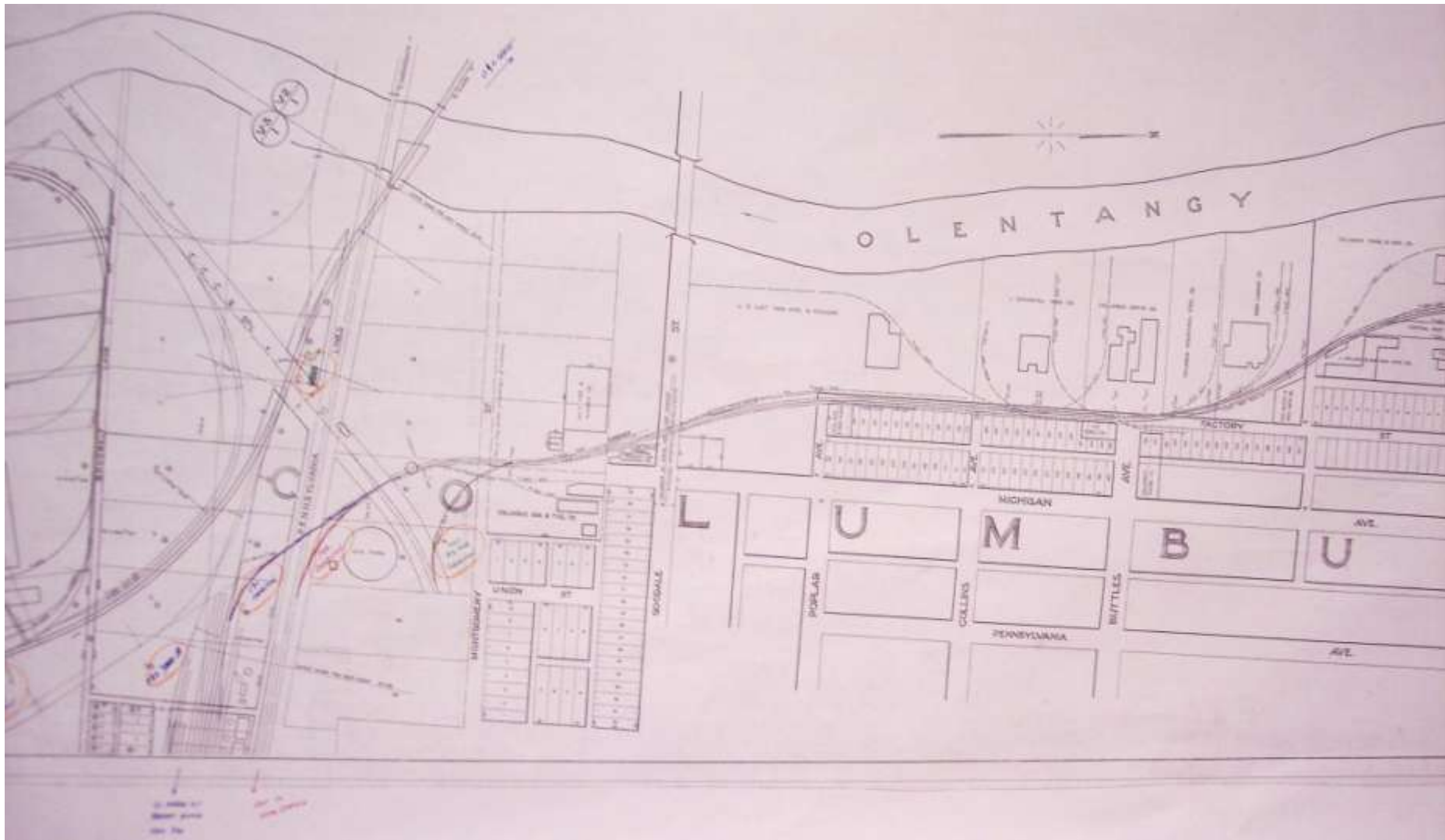


These ingredients can be in a straight line, an L-shape or a U-Shape. They can be straight or curved – whatever fits, and whatever strikes your fancy!

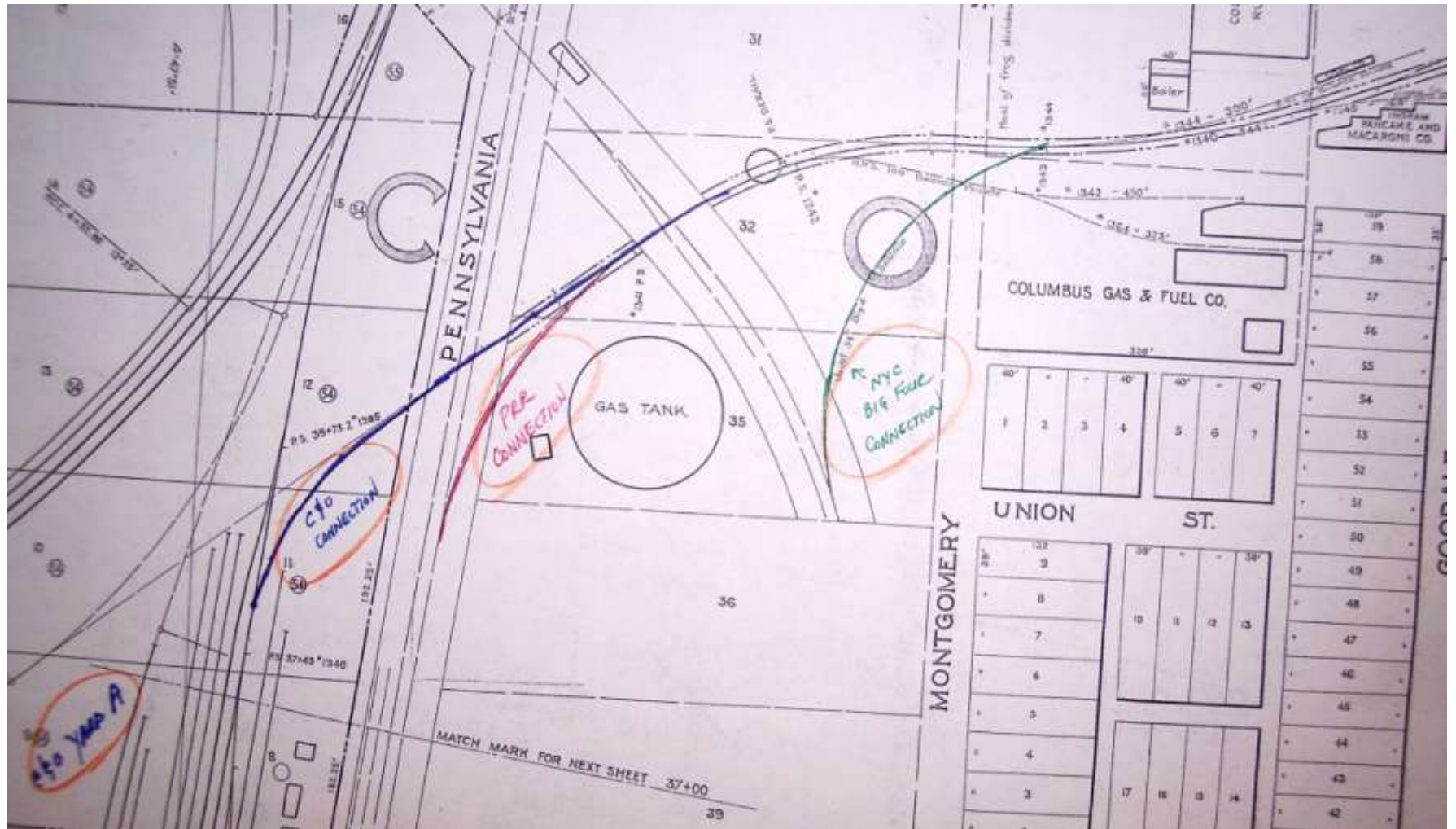
Design Study – Modeling prototype C&O operations in Columbus in the 1940's and 50's.

- Based on old 1939 railroad track maps and information provided by Jim Kehn and Dick Argo
- Focus on areas with interesting switching operations
- Follow prototype as close as possible within the constraints of a “practical” shelf layout – i.e., not too big!
- Selected two designs:
 - The “Neil Track” - or a portion of it!
 - The “Badlands” Brewery District – or a portion of it!

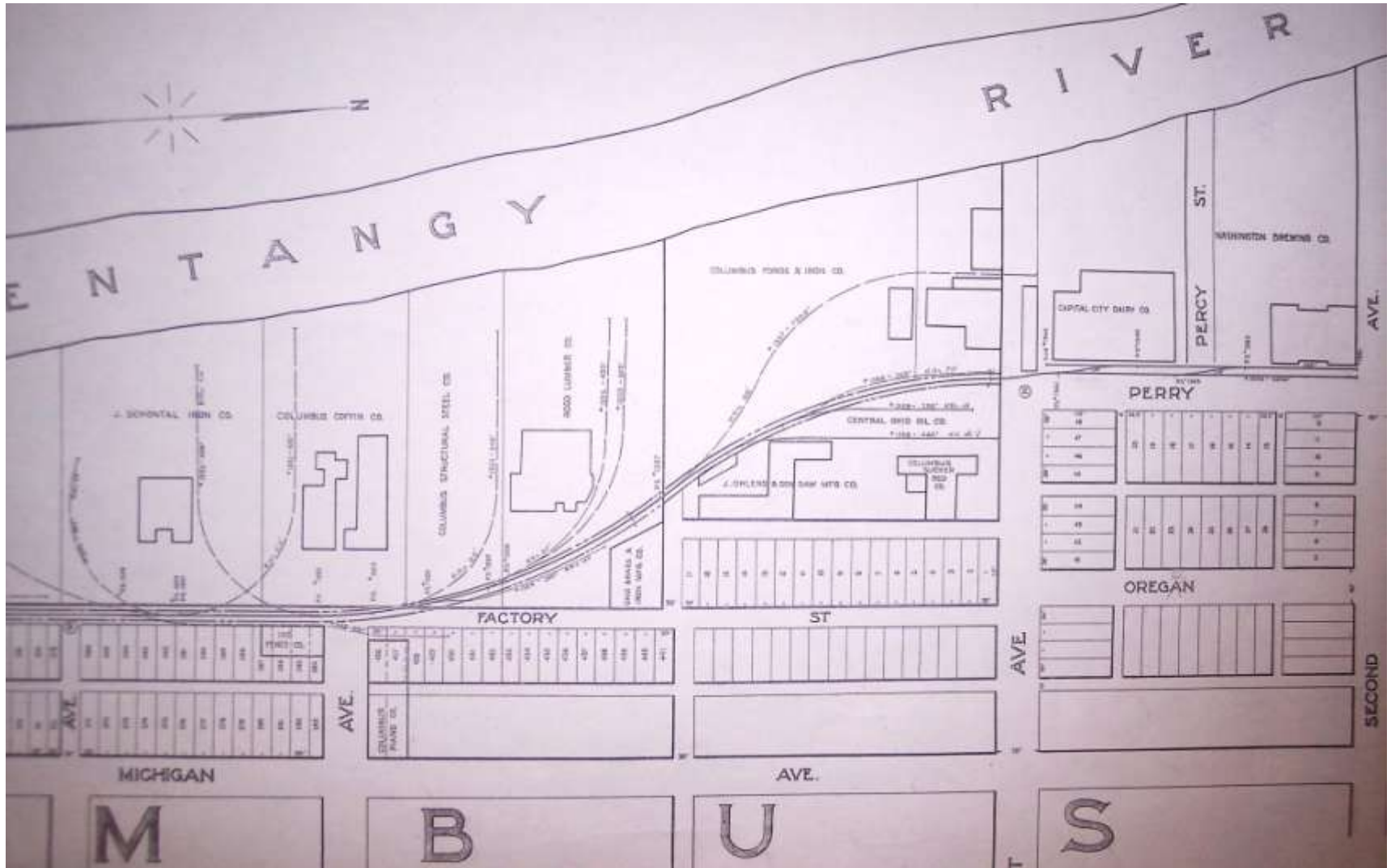
The Neil Track Switching District Map Overview



Neil Track South End Interchanges



Neil Track North End Industries



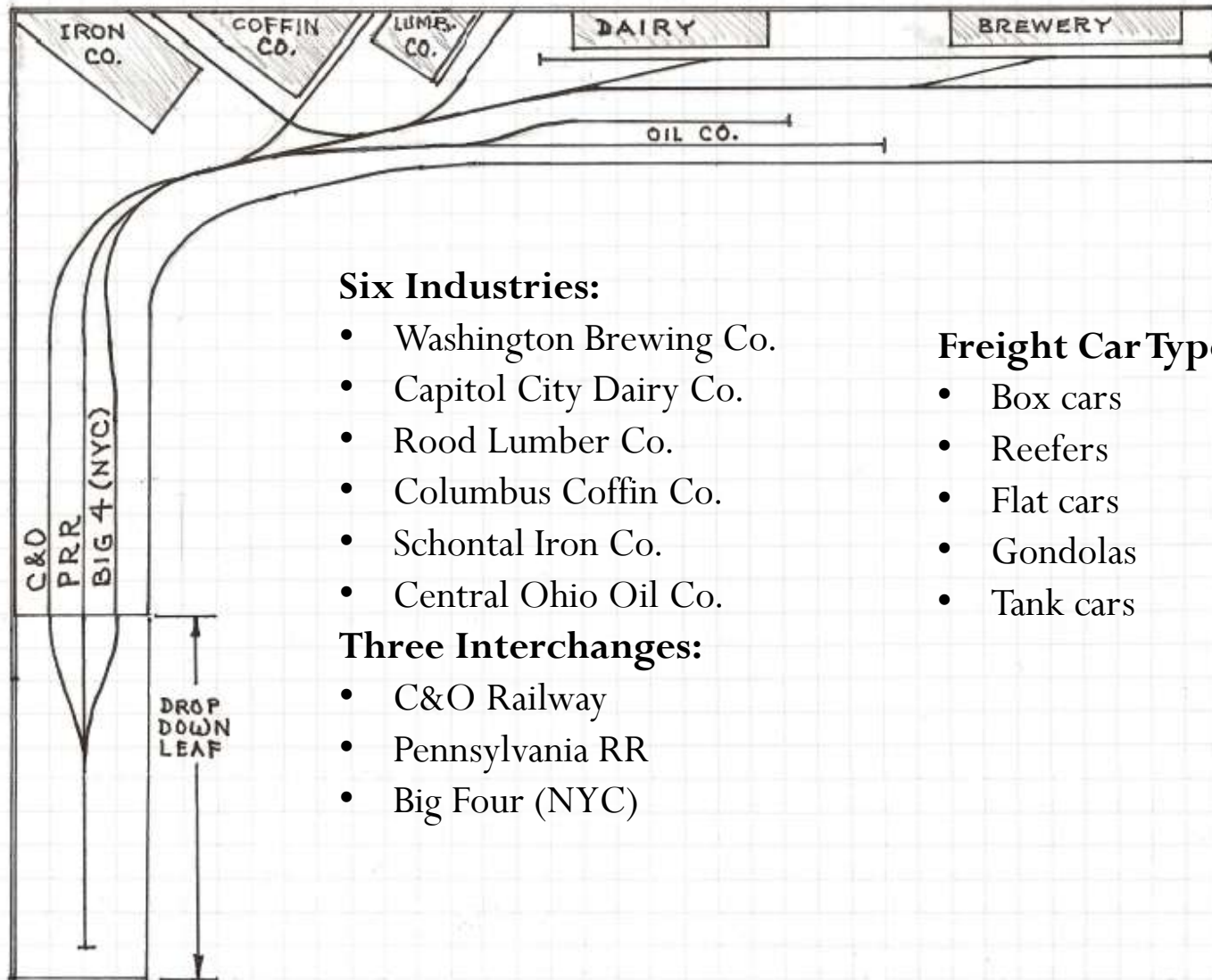
Neil Track Industries



Capital City Dairy

The Neil Track

10 ft. by 6 ft. “Inside Corner” L-Shaped Layout (18-inch wide shelves)



Six Industries:

- Washington Brewing Co.
- Capitol City Dairy Co.
- Rood Lumber Co.
- Columbus Coffin Co.
- Schontal Iron Co.
- Central Ohio Oil Co.

Freight Car Types:

- Box cars
- Reefers
- Flat cars
- Gondolas
- Tank cars

Three Interchanges:

- C&O Railway
- Pennsylvania RR
- Big Four (NYC)

The “Badlands” Brewery District Map Overview



Brewery District North End



Brewery District Structures

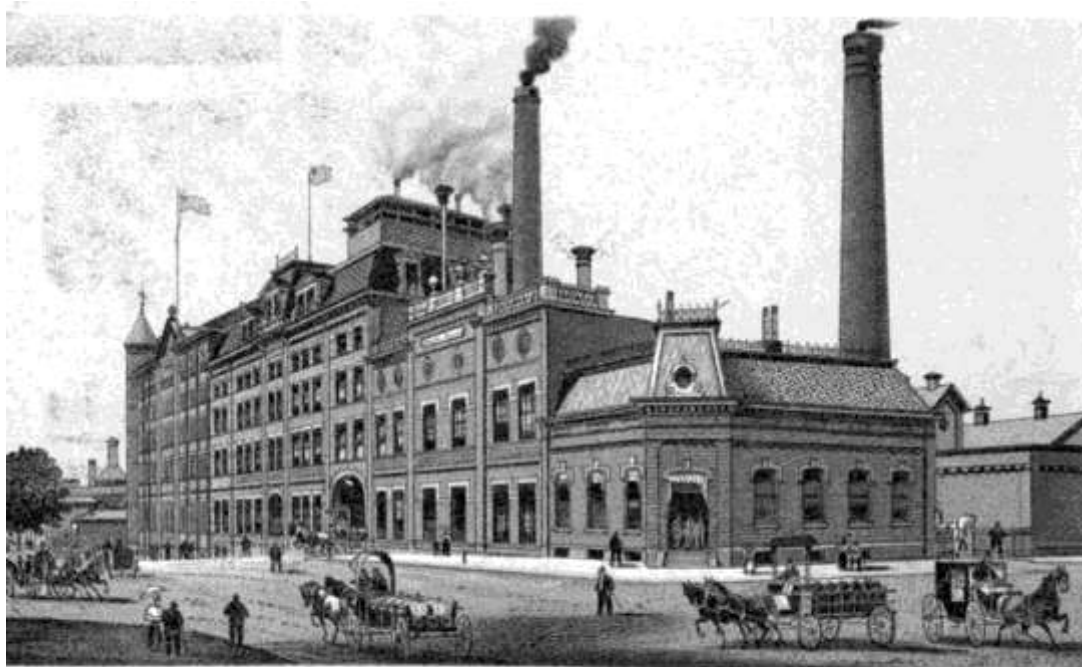


Jones Heel Mfg. Company



**Frankfort Street Tower
(Toledo & Ohio Central Ry.)**

Brewery District Structures, Cont'd.



THE L. HOSTER BREWING CO.

The L. Hoster Brewing Company



Milwaukee Beer & Ale Kit
12-3/8 x 10 x 12 inches
Walthers Part # 933-3024

The “Badlands” Brewery District

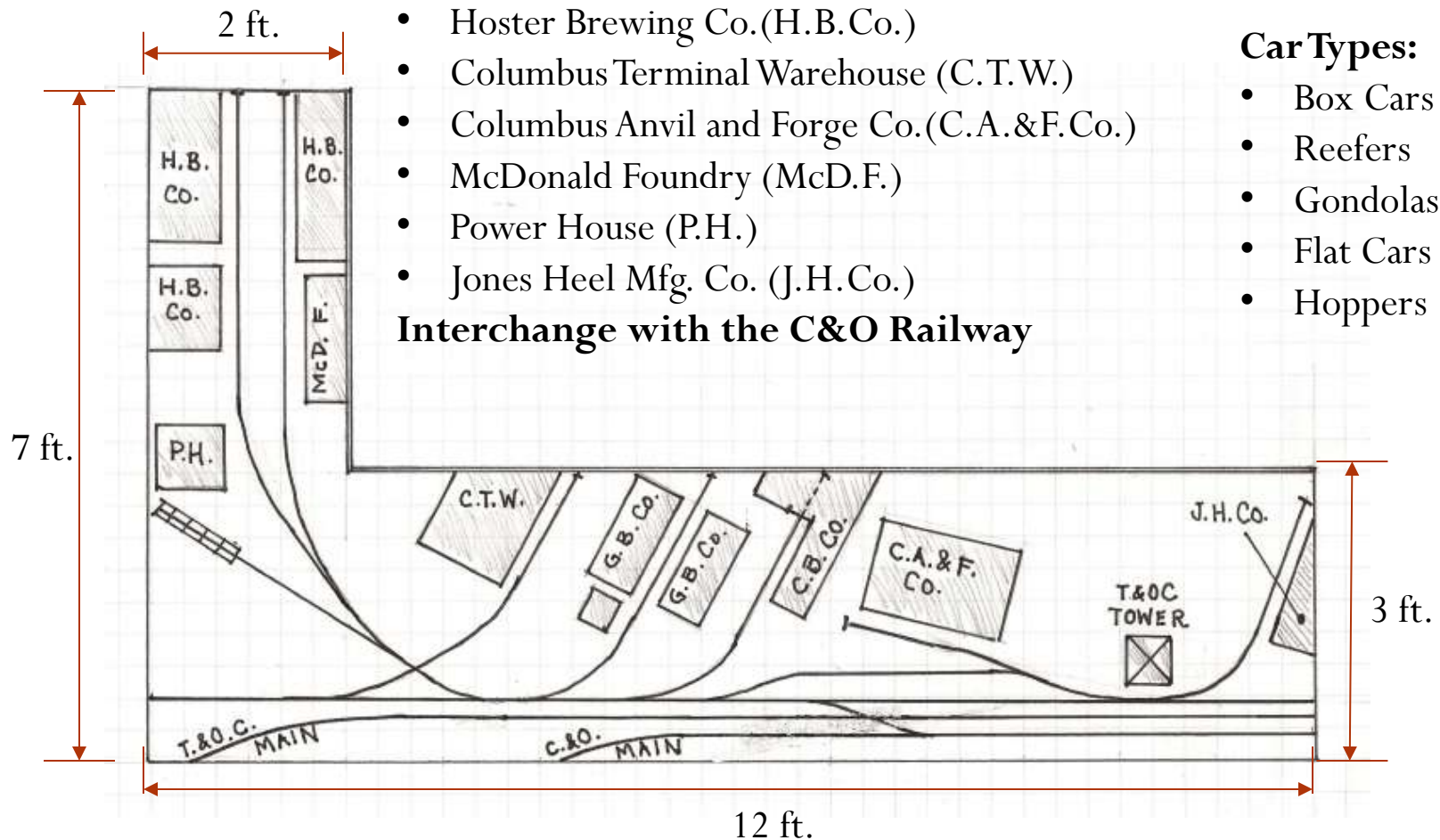
“Outside Corner” L-Shaped Shelf Layout – 12 ft. by 7 ft.

Three Breweries and three other industries:

- Columbus Brewing Co.(C.B.Co.)
- Gambrinus Brewing co.(G.B.Co.)
- Hoster Brewing Co.(H.B.Co.)
- Columbus Terminal Warehouse (C.T.W.)
- Columbus Anvil and Forge Co.(C.A.&F.Co.)
- McDonald Foundry (McD.F.)
- Power House (P.H.)
- Jones Heel Mfg. Co. (J.H.Co.)

Car Types:

- Box Cars
- Reefers
- Gondolas
- Flat Cars
- Hoppers



Summary

- If you have a wall that you can hang a shelf on, you can design a shelf layout that will provide realistic operation
- Shelf layouts come in all shapes and sizes
- Shelf layouts can be any theme, prototype, era, scale
- There are lots of references and material to draw upon for inspiration, including the internet!
- You can get a shelf layout up and running in a short time
- A shelf Layout is a great way to explore a new scale, new era, a new theme, to see if you like it before committing to a large layout
- Go design and build one! And operating it can be fun!

Some Good References

- **Railway Modeller Magazine: Peco Publications, Devon, U.K.**
- **Continental Modeller Magazine: Peco Publications, Devon, U.K.,**
www.pecopublications.co.uk
- **Carl Arendt's Microlayout Design Gallery and Scrapbook web site,**
www.carendt.com
- **Layout Design Special Interest Group web site and LDSIG Journal**
- **Various issues of Model Railroader Magazine and Model Railroading Planning Annuals**
- **Various issues of Railroad Model Craftsman Magazine**
- **"Small, Smart and Practical Model Railroad Layouts," by Iain Rice,**
Kalmbach Publications, 2003.
- **"How to Design A Small Shelf Layout," by Lance Mindheim, published by**
Lance Mindheim, c. 2009, www.shelflayouts.com
- **"8 Realistic Track Plans for Small Switching Layouts," by Lance Mindheim, c.**
2009, www.shelflayouts.com

Acknowledgements

I would like to acknowledge and thank the following companies for granting permission to use their published material in the preparation of this clinic:

- **Kalmbach Publishing Company, for plans taken from Model Railroader magazine and Model Railroad Planning**
- **Carstens Publishing Company (Now part of White River Productions), for plans taken from Railroad Model Craftsman**
- **Peco Publications, U.K., for plans taken from Railway Modeller magazine and Continental Modeller magazine.**
- **Dick Argo and Jim Kehn of Division 6 MCR, for providing advice, guidance and photos**

Thank you for your kind attention....
Questions?

