

Creating Unique Models Using Photorealistic Card Techniques

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models On30 & SM32 Queensland
sugar cane and shire tramways

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The clinic...

- Builds on over a decade of working with photorealistic card models to create Queensland's unique structures/rolling stock.
- Photorealistic textures... using photography and computer manipulation.
- Techniques suitable for any modelling era and locale.

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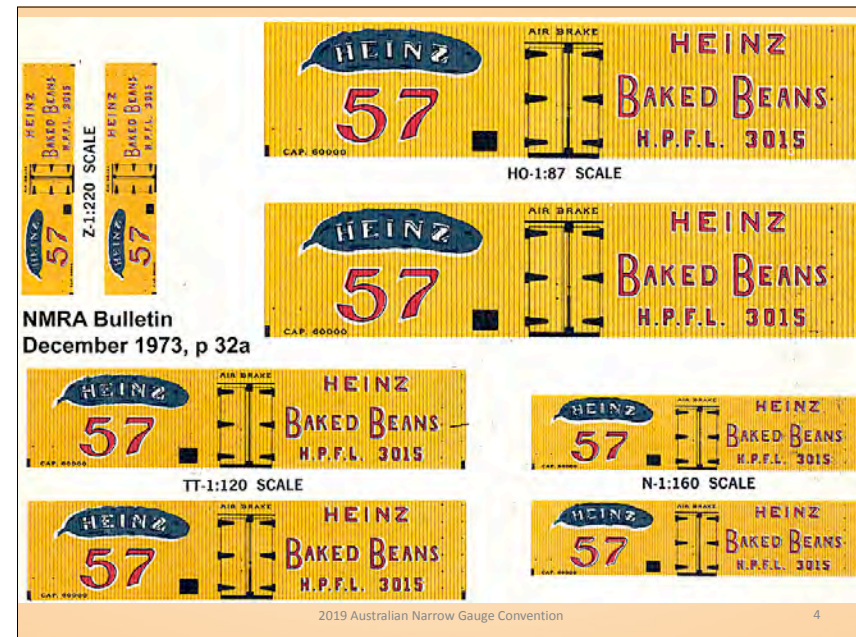
Card modelling evolution...

- Card use from the earliest modelling period, certainly during my 1950s teenage years
- Commercial and homemade brick paper, etc., "Punch Out" from books or single kit pack. Special inserts in modelling magazines
- Doll house type special event items, eg Christmas oriented structures
- Today: Models and textures on the web.

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Photographic sources...

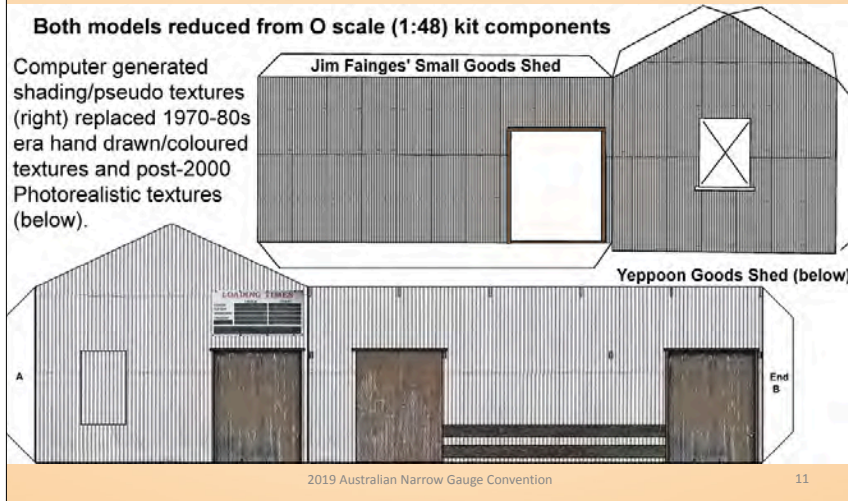


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Card modelling evolution...



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Photorealistic modelling

- Use of photographic images of surface textures to create a more realistic model.
- Textures may be specific to the local environs (eg recognisable doors, signs) or generic (CI sheathing, brick walls, etc.)
- Textures free online, commercial (including kit bashing), or developed by the modeller.

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Sourcing local elements...



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Qld Hotel... door with 3D layers



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Qld Hotel... finished model



Jim Fainges, Licensee Counter Sales & Bistro

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Qld Hotel... transom doors

- Drawn with photorealistic textures added

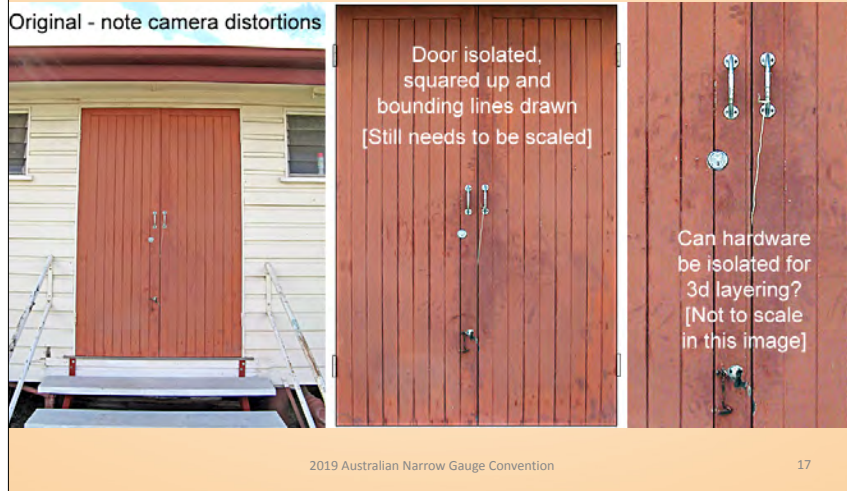


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And their challenges...



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Photographic Tips

- As many (high resolution) photos, from as many directions, as possible!
- Establish scene/locale/purpose and details
- Shoot straight-on for potential texture images
- Large objects need several overlapping images along the length at consistent distance/angle
- Avoid wide angle/telephoto for texture images (image distortion)

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Computer Support

- Image manipulation requires software that allows multiple “layers” for development and adding “textures”.
- 2D (photo or drawing) or 3D software OK, they just have different strengths/features.
- Work on copies of images/files, not originals.
- Save often and make backup copies.
- Ensure good workspace, frequent breaks (RSI)

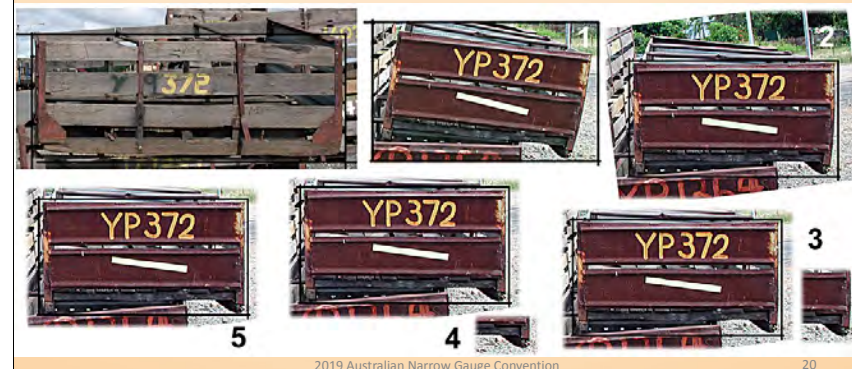
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Yeppoon Pineapple Bins...

- Good side image, but end required multi-step squaring up, image still needs scaling for use




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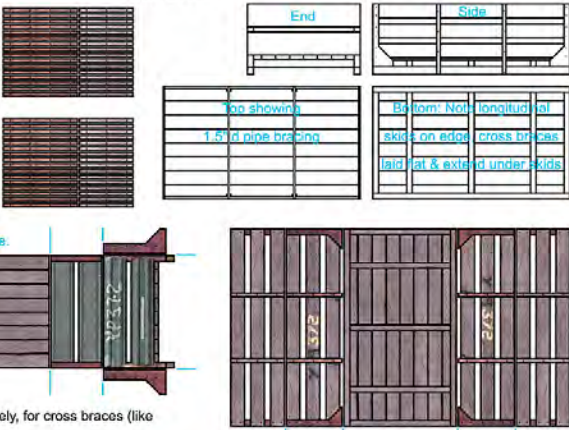
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Yeppoon Pineapple Bins...

Pineapple Boxes, Yeppoon - O Scale (1:48)
 QldRailHeritage.com/mrqc, © April 2018



1.5" vertical steel straps sides
 1" x 2" timber vertical straps inside
 1.5" d pipe, ends flattened across top
 2" angle welded frame corners/ends
 1" x 6" timber sides/floor
 10" wide galvanised plates ends
 2" x 3" timber skids/braces under box



Use 2" x 3" scale lumber, stained appropriately, for cross braces (like joists) and skids under box.

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Developing the Model/Kit

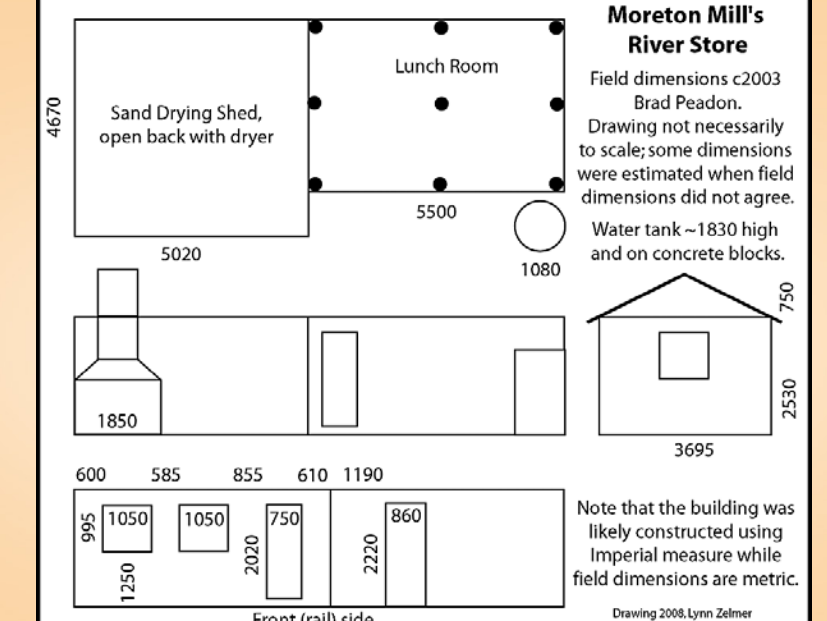
- Initial stages the same as for any model:
 - Research, including plans from publications, etc.
 - Site visit for dimensions and photos
 - Imagined from a photo
- Create scale drawings, decide on construction materials and acquire materials
- Research, Design, Test Build, Evaluate and Redesign, Test Build, Package for distribution.

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Moreton Mill's River Store
 Field dimensions c2003
 Brad Peardon.
 Drawing not necessarily to scale; some dimensions were estimated when field dimensions did not agree.
 Water tank ~1830 high and on concrete blocks.



Note that the building was likely constructed using Imperial measure while field dimensions are metric.

Drawing 2008, Lynn Zelmer

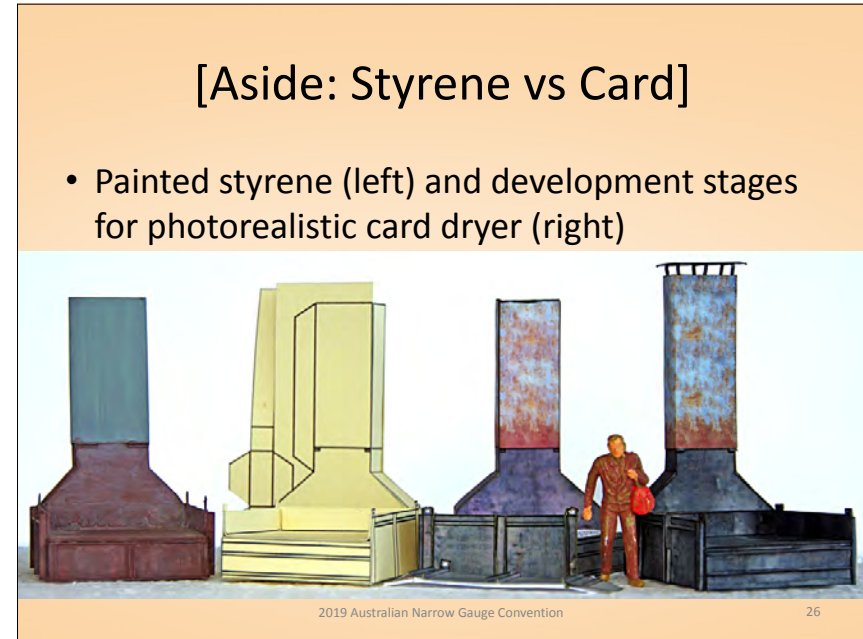
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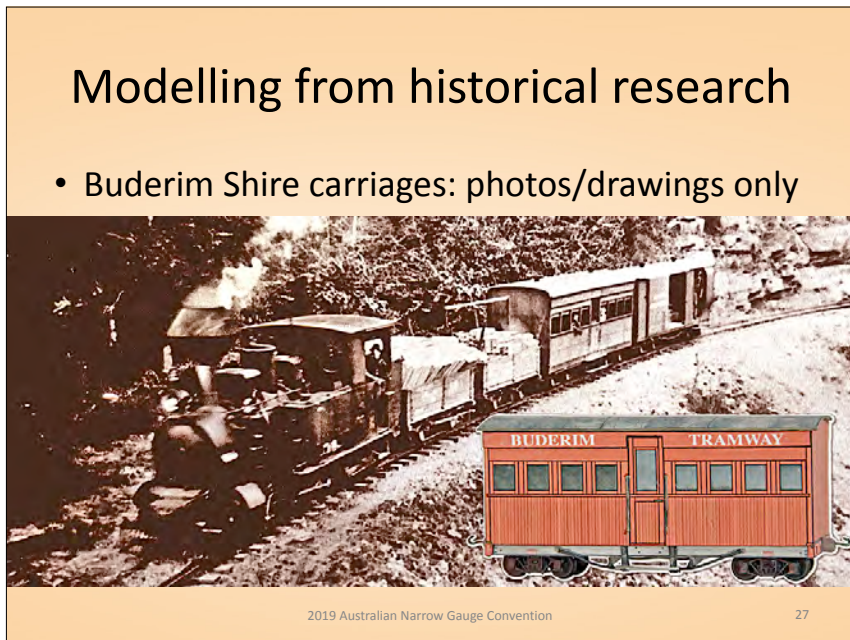
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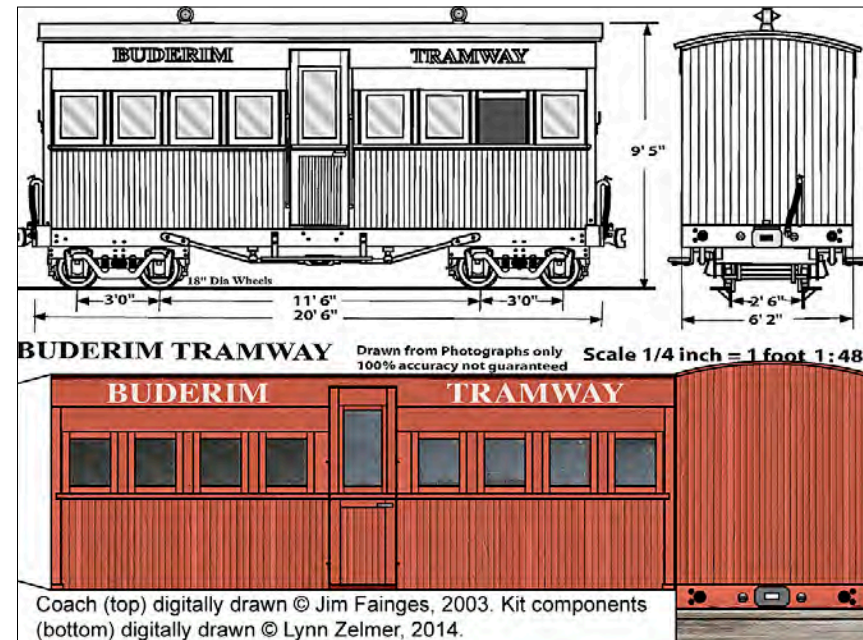
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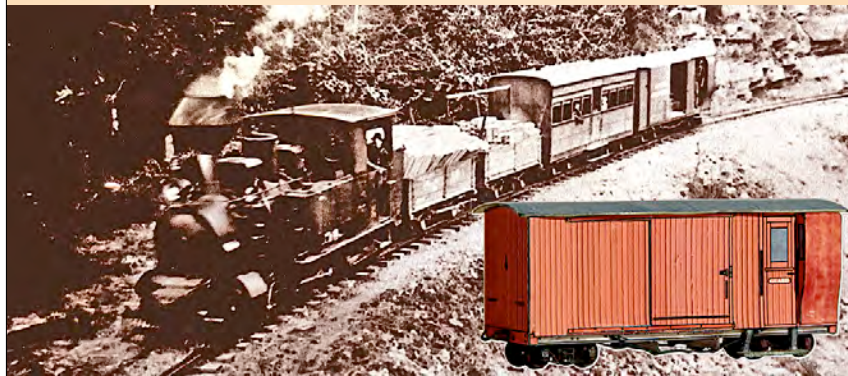
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Buderim Shire Tramway cont.

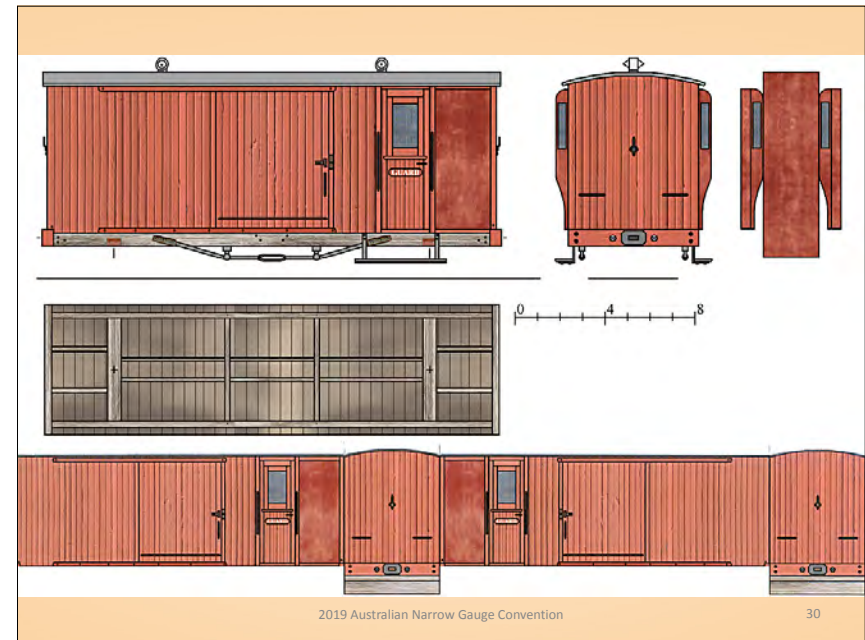
- Likely model should have BT lettering!



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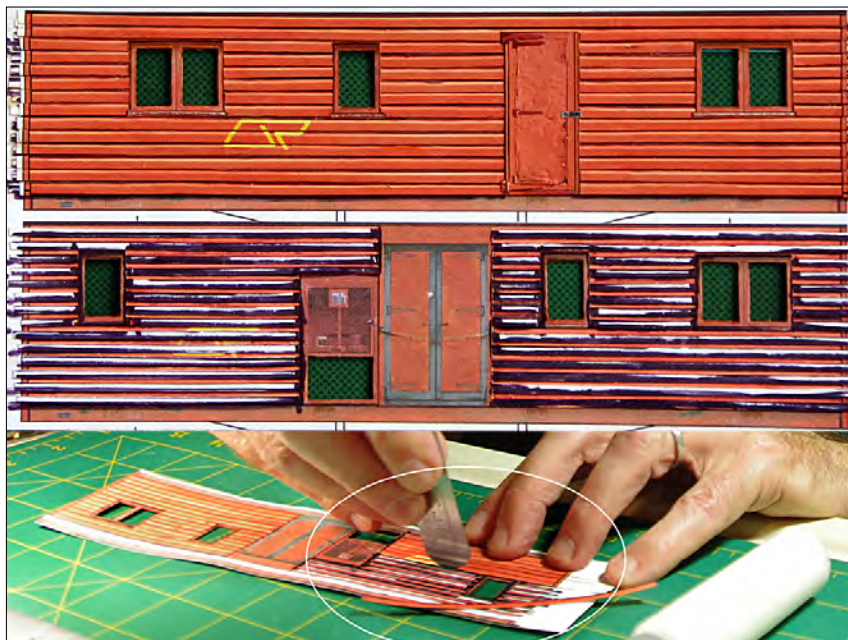
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3D with photorealistic card...



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If all else fails...

- Clever Models textures (structures and some rolling stock, “critters”) and kits; order online.
- Sample below: 4” timber, window with multilayer trim and standing seam sheathing



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order on line @ www.clevermodels.net

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If all else fails...

- Non-commercial online sources include textures.com (sample below: concrete block, wood shingles, galvanised metal) and free cutouts, such as “Build Your Own Historic Illinois Buildings”.



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For the future...

- Commercial, kitbashed and scratchbuilt photorealistic models: backscene, low profile and full featured
- 2D/3D modelling: dedicated model railway software; entry level through professional design software
- Purpose? Cost (h/w & s/w)? 2D only, 3D for 2D output, 3D printing?

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Free online photorealistic kits

- QR 32' timber camp wagon, QR cream shed, QR fettle's shed, QR small halt (station), and QR small communications shed.
- Queensland-style cottage, garden shed, brick toilet block, and timber picnic tables.
- Moreton Mill's River Store lunch room with dryer shed and sand dryer, Queensland-style Country Hotel, Saw Tooth Roof Industrial Building and 20' shipping container.
- Buderim Shire Tramway carriages: Coach and Guards' Van.

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Kits/Photos/Research, etc.

- CaneSIG and Modelling the Railways of Queensland Convention web sites:
zelmeroz.com/canesig and
www.zelmeroz.com/mrqc.
- Narrow Gauge Downunder (NGDU) magazine for details on development, techniques, etc.

• Happy Modelling!

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