

GREAT LAYOUTS

BRITAIN'S **BEST MODEL** RAILWAYS



• 'OO' GAUGE • 'N' GAUGE • 'O' GAUGE



20

£7.99

KEY

NOT JUST WEATHERING



WHY CHOOSE TMC?

We're constantly trying to increase the quality of our weathering and the service we provide.

Our fast weathering turnaround times mean your models will be back on your layout within 1-2 weeks.

With wagon weathering starting at just £3.50 and Locomotives from £20.00 it's great value, and of course we can also take it to the next level with our deluxe weathering service.



www.themodelcentre.com

THIS IS TMC WEATHERING



Weathering Range	TMC Supplied	Customer Supplied
Value Small Wagon Weathering	£4.00	£5.00
Standard Small Wagon Weathering	£7.00	£9.00
Deluxe Small Wagon Weathering	£11.00	£15.00
Value Large Wagon & Coach Weathering	£7.00	£8.00
Standard Large Wagon & Coach Weathering	£10.00	£12.00
Deluxe Large Wagon & Coach Weathering	£15.00	£18.00
Triple packs (Small Wagon x 3)	See above	See above
Value Locomotive Weathering	£20.00	£22.50
Standard Locomotive Weathering	£30.00	£35.00
Deluxe Locomotive Weathering	£50.00	£65.00
Value Multiple Unit Weathering	£35.00	£40.00
Standard Multiple Unit Weathering	£50.00	£55.00



t. 01947 899125

What's inside...

- | | | | | | |
|----|--|----|---|-----|---|
| 6 | DOREHILL ST STEVENS
This massive 'OO' gauge layout is a whole railway system in miniature. | 42 | PENHALLICK
This slice of pure Cornwall found a new home after it was retired from the exhibition circuit. | 82 | WEST COAST SOUTHERN SECTION
'N' gauge was used to its greatest advantage in recreating two large stations from the West Coast Main Line in the 1970s by Andrew Armitage. |
| 12 | GRINDLEY BROOK
Fast running and a continuous circuit were essential to this impressive 7mm scale layout. | 48 | REEVY ROAD WEST
West Yorkshire is the setting for Bradford MRC's first DCC controlled 'OO' gauge layout. | 88 | WHITEACRES
This privatisation era 'OO' layout started out as a steam era scene, but has changed radically during construction by Stafford Railway Circle. |
| 18 | EVERARD JUNCTION
The original Everard Junction was a huge hit on YouTube. We look back on the model as it was in 2017. | 56 | OVER PEOVER
John Ryan's stunning home-based 'O' gauge layout is a delight to see from every angle. | 94 | THE SUMMIT
'O' gauge was chosen on a grand scale to create this awe inspiring exhibition layout based on the Settle and Carlisle line by Yeovil Model Railway Club. |
| 24 | VALE OF OXBURY
This magnificent 'N' gauge layout took inspiration from Pendon to create a scene with depth. | 62 | EXETER JUNCTION
The Western Region in the early 1970s was the period of choice for this attractive 'OO' gauge layout. | 100 | SEVEN ASH
The former turntable at Old Oak Common was the inspiration for this compact scene from the 1970s built by Steve Pike in 'OO' gauge. Featuring diesel hydraulics, it is a clever design of depot layout. |
| 30 | BILLINGHAM
Middlesbrough MRC looked close to home when it decided to model Billingham station in the North East. | 68 | BEWDLEY
Famous as part of the Severn Valley Railway in preservation, this 'OO' model is set in the 1960s. | | |
| 36 | BILSTON ROAD
The West Midlands in the final decade of steam are the inspiration for this brilliant home-based loft layout. | 74 | TONBRIDGE WEST YARD
Paul Wade brought this inspirational Southern Region layout back to life in 2015. | | |



Introduction



Welcome to the third edition of *Hornby Magazine's Great Layouts*. This volume is packed full of favourite layouts from past issues of *Hornby Magazine*, and each includes previously unseen

images that we couldn't fit into the original feature for the magazine.

Inside this volume you will find 20 inspirational layouts, picked to cover steam and diesel era subjects across the eras as well as representing the 'big three' scales - 'N', 'OO' and 'O'. All three are important parts of the model railway hobby which reflect different tastes and the latest

trends. 'O' gauge is currently on the rise with an increasing range of ready-to-run products, but 'OO' gauge remains the most popular, accessible and affordable of all in British modelling circles.

Great Layouts is a perfect way to sit back and enjoy some of the finest model railways we have featured in the magazine. If this is your first taste of what we do, don't forget to visit www.hornbymagazine.com where you can find the latest model railway news, buy the latest issue and much more besides.

Mike Wild
Mike Wild,
Editor, Hornby Magazine

106 CALVERDALE

Built by the great 'N' gauge modeller Andy Calvert, this superb LMS through station is kept as a lasting memory of his abilities.

112 NEWTON CENTRAL

Military modelling, memories of Chesterfield and a new loft room were the starting point for Andy Statham's 'OO' gauge home-based model railway.

118 MELTON MOWBRAY (NORTH)

The lost LNWR/GNR joint station is the subject of this respected 'N' gauge exhibition layout by John Spence and Steve Weston.

124 OLD ELMS ROAD

Bodmin and District MRC set out to model a Western and Southern operated mainline station in 'OO' gauge.

12



Grindley Brook by Hillingdon Railway Modellers in 7mm scale.

42



Penhallick by Mel Rees and friends models the Southern Region in 'OO' gauge.

124



Old Elms Road is Bodmin and District MRC's busy 'OO' gauge mainline layout.

EDITORIAL

Editor: Mike Wild

Assistant Editor: Mark Chivers

Sub Editor: Andy Roden

Senior Designer: Steve Diggles

REGISTERED OFFICE

Units 1-4, Gwash Way Industrial Estate, Ryhall Road, Stamford, Lincs PE9 1XP

PRINTING

Precision Colour Printing Ltd, Haldene, Halesfield, Telford, Shropshire TF7 4QQ.

ADVERTISING

Advertising: Brodie Baxter

Email: brodie.baxter@keypublishing.com

Tel: 01780 755131 Fax: 01780 757261

Advertising Production: Rebecca Duffy

Tel: 01780 755131

Fax: 01780 757261

Email: rebecca.duffy@keypublishing.co.uk

PUBLISHING

Publisher: Mark Elliott

Tel: 01780 755131

Fax: 01780 757261

Email: mark.elliott@keypublishing.com

Group CEO: Adrian Cox

Head of Advertising: Brodie Baxter

Head of Production: Janet Watkins

Head of Content Management: Finbarr O'Reilly

Chief Digital Officer: Vicky Macey

Chief Customer Officer: Gaynor Hemingway-Gibbs

Chief Content & Commercial Officer: Mark Elliott

HORNBY is a registered trade mark of Hornby Hobbies Limited and is used under licence.



Key Publishing Ltd,

Units 1-4, Gwash Way Industrial Estate
Ryhall Road Stamford, Lincs PE9 1XP

Dorehill

ST STEVENS

This massive 'OO' gauge layout is a whole railway system in miniature created by Soar Valley MRC. Better still, it can be seen in full on the exhibition circuit.

PHOTOGRAPHY, MIKE WILD



1 Right: A Gresley 'K3' 2-6-0 bursts out of the tunnel with perishable traffic. The smoke vent for the tunnel can just be seen at the top of the landscape.

2 Below: One of the highlights of Dorehill St Stevens is the impressive triangular junction leading from the central storage yard. A BR 'Britannia' 4-6-2 takes an express out onto the main lines as a Class 15 crosses the canal on the station approach. On the left a rebuilt 'Royal Scot' has just left Dorehill heading for the storage yard.



DOREHILL is set in the 1958 to 1961 period on the London Midland Region and located in the North Midland to South Yorkshire area with Eastern Region trains transgressing. John Elliott says the group involved has tried to be prototypical and have been as accurate as their minds allow: "We are in it for the pleasure and enjoyment, and trying to give the impression of a real railway."

The aim has been to present a railway passing through the countryside or town with cuttings and banks appearing to have actually been created to let the railway pass through or over.

Dorehill measures 41ft 9in x 14ft 6in with all-round viewing. The storage yard is in the centre and creates a destination for stock running around the layout via three main junctions. Electrics for Dorehill remain analogue with Gaugemaster controllers. Digital Command Control (DCC) was considered but using such diverse stock it was thought an impossible concept and only a few members had DCC fitted models.

Operation

Dorehill station has five through platforms, three north and two south, with a bay platform northbound and a goods avoiding line in each direction. These have two sections which can be used by both controllers. These sections allow continuous operating in both directions, except for the crossing of lines to gain access to the bay, parcels depot, two-way and return running.

Incorporated into the station control area is the small goods depot which gains its access from the north. All platforms and approaches are signalled with colour lights, mainly two aspect, but the northern approaches are semaphore with a theatre display giving platform numbers. Beyond each end of the station is a junction. The south end diverges to a twin track branch we call 'to Birmingham' and the mainline onto London and the south. The other end splits into the line to Newbolden and the north with the left-hand junction to Nottingham. The mainline slow goods traffic takes the Nottingham and London line.

A different concept is used for the mainlines and Newbolden Junction. The up and down lines are controlled independently to provide fluent >>



Alongside the main line at Newbolden is the busy market.

operation. Just as the tracks come in from the east they diverge, hence the junction part of the name. Newbolden Junction has four platforms. Platforms 3 and 4 go off to Derby (back into the storage yard) and from Derby. Platforms 1 and 2 go off to Leeds and from the north. At the same time the dual goods line joins at the station throat. A problem arises here as the Derby trains now share the running lines. All lines are signalled; mostly with semaphores on this section, the main controller operating the goods signals through Newbolden station.

Hidden hub

The storage yard is the hub of the layout, setting the pace for the timetable with two operators - one for outbound north and inbound south and the other out south and in north. All routes are sectionalised to both controllers allowing trains to move in and out at the same time.

There are 19 passenger lines in the off-scene yard and at an exhibition they hold seven corridor trains from seven to 11 coach formations. There are three different non-corridor stock rakes and six Diesel Multiple Units and several fast freights which are marshalled as required. The ten goods fiddle tracks are allied to the main storage yard and hold full trains. These are fed into the main system as required and needed.

The goods yard is an independent section with its own operator. It marshals, shunts and in return feeds back to the fiddle yard. This is a very important operation as it keeps movement along the line and acts as entertainment when a delay in passenger movement occurs.

Scenery

The scenics on Dorehill have been quite a task if not a labour of love. With over 112ft of viewing area to be created, and more than 140 buildings required, only three years were allocated to complete the exercise. The layout construction itself and electrics were completed within the first year and have been exhibited in their raw state at the club's open day it holds every two years or so. This gave the team the opportunity to test the system before scenery was started.

With such a lot of scenery, how on earth do you complete it? As John explains: "We began at each end of Dorehill station, working in two

directions. This enabled us to have continuity and not overcrowd each other while working. The first major area was Tetley Tunnel for which wooden frames were constructed and interwoven strips of card for the surface paper glued thereon."

At the North end of Dorehill is a large triangle which gave the opportunity to vary the levels. A canal basin developed below a viaduct with the structure embedded into the side of the embankment. The adjacent buildings had to be scratchbuilt from photographs of real structures. "The real thing is always best to copy if it's possible," says John.

Bridges and viaducts also had to be scratchbuilt but some of the village buildings were modified Skaledale. More than half of the scenics were completed by the second year, still on schedule.

Newbolden station was next, a station of four platforms on a curve. A large sheet of 2mm card was placed over the area and carefully the whole station was cut, allowing the road to be >>



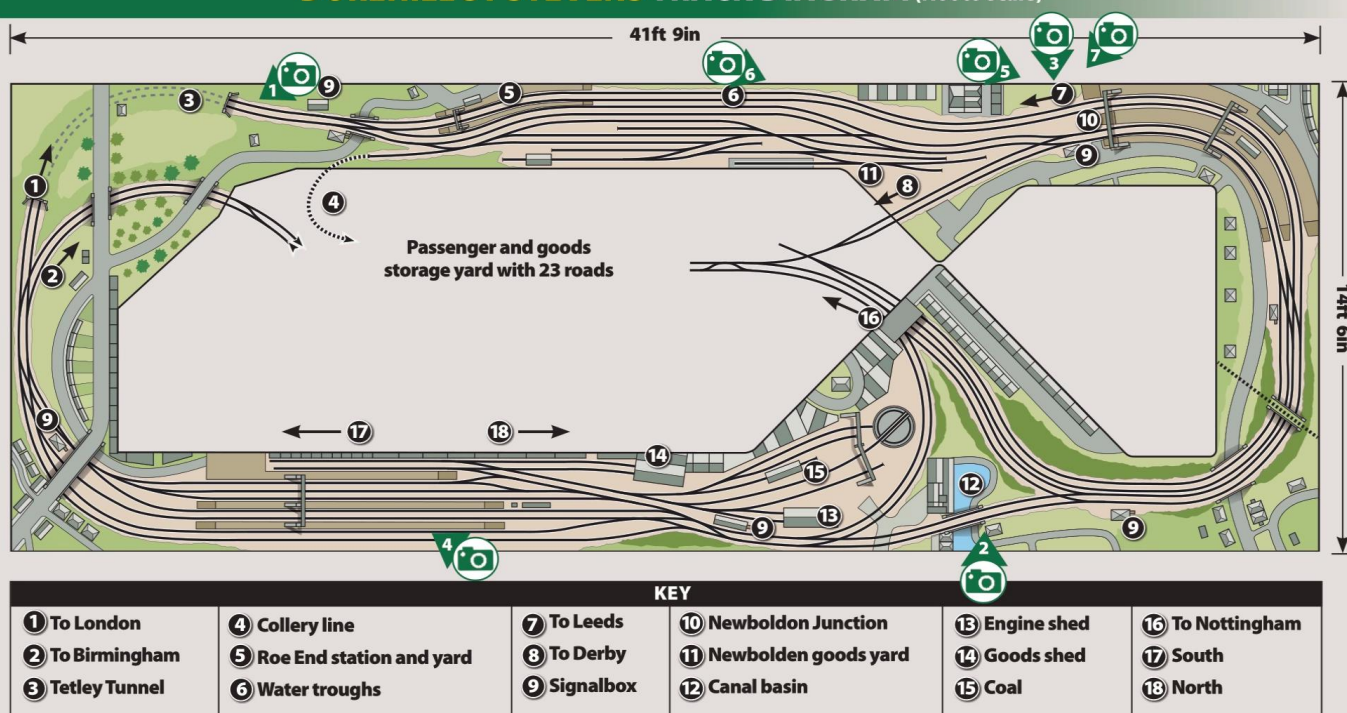


4 Above: At Dorehill station a Stanier 'Black Five' has just arrived while a Fowler 'Jinty' 0-6-0T is engaged as station pilot.

5 Below: At Newbolden station a Gresley 'V3' 2-6-2T takes a quad-art set along the main line while an Ivatt '4MT' 2-6-0 has charge of a goods heading back to the storage yard.



DOREHILL ST STEVENS TRACK DIAGRAM (Not to scale)



at platform height. The same method was used for the middle and inside platform. The whole platform surface was glued, allowed to dry until tacky and flagstones were etched by hand. Shops in the surrounding area were scratchbuilt by necessity of shape and fit. The footbridges are also scratchbuilt, but with a shortage of time all terrace houses and other shops are Skaledale, nearly 40 of them in all.

Final phase

The last 30ft apart from Dorehill was now tackled. This was to be a goods yard that worked as well as it looked. John says that this had been thrashed out in the design stage and was probably the most contentious part. Access and exit is gained from the Newboldon end. The other exit north was a compromise but is useful for operating potential. The colliery line bears off to the left at the north end, disappearing through a bridge and on to the storage yard.

The actual scenic design was a compendium of ideas but two members stepped forward and with their usual sensibility and created the goods yard. One also made the ventilating towers on the tunnel adjacent to the yard, which disgorges smoke from a small generator below and the other made the control panel, so that whole area was left in their capable hands.

The row of scratchbuilt buildings to the south of Dorehill and above were from a previous layout, much modified but fitting the bill.

Beyond the triangle on the way back to the storage yard there is probably the greatest amount of scratchbuilding. Looking from the viewer's side the triangle's six lines converge to a tunnel topped by a large conglomeration of high industrial buildings. These are based on the outgoing tunnel at Birmingham New Street station taken from an old Bradford Barton book. They give the impressive look that was sought

to give great effect to the viewer and hide the storage yard entrance.

Adjacent to the triangle is the motive power depot and parcel building which is next to the engine shed. This was scratchbuilt as were the coaling plant and sand dryer.

Dorehill St Stevens station is based on Derby Midland station. The main platforms at Dorehill were made in the same way as the others but scribed with paving slabs and weathered as the buildings. The white edges are strips of thin sticky quality paper from a printer, cut with a very sharp knife.

Main attraction

Exhibiting a large layout is always a challenge, but John says an innovative solution helped ease the challenges: "The difficulty with such a large layout, apart from the obvious problems of storage, transport and number of operators, is the ability to see where your train is. A solution, although a little expensive is CCTV cameras. The monitor at Dorehill is provided with three cameras and the monitor at Newboldon with

two. This covers all the hidden lines. The cost was probably around £200: this why we join a model railway club - what one cannot afford together we can collectively."

Another attraction at Dorehill is the display board, about 2ft x 18in. This displays a myriad

of LEDs showing the departures from the station controlled by a touchscreen computer. This is operated as the train is leaving, moving up the screen to make way for the next event and eliminating the departing train. Up to ten departures are displayed at any one time.

The main premise of operation is to run the layout like the real thing, so there is no 'tail chasing' or creating a racetrack effect. There is always something moving somewhere on the layout but not always in front of every viewer all the time, just like the real railway. ■

 Freight trains operate as required in between the passenger services. Stanier '8F' 2-8-0 48739 plods along the main line past the goods yard with a rake of loaded 16ton mineral wagons.





A Class 40 roars into Newbolden station across the large level crossing at the head of an express. Next stop, Dorehill.



Grindley BROOK

Fast running and a continuous circuit were essential criteria when it came to developing Hillingdon Railway Modellerss outstanding 'O' gauge layout, Grindley Brook.

PHOTOGRAPHY, MIKE WILD

HILLINGDON RAILWAY Modellers built their first layout in 1984, but Grindley Brook is the biggest in a line of six created by the group. Previous projects included Compton Abbas in 1991 and East Dean which debuted in 1997. These all had a common feature – the use of 7mm scale 'O' gauge as the scale of choice for the group.

However, that is where the similarities ended as East Dean was a single track branch

line with a storage yard at each end while Compton Abbas was also based on branch line operations like the club's previous smaller scale layouts. Grindley Brook was something different as it was the club's first continuous run exhibition layout which was designed to build on the footprint and successes of its regularly used 'O' gauge test track.

One of the ideals which instigated the change in layout design was the intensive operation required for an end-to-end layout. The club longed for a railway where they could enjoy

trains running on a circuit with the advantage of a fully scenic backdrop. The test track could provide one component of that, but it had no scenery due to the need for it to be easily stored and occupy the minimum amount of space when not in use.

Peter Storey takes over: "The excellent Holiday Haunts 'O' gauge layout was an inspiration for Grindley Brook. The complete layout measures 34ft x 20ft and because of its size, we've found that operating Grindley Brook at shows has turned out to be just as demanding »

 **'WD' 2-8-0 90434 takes charge of a coal train as a rebuilt 'Royal Scot' 4-6-0 thunders towards Grindley Brook station. The layout is built to 7mm scale, 'O' gauge.**





A Dapol Fowler 'Jinty' 0-6-0T crosses back onto the mainline after collecting wagons for its pick up goods.





3 Left: At the station a Royal Mail van collects the latest consignment of mail sacks from the wonderfully detailed station.

4 Below: An Ivatt '4MT' 2-6-0 disturbs the peace as it clatters through the station with a loaded coal train. Figures can be changed using carefully drilled holes at different locations along the platform.

as managing the previous smaller layouts. On the upside we have been able to display much more of our stock, but it now takes as much time setting out the trains as it does to assemble the layout."

New direction

The starting point for Grindley Brook was an oval test track which had been built for club running days. "We decided to borrow the storage yard boards from the rear of the test track for Grindley Brook and develop a new scenic layout at the front," says Peter. "There were various suggestions for themes, regions and periods but, eventually, we selected a secondary line, which was built by the London North Western Railway (LNWR), and set it in the British Railways period of 1955-1965."

The club looked at maps to find a location where a railway crossed a canal or river, a feature high on the hit list, and eventually came across Grindley Brook between Whitchurch and Chester in Shropshire. Peter added: "The 1961 map we used didn't show a station at Grindley Brook which gave us the licence to design one incorporating lots of old LNWR features. It was only a few years later that we discovered that there had been a halt at Grindley Brook which closed in 1957."

Having selected the premise of the new layout the serious design work started in about 2006. CAD design was used to design the shape of the new scenic boards as well as the trackwork while the brief also called for an unusual track gauge of 31.5mm. Standard 'O' track is 32mm gauge, but as Peter explained previous layouts had confirmed the better visual running of this slightly narrower gauge.

By the end of 2007 birch plywood was being cut to assemble the eight new scenic baseboards. "We always use Birch plywood as we have found it splinters less than the usual plywood from high street DIY centres. It is more expensive, but the superior quality is well worth it," Peter adds. Two years later, after many weeks of cutting and shaping, final assembly began and the CAD drawings started to take shape in 3D.

The whole layout is oval-shaped and each one of the eight new boards is on a gentle convex curve making the total width of the scenic section 32ft. Each board is 2ft



10in wide. The boards at the station end are straightforward with a solid top, but about halfway along the design changes to open frame. This is to accommodate the embankment as the railway crosses over the canal on the approach to the tunnel.

Creating the scene

A year later and track work was progressing for Grindley Brook and attention was starting to turn to buildings and structures. Mock-ups for the signalbox, station buildings, goods shed, weighbridge and the station footbridge were made from card to work out exactly where to position each item. The platforms were then marked out followed by the road bridge across the scenic break and the tunnel at the opposite end of the scenic section. Meanwhile club members were building the tunnel entrance, canal bridge, canal lift bridge, road bridge and signalbox at home.

The embankments were shaped from polystyrene and glued to the boards before

being covered in Modroc plaster bandages. Artex was spread over the Modroc and finally sealed with PVA glue. Brown powder paint was added to the Artex powder so that should any of the landscape get slightly damaged it wouldn't reveal a white patch but rather a brown soil colour.

The whole of the goods yard area was covered in very fine cinders which were gathered from a local canal towpath before sifting down to a fine powder to represent the typical goods yard surface.

The embankments, hills and tunnel were then covered with carpet underlay which was trimmed very low before being painted with diluted artists water-soluble oil paint. Static grasses were added on top of this base layer to create a realistic final effect. Peter adds: "We assiduously avoided yards of the same shade of ground cover as railway embankments and hills tend to be covered in many subtle shades of green. This was then all topped off with shrubbery of various heights and colours."

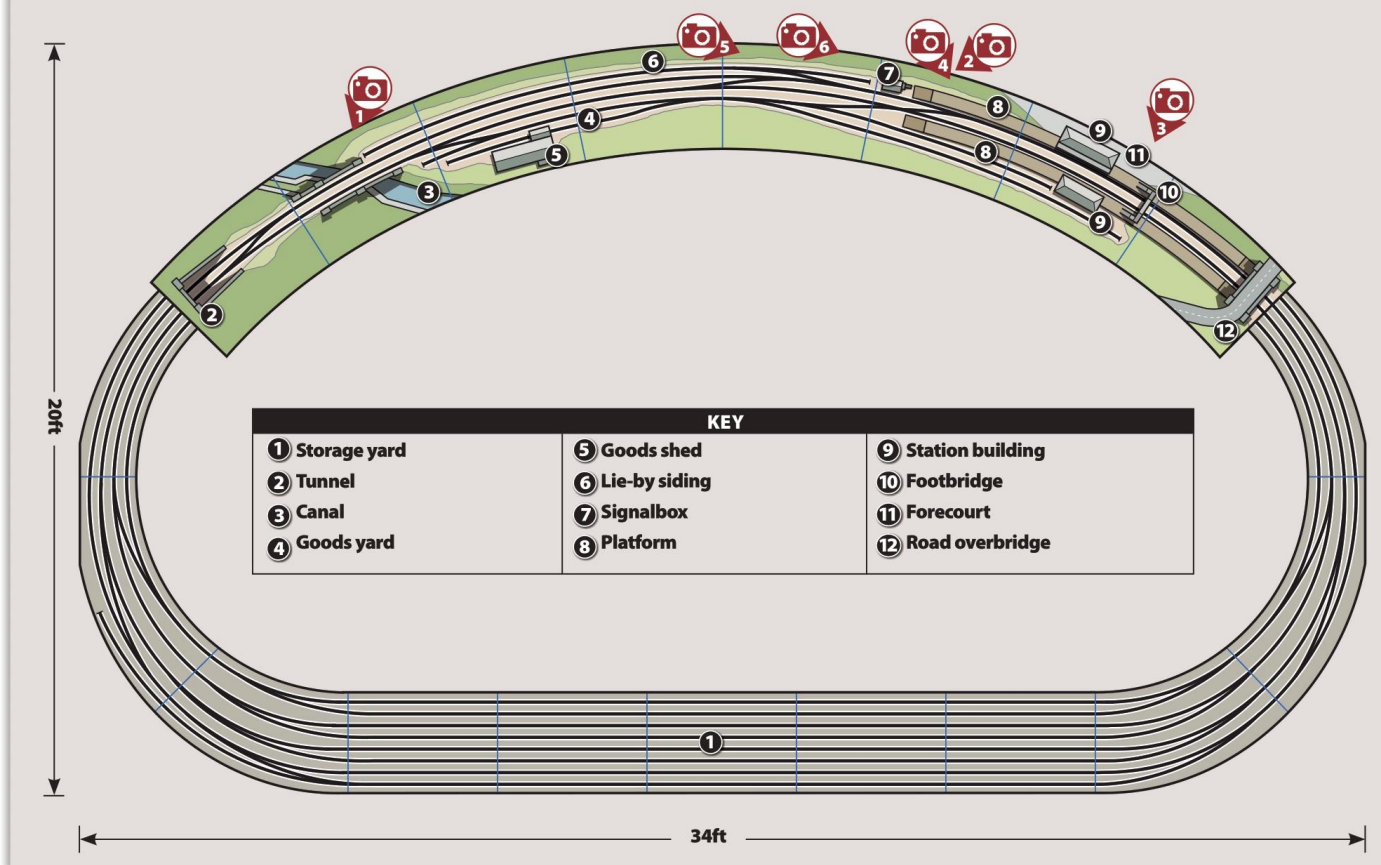
Once that was completed the builders started work on the wooden wire fence that runs along the embankment virtually the whole length of the scenic section. This alone took about two months to complete. The 'wire' is made from an American product EZ Line, an elastic polymer which stretches and therefore should anyone touch the fence the stretch in the wire means it's less likely to be damaged.

Rolling stock

Grindley Brook is analogue controlled and currently has an eight-track storage yard – though there are plans to expand it. Each of the long tracks can hold two trains using section switches. This allows the club to operate a variety of locomotives and rolling stock, but with the addition of two further roads in the future capacity will be increased still further. Club members provide all of the rolling stock and the vast majority is kit built. This includes locomotives, carriages and wagons with a smattering of ready-to-run »



GRINDLEY BROOK TRACK DIAGRAM (Not to scale)



products on the roster.

All exhibition models are fully weathered and detailed before entering service and the same goes for carriages and wagons as for locomotives. Highlights of the fleet include a Fowler parallel boiler 'Patriot' 4-6-0, a 'WD' 2-8-0, a Fowler '4P' 2-6-4T, a GWR 'Dukedog' 4-4-0, an Ivatt '4MT' 2-6-0 and a Stanier 'Black Five' 4-6-0. Carriages include two rakes of LMS Period III corridor stock – one with an LMS Stanier 12-wheel dining car – a parcels train featuring a rake of kit built stock and an ample and growing array of goods wagons modelling everything from the standard 16ton mineral wagon and BR 12ton box van through to bolster wagons, tankers, hoppers, sleeper wagons, ballast hoppers and more.

Future tasks

Only the station buildings remain to be finished and weathered. Many other small pieces that go into making a scene come to life have slowly been added. The last major task is to finish the back scene which is currently plain blue curved backboards. Discussion is ongoing about how best to present the back scene.

"We've been showing Grindley Brook on the exhibition circuit, during its various stages of construction, since 2013," comments Peter. "We were very surprised and happy to win the 'Best O Gauge Layout' trophy at the Warley 2017 Show and we are booked up with two shows a year until 2022."

You can be sure to see Grindley Brook on the exhibition circuit for years to come and for more information about the club and its regular test track running days visit www.hillingdonrailwaymodellers.co.uk ■

Right: Realism is everywhere on Grindley Brook, right down to the signals, track and ballast.



"You can be sure to see Grindley Brook on the exhibition circuit for years to come."



A Stanier
'Black Five'
4-6-0 powers a
parcels train
through the
station. All of the
buildings are
scratchbuilt.



EVERARD

JUNCTION

RICHARD WARREN'S Everard Junction YouTube channel is one of the biggest in the model railway scene and has now achieved more than 12 million views. In this feature we take a look back at his first completed 'OO' gauge layout, which was dismantled in 2017 to make way for a new railway.

PHOTOGRAPHY, MIKE WILD

IT'S THE FINAL YEARS of the 1980s. British Rail has sectorised its passenger services and Everard Junction is located in the Network SouthEast (NSE) area on the Great Western Main Line between Reading and Bristol. This busy station sees a wide range of passenger and freight traffic including express workings from InterCity, NSE long distance and stopping trains together with freight workings

transporting coal, steel, oil and more.

Everard Junction is the work of Richard Warren. Construction of this layout started in 2009 when he was 17 and he documented its development via YouTube to show how he had built the model, expanded it and crafted the stock to represent the late 1980s era. However, after eight years, Richard decided to dismantle the original layout to make way for a brand new scheme making the most of all that he had learned along the way.

In this feature we will look back at the original layout as it was in 2016 before dismantling. It used Digital Command Control and was built in the attic of Richard's home. There were four main baseboards that hosted a small depot, a raised town scene, a four platform station, a stabling point and a sweeping countryside scene plus a set of carriage sidings leading off the main layout.

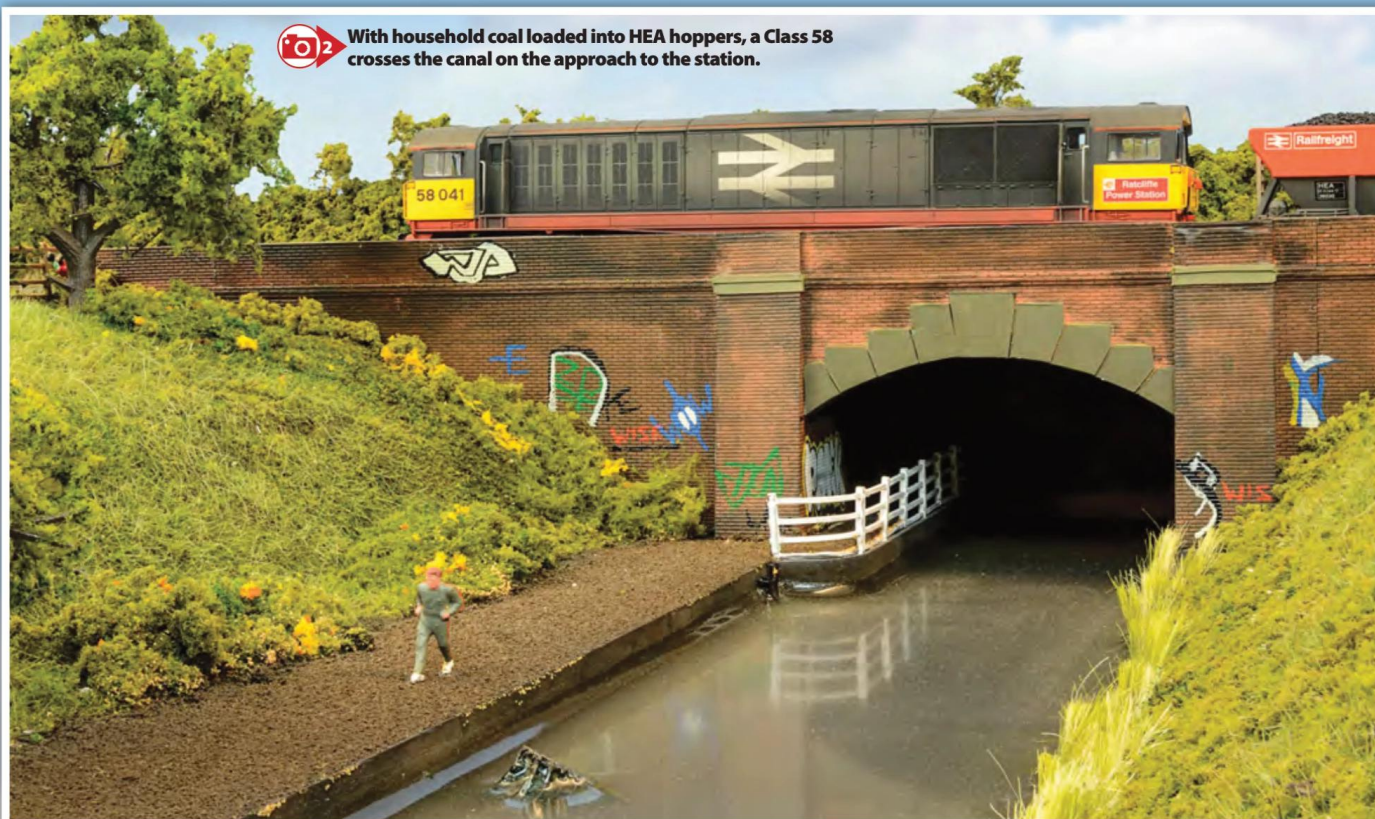
One of its most compelling features was that the layout was a continuous run but built in a 'U' »



A Railfreight liveried Class 37/6 leads a spoil train formed of Limpet and Tope ballast wagons through Everard Junction. On the left a Class 108 stands in the bay platform while a semi-fast Network SouthEast working has just arrived at the main platform.



With household coal loaded into HEA hoppers, a Class 58 crosses the canal on the approach to the station.



shape. To achieve this, a storage yard was built on a lower level underneath the scenic boards accessed via a pair of helix – one at each end of the scenic section. It featured three independent circuits – a pair of mainlines and a separate third circuit that could accommodate bi-direction running.

Richard commented: "I chose to model the late-1980s as I remember seeing the liveries on various routes out of London when I was growing up in the 1990s. By electing the late-1980s it allowed me to run an immense variety of traction and liveries. This caused issues with researching the layout era as I wasn't around to photograph and remember what BR was running. YouTube was highly useful and there are thousands of videos of the era which show what the railway was like then."

"Shortly after I finished the baseboards in 2010, and got all three loops running, I decided to film some of the trains. I was pleased with the results and thought of the inspiration I had gained through YouTube. I'd gained so much from the videos people had posted of their layouts and the prototype that I thought it would only be fair to post my experiences and efforts for other people to watch and perhaps even gain inspiration from them. I hoped for a few hundred views over time and a few comments."

Richard was soon making regular videos about the layout's progress as well as creating dedicated 'how to' videos about a variety of aspects. The channel's popularity continued to increase and it now has more than 55,000 subscribers.



The Sulzer engine of Class 47/4 47535 University of Leicester echos around the station before departure time.



Creating the scene

The original layout used a combination of Peco and Hornby code 100 track with live frog points used on both levels. Points were motorised with SEEP and Peco solenoid motors powered through a Capacitor Discharge Unit (CDU). All of the track was ballasted with Woodland Scenics medium grey blend and this was then weathered to adjust its tone around the layout.

The scenery around the railway developed over time with Richard's skills. Many parts were reworked during the layout's lifetime with new

buildings and techniques. Buildings around Everard Junction include Bachmann Scenecraft and Hornby Skaledale readymade structures as well as scratch built models for the station and carriage shed.

The natural scenery on the layout was made using Woodland Scenics materials. Much of the landscape was constructed using traditional methods such as plaster bandage laid over cardboard and newspaper formers. Static grasses from Woodland Scenics and Silfor completed the ground cover.



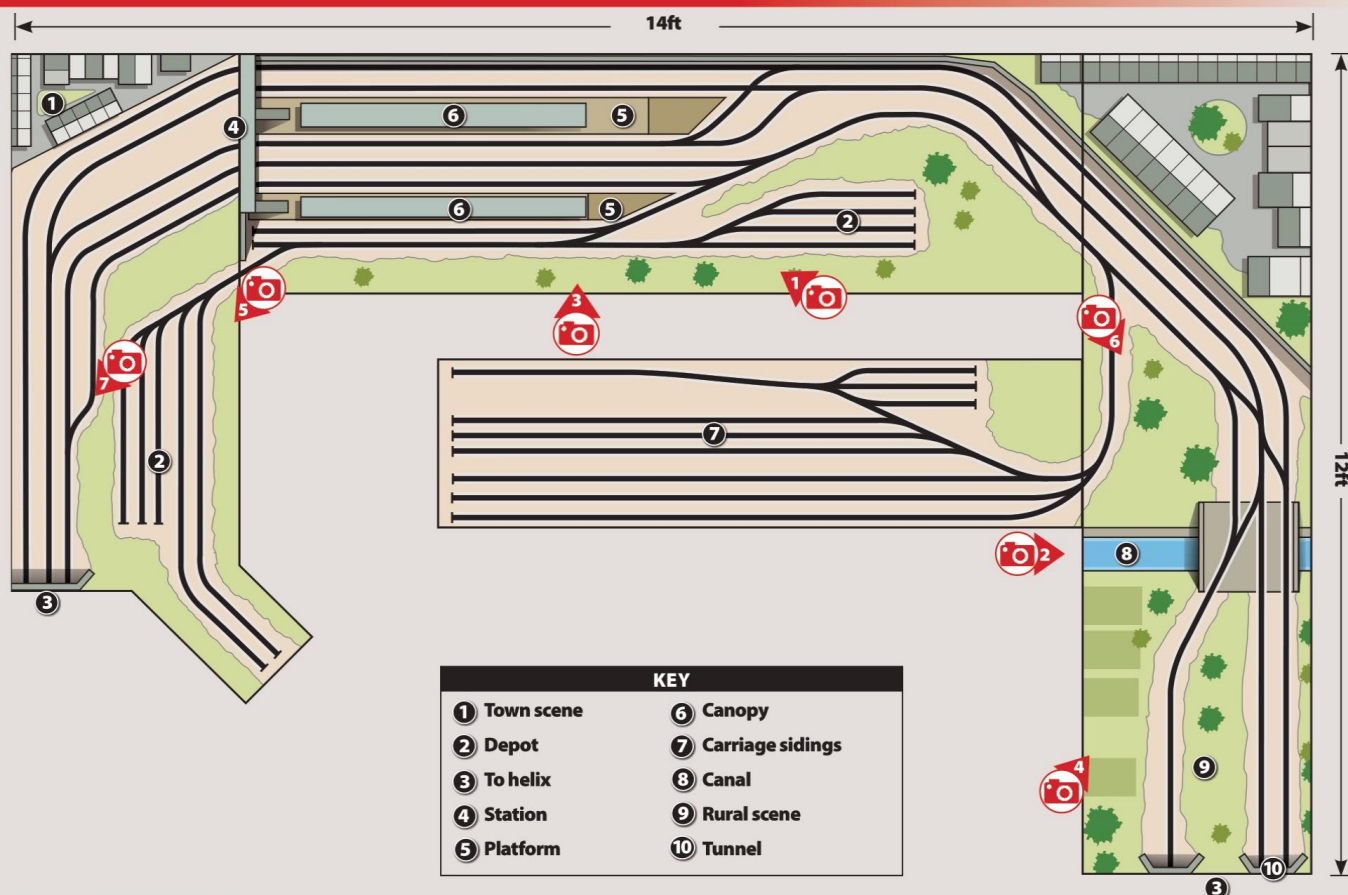


4 Above: A Class 31 leads a rake of POA scrap wagons on the branch while a Class 50 thunders towards the station on the mainline. Extensive use of Woodland Scenics products was made in production of the scenery.

5 Below: At the depot a Class 58 shares space with a pair of Class 33s while a Class 50 and 56 pass on the mainlines behind.



EVERARD JUNCTION TRACK DIAGRAM (Not to scale)



A Network SouthEast operated Class 47/7 has charge of an express working on the final approaches to Everard Junction. This attractive landscape has been swept away to make way for a completely new layout.



Rolling stock

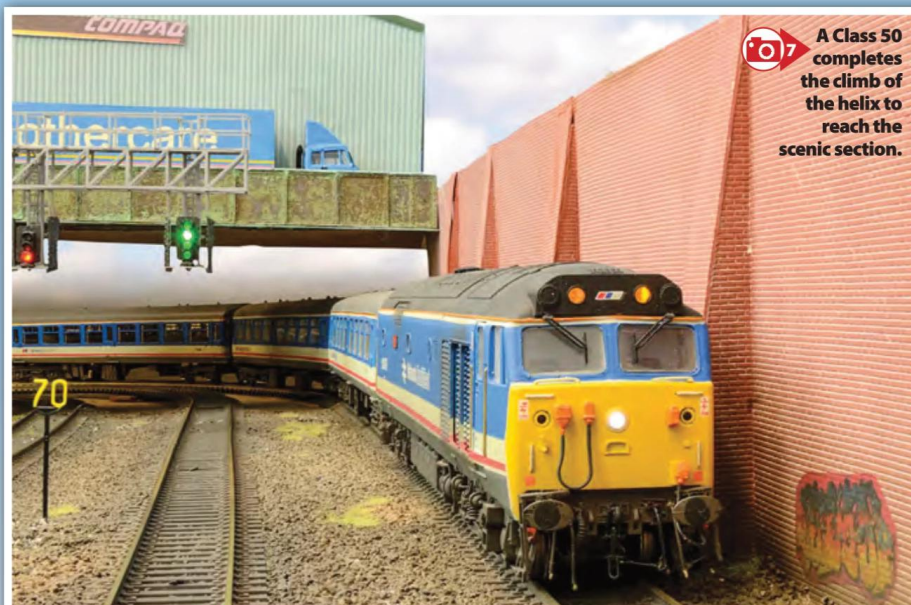
Traction and rolling stock on the layout comprised of ready-to-run items that were detailed, weathered and in several cases repainted. Almost all of the Network SouthEast stock was repainted as the early light blue livery was only available on a select few locomotives.

The layout ran diesel traction exclusively, as per the Great Western Main Line at the time. Passenger rakes were High Speed Trains or hauled by Class 47s and 50s, with an occasional Class 33. Freight was in the hands of a mix of classes 37, 47, 56 and 60 with the odd Class 31 or 33. Diesel Multiple Units such as classes 101, 108 and 150 were another essential element of the fleet.

The extensive storage sidings underneath the scenic area allowed a wide range of train formations to be assembled to run. These included passenger sets formed of BR Mk 2 coaches as well as HSTs created with Mk 3s. Freight traffic included block rakes of HAA and HEA coal hoppers, a steel train, block oil, ballast and mixed formations of air-braked stock. Like the locomotives, all of the passenger and freight formations were weathered to reflect the appearance of the real working railway accurately.

Second coming

With the dismantling of this layout in 2017, Richard started on a brand new plan which used the full space available in his loft to create a four-sided circuit. This has been an on-going project since the autumn of that year and we are looking forward to showcasing the finished layout in a future edition of *Hornby Magazine*.



A Class 50 completes the climb of the helix to reach the scenic section.

In the meantime, if you want to catch up with the latest developments or even see more of the original layout, go to [YouTube.com](https://www.youtube.com) and search for Everard Junction. With more than 200 videos

available to watch, there is plenty to see while the *Hornby Magazine* YouTube channel also features video footage of Everard Junction from our photoshoot in 2016. ■



Vale of OXBURY

Taking inspiration from real locations in Oxfordshire and the Cotswolds **CARL WOODWARDS** developed this stunning 'N' gauge layout which models the Western Region in transition in the early 1960s.

PHOTOGRAPHY, TREVOR JONES



1 Vale Creamery takes centre stage as a 'WD' 2-8-0 exits the goods loop with a loaded coal train.

2 A pair of Dapol Class 22s chatter through the station at the head of a mixed goods as a GWR 'Castle' 4-6-0 slows for a stop. In the background a Collett '2251' is on the turntable. The sense of depth created by the backscene is impressive.



MODELLING A RAILWAY gives a great opportunity to bring together many things that you appreciate and have a passion for. For Carl, his lifetime interest is in the locomotives of the Western Region and the wonderful countryside that the railway was set in. His first exhibition layout, *Oxbury Town* (HM5) was set in the 1960s transition period in a built-up urban context. For his next one, he felt it needed to ring the changes and be in a rural location with mainline trains. It would be set in his preferred era of 1960-1965 as steam on the Western Region (WR) was eclipsed by the new order of diesel hydraulic and diesel electric traction.

Carl explains: "I set out to create a layout that would tell a believable story of a Western Region junction station. A fine summer's day where the powerful noisy trains passed through, leading to peaceful periods when you could appreciate your surroundings - those rolling hills - awaiting the next train. The majesty of the Vale Scene at Pendon is a clear inspiration for me. My thoughts and plans were centred on how I could represent that atmosphere in 'N' gauge through an exhibition layout that was easily transportable. The challenge was getting the balance right between the landscape and railway."

Many have found that it's tempting in 'N' gauge to include too much railway in the space available. However, in the countryside, railways had plenty of room to breathe - even the smallest stations could be surprisingly spacious affairs. To get the design, atmosphere and credibility of the layout right, Carl wanted it to be based on a prototypical track configuration and provide a good amount of operational interest for the viewers and operators.

He studied other layouts at exhibitions and scoured books in his research into Great Western Railway junction stations that

combined the station, main line, a connection to a branch and a small yard. Ultimately he settled on West Brent, Devon, for the core plan. As is often the case though, due to its size and the fact it did not have features he was keen to model, he decided against attempting to model it as a prototype: "I decided to add those key essential elements we all love about railways - a tunnel, bridges going both over and under the lines, engine shed with turntable and a dairy so the wonderful milk can get to its market." As he says, getting the composition right leads to a believable model railway and that was his main goal.

A different approach

Railways in the landscape have notable depth that is tricky to replicate with an exhibition layout - it's a more straightforward proposition with a permanent home-based layout if space allows.

In creating Vale of Oxbury Carl decided early on to allow the track plan to 'breathe' in its setting, but initially the size was going to be 12ft, with the standard 3ft board overall depth. A moment of inspiration struck to consider adding 50% to the normal 2ft scenic depth to make it 3ft. This would give more opportunity to properly compose the landscape leaving 1ft to accommodate the storage yard for rolling stock at the rear. The total layout size was decided - 12ft x 4ft, a somewhat unusual depth for a 'N' gauge layout but it gives Vale of Oxbury one of its most distinctive aspects.

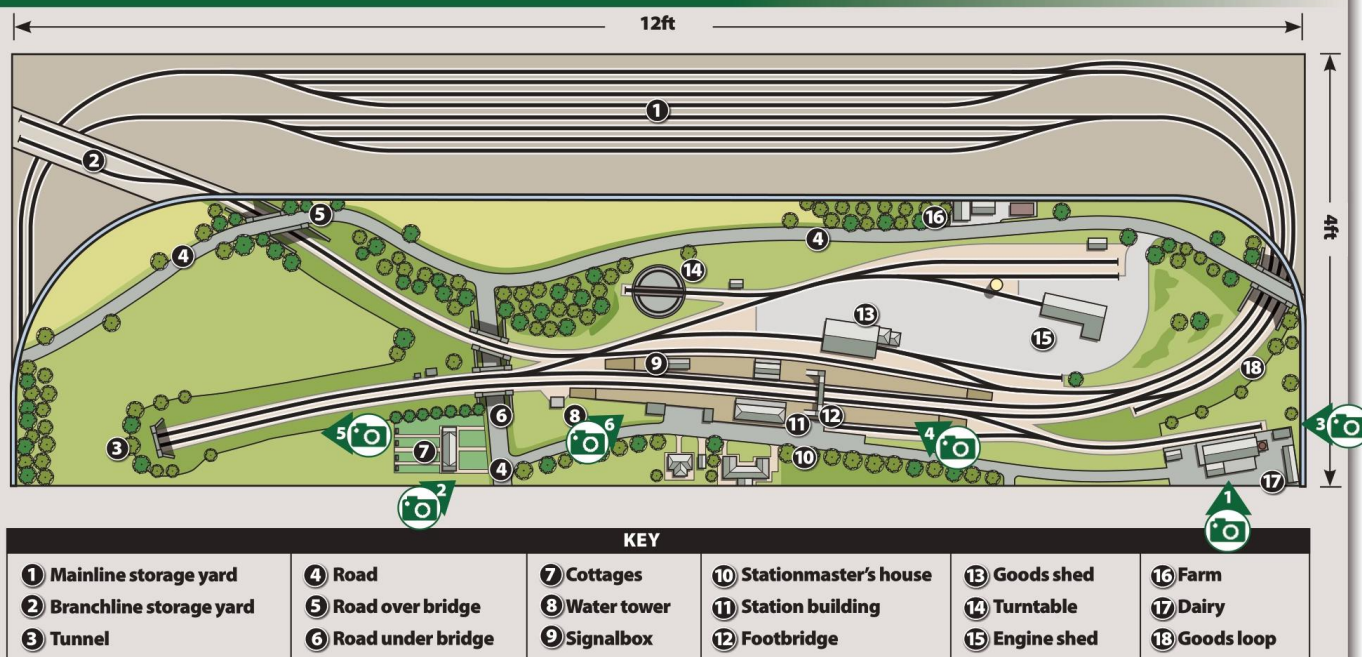
The layout plan was coming together - its size, a broad concept of the track plan and key features. Photographic backscenes were selected for the layout and Carl struck gold sourcing a backscene print from a small cottage industry producer of sufficient length for the scene - a limited run and sadly no longer produced.

This leads on to another point about this layout - the backscene was sourced before >>

TO3 Overlooking the station, two long coal trains snake between the platforms hauled by a GWR '2884' 2-8-0 and 'WD' 2-8-0. The goods yard is fully operational together with the branch line.



VALE OF OXBURY TRACK DIAGRAM (Not to scale)



the layout was started so the landscape environment could be developed to truly link it to create a natural looking background for the railway. To maximise the visual benefit of the backscene, Carl chose to curve it at the ends. This is an established method on many exhibition model railways set in the landscape and is clearly best done at the design stage.

The layout is set in against the backdrop of rolling hills, so the topography modelled also has different levels to create a sense of realism and visual interest. To achieve this, open frame baseboards were used, making it relatively straightforward to build landscape up and dig down whilst keeping the trackbeds flat.

The built environment

To continue Carl's vision for the layout, his attention turned to researching and constructing the correct railway infrastructure

and buildings to ensure a consistent credibility of creating the scene of a Western Region junction station. He took early scratchbuilding experience and developed it to include the models he actually wanted. First up was the tunnel, based on Greet in Gloucestershire, whose curved side walls compliment the round tunnel entrance (made up from Slater's brick plasticard). Next, attention was paid to the three bridges, all inspired by bridges observed in books or visits to actual locations to get the measurements and proportions right. Again, these are built from plasticard. Semaphore signals add to the sense of time and place and as far as possible these have been placed in the correct locations. The stop signals are working Dapol units with the junction signals being modified kits and non-operational.

The buildings are mostly GWR standard pattern items, all recognisable from period

photographs or buildings that survive today. The goods shed is from Tetbury, engine shed from Kingham, stationmaster's house from Culham and cottages from Hullavington. All were scratchbuilt.

The station was always going to be the focal point of the layout and this time luck smiled on Carl as some prototypical GWR kits were available. The main building is from Timecast, footbridge from Osbourne's, island platform waiting room modified Peco and signalbox an adapted Ratio kit.

The farmyard scene is a favourite of Carl's, the Dutch barn being an N'tastic kit with scratchbuilt storage sheds for machinery. It's based on a local farm holding near where he once lived. The final notable building on the layout is the only industrial one, the rail served Wallingford Dairy. It's long gone but a book covering the history of the line included >>

With a pair of BR Mk 1 suburban coaches behind, a GWR '4575' 2-6-2T waits for passengers to board.



photographs and scale plans so, another scratchbuild was undertaken with the chimney from Walther's.

Realistic operation

The track plan has been designed to allow trains to run in a prototypical manner. Working potential is maximised with full length mainline trains, branch line operations and a station yard for goods handling alongside locomotive

servicing. Trains run at realistic speeds whether it be an express passenger whizzing through the station or a lengthy coal train getting the 'all clear' from the signalman to take the mainline from the relief sidings.

But the stars aren't the impeccable setting and operation: "For me the stars of the show are the locomotives and rolling stock. Following plenty of research the locomotives, carriage and wagon rakes featured on my

layout would have worked back in the day in Oxfordshire. To add to the overall goal of realism, almost all my stock has been detailed and weathered by my friend, Tom at CF Locos. Many of the steam locomotives coming to the end of their working lives on the railways look particularly decrepit but, in my opinion, still look magnificent alongside the shiny and not so shiny diesels," he says.

Vale of Oxbury was a freelance design but



pretty much everything modelled is based on a real location. The building of the layout and its appearances at exhibitions with the support of Carl's friends who help operate it have given him and the many viewers great pleasure over the years. As he concludes: "If you feel it could have been a real location and imagine you have been taken back to the 1960s somewhere in Oxfordshire watching the trains, then I have done my job." ■



Right: Representing the new order on the Western Region, a Brush Type 4 bursts out of the tunnel with a block oil train.



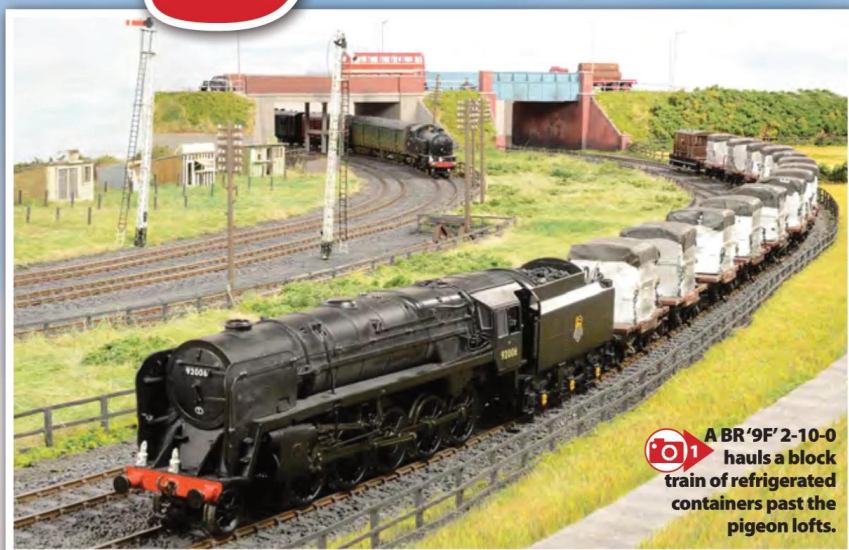
Below: A 'Western' hydraulic rumbles through the station. All of the buildings are based on structures at real locations, as is the trackplan.



Billingham

Middlesbrough MRC set out to recreate the nearby Billingham station and its approaches in 'OO' gauge to develop a sizable exhibition layout. This is its story.

PHOTOGRAPHY, MIKE WILD



A BR '9F' 2-10-0 hauls a block train of refrigerated containers past the pigeon lofts.



ON A WARM SUMMER'S afternoon in the late 1950s, a tired looking 'WD' 2-8-0 moves slowly down the Durham coastline. Behind the locomotive is a long line of 16ton mineral wagons loaded with coal from the Durham coalfields destined for the Midlands. The train is heading through Hartlepool, Billingham and Stockton as it makes its way towards the East Coast Main Line at Northallerton.

Leaving Hartlepool, the train enters the outskirts of Billingham, passing under the Marsh House Avenue road bridge. Turning right towards Billingham station it passes a row of pigeon lofts on the right-hand side. A row of empty bogie bolsters fills the siding on the left

while in the distance beyond Pond House we can see a goods train standing on the branch line from Haverton Hill, waiting its turn to pass through Billingham Junction. Our train has clearance, so we proceed through the junction and on to Billingham station.

As we leave the junction, the train passes a row of prefabricated bungalows on the left. On the right-hand side, the terrace houses making up Cotswold Crescent fill the skyline. At this time of year, the gardens of both the prefabs and the terrace houses are a remarkable sight. Flowers and vegetables grow in abundance, although one or two of the gardens are in need of attention.

We move steadily forward, passing over the level crossing with the usual traffic standing on both sides and enter the station. The tall signal

cabin looms over us on our left whilst to our right we can see the Station Hotel. Along with a number of parked cars, a sports car towing a caravan is receiving attention from the AA. The station platforms are quiet this time of day; however, the usual group of trainspotters are in their favourite spot at the end of the down platform. They give us a wave as we proceed past the goods and coal yard on the right.

Up ahead looms the impressive Davis Bridge, recently opened as part of a new bypass to take the A19 across the railway. As we pass under the bridge, the land falls away on both sides and we proceed along a high embankment across the Billingham Beck valley. Turning right towards Norton and Stockton, we end our part of the journey, leaving the train to continue on its way to join the East Coast Main Line. »



'WD' 2-8-0 90201 takes a loaded coal train through Billingham. The tall signalbox was a distinctive part of the station architecture and has been built from scratch.





A Worsdell 'J26' 0-6-0 passes under the new A19 Davis Road bridge with a rake of iron ore wagons.

Billingham in 'OO'

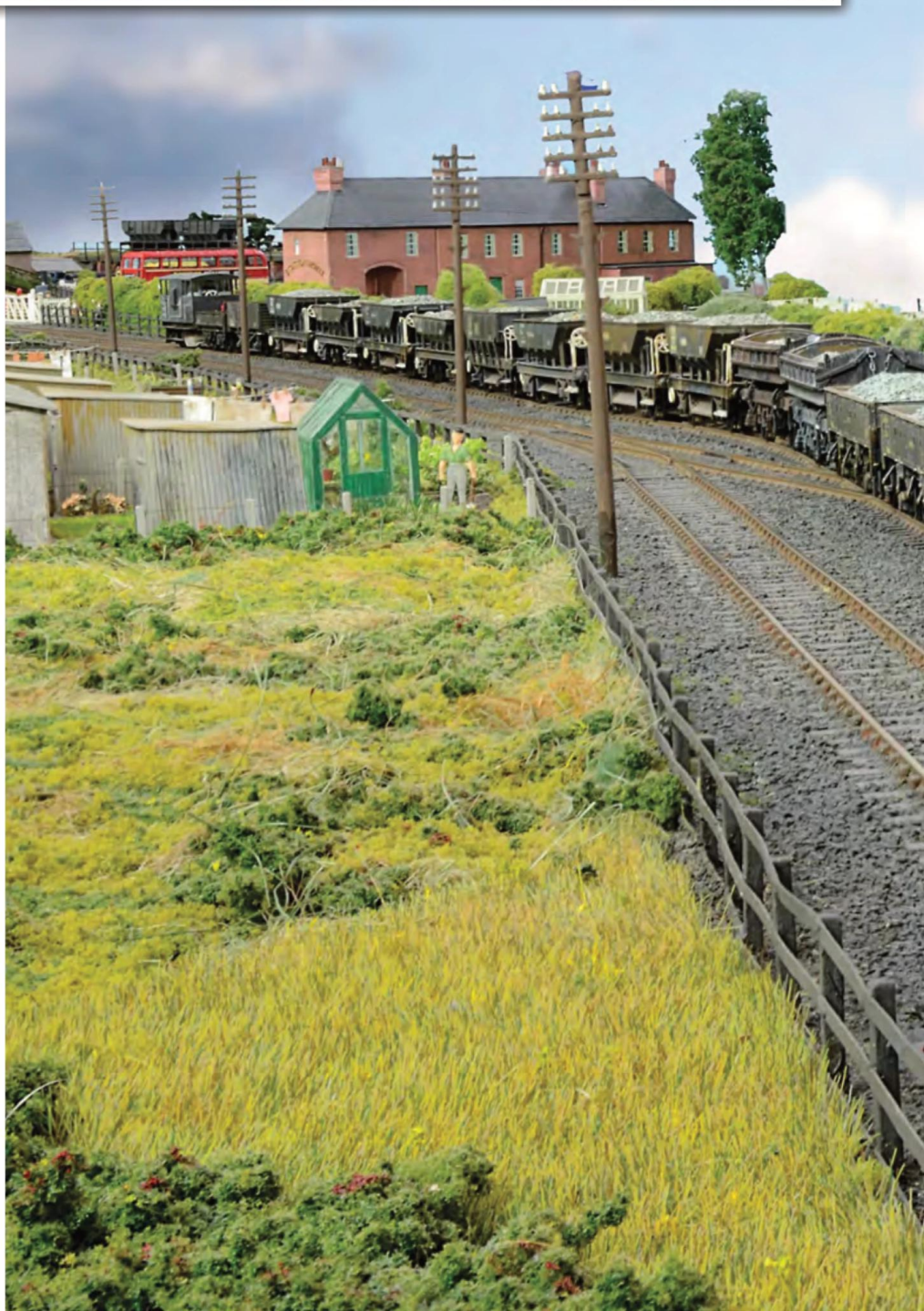
The layout is a representation of Billingham station and the immediate area in the period 1955 to 1963 prior to the station being moved to a new location further to the north of the town. Billingham was a small station on the line between Stockton and Newcastle using the route up the Durham coast via Hartlepool. Whilst this only provided a limited passenger service, a wide range of freight trains passed through Billingham. Some of these were travelling to and from the Durham coalfields and other mineral extraction areas, whilst others were using the Haverton Hill branch line to access the shipyards, chemical plants and the coal fired power station on the north bank of the River Tees.

The layout was planned by members of the Middlesbrough Model Railway Club during the early 1990s and after a short hiatus recommenced in the early 2000s when several new members joined the club. In total it measures 40ft x 11ft and is made up of 18 baseboards, each 5ft x 3ft.

Baseboards are all of plywood construction. These are fitted with location dowels to ensure accurate track alignment when bolted together. Four of the boards within the scenic section are double level to allow the track to run along a substantial embankment.

The track in the scenic section is C&L code 75 flexible track with Peco code 75 points and crossings, whereas the track in the storage yards is all Peco code 100. All points are operated by Tortoise slow action point motors located under the baseboards. Once the track was laid and the wiring complete, it was extensively tested prior to any ballasting being carried out.

The storage yard is made up of 14 tracks allowing the storage of 28 separate train formations. As one train leaves the yard to enter the scenic section the one behind it automatically moves up making space for its return.



The layout is wired for analogue control using eight KPC handheld controllers. These control both the scenic section and the automatic shuffle system in the storage yard. Three separate transformer units provide power to the three control positions on the layout. Two of these panels control movement in and out of the storage yard and around the scenic section. The other acting as the signalbox sets the route and selects the colour coded controller for that route.

Rolling stock

All stock on the layout is owned by members of the model railway club. A typical sequence of trains passing through the station has been developed using records from the signalbox in the late 1950s.

The train formations are mainly freight with a small number of passenger trains, both suburban and express depending upon

their destination. The type of freight trains depended upon their source and destination, from the humble pick-up goods to the raw materials and specialised products being transported to and from the various industries on Teesside. We have endeavoured to cover as wide a range as possible. The Darlington depot engineer's train (including crane) together with a ballast train also feature.

The locomotives that were seen at Billingham were predominantly freight engines but various 'Pacifics' and other mixed traffic locomotives along with the early diesels could also be spotted. Research through images allowed an accurate collection of types to be assembled for the layout including 4-6-2 tender and tank locomotives, 4-4-0s, 'Moguls', 'WD' 2-8-0s, 2-6-2s, a Diesel Multiple Unit and Type 2-4 diesels. These are a mixture of off-the-shelf models (some modified) and kits.

Buildings and scenery

Almost all the buildings on the layout are scratchbuilt using a mix of materials from timber to the modern plastic construction. Exceptions to this are a couple of the garden buildings, which are Wills/Ratio kits and the Station Hotel. A detailed model based on the existing/original building was planned for the hotel. However, other projects and work have delayed its completion. All the other buildings are based on photographs and drawings of the original buildings on the site. Fortunately, although changed over the years, many still exist today.

A significant structure is the Davis Bridge located to the left of the station. This was built by one of the club's members using photographs of the original and current bridge, together with drawings supplied by the local authority.

No North Eastern layout would be complete >>



A BR Sulzer Type 2 takes the junction towards Hartlepool at Billingham while working an engineer's train. It carries the two-tone BR green livery applied to several North East allocated Type 2s in the mid-1960s.





Above: All of the buildings at Billingham are scratchbuilt while the goods yard models the prototype closely including the high-level coal drops.

without the obligatory row of pigeon lofts alongside the railway. These can be seen at the end of the layout as the line turns to enter the storage yard.

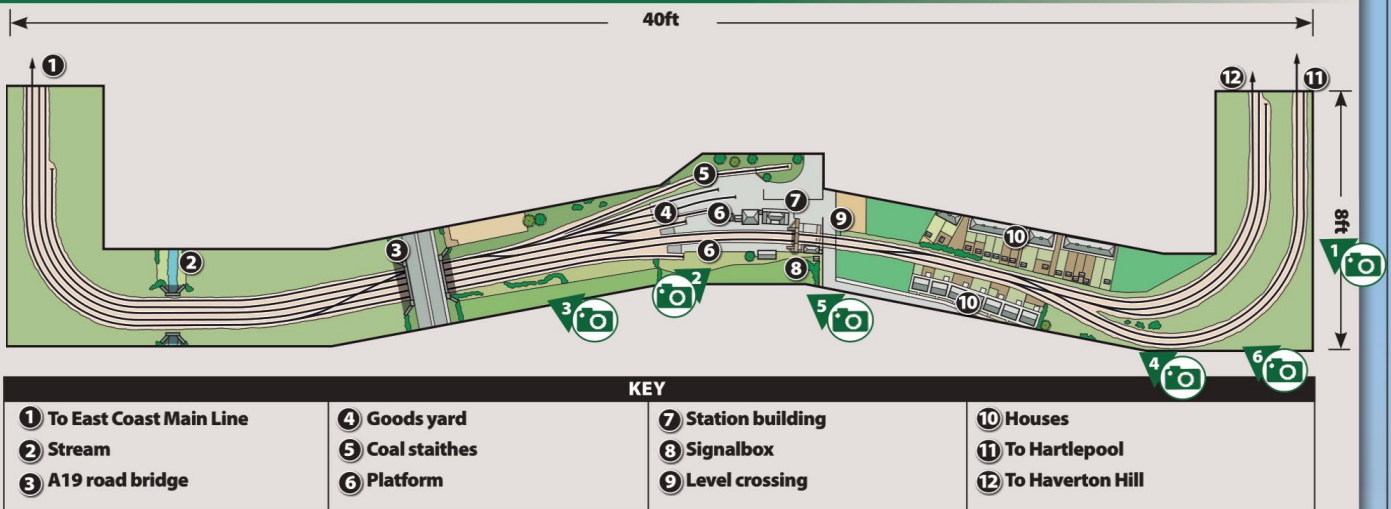
The scenics wrap around both ends of the layout so that 10 of the 18 boards are fully scenic. A lot of this is rough grassland and undergrowth. Whilst some of this is purchased grass mat, it has all been modified and improved to produce variation. The scenic covering on the embankment and other rough areas were produced using over seven metres of hanging basket liner obtained from the local garden centre.

Woodlands Scenics material was used to produce flowers, plants and vegetables for the gardens. The various bushes and the hundreds of potato plants were all produced using thin multi-strand electrical wire. This was twisted to shape, painted and covered in scenic leaves or turf depending upon the desired effect.

Every board on the layout required fencing to be erected. The type and length varied depending upon its location. Most of this fencing was post and three-rail lineside fencing. This was constructed using metal components. Square brass tube cut to the appropriate length was used to form the posts. These were glued in place and nickel silver strips soldered on to produce the rails. Whilst expensive to produce, the quality and robustness of the fence makes it all worthwhile.

Billingham has given us considerable enjoyment over the last ten years, and we have had the opportunity to exhibit it at several major shows across the country. We really appreciate all the positive comments about the layout made by the viewers at these shows and look forward to the upcoming shows. ■



BILLINGHAM TRACK DIAGRAM (Not to scale)

Thompson 'B1'
4-6-0 61132

hauls a Dolomite train
through Billingham
flanked by terrace
houses on the right with
their detailed gardens.



Bilston

ROAD

The West Midlands in the final decade of steam operation was the inspiration for **GEOFF READ'S** stunning four-sided 'OO' gauge loft layout. We take a tour of Bilston Road.

PHOTOGRAPHY, MIKE WILD



BR '9F' 2-10-0 92116
slogs through the
countryside at the head of
a lengthy block oil working.
The reverse curves on the
approach to the viaduct
really enhance this scene.



THE LONDON MIDLAND REGION in the West Midlands is the setting for Bilston Road. Its inspiration came from builder Geoff Read's memories of growing up in the 1950s and 1960s in that area which led to a lifelong interest in all things railway. His first trainset was a Tri-ang 'Princess Royal', while later inspiration for industrial themes came from regular journeys through the Midlands in the 1970s.

Construction of Bilston Road started a little over a decade ago when Geoff moved to a new house. He had built several layouts on a smaller scale previously including a Somerset and Dorset theme model with friend Rod Pearson named Hinton St Mary. However, the new house offered an ample 18ft x 11ft loft space which sparked construction of this beautiful 'OO' gauge model railway.

The brief called for continuous running, a station, off-scene train storage and interesting operation. A suitable plan in one of Cyril Freezer's books provided the basis, and that led to the introduction of a goods yard, engine shed and countryside scene to expand the list of 'wants' from the new layout.

Visual impact

One of the most striking features about Bilston Road is that on entering the room you are confronted with four sides of scenery.



The goods yard is superbly detailed and features plenty of hard standing for road vehicles. Everything has been weathered to suit the era portrayed.

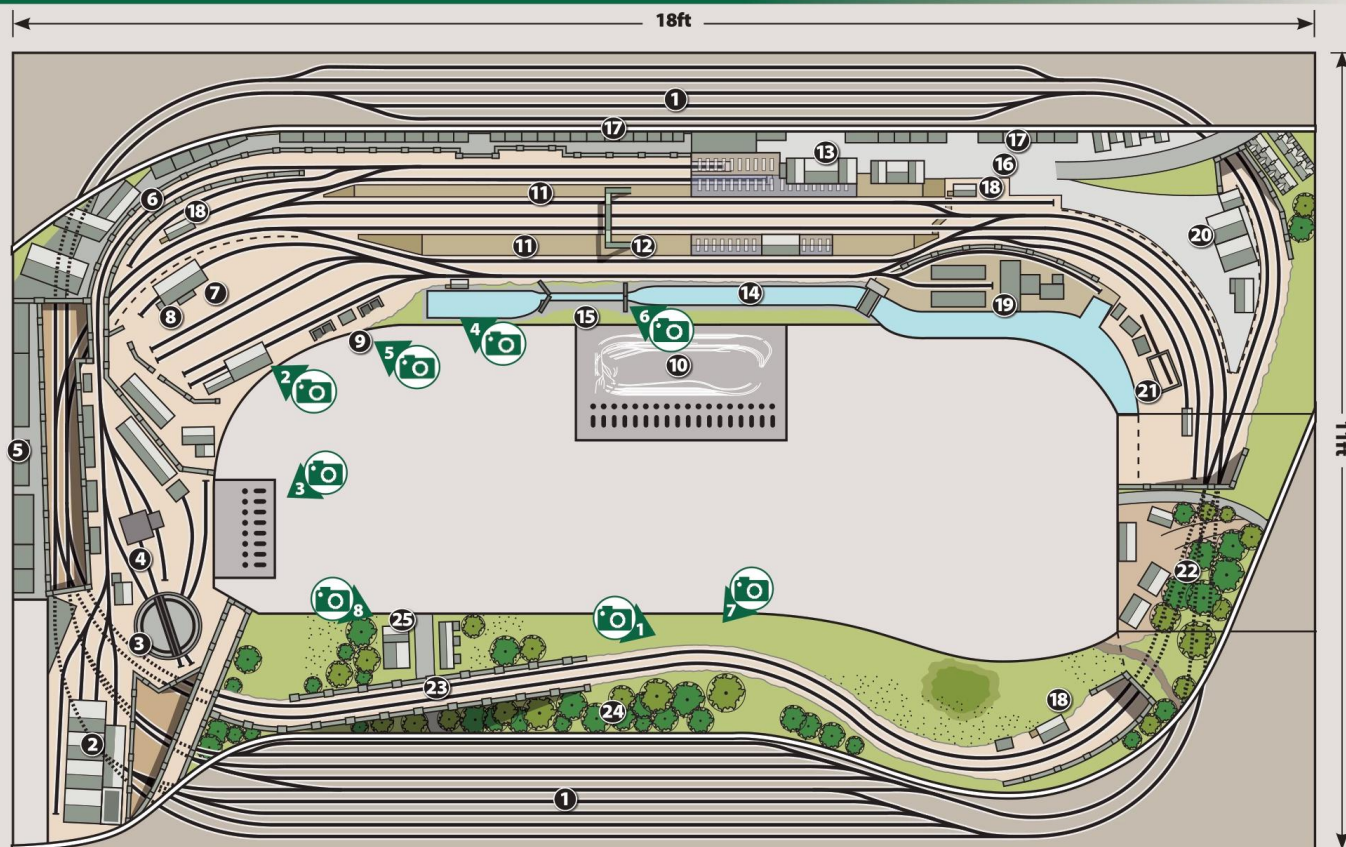
The storage yards are entirely hidden from view allowing a fully detailed railway to catch your eye at every turn. Even the junctions between scenic and storage sections are neatly concealed, making it hard to spot that they even exist. To allow for maintenance, and train recovery should a derailment occur, removable back scene panels have been added behind each scenic section.

However, the concept of this design does mean that trains can go 'somewhere'. On leaving the station in either direction, a train can be sent out to the storage yard behind the countryside scene or for a run through the scene and across the viaduct. From there, it can be routed back into the station or sent to the second larger storage yard behind the station area.

Trackwork is Peco code 75 for the station >>



BILSTON ROAD TRACK DIAGRAM (Not to scale)



KEY

① Hidden storage yard	⑥ Incline	⑪ Platform	⑮ Road	⑳ Derelict shed
② Engine shed	⑦ Goods yard	⑫ Footbridge	⑯ L/R houses	㉑ Farm
③ Turntable	⑧ Goods shed	⑬ Station building	⑰ Signalbox	㉒ Viaduct
④ Coaling plant	⑨ Coal staithes	⑭ Canal	⑱ Brewery	㉓ Tree line
⑤ Low relief factories	⑩ Control panel	⑮ Lock	㉔ BRS Depot	㉕ Public house



3 Above: The locomotive shed is kept busy turning and preparing locomotives for their next duty.

4 Right: At the station a LMS Beyer Garratt 2-6-0+0-6-2 rumbles in the middle road with a loaded coal train. Varying depths of building have been used in the background to increase the apparent distance modelled.



and engine shed while the countryside and storage yard sections use code 100 rail. Control is afforded through analogue with full switch panels to manage train routes through two handheld controllers. Within the layout are 15 sections that can be switched to either controller or isolated. The engine shed is a separate circuit which has its own controller to power the track and turntable; the latter is a Peco kit powered by a Locomotech drive unit.

Some of the roads in the storage yards have been split into two sections, so in total 18 trains can be held off scene. To locate the trains, each section has two reed switches about two inches apart where the locomotive should stop. With small magnets on the engine, the first operates a buzzer, giving you an audible warning, and the second is connected to an LED on the control panel. The bell tells you to cut power so by the time you do this, the locomotive is over the second, lighting the LED.

Stock

Bilston Road is usually set in the late 1950s with a combination of ex-London Midland and Scottish locomotives running alongside the 'new' BR Standards. The roster contains 'Princess Royals', 'Duchesses', 'Jubilees', 'Black Fives', '4Fs', '3Fs' and some BR 'Standard' '9F' 2-10-0s and 'WD' 2-8-0s. The majority are ready-to-run joined by kits and scratch-built items.

Longer trains run in fixed rakes. The passenger

**In the yard
coal workers
discuss their next job as
a Fowler 'Jinty' 0-6-0T
shunts the sidings.**



trains are made up of four expresses, two nine-coach and two six-coach, and the freight of two coal trains, one full and one empty, a mixed freight, a van train, an oil train and a train of empty bogie bolsters. The stopping/local passengers are two, three or five coach trains, along with a push-pull set and an early Derby Lightweight DMU. The rest are short pick-up freights and parcel trains.

Geoff commented: "The non-off-the-shelf stock which may be of interest includes a Crosti boiler '9F' made with a Golden Arrow body on a Hornby chassis (completed just before Hornby brought its out). There is also a Fowler '7F' 0-8-0 made with an old Hornby '4F' cab and firebox, a scratch-built boiler and footplate on a Comet '8F' chassis and powered by the '4F' tender drive. Coaching stock made from kits include two >>





6 Ivatt '2MT' 41324 simmers at the station with a push-pull working.

London Midland & Scottish Railway (LMS) Royal Mail vehicles from 247 Components kits and an LMS inspection coach from a Comet kit."

Buildings and scenery

Geoff has aimed to recreate a particular time and space and that goes as far as using relevant colours and weathering. The whole scene has been developed in layers working forward from the back scene which includes a montage of Townscene sheets behind the station scene. In front of that, you will see low relief buildings while another step forward brings completed buildings into view to create a sense of depth and distance.

The buildings have been positioned to suggest the growth of the town around the railway, starting with the station building then moving out to the town, residential areas, terrace house backs and industrial buildings.

The structures are a mixture of ready-made, kits and scratch built. The station building, for example, started life as a Metcalfe kit but has had an additional storey added, different brickwork and a Ratio canopy to make it look more appropriate for the area modelled.

On the countryside scene, the back scene was painted with rolling hills and fields, again trying to give a sense of depth. The basic structure of the forward landscape is polystyrene blocks carved to shape and covered in plaster followed by the usual scatter material, static grass and trees made from sea foam. The large standalone tree is made from wire wound into shape and the foliage from wire wool teased out sprayed black and dipped into scatter material.

Operation

Running the railway isn't just confirmed to watching trains pass through the scene. Cameos have been built into the sequence, such as a train coming in from the North East of England with a 'B1' 4-6-0 which is replaced by a 'Jubilee' on arrival. The 'B1' then goes to the shed to be serviced and an LMS 50ft Kitchen and Dining car are added to the formation. Next, a parcels train drops a vehicle in the parcels depot before continuing its journey while there is also a pick-up goods which moves across the mainline to access the goods yard. To enable hands-free operation, the stock has been fitted with Spratt and Winkle delay couplings.

These are just a selection of the more unusual movements which take place at Bilston Road in between the passing of block coal workings and expresses.

The future

They say a layout is never finished, that's true, but there's not much to do on Bilston Road apart from adding a few extra details and a bit of fine-tuning. Geoff summarised: "I feel it has achieved what I set out to. The problem is I enjoy the creating and the building, some of which have been fulfilled by helping Rod build his American layout, Great Falls. Already the next layout is being planned in the other half of the loft, a smaller layout of 14ft x 2ft project, modelling a country station. This time though, it will have DCC sound, finescale track, point rodding, more detailed buildings - definitely improving the standard of the whole layout." ■



6 In the countryside, Geoff's scratch-built Fowler '7F' 0-8-0 leads coal empties along the top of the embankment.





On the viaduct an ex-LMS 'Black Five' 4-6-0 leads a van train as an Ivatt '4MT' 2-6-0 approaches in the opposite direction. The structure was assembled from Scalescenes.com downloadable kits.



Penhallick

This slice of pure Cornwall found a new home after it retired from the exhibition circuit – but its owners have continued its development.

PHOTOGRAPHY, TREVOR JONES

PENHALLICK's 29th and final exhibition was at the Spalding Show in November 2011. Three months later, in February 2012, the layout featured in *Hornby Magazine* (HM56). At the time

Mel Rees and the team concluded with the optimism that the layout would continue to keep them busy as they developed it in its new permanent home.

"It was never going to be easy obtaining or renting a building that would take Penhallick in its original form without modification," says Mel: "so the inevitable rebuilding commenced in Spring 2012. Now housed in a private building and measuring 32ft x 13ft at its widest point, Penhallick has been modified to form a U-shaped layout."

For those who remember Penhallick in its first incarnation, it stretched 55ft 6in long and included a 4ft square baseboard devoted purely to the street scenes at the rear of Penhallick station. The width of the building afforded opportunities to expand the depth of the layout, and with it now being U-shaped, corner cameos – railway and non-railway – could be added.

The new configuration

On entering the room, Penhallick station and town scene are to your right, whilst the traverser is almost in front of you. Against the left-hand wall is the terminus of the brand new Great Western Railway (GWR) line, which splits at Trecarne Junction (WR). One line from this junction tunnels its way onto the traverser – which in real life would be Bodmin Road and the other terminating at Trecarne General. The Western Region destination was changed from Launceston to Bodmin Road so passengers can connect with the GWR main line between Paddington and Penzance or take the scenic route to Bodmin General via the short GWR branch.

Starting from the Penhallick end, the first five baseboards, 20ft long in total, are as they were with regard to track from the days of exhibiting. However, the opportunity was taken to extend the depth of the boards at this point, where the layout used to narrow to 3ft. This took place 12ft from the start of the layout.

Whilst the scenery now goes back to the wall by extending some of the baseboards it was felt that a central viewing area from the rear still >>

"Measuring 32ft x 13ft, Penhallick has been modified to form a U-shaped layout."

MEL REES



1 Right: Bulleid 'West Country' 34002 Salisbury charges across the river with a rake of Maunsell stock heading inland.

2 Below: A BR '3MT' 2-6-2T ambles into Penhallick at the head of a rake of Bulleid corridor stock while a Drummond 'M7' 0-4-4T is engaged as station pilot.





Penhallick is a huge layout. In its new 'home' based format it is 32ft long and 13ft at its widest.

afforded a perspective that would otherwise be lost. This area is situated where the old control panel used to be. The result is that the layout still reduces from 4ft to 3ft at the station throat, remaining in its old form where the underbridge is, but then extending back out to 4ft behind the engine shed section. This extra space has enabled a farm to be added at the end of the coal yard and extension of the River Hallick, giving greater depth to the cameo and allowing space for a headshunt to be built for the dairy.

Major alterations

Another running line from Penhallick engine shed turntable back into a new covered side extension has been added, plus two more stop roads off the turntable.

In its previous life, once across the river the line split at Penhallick Junction, where the erstwhile Western Region line trundled towards Launceston. The WR line was replaced and the existing trellis bridge used as access to a milk depot instead. Jerry and Mike are insistent that shunting is performed by at least one of the three '0298' 2-4-0WTs so emblematic of the railways around Bodmin.

The dairy has an interesting siding complex with a headshunt running back behind the signalbox towards the bank of the River Hallick. The course of the old Southern main line followed what is now a tributary to the estuary, known as the Little Hallick River.

Whilst the dairy is tucked into the right-hand corner, the Southern main line curves towards the back wall and on its way around the 'U', over a three-span bridge which crosses the tributary and bounds the estuary by means of an embankment built upon completely new boards before rejoining the old Penhallick layout at the beach scene and a rock outcrop.

At the end of the bridge, the line divides and the new WR line makes its way towards Trecarne Junction by means of a second and newly built embankment to the rear of the Southern Region (SR) line. The SR line wends its way through the cutting and into Trecarne Halt before leaving via an underbridge and onto the traverser.

A permanent home

Mike explains some of the changes that resulted from Penhallick having a permanent home. "On the basis that this new layout is permanent, the decision was taken to add depth by pulling the SR line away from the wall. The reason for this is twofold. Firstly, it enables the traverser to >>>



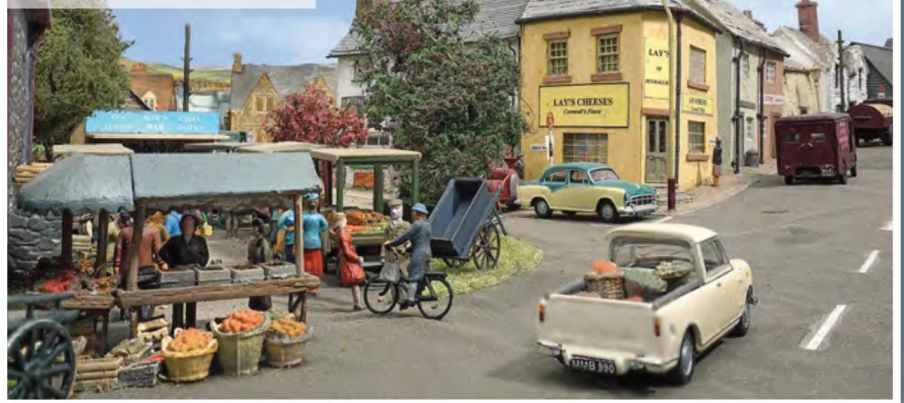
work and secondly, it gives us the opportunity for the Western Region line to split at the newly modelled Trecarne Junction. A long siding faces away from Trecarne General station in front of the signalbox, which controls the area. Whilst the right-hand line runs into Trecarne General, the left-hand line runs southwards to Bodmin Road."

With the limited space available, bearing in mind the need for the traverser to function properly, the backdrop to Trecarne General is Station Road, where a mixture of Metcalfe, Skaledale, Superquick and handmade buildings have been either modified, weathered or both to form a scene in their own right.

The station buildings and goods shed were supplied some years ago by Kevin Hardman of Accrington, who made some superb plaster cast buildings, painted, weathered and ready for



A large 4ft square town scene sits outside Penhallick station where rural life continues away from the railway.



The rear corner of the layout has been widened to make the most of the river Hallick as the dairy scene behind. A BR '4MT' 2-6-4T crosses the river as it heads towards the Southern Region terminus.

action. Many of his works grace the Penhallick end of the layout and one of his cottages is situated behind the embankment as the Western Region line runs around the rear of the estuary.

On the old Penhallick, at the rear of Trecarne (SR) there were two hidden sidings under the scenery. These were retained when building the new section and now house the engineer's train and the five-coach rake of Mk 1s which forms the excursion train. This provides the opportunity to use non-North Cornwall Line locomotives on specials. The revised timetable for Penhallick now includes the odd special which will be hauled by ex-GWR, 'Granges', 'Manors' and 'Dukedogs' as well as SR Adams 'Radial Tanks'.

The rolling stock

The stock used on Penhallick is dominated by a mix of Bulleid 'Light Pacifics' and 'T9' 4-4-0s which were typical of the area on the SR operated section. The original 4-6-2s were built by Crownline, the chassis being supplied

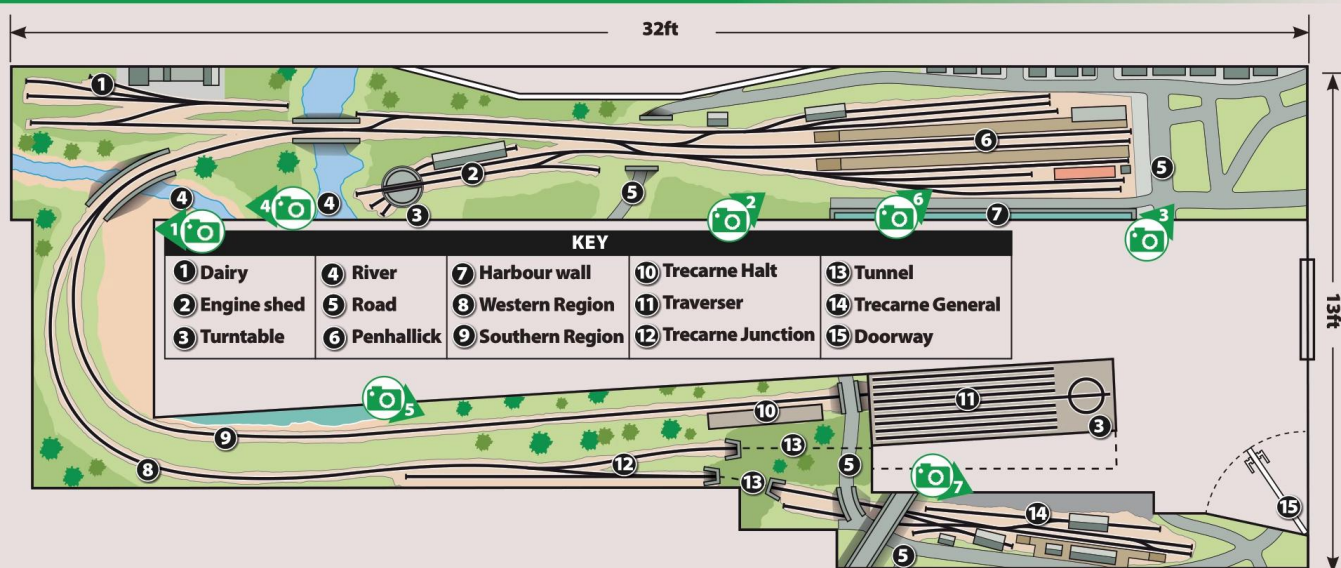


Above: The new section of the layout sees the Southern (left) and Western (right) routes run side by side. A Maunsell 'U1' 2-6-0 heads a parcels working towards Penhallick while a Pressed Steel Class 117 travels towards Bodmin Road.

Below: Penhallick sees both Southern and Western region trains arriving and departing.



PENHALLICK TRACK DIAGRAM (Not to scale)



by Kemilway and the body by Hornby with Albert Goodall brass overlays. These have been augmented by a further two from the Crownline/Hornby stable and there will be one additional Hornby model to grace the tracks once it is repainted, weathered and renamed.

The 'T9s' are a combination of kits built by Crownline or Hornby models. The other locomotives used on a regular basis are Southern Railway 2-6-0s from Crownline and Bachmann, plus GWR 2-6-2Ts and 0-6-0PTs, along with BR '4MT' 2-6-4Ts and ex-LMS Ivatt '2MT' 2-6-2Ts which make up the remaining motive power. The Heljan AC Cars railbus has been a very worthwhile addition to the stock, as is the Dapol Class 22. Both of these ran in the area during the early 1960s and make a useful alternative to the traditional ex-GWR stock.

Coaching stock is kit built from BSL and Ian Kirk together with ready-to-run stock from Hornby and Bachmann. Wagon stock originates from many kit providers, plus Airfix, Mainline,

Bachmann and Hornby. Couplings are hook and bar with magnets placed at strategic points throughout the layout.

Bright future

When an exhibition layout reaches the end of the line, for many their parts are stripped and reused. Thankfully Penhallick has avoided this fate. As Mel says: "We were always concerned as to where we would be going with Penhallick

once the very enjoyable years of exhibiting the layout came to an end. It has been a real pleasure for the three of us to be able to continue the development of Penhallick and create a more meaningful

"We look forward to many more years of enjoying the layout and operating it."

MEL REES

extension to the GWR line and build a further terminus. So, with that in mind, we look forward to many more years of now enjoying the layout and operating to a timetable."

That fascinating network of railways spanning North Cornwall is now fading from memory. Penhallick helps to keep it alive in stunning fashion. ■



The new Western Region terminus station, Trecarne General, features a single platform, a small shed plus a compact goods yard. A Class 121 DMU departs while the crew of a '45XX' 2-6-2T raise steam for their next duty.

REEVY ROAD

West

This busy BR blue period 'OO' gauge layout by Bradford Model Railway Club is proving popular at exhibitions with its West Yorkshire setting and scale length trains.

PHOTOGRAPHY, MIKE WILD

 A Class 45 leads a nine coach rake of Mk 1s through Reevy Road West as a single wagon freight rumbles along the relief line.



REEVY ROAD WEST started out differently from the rest of Bradford Model Railway Club's collection, as it was bought as a part-built scenic section. All of the club's previous layouts have been built from the ground up by its members. Reevy Road's story starts in 2015 when the embryonic 'OO' layout was purchased in the very early stages of construction. It took until 2018 for Bradford MRC members to bring it up to exhibition standard.

What the club bought was a set of scenic

boards built from Medium Density Fibreboard (MDF) on pine frames. There was no storage yard and the scenery which had been built was very basic. This gave the club a good starting point, but also meant that it had plenty to get stuck into to develop it into an exhibition layout.

The first port of call was to build a new storage yard using plywood for the surface and pine frames while a lighting pelmet was built at the same time to allow the scenic section of be illuminated at shows. Screens have been fitted to the curves at each end to mask their appearance and these sit either

end of the 15ft long straight scenic area.

Another change from the club's previous 'OO' gauge layouts was the choice of era. Kevin Jagger explains: "We chose the 1974-1984 corporate blue diesel era for Reevy Road West – we had done this before in 'N' gauge for our Western Region layout Titheridge Junction (HM83). This time however we looked closer to home and selected the West Riding of Yorkshire as the setting. Being in Bradford we had plenty of inspiration on our doorstep as well as the memories of the operating team with which to create the final scene." >>





Lightweight as well as Class 101 and 108 Diesel Multiple Units (DMUs) also operate in between the flow of mainline stock.

The locomotive fleet is sound equipped too with ESU and Zimo decoders from Legomanbiffo, Digitrains, Bachmann and Hornby Twin Track Sound collections. Bufferbeams are also detailed at one end of each locomotive – the other retaining the factory coupling – so that the leading end of each train portrays a realistic appearance. Tail lamps and pipes have also been added to the last carriage and wagon in each formation too.

A wide variety of traffic can be seen on Reevy Road West including coal, cement, sand, grain and Ministry of Defence workings alongside long rakes of BR blue and grey Mk 1 and Mk 2 stock forming the passenger service.

Going digital

This is the first Bradford MRC layout to use Digital Command Control (DCC). The trains are controlled by an NCE Power Pro 5amp system enhanced with a 5amp booster meaning »

City scene

The track on Reevy Road is Peco code 75 for the scenic section while the storage yard uses the same manufacturer's code 100 range. The original ballasting was removed and redone using Woodland Scenics fine grey ballast while the scenery is made up of polystyrene blocks covered with lightweight filler which had been painted brown. Woodland Scenics foliage and flocks were used to colour this while trees from the Model Tree Shop completed the green sections of the layout.

Being based in the West Riding, the layout had to convey the sense of industry and town around the railway. Buildings in the town are laser cut wood from In The Green Wood. The industrial buildings have all been scratchbuilt using cardboard shells overlaid with embossed Plasticard. Key structures include the coal loading tower of Slackside Mining which is served by regular hopper trains, industrial warehouse ends along the backscene and a bustling town scene at the right hand end of the scenic area.

The backscene is painted sky blue which is enhanced using a printed townscape montage cut from various Townscene sheets. The retaining wall and overbridge are from various Skytrex components while the road vehicles which populate the streets are a mix of various proprietary manufacturers – including Oxford Diecast and EFE – which have been toned down with matt varnish to blend them into the scene.

Signals and other electrics are from Absolute Aspects with one from CR Signals. All of the signals are automated using infra-red sensors between the rails from Block Signalling and are reset to red after the train passes. After a set time each signal clears back to green using the built in timer.

Rolling stock

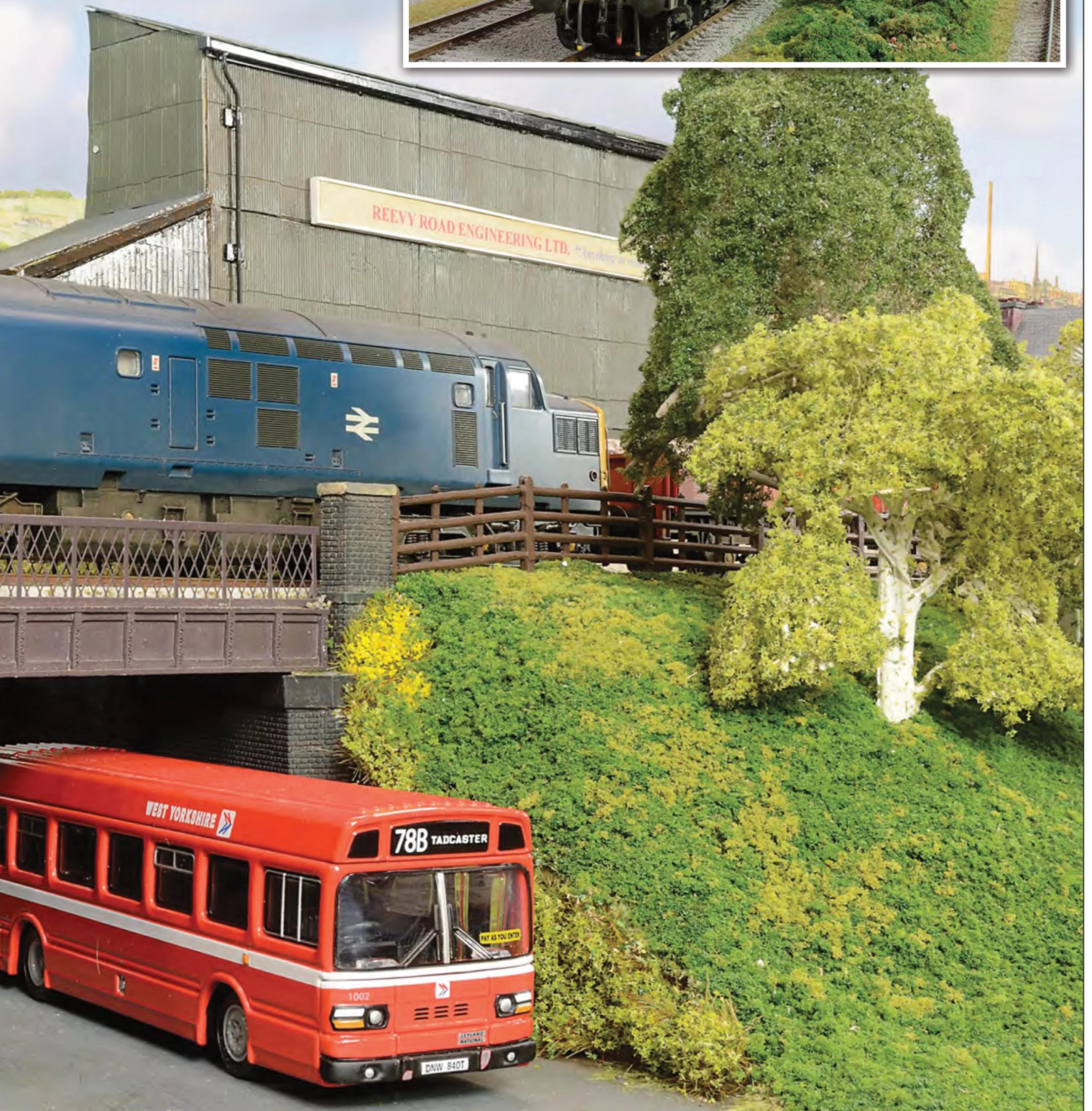
The 1974-1984 period is well catered for with ready-to-run locomotives and rolling stock. Those seen in action on the layout are from Bachmann, Hornby, Heljan and Dapol. These include classes 20, 24, 25, 31, 37, 40, 45, 47, 55 and 56 – all of which are appropriate to the area during the period selected. Derby



2 Right: Capturing the spirit of the 1980s, Class 47/0 47001 leads a block train of British Industrial Sand liveried CovHops through Reevy Road.

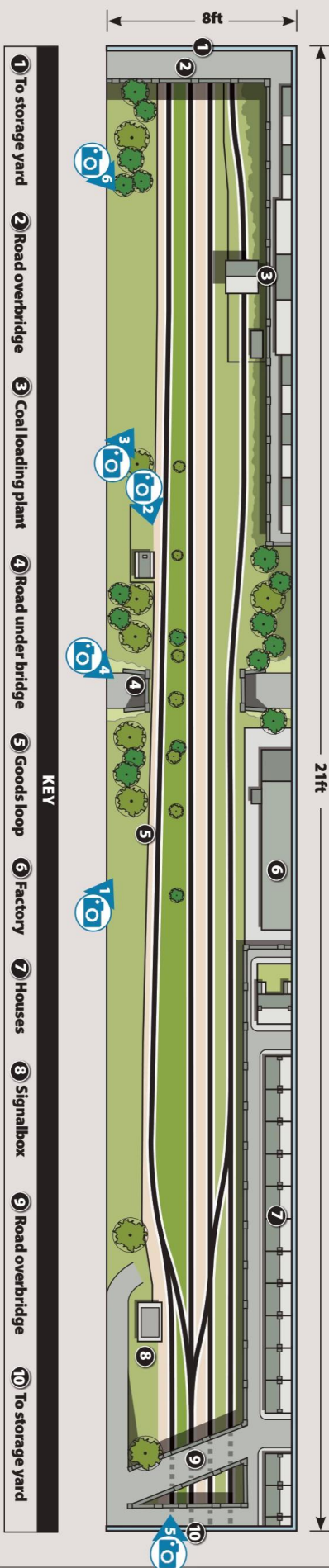
3 Left: All of the locomotives on Reevy Road West are ready-to-run items with bufferbeam detail, weathering and digital sound. A Bachmann Class 25 heads a freight past local industry.

4 Below: Class 37 37224 crosses the road bridge at the centre of the layout as a Leyland National passes underneath.



REEVY ROAD WEST TRACK DIAGRAM

(Not to scale)



operators always have plenty of capacity to run an intensive service at shows. NCE was selected as many club members were already familiar with NCE power cabs which are compatible with the Pro system.

To drive the trains, four operators are required - two front and two rear - each with an NCE handheld controller. Peco solenoid point motors are controlled by DCC Concepts ADS-FX8 accessory decoders to change the points. Routes are selected by push buttons linked to an NCE mini panel which has been programmed with macros (a sequence of operations) to achieve complex route setting with the push of a single button. Additionally, two DCC Concepts mimic panels illuminate LEDs indicating the route selected.

The future

Reevy Road has been a huge learning curve for the club as its first venture into digital control, but it has definitely been worth the effort to create the stunning final effect. The layout is available for exhibitions and the club is looking forward to taking it out on show in 2020 to the *Hornby Magazine* Great Electric Train Show on October 10/11 and many more. ■

WHAT TO KNOW MORE?

- Find out more about Bradford MRC and its activities by visiting www.bradfordmrc.org.uk





Right: A Class 56 hauls a bulk load of steel coils at full power as a Class 105 DMU rattles past in the opposite direction.



Below: A busy scene as a Class 44 takes a rake of hoppers through Slackside Mining's coal loader and a Class 37/0 and Class 25/1 pass on the mainlines.



www.YorkModelrail.com

Precision laser cut scenery detailing and architectural components; helping you create your model layouts
Unique range of laser cut kits, component parts & tools

Plus affordable bespoke laser cutting service for everything else that you can't buy ready made



N, 00 & 0 scales. Bespoke service for ALL other scales
Please visit our website to view all our products

York Modelmaking Printed price lists available 01904
Unit 13, Bull Centre, Stockton-on-the-Forest, York, YO32 9LE 400358

LX314-00 Industrial Unit / Lineside Building

LASER CUT 00 SCALE KIT



Highly detailed kit with laser engraved brick



Only £18.99 + P&P

scalemodelscenery.co.uk

Order online or call 01530 456952

Skytrex Model Railways



Unit 1, Charnwood Business Park,
North Road
Loughborough, Leicestershire, LE11 1LE
tel: 01509 213789
www.skytrexmodelrailways.com
www.ogauge.co.uk

CL FINESCALE
TRACK BUILDING SYSTEMS

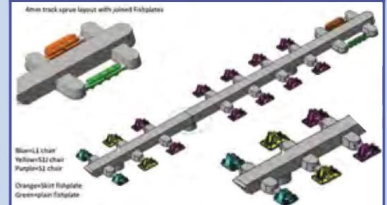
125 Reaver House, 12 East St, Epsom KT17 1HX

Office hours: 10.00 - 14.00 Monday, Tuesday & Thursday.
14.00 - 19.00 Wednesdays - Closed Friday, Saturday & Sunday



C & L have been suppliers of well proven range of track components for over 30 years in both 4mm and 7mm scales with our easy to build point kits and flexi track including a range other useful materials check out our new website for up to date product listings and exhibition calendar. New 4mm code 75 bull head track 60ft panels and 2mm British Finescale range of parts.

ALL NEW
2 & 3 Bolt Chair Sprues



Tel: 01372 748490
www.clfinescale.co.uk

GRIMY TIMES MODEL RAILWAYS
www.grimytimes.co.uk

187 Orford Lane, Warrington, Cheshire WA2 7BA

Open daily 10am-5.00pm Closed Sundays & Mondays 01925 632209
07921 830484



The Home of Grimy Times Weathering

- Excellent range of products and very competitive prices.
- Weathering, Renumbering & Renaming Service.
- Displays of pre-weathered locomotives for sale.
- Advice from professional railway modellers.
- DCC fitting service / Repairs & Servicing.



HORNBY **PECO** **METCALFE**

Sankey Scenics

Over 800 different packs of Quality Signage & Titled Trains



COACH DESTINATION BOARDS

GENERAL ARKRIGHT'S STOP

TOPILEY DALE

THE RAILWAY

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

THE MOST COMPREHENSIVE RANGE OF MODEL SIGNAGE

www.sankeyscenics.co.uk

ROXLEY MODELS
Est. 1986

SURREY'S SPECIALIST MODEL SHOP



DCC Doctor
Professional friendly advice.
Full DCC + DCC Sound Installations.
Expert repair services in the heart of Surrey.

DCC Sounds from Legoman Biffo South West Digital



Telephone: 01372 452976

Website: www.roxleymodels.co.uk

Email: enquiries@roxleymodels.co.uk

Address: 4 Beckley Parade, Leatherhead Road, Great Bookham, Surrey, KT23 4RQ
Opening Hours: Mon-Fri (9.30-17.30, Thurs till 20.00), Sat (10.15-17.30), Sun (Closed)

RK EDUCATION

SPECIALISTS IN A WIDE RANGE OF HIGH QUALITY PRODUCTS FOR MODEL RAILWAYS

RKPDU2 POWER DISTRIBUTION UNIT

£7.99
Or £9.99
Soldered



RKBRACKET1 SERVO POINTS BRACKET

£1.75
Or £3.50
with Servo



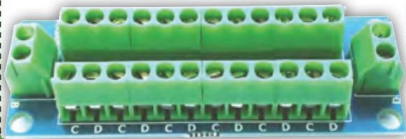
MULTI CORE, 3 WAY WIRE 10 METER ROLL AWG22

£5.99



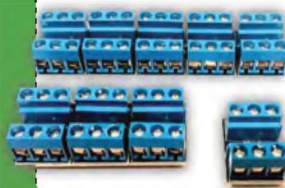
RKBUS1 BUS WIRING MODULE CONSTRUCTED

£3.99
Or £2.99
Self Build



RKCON1 (Pack of 10) WIRING MODULE CONSTRUCTED

£6.99
Or £4.99
Self Build



RKCDU1 CAPACITOR DISCHARGE UNIT - CDU

2X 2200UF

SELF BUILD KIT

£1.99



RKSWITCH1 TOGGLE SWITCH MODULE CONSTRUCTED

£6.99
Or £4.99
Self Build



RKTOGGLE7 TOGGLE SWITCH MODULE CONSTRUCTED

£6.99
Or £5.99
Self Build



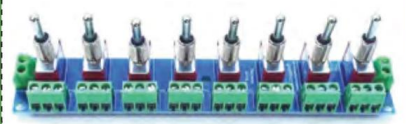
RKPSU V1 SINGLE OUTPUT PSU CONSTRUCTED

£2.99
Or £1.99
Self Build



RKTOGGLE8 TOGGLE SWITCH MODULE CONSTRUCTED

£9.99
Or £7.99
Self Build



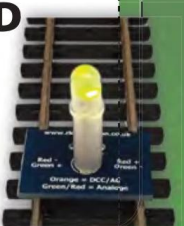
RKPSU V4 QUAD OUTPUT PSU CONSTRUCTED

£14.99



RKTT1 TRACK TESTING MODULE CONSTRUCTED

£1.99



www.rkeducation.co.uk

Over Peover

The golden age of the LNER provided the inspiration for **JOHN RYAN'S** glorious 'O' gauge masterpiece, which has been more than two decades in the making.

PHOTOGRAPHY, MIKE WILD

WELCOME to one of Britain's largest 'O' gauge model railway layouts, Over Peover, housed in a quiet area of Cheshire. Once you are inside the building it really is difficult to get a full sense of the enormity of this magnificent layout. Everywhere you look there is something to catch the eye and your imagination, from the huge London & North Western Railway (LNWR) and Great Northern Railway (GNR) inspired warehouse exteriors to your left, to the castle ruin straight ahead or the coaling plant to your immediate right. And what about the striking terminus station at the far end? At 120ft x 34ft, this layout stretches for as far as the eyes can see.

20 year project

Over Peover is the realised dream of former Doncaster Rovers chairman John Ryan. At 69, John has spent the past 22 years developing this stunning 'O' gauge layout to the condition we see today. Says John, "I've always been



fascinated by 'A4s' having seen them storm through Doncaster at great speed. I was a 4mm modeller for many, many years until I moved here 21 years ago. Just before the move, I started experimenting with 'O' gauge and immediately realised the feeling that 'O' gauge offers – more momentum and more power."

John's passion for the East Coast Main Line shines bright, with motive power and rolling stock reflecting examples that passed through or were built at Doncaster – two of his family members used to work at The Plant. While the layout is fictional, it operates to strict time periods – LNER 1936-1938 and British Railways 1954-1956, as these are John's beloved eras. During our visit today, all motive power and rolling stock is from the earlier LNER period, though we caught a glimpse of the BR stock in its purpose built lower storage yard.

John's first 'O' gauge locomotive purchase was a former Great Central Railway (GCR) 'D11' 4-4-0, having traded-in a quantity of his 4mm models. He repainted the 'D11' into BR black and weathered it too, kick-starting his love affair with 'O' gauge. Since then, John has gone »



Express trains dominate at Castle Cross with Gresley 'A3' and 'A4' 4-6-2s in charge.



Over Peover is about capturing the spirit of the East Coast Main Line in its heyday. Two 'A4' streamlined 'Pacifics' lead expresses on the upper and lower levels as a Robinson 'O4' 2-8-0 takes charge of a van train.

on to amass a formidable collection of 'O' gauge LNER motive power including 'A1', 'A3', 'A4', 'B17', 'P2', 'V2', 'V1', 'B3', 'B4', 'B16', 'D49', 'J39', 'J50', 'K3', 'N2', 'O2', 'O4', 'V1/V3' examples and many more. While a good deal of the engines are Golden Age Models ready-to-run items, the roster also includes products from LH Loveless, DJH, Connoisseur Models, David Andrews, Tower Brass, Ace Models and others. But that isn't the end of it, as John also has a large collection of BR motive power too, which he recognises may need thinning down: "Two-thirds of my stock is BR and a third is LNER, but I may have to rationalise a little bit as I have too much at the moment!"

Dedication

A house move in the mid-1990s afforded John the opportunity to indulge his passion in a dedicated building within the grounds. He had an 'OO' gauge layout, but explains: "Then I realised that 'O' gauge was definitely for me and I disposed of the 'OO'. The 'O' gauge was almost exactly the same in terms of era and location".

John's new 'O' gauge layout soon proved to be larger than the space available, as the return curves extended outside at each end. Explains John: "The layout inside is 120ft x 34ft, plus the outside curves at one end, so it's pretty big. The trackplan is a figure of eight. In the design I wanted the East Coast Main Line, I wanted



Even though Over Peover is a huge layout, detail is everywhere, even down to a possible cleaner in the shed.

mainline running, I wanted powerful engines pulling ten-coach trains at speed, passing each other. You can have almost three on each circuit as the circuits are the best part of 1,000ft long. I've built loops in so any goods train can go in the loop and an express can pass."

Over Peover features a double-track mainline throughout with various branches, loops,

sophisticated junctions, sidings, two stations, goods sheds, engine sheds, signalboxes and an extensive storage yard. A figure-of-eight track plan incorporates an upper and lower level, enabling trains to circulate the room multiple times before retracing the same route. All the track has been hand-built by Norman Solomon while the turnouts are wired for improved



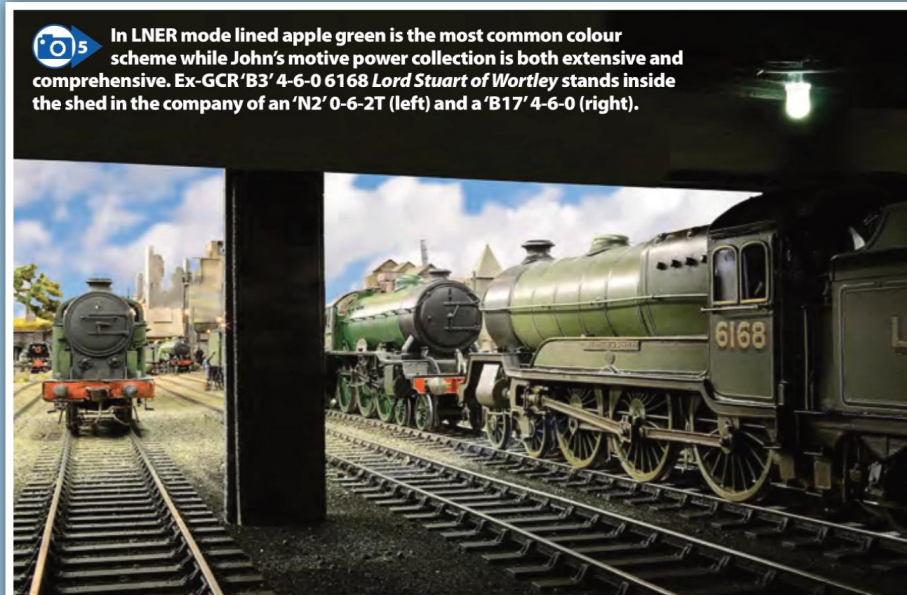
Castle Cross station features a stunning custom made 13ft x 9ft 6in overall roof. It covers six tracks of the station and can accommodate scale length trains.



electrical continuity. Norman is just one of many to have helped John create his dream layout over the years.

Semaphore signals are route controlled, so will only clear when the route is set correctly. Train control can be selected for analogue DC or Digital Command Control (DCC) running, as some of John's locomotives still need upgrading for digital operation, while those that are so fitted feature digital sound and synchronised smoke units installed by Cliff Williams.

Built over three phases, the first section of the layout involved the main lines and developing Over Peover as a through station, together with the engine shed, which has changed over time. The second phase of the layout's evolution resulted in the creation of Castle Cross station, the 24ft x 6ft terminus station towards the centre at the far end of the building. The station nestles inside the curve of the main lines at this end of the building on a dedicated central section, connected to the main lines on either side by means of a complex junction and series of tunnels at the station throat mid-way along the building. As John elaborates, "It is my small version of King's Cross with complicated trackwork, Gasworks tunnel, the small locomotive shed, the platforms and overall roof. The roof is actually based on Manchester Central, where I used to park my



In LNER mode lined apple green is the most common colour scheme while John's motive power collection is both extensive and comprehensive. Ex-GCR 'B3' 4-6-0 6168 Lord Stuart of Wortley stands inside the shed in the company of an 'N2' 0-6-2T (left) and a 'B17' 4-6-0 (right).

car for many years."

Timber Tracks produced the 13ft x 9ft 6in overall station roof in laser-cut kit form, which John and Brian Lewis from the company built between them. It can comfortably accommodate full-length train formations. The third phase of the layout resulted in the creation of the goods depot area to the far left

of the room as you enter the building, with its large warehouse backdrops, including a replica of the GNR warehouse building facade, providing the backdrop to this area. Extensive goods sidings are filled with wagons of various prototypes from the period. As John recalls, "I decided to go big into goods. I love the coal trains, especially the private owners."»

"It is my small version of King's Cross with complicated trackwork, Gasworks tunnel, the small locomotive shed, the platforms and overall roof."

JOHN RYAN



Details that count

On a layout of this magnitude, getting the detail right is very important, and this is certainly an area that John and his team have excelled from the immense warehousing back drops to the lush green open spaces, ponds, retaining walls, telegraph poles, road signs, platform noticeboards, posters, figures, animals, yard detritus and so much more.

Detail also extends to the layout's train formations, many of which are modelled on actual LNER services from the period with appropriate roof boards or bodyside lettering, such as the many well-known titled trains that operated along the East Coast Main Line including the 'Flying Scotsman', 'Queen of Scots Pullman', 'Yorkshire Pullman', 'Silver Jubilee', 'Coronation' and 'West Riding Limited'. These carriages are mainly ready-to-run items from Golden Age Models and LH Loveless and Co.

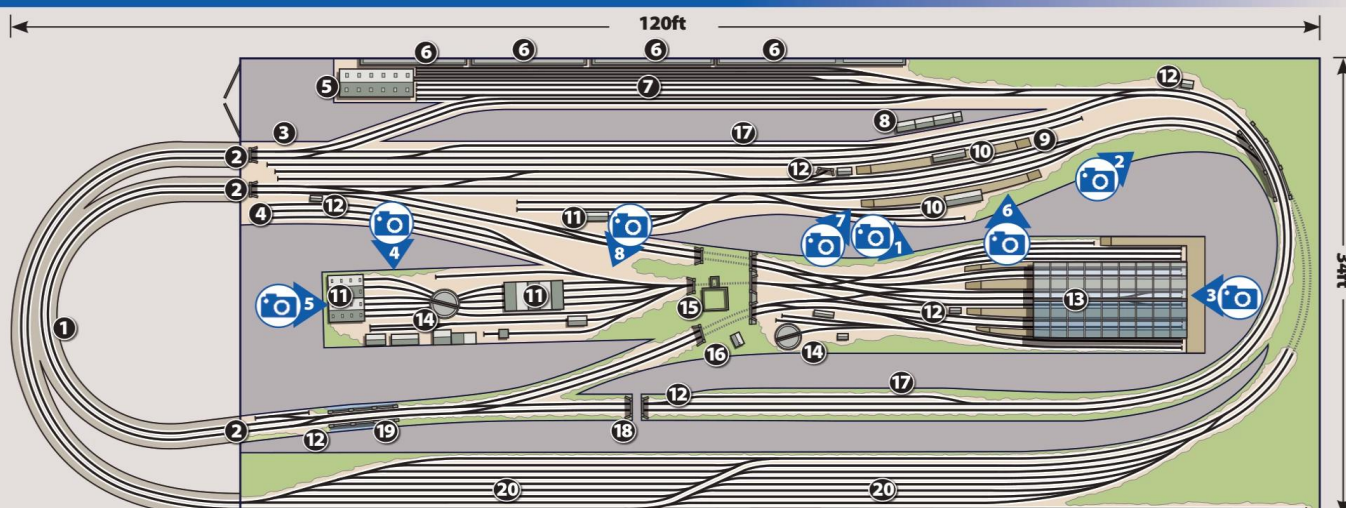
Wagons include a vast array of private owners, insulated fish vans, 12ton ventilated box vans, cattle trucks, carriage trucks, tar wagons and many more.



6 A solitary car ambles towards the station while a 'V2' simmers in the platforms at Over Peover.

7 Over Peover station is more modest, but its platforms can still hold scale length trains – in 'O' gauge! Unique Gresley 'Hush Hush' 4-6-4 10000 simmers at the head of a rake of teak corridor stock while two streamlined expresses cross on the upper level mainlines.



OVER PEOVER TRACK DIAGRAM (Not to scale - some lines omitted for clarity)**KEY**

- | | | | |
|-----------------|-------------------------|------------------------|---------------------------|
| ① Outdoor loops | ⑥ Low relief warehouses | ⑪ Engine shed | ⑯ Public house |
| ② Tunnel mouth | ⑦ Goods yard | ⑫ Signalbox | ⑰ Goods loop |
| ③ Upper level | ⑧ Houses | ⑬ Castle Cross station | ⑱ Road bridge |
| ④ Lower level | ⑨ Over Peover station | ⑭ Turntable | ⑲ Three arch river bridge |
| ⑤ Goods shed | ⑩ Station building | ⑮ Corfe Castle | ⑳ Storage yard |

While a layout may never be truly finished, John believes his incredible 'O' gauge scheme is almost there: "This railway has always been my dream. I've always wanted to have this railway. To have achieved it is a great feeling. It's just about finished. It needs perhaps another six months' work, I would say. I've got all the locomotives and stock that I need, particularly in BR - apart from a BR '9F' that I have on order - and there's nowhere else that I can put in any more lines! It's as finished as it's likely to be, really". ■



On shed 'A3' and 'A4' 4-6-2s gather at the depot. The concrete coaling tower dominates the skyline.

EXETER

JUNCTION

Train driver **PAUL TOULMIN** drew inspiration from his youth to create a 'OO' gauge loft layout modelling the Western Region when the hydraulics ruled the rails.

PHOTOGRAPHY, MIKE WILD



SCHOOL AGE TRIPS to the Western Region in the final years of the diesel-hydraulics fuelled Paul Toulmin to create this impressive and attractive 'OO' gauge loft layout which is set firmly in the first years of the 1970s. This was an era when BR green and maroon could be seen side by side with the new corporate blue era, but most importantly for Paul the 'Western', 'Warship', 'Hymek' and 'Baby Warship' hydraulics were still in service.

Paul explains his inspiration: "We spent many Saturdays on platforms at Paddington, Reading and Bristol and 'bunked' the depots at Old Oak Common and Bristol Bath Road. Days often finished with being chased out of the yard at Swindon Works and this inspired a short line of withdrawn Class 42 'Warships' on the layout next to the main line. They were such great happy times and with all these memories this had to be the region I chose for my layout."

Being a train driver by day, Paul has been able to study the railway network from the driver's desk which has helped him along the way. He has only been modelling for 10 years, but has enjoyed the observational aspect as well as recreating history in miniature.

In planning Exeter Junction there were many requirements. It had to be a continuous run to allow locomotives to get into their stride and it could occupy a healthy 25ft x 13ft in a

 **Classes 22, 42 and 45 share space at Exeter Junction depot.**



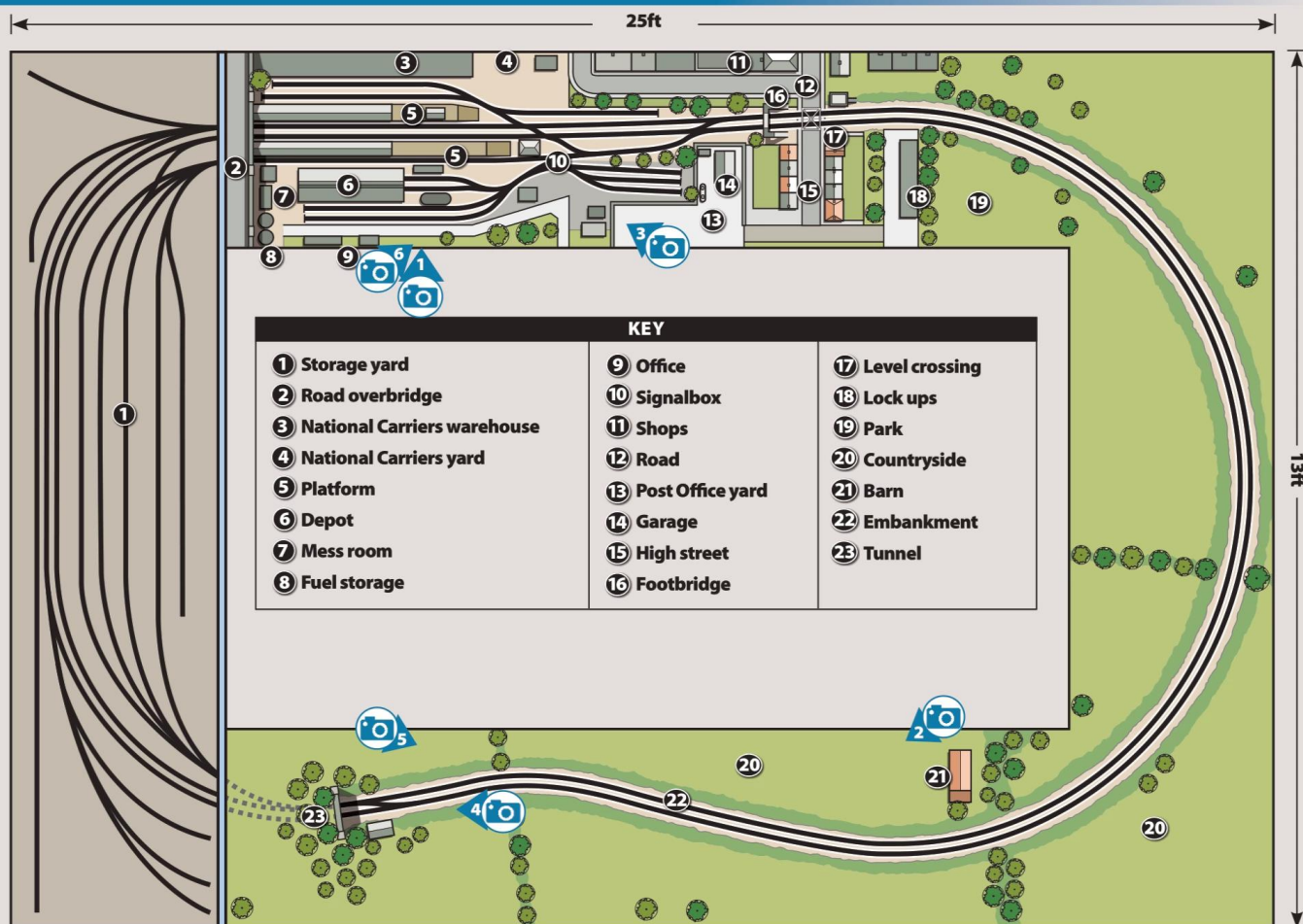
dedicated loft room. It needed a station with a bay platform, space to carry out locomotive changes and a depot area too. Sound was another key factor for Paul at an early stage and this has helped shape his way of recreating his memories of the Western from almost 50 years ago.

However, there was another component which was just as important as the station scene – an open double track mainline scene where the railway could run through the landscape. This was a feature of many photographs of the Western Region as trains wound their way into the Devon hills >>



A Class 52 'Western' pilots one of its replacements, an English Electric Class 50, on the countryside section of Exeter Junction.

EXETER JUNCTION TRACK DIAGRAM (Not to scale)



heading to and from the west. This meant careful planning so that three sides of the loft room could be used for scenery while the fourth became an off-scene storage area for additional rolling stock.

The build

The loft space was fully insulated prior to construction of the layout while the baseboards have been built using 9mm plywood which has been fixed to battens built onto the roof trusses. Track is a combination of Peco code 75 and code 100 with converter sections where the two types of track meet. Paul commented: "Prior to ballasting, the whole track layout was sprayed with Phoenix Rusty Rails, a great colour. I am lucky in having a lot of workmates with similar interests and they have been invaluable in giving advice and assistance especially when it came to wiring the layout."

Construction of the rolling hills used an unusual method. Over to Paul: "Hardboard sections were cut to shape and screwed to blocks of wood of various sizes as this gave me the nice smooth contours and transitions that I was trying to achieve. It took a while, but I was happy with the results. Under the hardboard are sections of polystyrene to give it a bit of strength and support."

The tunnel is a plywood box screwed together with hardboard angled and screwed down on top of it. The grass on the fields is Gaugemaster mats cut to shape and fastened down using double-sided tape. The grass on the embankments and cuttings were created

using Gaugemaster 6mm meadow mats to provide different colours and textures. This was then detailed with different scatter material to bring it to life. The buildings around the layout are mainly from either the Bachmann or Hornby ranges, all slightly weathered and tweaked.

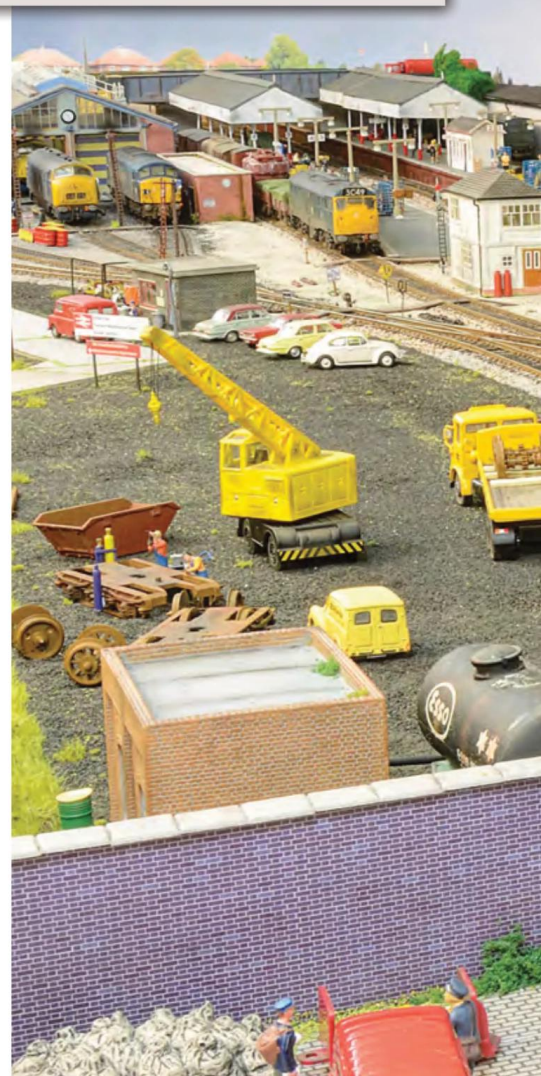
Power and control

With Paul's desire to use digital sound, Exeter Junction has been operated with Digital Command Control from the start. His system of choice is the Gaugemaster Prodigy Advance which operates all sections and provides plenty of power for the movements required during an operating session. Paul added: "As a home layout, I haven't found the need for power districts and the Prodigy provides ample capacity to have a number of locomotives ticking over with sound on in the depot area while two trains are running on the mainlines."

More than half of the locomotive fleet has now been equipped with DCC sound using ESU decoders from Howes and Legomanbiffo. The locomotives these decoders are installed into are a selection from all the mainstream manufacturers. Rolling stock is weathered using an airbrush and vehicles are not allowed >>



At the station BR blue dominates as a Class 205 DEMU departs for the Southern Region. In the foreground withdrawn 'Warships' wait for removal from the yard.





 A 'Warship' leads a loaded stone train for construction of the M25 out of the tunnel and starts its descent of the bank towards the station.





A Class 35
'Hymek' climbs
towards the summit
tunnel with a parcels
train working as a Class 42
'Warship' descends the
bank with a stone train.



Brush prototype 1200 *Falcon* has just arrived with an express while the depot yard is home to classes 08, 42, 45 and 52.

on the layout until it's been done.

Western Region diesel-hydraulics feature prominently in the roster including classes 22, 35, 42, 43 and 52 from the ranges of Bachmann, Dapol and Heljan. These are modelled in a number of liveries from the early 1970s including BR maroon with small yellow warning panels (Class 42 and 52), BR green with small yellow panels (Class 22 and 35) and BR blue with full yellow ends (Class 22, 42, 43 and 52). In addition the newly arrived diesel-electrics from classes 31, 33, 37, 45, 47 and 50 can all be seen running on the layout as well as Brush prototype 1200 *Falcon* in its final BR blue colour scheme.

Passenger traffic is mainly formed from rakes of Bachmann Mk 1s with the close coupling bars connected. These are joined by a Class 108 Diesel Multiple Unit and a Class 205 Diesel Electric Multiple Unit to provide stopping services. Freight stock from both Hornby and Bachmann covers a cross-section of what would have been seen in this part of the region. The weathered china clay wagons without the hoods and six-wheel milk wagons can all be hauled by a variety of engines from classes 22, 25 and 'Warships' right through to classes 45, 46, 47, 50 and 52. This era also allows Paul to run pick-up goods with many still coming out of Cornwall during the 1970s. This is also a great excuse to buy a variety of different stock.

Exeter Junction is an enthralling layout to watch and operate and the open countryside section is just as enthralling as the bustling station and depot. Paul's layout shows just how much potential a 'OO' gauge loft layout can hold and he is never short of a new project to bring something else to the table and enhance both the railway and its roster. ■

Bewdley

Better known these days as one of Britain's most loved preserved stations, Bewdley in the 1960s was the inspiration for **GRAHAM HEALD'S** 'OO' gauge layout.

PHOTOGRAPHY, MIKE WILD

GRAHAM HEALD loves everything about the Great Western Railway. Standing on the island platform at Bewdley station on the Severn Valley Railway (SVR) some years ago, he was reminded of many happy memories from his younger days trainspotting in Hereford. There and then he decided that his next layout must be based on a real location, and of course it had to be somewhere on the Great Western.

He realised his ideal prototype for the new layout was right there under his feet. On a long narrow site, with an existing embankment forming a natural backscene it was an ideal configuration for a model railway. Bewdley had the advantage that all the buildings on the station site were original, little changed from

their original construction.

The era for the new layout was to be set in the period 1958 to 1969 when steam was still the main motive power provider on the line, although green Diesel Multiple Units (DMUs) were beginning to appear. There was quite a mixture of traffic through Bewdley station in the sixties. As well as regular passenger traffic, there was also local goods services, and LMS '8F' 2-8-0s could be seen on a regular basis, with their long coal trains and their return empties.

The market town of Bewdley is in the West Midlands not too far away from Birmingham. Before the rationalisation of the railways in the 1960s by Beeching, Bewdley was a busy junction of four principal railway routes. To the north west one route ran to Bridgnorth and onward to Coalport and Shrewsbury, while the

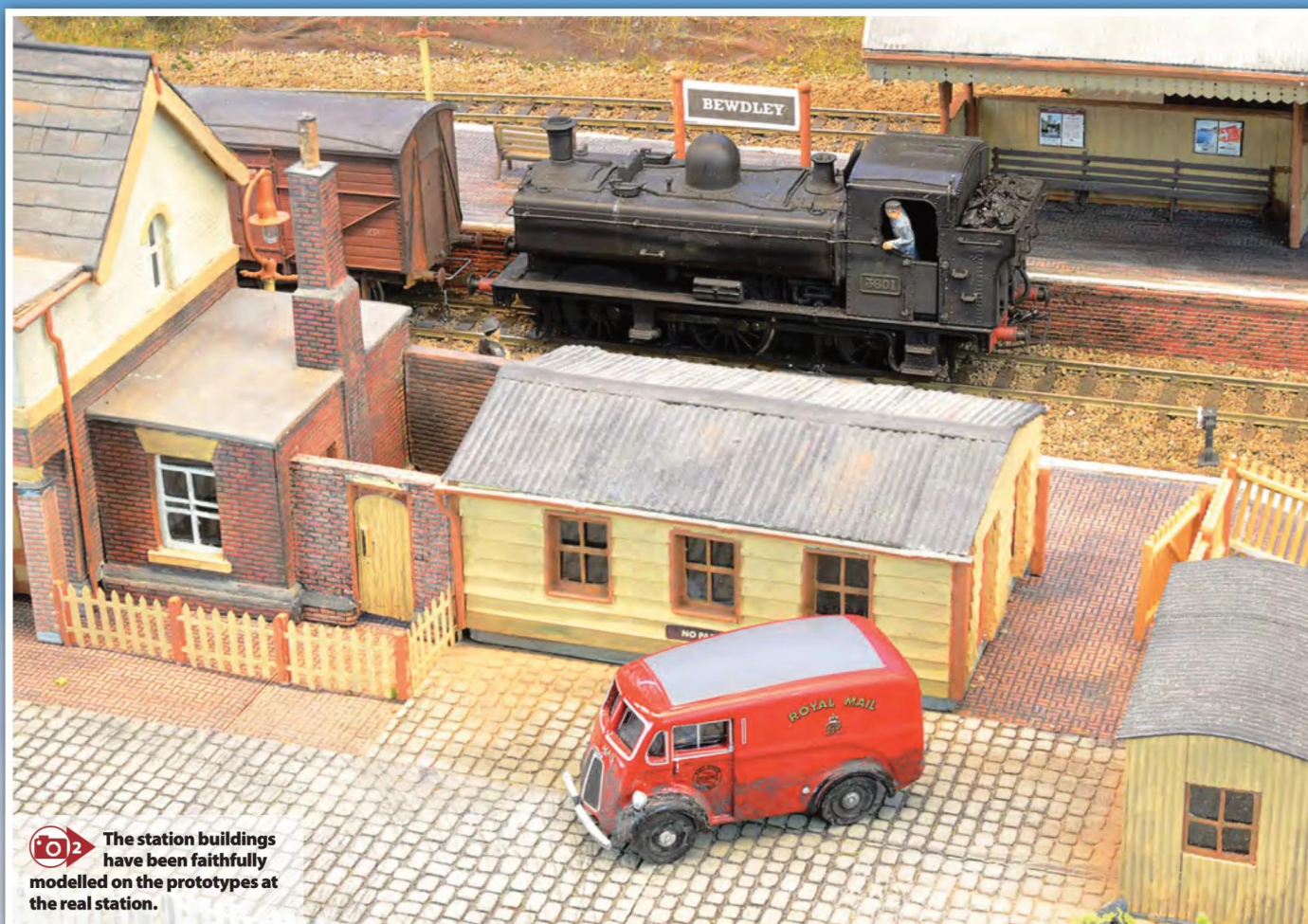
second route headed westwards to Cleobury Mortimer, Tenbury Wells, Woofferton Junction and onward to Ludlow and Hereford. In the opposite south easterly direction, only one line remains. This is the present SVR route to Kidderminster. There was previously a second route for Stourport on Severn, Hartlebury and onwards to Droitwich and Worcester. This line has long since been closed.

Today Bewdley is an intermediate station on the SVR between Kidderminster and Bridgnorth and it has gained a motive power servicing point as well as the goods yard being home to the wagon restoration team. None of the other branch lines remain, though the junction to Stourport on Severn to the south and Tenbury Wells to the north of the station can still be seen. >>

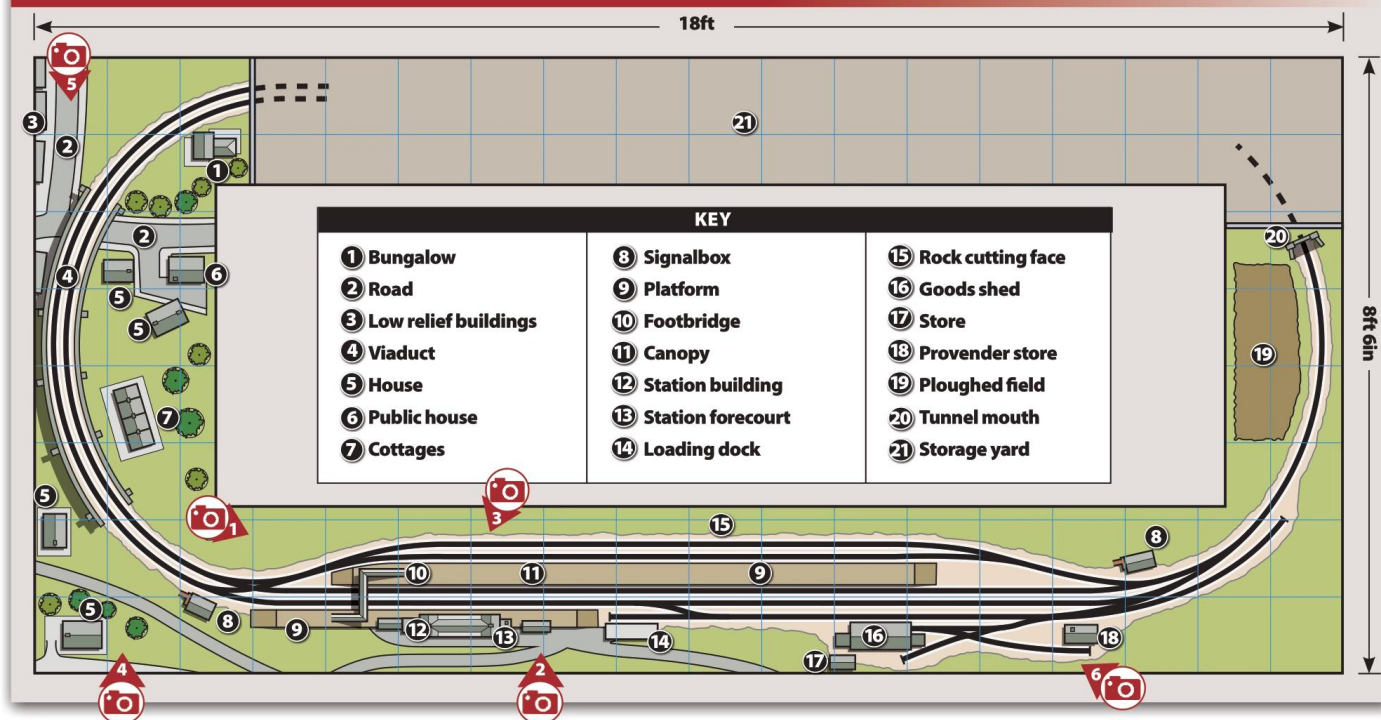


BR '3MT' 2-6-2T 82008 departs Bewdley with a typical two-coach stopping train. The signalbox and footbridge are distinctive aspects of this well-known preserved station.





BEWDLEY TRACK DIAGRAM (Not to scale)

**Building the foundations**

An early decision was taken that the layout would be a continuous run through the station and storage yard at the rear. The overall size of the layout (18ft x 8ft 6in) was dictated by the space available in Graham's railway room. At an early stage of the initial design process, the decision was taken that Bewdley would go out on the exhibition circuit, so the baseboard sections were divided into easily transportable units. Construction of the baseboards was by the long established method of plywood decking on timber sub-frames.

Construction was assisted by members of Wirral and North Wales Model Railway Club. The initial help was provided by club member Chris Manners, with the laying of the track. For the scenic section SMP Track has been used. This proprietary track gives a more accurate and convincing sleeper spacing. The setting out >>



3 The station building will be familiar to thousands of visitors who have been to Bewdley in preservation.





 A BR '4MT' 2-6-4T approaches Bewdley and passes a Stanier '8F' 2-8-0 on the viaduct across the outskirts of the town.

details of the crossings and points on the scenic side were given to Marcway of Sheffield for construction, which included the complicated crossover at the south end of the station. Peco Streamline code 75 track and points have been used in the off-scene storage yard.

Bewdley has been wired for Digital Command Control (DCC) operation using the NCE control system, the points and signals being operated by servos and switches.

Experience has taught the club members that to operate Bewdley successfully it requires one operator to run the northbound trains, a second operator to control the southbound trains, with

a third operator acting as signalman who sets the routes for each train movement. The single line routes to and from the station demand this method of operating discipline which avoids two trains meeting head-on on the same single line.

To increase the operating fun a full 24-hour timetable has been prepared using flip cards. This timetable is based upon the original 1960s Bewdley working timetable. It allows for the correct train services and sequences to be operated through the station, using the correct locomotives and rolling stock of the period.

The locomotives and rolling stock are principally proprietary products from

Bachmann, Hornby, and Airfix with a few scratchbuilt items, suitably weathered. All the locomotives have been fitted with a variety of sound chips and speakers which increases the enjoyment of operating the layout. The principal steam classes are GWR '57XX' 0-6-0PT, LMS '8F' 2-8-0, BR '3MT' 2-6-2T and BR '4MT' 2-6-4T together with a pair of GWR AEC railcars and a Class 108 two-car Diesel Multiple Unit (DMU).

Dream come true

The construction of Bewdley began as a dream for Graham Heald. He probably did not realise the scale of the venture when he started



out on its initial planning. However, he has appreciated the benefit of involving his fellow club members of the Wirral and North Wales Model Railway Club in his project.

The construction and operation of Bewdley has benefited from the shared knowledge of all the members of the club. This has been proved to be invaluable. The added bonus is that the club regulars have a working knowledge of the layout and operation of Bewdley station. As a team, they can all enjoy going back to the 1960s and operate a busy branch line station in the West Midlands - all from the comfort of the clubroom.

Eagle-eyed readers will have spotted that the layout and track plan of Bewdley has changed little from the 1960s to the present day under the auspices of the Severn Valley Railway. The only change is the removal of the crossover at the south end of the station. This has given rise to some club members suggesting replacing the 1960s road vehicles with something more contemporary, and then operating Bewdley as a heritage line in the manner of the SVR. It has to be recorded that a Class 66 has already been seen on the layout - and there are rumours that a Voyager is lurking somewhere - but all this 'modern image' thinking is for another time! ■

 **'8F' hauled coal trains were a feature of the route in the 1960s. 48739 leads a loaded working through the station while a GWR '57XX' 0-6-0PT shunts the yard.**



TONBRIDGE

West Yard

This inspirational 'OO' Southern electric layout was a popular exhibit of the 1990s and early 2000s show circuit. After a lengthy absence from the public eye **PAUL WADE** revived it and brought it back to the public.

PHOTOGRAPHY, TREVOR JONES

Right: A pair of 4-VEP units enter the scenic section and cross paths with a Rail Express Systems Class 47/7.

Below: A pair of Class 33s use the crossover with a loaded ballast train. The yard behind is busy with locomotives, wagons and multiple units typical of the early 1990s on the Southern Region.



BRIDGE



AT THE START, Paul says he was looking for a design that combined Southern Region Electric Multiple Units (EMUs) with his expanding interest in departmental wagons and on-track plant. "I had enjoyed modelling a prototype location before with the mix of research, design and the challenge of recreating items large and small, much of which had to be scratchbuilt or heavily modified," he says.

After much research and several sketched ideas, he chose a scaled down Tonbridge West Yard as the future layout. There was huge variety in freight and passenger operation to make it an interesting layout to operate and view.

Modelling any real location requires extensive research and Paul visited to photograph the real location. Later on he sketched out physical locations of features and details, and measured buildings and anything he thought he would have to make himself.

Realistic compression

Railways are huge things and almost every model has to be a compressed version of the real thing. Paul's model of the vast Tonbridge West Yard was no exception, but he managed to restrict the losses to eight loop sidings in the West Yard and one road in Jubilee Sidings as well as a reduction in the length of everything. The layout is modelled in electrified form as this was taking place while Paul was creating the model.

For optimum running at shows there are three control panels - one each for the Up and Down circuits and one for West Yard. Analogue controllers were ECM Comspeeds when built but changed to Kent Panel Control feedback models after a few years.

The three panels allow independent operation to keep trains moving, but switches control movements between circuits or into West Yard. Each panel has a separate section of the storage yard at the rear of the layout. This consists of six loops and six feeder sidings for the Up, eight loops for the Down, and four sidings plus five short/locomotive sidings for the West Yard. The loops can hold more than one train depending on length.

The signals were made by Roger Murray replacing less realistic versions used for the first few shows. These were a three-aspect for the Up line, a three-aspect with four-way Southern Region type feather route indicator plus a call on head for the Down line, and five position light ground signals. "The latter should have motorised discs, which I felt were too hard to do on a model," says Paul. There is a rail-built bracket semaphore signal for the exit from the West Yard with a two aspect head. This was made using MSE components.

The scenery

After spraying and ballasting the track, attention turned to the scenery. Where there was high ground, layers of polystyrene tiles were overlaid with Mod Roc. For a few areas of lower relief scenery, sections of Sundeala top were cut away and replaced with 1mm plywood which was overlaid with Mod Roc again.

Much of the yard ballast is fine grey ballast to represent the finer walkway surfaces. The yard »

and Jubilee Sidings tracks were weeded up with scatter and turf using Woodland Scenics products. Larger green areas were similarly covered with trees and bushes added mostly from the Heki and Woodland Scenics ranges. Some bush areas were formed with horsehair cut to shape and covered in scatter attached with hairspray.

Other details included troughing routes, relay cabinets, point heating transformers, the distinctive long footbridge, lineside telephones, structure numberplates, mileposts, overhead cables on posts and the ground frame at the Redhill end. The carriage and wagon depot has an overhead hoist, inspection pit, Matterson hydraulic jacks and a wheel storage area. A Hornby hand crane was detailed using Jon Hall's etched and cast components.

All the buildings were scratchbuilt except the platelayer's hut and tool hut which are Roxey kits used in the carriage and wagon area. Plasticard was used for buildings with micro strip and plastic rod for details where scratchbuilding was employed. The majority of the buildings were measured and



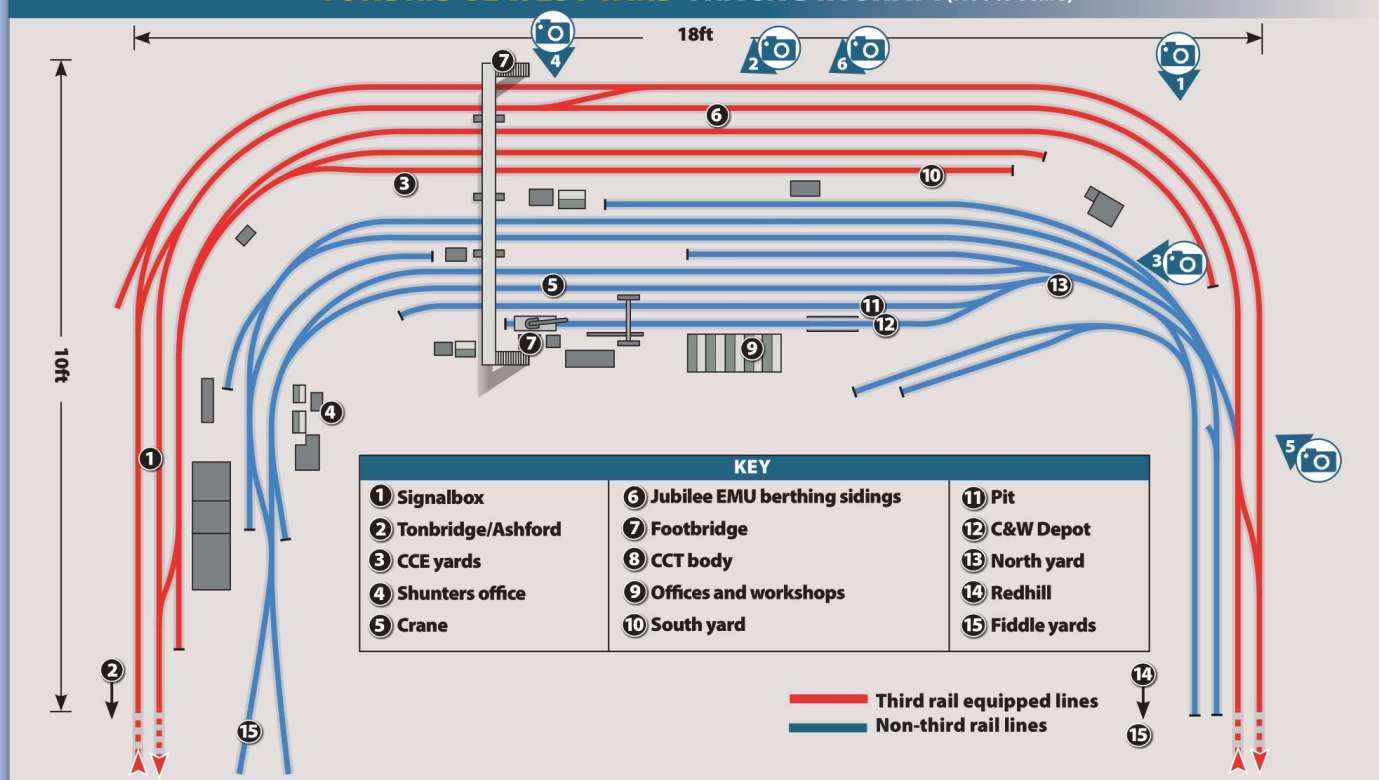
4 Hunslet Barclay operated Class 20 20904 heads a weed killing train past the yard and under the footbridge.



3 A Class 73 draws out of the yard with a rake of Satlink wagons. On the right are the EMU carriage sidings, while on the left are storage lines for engineers stock.



TONBRIDGE WEST YARD TRACK DIAGRAM (Not to scale)



photographed making construction easier. Brick papers were used with block walls made from scribing and embossed plasticard used where possible for planking. Interiors were modelled in detail, which really brings the buildings to life. There are several grounded wagon bodies around the yard: these used kits or ready-to-run wagons suitably modified and painted.

Nineties launch

Amazingly, Tonbridge West Yard made its debut back in 1990 but was developed rapidly. Some of the rolling stock dates back to Paul's Maidstone Barracks layout but much was added continuously while the layout was exhibited. All the multiple units are detailed

MTK kits. These were either aluminium or brass pre-formed shells with white metal or plastic ends. Locomotives were mainly Lima originally but Bachmann and Heljan have replaced some of the older models. Freight and departmental stock is a mixture of detailed ready-to-run, kits, conversions and scratchbuilt. Cranes and on-track plant vehicles add to the variety.

Multiple units have Kadee couplings for auto coupling but deliberately set too high for auto uncoupling. Locomotives and wagons have tension lock couplings but many rakes of wagons have scale couplings within the rake. Dummy tail lamps are fitted at the ends of all wagon and coach rakes. Locomotives and many units have drivers and train crew fitted in the cabs.



As a Class 33 enters the yard with a mixed rake of Grampus and Tunny open wagons, a Class 107 DMU rattles along the mainline.



Operation

"Operation is as prototypical as possible but ramped up in frequency and variety to be as interesting as we can make it," says Paul, who adds: "Operating the Up and Down circuits can be quite relaxing but the West Yard can be daunting at first. Once you are familiar with the layout of the yard including isolating sections it provides many possible moves including exchanging trains from the circuits with those in the yard. But as the yard and storage yard

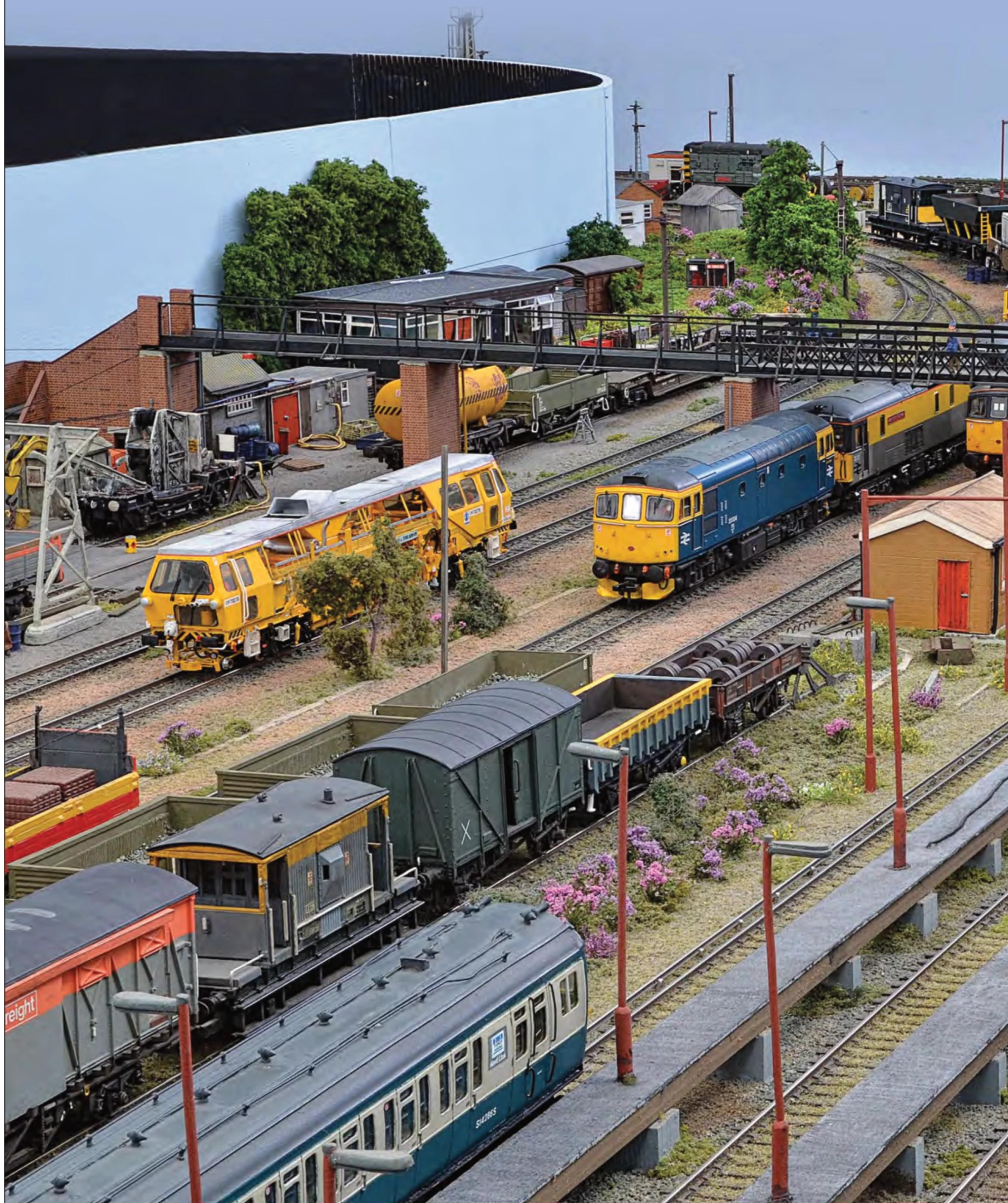
have limited space and the usual quota of trains leaves only three sidings empty you have to think ahead to cope with this and avoid gridlock! I am sure the prototype must have faced the same problem in busy times."

The revival

The layout retired from shows after returning to Blackburn in 2009 at which point it had attended 88 shows in 20 years. Paul had other priorities which forced him to take an almost

complete break from railway modelling. A return was soon in the offing, however: "I was asked to return for the DEMU Society's 21st anniversary Showcase event in 2015 which I agreed to do. Luckily I had decided to take early retirement at the end of 2014 so I was fired up to repair and refresh the layout for a limited comeback tour.

"Even with my new massively increased free time it was still quite a task to get it ready in time. I set myself the goals of carrying out any



repairs needed, enhance anything that had caused problems in the past like connector pins getting loose, and refresh the scenery using modern materials now available."

Paul says that the layout was in good condition considering it had had five years in storage, with repairs undertaken and scenery updated to reflect changes that happened during the layout's exhibition career.

But there was more as Paul wanted to do a more significant change so the layout was a

little different for people who remember it. He built the derelict old carriage and wagon lobby and grounded wagon body stores that he had excluded from the previous scene.

Paul also made dozens of small detail items for this area including small plant, wagon components, air hoses, oil drums and tools, and the space behind the signalbox with stored sleepers, rails and other bits. Other small additions refreshed the layout so it was not identical to its previous exhibition appearances.

Future plans

With the layout complete, Paul turned his attention to rolling stock, and kept his fleet of MTK units. Other models have been replaced by newer products developed in the 30 years since Tonbridge West Yard made its debut.

All these years on, it remains an outstanding layout which is now something of a time capsule showing an era of railway operation long eclipsed. If you get the chance to see it, we can guarantee you'll be as impressed as we were. ■



Class 33s and 73s dominate the motive power scene at Tonbridge West Yard. The long footbridge was a distinctive feature of this location running across the mainline, carriage sidings and yard.



HORNBY

magazine



Published monthly in print and digital format and featuring exclusive Hornby Hobbies content, Hornby Magazine takes a unique approach to model railways with the novice, returning and seasoned modeller in mind.

Unique step-by-step guides offer modellers hints and tips on how to get the most from the hobby. The very best photography and all the very latest news inspire and inform modellers of all abilities. Hornby Magazine is produced independently, under license from Hornby Hobbies, and is dedicated to promoting this most rewarding of hobbies, introducing it to newcomers and those returning to the hobby. It is written by enthusiasts for enthusiasts - the editorial and publishing team are all active modellers who care passionately about the hobby.



170/20

SUBSCRIBE AND SAVE

For the latest **HORNBY** magazine subscription deals

Visit www.keypublishing.com/shop

Call: +44 (0)1780 480404

Also available monthly from **WHSmith** and other leading newsagents

model making
supplies

4D

model making
services



5,500+ products



Resin & metal casting



Wide range of scenic material
& model effects



Etched GWR signal gantry for the
Cardiff Model Engineering Society

www.modelshop.co.uk

The Arches 120 Leaman Street London E1 8EU
Mon - Fri 9am-6pm Sat 9.15am - 6pm

ESR Electronic Components Ltd



Soldering Iron & FREE Tip Set

An all purpose mains operated soldering iron. Supplied with a FREE set of different size tips which allow you to solder small LED's, Point Motors or Track Rails. The unit has a 48 Watt iron with adjustable temperature control. Supplied with sponge and stand.

**HG101
£24.00**



Digital Multimeter

LCD Digital Meter with backlit display. It includes a buzzer for testing fuses and leads. AC and DC voltage ranges for track voltage measurement and a Resistance range for testing of point motors windings. Comes with battery and test leads.

**121-104
£12.95**



230V Electric Drill

A high power 230v AC mains operated drill, with variable speed control. Suitable for use with most rotary tools. Supplied with a case and full range of accessories. Perfect for model railway enthusiasts and small DIY projects.

**270-610
£27.30**



Prices include VAT. Order online, by phone or post. Cheques made payable to ESR Electronic Component. add UK Shipping £4.20

Station Road, Cullercoats, Tyne & Wear. NE30 4PQ
sales@esr.co.uk **www.esr.co.uk**

Mon to Fri 08:30 - 17.00, Sat 08:30 - 15:30 Tel: 0191 251 4363



*White Rose
Model Works*

PREMIUM MANUFACTURERS OF MODEL RAILWAY BASEBOARDS

MODULAR LASER CUT BASEBOARDS

40 standard sizes to suit your space & needs
Control shelves
& Backscenes
Unique plug and latch system for easy joining



LASER CUT DRAWERS AND PLINTHS

We provide a range of modeller's Plywood Laser Cut Drawers ideal for storage of engines, rolling stock, paints or modelling equipment.



MODULAR LASER CUT BASEBOARDS

40 standard sizes to suit your space and needs
Control shelves and Backscenes
Unique plug and latch system for easy joining



*Available in kit form,
built-up boards or
fully assembled railways*

Unit 10, Bedale Station, The Bridge, Bedale,
North Yorkshire DL8 1BZ • Tel: 01677 422444

Email: info@whiterosemodelworks.co.uk

www.whiterosemodelworks.co.uk

WEST COAST

Southern Section

'N' gauge offers the potential to recreate whole main line scenes in a viable space. **ANDREW ARMITAGE** decided to use it to its full potential to create a pastiche of the southern section of the West Coast Main Line set in the 1970s.



1 Right: The depot at Watford Junction is busy maintaining diesel and electric motive power as a Class 31 passes towing Metro-Vick electric prototype E2001 and a test train.

2 Below: At Watford Junction the Manchester Pullman is in the hands of a Class 81 as Brush prototype HS4000 *Kestrel* runs through light engine. The whole layout recreates the 1970s on the southern section of the West Coast Main Line.



THIS FABULOUS LAYOUT is based on the southern area of the West Coast Main Line (WCML), covering Harrow, Watford, and Linslade in the 1970s. Although the layout

resides in Hastings on the South Coast, it was inspired by Andrew's formative railway career based at Euston during this time.

The layout has developed on from the exhibition layout Kings Park (based on Queens Park) of which Andrew was one of the founder members. And he used a similar philosophy: "When it came to building my current layout, I chose to stick with the same general area so the same stock could be used on it," he says.

The overall size of the layout is about 32ft x 11ft in his loft, so unfortunately only a privileged few will get to see it. Unlike many layouts these days, Andrew opted for analogue control rather than digital, but as he enjoys watching the trains pass, he reckons this is not a major issue in terms of operation.

The main framing of the layout was made of 4in x 2in timber set around waist height from the floor. The layout was then made up from individual baseboards of 5mm plywood on 2in x 1in timber. As the storage sidings are on the outer edges these were made first in five 6ft x 1ft sections. The track and points were laid and wired before being 'rolled' into place and fixed on the main framing. This, says Andrew, avoided the problem of the sloping loft roof so he didn't have to squeeze under limited headroom to lay the track.

The scenic section was made up in individual sections formed of 6ft x 2ft 6in 5mm plywood on 2in x 1in timber. A couple of these boards were tapered in closer to the access hatch so that the maximum amount of space was available for lifting materials, models and items for storage in and out without damaging the layout.

As anyone who has built a layout in their loft will tell you, it isn't without its challenges. Andrew explains how he got around some of them: "As the loft hatch was at the end of the room I 'pinched' another 2ft from the »



A Class 87 threads through the complex trackwork at Harrow and Wealdstone while London Underground 1972 stock approaches the station. In the foreground is one of the yards with its stock including an electrification train in the hands of a Class 24.

unconverted loft area to avoid running the lines over part of the loft hatch itself. This area was used for the section where the tracks were required to cross over each other. The mainline gradients were kept to a generous 1-in-70, although the Watford 'New Lines' had gradients of 1-in-30. As the trains using these lines were lighter and shorter they are unaffected by these relatively steep gradients. Trains on the mainlines sail over the other gradients with no difficulty.

Tailored plan

Testing of the track was carried out as the boards were completed and joined together, which meant that everything ran well from day one. "It was possible to run trains after about the first 18 months of building, although it was another 18 months before the trains could run around the entire layout," says Andrew.

The layout consists of 10 individually controlled tracks. The four mainlines consist of Up Fast, Up Slow, Down Fast and Down Slow. There are the two Watford 'New Lines' (Up and Down). All these lines are broken down into sections, the mainlines have three 'controlled' areas, and the 'New Lines' are in two, so multiple train running is possible on each line. At Watford there is a separate controller for the locomotive depot and the St Albans branch/yard. At Harrow the Stanmore branch has been retained with its own controller, as has the goods yard with its own shunting panel.

The four mainlines and the two 'New Lines' are equipped with track circuiting units which show the positions of the trains on the control panels with red LEDs as they move round the layout (essential for keeping an eye on things when there are many trains on the move at the same time). Each of the track circuiting units operate a relay which in turn operates the signalling which is fully functioning Multiple Aspect type on the main lines, and the pre-



1986 'searchlight' types on the 'New Lines'. The signals have working route indicators and Position Light Ground Signals worked by Andrew's own relay boards providing simple interlocking.

Modified reality

The layout sets out to try and recreate the general feel of the scene rather than be 100% accurate. Making the station buildings at Harrow and Watford proved quite challenging as Andrew only had photographs to work to alongside a few memories from long ago. It wasn't possible to revisit any of the locations modelled, and Watford has changed quite a bit after the major rebuilding which took place in the mid-1980s altering a lot of the features.

Even though Andrew made these buildings before the layout began, he says he was pleased that everything eventually fitted together when it was finally finished. Not that there weren't challenges here too: "Watford proved a bit problematic as the main building sat below track level and I had to engineer the forecourt area to be set at a lower level on the baseboard. Having made everything in sections before fixing I was able to modify the baseboard where the Watford main buildings sit."

There are several other modifications made at Watford, as the station has had Platform 5 reinstated to cope with the 'Croxley Link', which in this alternate reality had been built, and the extended Northern Line from Edgware which has crept beyond Bushey Heath to Watford High Street. In this way it generates a lot more traffic which keeps the station area very busy. The old depot at Watford has also survived on this layout, rather than being turned into a car park. The original St Albans branch platforms have also been retained.

The actual scenic areas are not in their correct sequence. This came about as Andrew wanted the Watford area on the side of the loft with the maximum headroom. However, the trains do run either north-south or vice versa, so the coaching formations remain correct for viewing purposes.

Rolling stock

The trains are mostly all BR blue or blue and grey for the period depicted. The mainline sets range from Mk 1s to Mk 3s made up in sets typical of the 1970s. This includes parcels, sleeping cars and Pullman sets. The Mk 2 Pullmans were made by modifying some early Farish stock with homemade plasticard inserts.

It wouldn't have been the 1970s if there weren't some of the early AC locomotives of classes 81-85. As there were none available in ready-to-run form Andrew made them himself. The very first ones he made were scratchbuilt in plasticard around second-hand continental chassis that he acquired at exhibitions. The later examples were made by shortening the Graham Farish Class 87 bodysell, altering the detail, and mounting them on old Minitrix Class 27 mechanisms with Minitrix Class 42 bogies.

The Electric Multiple Unit (EMU) stock also had to be created as none were then available. The Class 304s and 310s were converted from early Farish coaches which had the removable window strips, which were replaced with solid plasticard which was drilled and filed to create the windows. The ends were fashioned from thicker plasticard then sanded to shape before drilling the windows out. The Class 501 Euston-Watford stock was modified from the B H Enterprises 4-EPB kits, having shortened them by one compartment on each coach and mounting them on some old Farish Mk 1 Full Brakes.

The Underground stock was the most challenging to build, says Andrew. They were >>



A Class 84 powers away from Harrow and Wealdstone alongside a scratchbuilt underground unit.

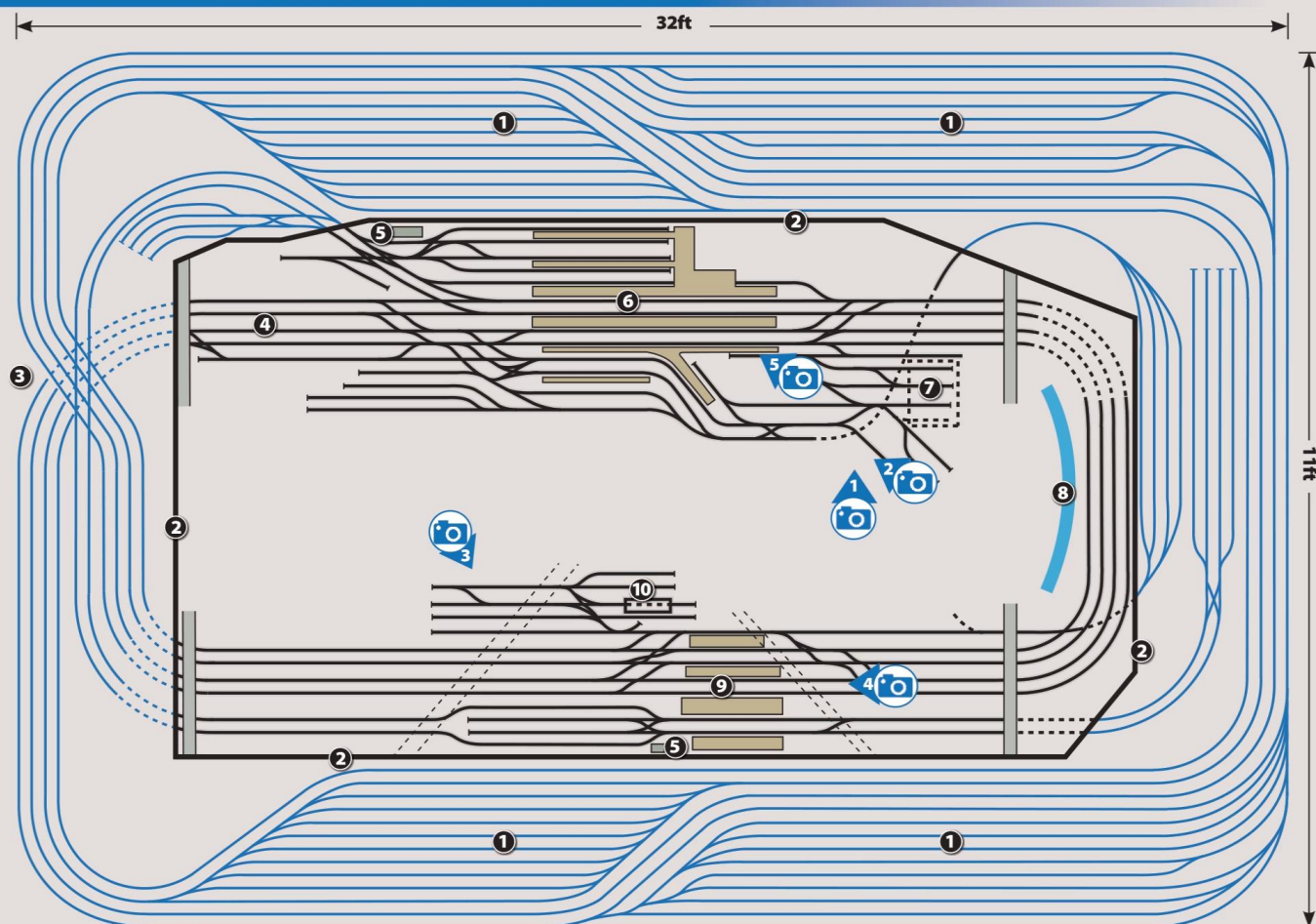




5 'N' meant Andrew could build an extensive mainline railway system in his loft with huge multi-platform stations.



WEST COAST SOUTHERN SECTION TRACK DIAGRAM (Not to scale)



KEY

① Storage yard	③ Off scene flyovers	⑤ Signalbox	⑦ Depot	⑨ Harrow and Wealdstone
② Backscene	④ Road and river bridge	⑥ Watford Junction station	⑧ Canal	⑩ Goods shed

Andrew takes control at Harrow and Wealdstone.

made by using some resin coach roof sections with the front and sides from plasticard sheet. The windows were all individually drilled and filed, with the doorway sections cut out and recessed into the body. To make them low enough I used old Lima coach bogies with the framing cut down, then attached to the body by inserting a cross-member of plasticard with a hole drilled in it. Originally, I had them powered by two Arnold 'Kof' diesel shunters joined on a piece of brass strip to form a chassis. But after nearly 20 years they were upgraded with Tomytec mechanisms.

There are five Tube sets, three 1938 types, plus one 1959 and one 1972 set. To operate the Metropolitan service via the Croxley Link Andrew modified some Farish Class 101 DMUs into some A60 sets, in much the same way as the Class 310s. "I think building a lot of the unique stock has given me the most pleasure, even if they did take a long time to complete," he says.

Those blue and grey years of the 1970s are increasingly popular amongst railway modellers who want to recreate the sheer variety of trains and traffic. Will people be feeling so nostalgic in a decade or so when the West Coast Main Line is changed out of all recognition with the advent of High Speed 2? We wouldn't bet against it... ■

Whiteacres

Originally developed as a transition era layout, Stafford Railway Circle recast this Midlands-set 'OO' gauge model railway to the early years of privatisation.

PHOTOGRAPHY, TREVOR JONES





Right: Away from the railway the street scenes are fully detailed with period correct road vehicles.



Below: The multi-level design of Whiteacres is clear to see as a Class 153 scuttles along the lower lines as a Class 60 passes a Class 55 'Deltic' on the high level main lines. Behind the viaduct is a gradient linking the two levels together.



THIS LAYOUT is a replacement for Stafford Railway Circle's well-travelled 'OO' model called Littleton Parkway. Whiteacres is a combined continuous run and end-to-end multi-level layout in 'OO' gauge, with track to finescale standards which is a regular on the circuit.

The design of the layout was agreed at the Stafford Railway Circle annual general meeting in 2008. It was originally intended to be a steam/diesel era layout but was subsequently recast to a later era based on experience with Littleton Parkway. The operators of this layout formed the nucleus of the team who took over the Whiteacres project and redesigned the track layout to reflect modern practice.

Due to the poor facilities and lack of space at the old clubroom in Stafford, construction was very slow and did not really show any progress until the move to the current premises in Stone in 2010. A further impetus was an invitation to the 2012 Warley Show so the team put in a lot of additional hours to get the four main scenic boards in a presentable state. The first test trains ran in early 2012 and apart from a few electrical gremlins the layout worked as intended. There was no time to complete the low-level scenic boards and storage yards for Warley, but the opportunity was taken to take two of these front boards to the Stafford exhibition in February 2012 as demonstrations of tracklaying, ballasting and DCC operation.

The layout is set in 1995-2005 plus or minus a few years and is set in the east of Staffordshire on a fictitious route from Birmingham via Walsall and Lichfield to Derby and Nottingham, assuming the current railway was never built. The low-level line is again a 'might have been' ex-Great Central Railway line from Loughborough to the Potteries, built much later than the earlier route.

The viaduct is constructed from heavily modified Wills kits with the plate and truss girder bridges scratchbuilt. The plate girder bridges on the connecting line are Peco while the other plate girder bridge on the low-level line is scratchbuilt. One end of the station >>

is modelled, plus the junction of the Derby/ Nottingham lines, the connection between the low and high-level lines and the low-level line, yard and servicing depot.

There are four distinct levels to Whiteacres - the high level mainlines and storage yards, junction between the low level and interconnecting line (and tunnel and storage yard representing the line to Loughborough), interchange yard, level crossing and servicing depot with the fourth level being the low-level storage yard on the right of the layout as viewed from the front. This is now a truncated line which goes to a quarry and cement works and low-level station. The gradient on the connecting line is 1-in-35 with the other gradients being 1-in-60.

Track and control

Track and pointwork on the scenic sections is handbuilt using C&L and Exactoscale components with Peco code 75 track and pointwork on the hidden sections and storage yards (of which there are four). Although originally planned to be able to run as either analogue or Digital Command Control (DCC) - it is now only run with DCC using the Lenz system.

All the pointwork on the layout is live frog and, apart from one of the low-level hidden yards, is operated using Tortoise and Cobalt point motors on the scenic sections and mainly H&M solenoids elsewhere. The crossing polarity is switched using either the point motor switches or additional microswitches. The points on the low level and part of the main storage yard are DCC operated using Roco accessory controllers, the remainder are controlled via analogue switches on three control/indicator panels.

"It is now only run with DCC using the Lenz system"

STAFFORD RAILWAY CIRCLE

It is a large layout (29ft x 12ft 6in) but needs an area of 32ft x 16ft to allow for operator and access space. The scenic part of the layout is 24ft x 4ft. There are 21 individual boards all built from 12mm or 9mm plywood with 2in x 1in framing aligned with adjacent boards using pattern-makers dowels and secured using 6mm and 10mm bolts. All the integral board legs are

fitted with height adjusters.

The scenic boards are all 6ft long and either 2ft 6in or 1ft 6in wide. The main storage yard boards are all 3ft wide and 6ft or 7ft long with various sizes for the transition boards. We would probably now go for smaller boards despite increasing the number of board joints. The scenic boards use open frame construction which was critical for creating the embankments and viaducts due to the multi-level nature of the layout.

Continuous running

As befits what represents the main South West and Midlands to the North East and Scotland route, the yards have storage capacity for up to 60 trains. A considerable variety of passenger and freight services is run, while most items are from the main manufacturers including Bachmann, Hornby, Dapol and Heljan. All locomotives and multiple units are sound fitted and have new lighting where required. Several are resprays/renumbered or otherwise modified and detailed. Kadее and tension lock couplings are used depending on the owners' preference.

Signature trains are the Class 37 hauled Regional Railways service from Birmingham to Skegness, the Class 57-hauled Class 390 and the EWS Class 66 convoy. Other notable trains are the Class 47 or 67 hauled Royal Train, steam and diesel hauled specials, the double-headed >>



A small motive power depot sits immediately in front of the station throat and even includes locomotives with their engine compartments open for repairs.

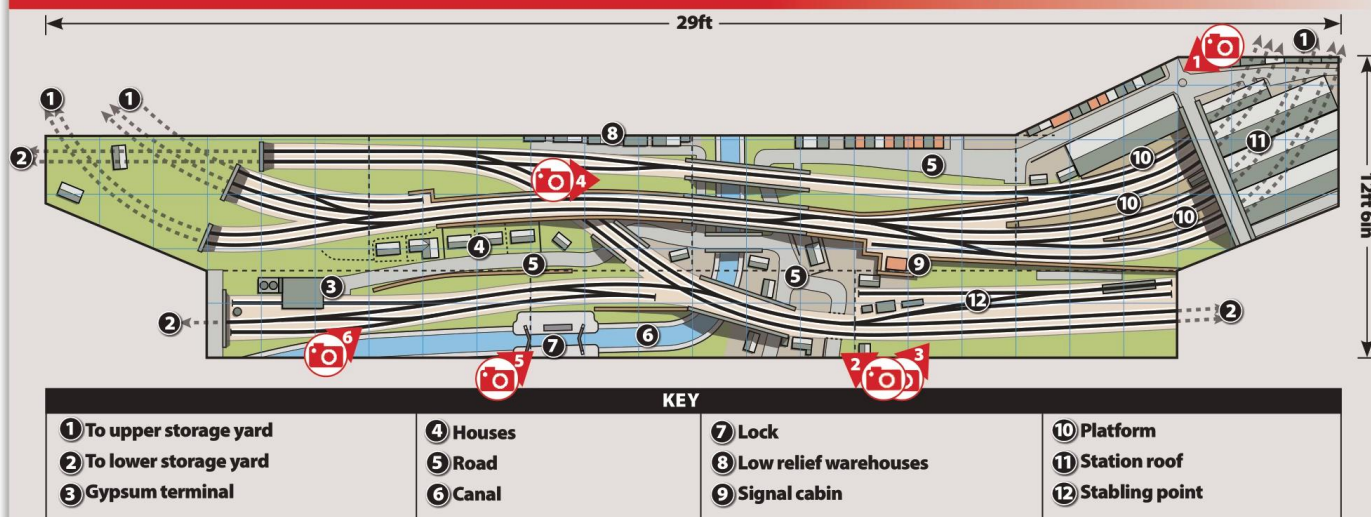




The chord linking the high and low levels is traversed by a Class 150 DMU as a Class 57 drags a Pendolino unit towards the station on this intensively operated 'OO' layout.



WHITEACRES TRACK DIAGRAM (Not to scale)



Class 20 nuclear flask train and the two EWS coal trains. The layout is not operated to a fixed timetable but to a relaxed sequence which allows for some complex moves between the various storage yards. A cordless phone system is used for communications between the four operating positions so that all moves can be made correctly.

On show

One major consideration with any large exhibition layout is how is it going to be transported while protecting vulnerable areas - particularly board ends and fragile scenic items. Based on experiences with other layouts, it was decided early on that bespoke transport/protection boards and stacking systems would be constructed.

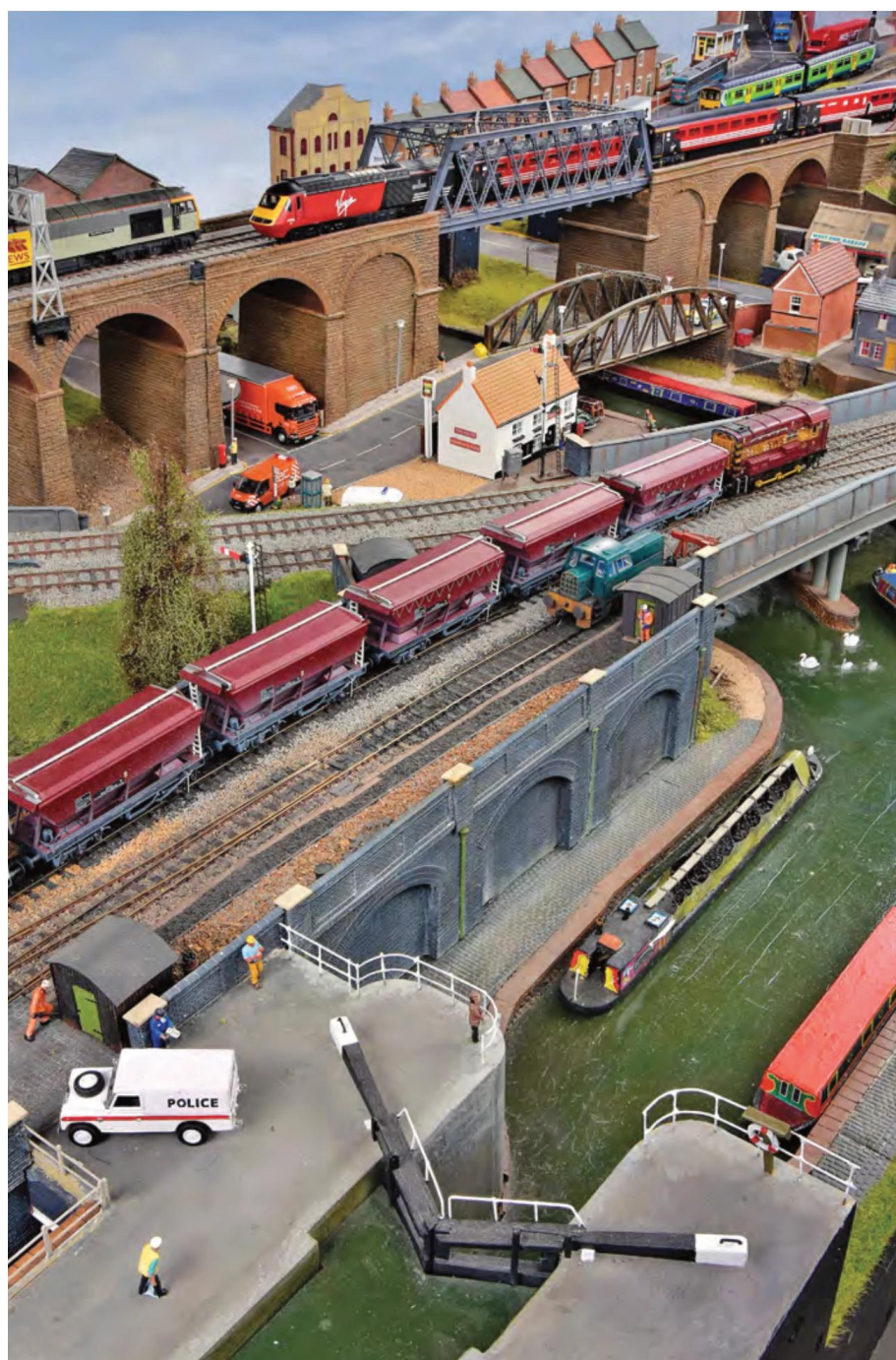
Whiteacres has appeared at a lot of exhibitions since its first appearance in 2012 and in 2017 was exhibited five times - at Stafford, York, Perth (awarded best scenic layout), Loughborough (best layout voted by the traders) and Warley (winning the Mayor of Sandwell's trophy). It was then put into store pending further work on the signalling and level crossing and some additional scenic areas.

The club sees construction of Whiteacres as a very rewarding experience - particularly meeting and conversing with other modellers and members of the public. The layout is now back out on the exhibition circuit in 2020 with one of its confirmed appearances being the *Hornby Magazine* Great Electric Train Show on October 10/11 at the Marshall Arena in Milton Keynes. ■

● Visit www.greatelectrictrainshow.com for more information.

Right: A Class 08 shunts covered hoppers by the canal as a Class 43 HST passes a Class 60 on the high level bridges behind.

Opposite page: A gypsum terminal provides shunting interest away from the long trains on the main lines. In the distance a Class 60 leads a coal train on the high level as a Class 66 passes underneath with open box wagons.





The Summit

With stunning Pennine scenery, this massive 'O' gauge layout rekindles the spectacular Settle and Carlisle in steam days.

PHOTOGRAPHY, TREVOR JONES



English Electric prototype *Deltic* brings a splash of colour to the moorlands as it races across the viaduct with a rake of Stanier stock.



Eastern Region
motive power
appears from time to time
including this superbly
kit-built Robinson 'O4'
2-8-0 at the head of empty
mineral wagons.

THE SUMMIT is inspired by the Ais Gill section of the Settle & Carlisle line. It features the viaduct, the signalbox beside the crossover and the two layby sidings for freight trains. It is fully and correctly signalled for the London Midland & Scottish Railway (LMS) and early BR period.

In the early 1990s, there had been discussion among the members of Yeovil Model Railway Group about what their next project should be. Bob Alderman explains: "A 7mm:1ft scale layout was proposed. The idea surfaced that if it was 7mm then it should be very different from our earlier 7mm layout Gas Works. Indeed, we would go to the other extreme from a small layout to a very large one - our last great effort!"

The layout is large - 47ft x 27ft. One side carries the scenery and the other the storage yard. The Fell extends for nearly 6ft behind and above the railway and 3ft in front. A member visited Ais Gill and the surrounding countryside in 2000, taking photographs of the many features along and around the line. The planning for the railway began in around 1995 but did not come to fruition until 2005 when the group had a clubroom that could accommodate it.

All the design work from trackplan, basic baseboard structures and scenic area was taken up by the late Brian Draper. Brian created a set of drawings defining the construction of each baseboard. This included the scenic profiles where appropriate. The profile of the scenery at the front and back was also defined, though at this stage the construction of scenic boards was not.

The track on the scenic side is laid on a spine of box section baseboards constructed from 12mm plywood. The storage yard boards are a series of 'table tops', again in 12mm plywood. The viaduct board is an independent structure and is mounted on wheels.

A unique feature is the construction of the scenic boards. They are made up from a series of various sized panels around 5ft long and up to 2ft deep for the rear ones and 2ft or 3ft deep x 5ft long at the front. All have been made to

be as thin as possible for transport. Exhibiting would have been a challenge - but as Bob says: "It was always intended that the layout should be exhibited despite its size. To take the layout to an exhibition, all the boards are packed onto specially constructed stillages. These have been made from square steel tube, bolted, and welded together. Each board has a unique position in its stillage. The whole layout can be packed into a 7.5ton truck, but the stock must travel in two cars." >>



The Summit can operate in the LMS or BR period. Modelling the pre-1948 period, an Ivatt '2MT' 2-6-2T is held in the lie-by siding as a '4F' 0-6-0 plods by with a goods working.

Track and control

On the scenic areas C&L plain track is used with the same company's chairs and sleepers for the pointwork. This has been ballasted with Woodland Scenics ballast bonded with dilute PVA glue.

Particular attention was paid to the track. Says Bob: "A feature not seen on many models is

superelevation or cant on the curves. The outer rail has been lifted by 4mm card strips to produce the cant. The entry into the cant tapers to flat over about 800mm. The lift was not determined by the mathematics used prototypically but simply judging what looked 'right'. The downside is that long wheelbase vehicles without springing or compensation are not happy, riding on diagonally

opposite wheels: locomotives are the same. The plain track in the storage yard is Peco and the pointwork is all rail soldered to copper-clad sleepers."

The semaphore signals have been constructed from Scale Signal Supply components. The locations follow the prototype. Originally the model had semaphore ground signals, but they



suffered from out-of-gauge stock and derailments so were changed to LMS colour light ones. The signalman in the cabin emerges to flag signal the crossover - he and the signals are driven by servos.

A signalman situated at the front of the layout operates the signals through a Modratec lever frame with full interlocking. As the operators have no direct sighting of the signals they use a CCTV



The Summit takes

inspiration from Ais Gill on the famous Settle and Carlisle line. A Stanier 'Jubilee' 4-6-0 and Gresley 'V2' 2-6-2 pass high above the stream on the four arch viaduct.



A BR '9F' 2-10-0 is about to enter the tunnel with a van train as a BRCW Type 2 exits with an engineering train.



system and repeater LEDs to work to the signal aspect. The CCTV also allows sight of the entry and ends of the layby sidings.

Train control is by two Helmsman 5amp units

for the Up and Down lines. These are situated at each end of the storage yard controlling the Up and Down main and hidden yard lines. As a train departs the yard section, push button switches on that line can be depressed to advance the next train section by section to the head of the storage line meaning that each road can hold multiple trains. »



Setting the scene

This vast area of scenery has been simply finished. Hanging basket liner from a roll has been torn up and glued down for most of the grass. Other grass and foliage is from the Green Scene and Woodland Scenics ranges. The whole has been fixed with a fine spray of diluted acrylic matt medium.

Notable in the scene are the drystone walls - over 100ft of them. The method of construction was to stick a strip of corrugated card, corrugations vertical, onto the scenery. DAS modelling clay was rolled out to a thickness of about 3mm and cut into strips. The strips were stuck onto the card with pva glue. The strips were then impressed with the stone pattern.

Blocks of Styrofoam with a number of hollows created the stone pattern. The blocks were then pressed into the DAS, one each side, leaving the stone pattern proud on the surface. The capping stones were made by sticking a 'sausage' of DAS onto the top and a blade pressed in to make individual upright stones. Once the DAS has hardened, it was painted with an emulsion base coat and then patch painted the stone colours. A three-member team undertook the walling - inevitably known as Hadrian's Crew!

There are few structures on the layout. The scenic part of the line is completed at each

end with tunnel mouths. These are based on Birkett tunnel, a typical Settle and Carlisle tunnel profile. The road bridge at Ais Gill has also been used at one end of the railway. These are simple compared to the viaduct which uses a plywood trackbed as its foundation. A 3mm plasticard structure has been added around this and faced with an embossed stone from Slater's Plastikard. The arches were done as a long section and the piers added to them - hanging beneath! A hidden support is in the middle pier.

The signalbox that once stood there is from a Modelex etched kit, modified to suit - the original structure has been relocated to the Midland Railway Butterley. The platelayer's hut is based on photographs of the one that once stood there, plus the toilet and coal store. The latter should be there but do not seem to appear in any photographs. These structures have been built from plasticard. The distinctive Kell Beck Culvert also features. This is a plywood structure faced with carved DAS stonework.

The trains

Of course, it is the trains which people come to see as much as the scenery. There are ten-coach expresses hauled by 'Duchesses' and 'Deltics' and local three-coach passenger trains powered by a '4F' 0-6-0. Large freight trains hauled by a

'9F', 'O4' or 'Super Ds' intersperse the passenger operations. There is a coal train of BR mineral wagons in one direction and similar empties in the other. Mixed freight and fitted van trains trundle around. There are also breakdown and permanent way trains to add further variety to the roster. Diesel traction and London and North Eastern Railway locomotives with appropriate trains make a showing too.

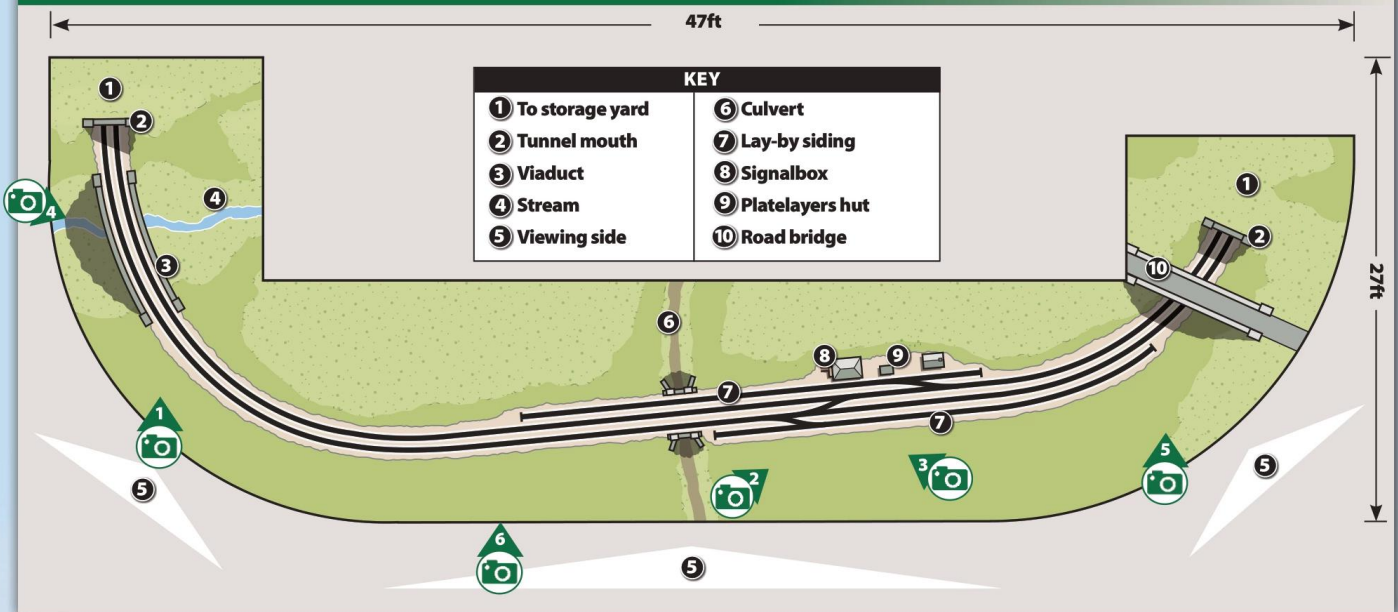
This remarkable layout truly has been a club effort, reckons Bob, adding: "Many different members contributed their particular skills to all aspects of construction. This, we believe, has produced an extraordinary model where the scenery dwarfs the railway. An acclamation at its first show, Guildex 2015, from someone watching the layout was: "I live near there. It looks like that".

"Sadly, Brian Draper did not live to see it complete nor hear this. He died shortly after the first train ran, but we know that he would have been thrilled with the layout's reception. What do we do next? Simply enjoy it" ■

WANT TO KNOW MORE?

- See more about the club at yeovilrmg.org or visit www.facebook.com/yeovilmodelrailwaygroup



THE SUMMIT TRACK DIAGRAM (Not to scale)

 6 A new Brush Type 2 heads a parcels working towards the viaduct as a Stanier rebuilt 'Royal Scot' 4-6-0 works a mixed goods in its final years of service.



Seven Ash

The Great Western Railway's famous Old Oak Common is no more, but it lives on in model form thanks to **STEVE PIKE**, who created a representation of its most famous turntable in 'OO' gauge.

PHOTOGRAPHY, TREVOR JONES

SEVEN ASH is a representation of West London's legendary Old Oak Common depot. Just a few miles from central London and the famous terminus of Paddington, this landmark railway location has supplied top link motive power to trains from the Great Western steam era to the present day.

It opened for service in 1906 to a design by Churchward and at the time was the largest depot on the Great Western Railway (GWR) system. It set the pattern for other GWR depots to follow and had four 65ft turntables under a six-span roof. Each turntable had 28 connecting tracks which could accommodate 75ft locomotives while there was also a repair shop on site known as the 'Factory' which had 11 roads and an electric traverser for access. It was a stunning location and a true cathedral of steam.

In 1965, and with steam transferred away to Southall depot, BR's Western Region demolished the famous steam shed, a roundhouse with four turntables along with three of the turntables and left one in place for stabling the then new diesel-hydraulics. A three-road fuelling shed was added at the same time. The 'Coronation Carriage Sidings' were built in the 1960s for the Blue Pullman Diesel Electric Multiple Units and these were joined by further extensions for High Speed Train operations in the 1970s and Heathrow Express unit maintenance from 1997.

Miniature depot

The model is set between 1968 and 1971 and has been constructed with great assistance from Steve's local model club, Somerset Railway Modellers. It made its exhibition debut at Taunton Railx in 2016. The model has been constructed with usual methods of 6mm plywood board with wood bracing. The bank has been made from insulation board covered with brown packing paper and PVA glue; track is from the C&L bullhead rail range, ballasted with Woodland Scenics ballast and glued down.

Steve explains how the signature structure was built: "The main building has been constructed by Seven Models, and the background model building has been built by myself using laser-cut components. A prominent feature of Old Oak and Seven Ash are the large lighting towers. These are N-brass kits and after several attempts by me were handed over to a fellow modeller for completion before being added to the layout." »

1 A BR blue Class 52 'Western' takes centre stage surrounded by Class 42 'Warships' and Class 22 'Baby Warships'.





Scenic vignettes help to create a believable scene, says Steve: "Several British Rail yellow lorries and staff cars complete one side of the layout as it was used as a car park - I always wonder how many cars lost out to an unexpected 'Western'? There are also more than 50 oil barrels painted to represent

the differing contents, including engine oil, hydraulic transmission fluid and lubricating oils. Just as importantly Old Oak's three cats, discovered after chatting to men who worked from Old Oak Common depot, which were called 'Dipstick', 'Marmite' and 'You ---' the last one was known as a nasty cat!"

Taking control

Operation of the model is by Digital Command Control (DCC) using a Prodigy Advance² handheld unit. This controls the movement of locomotives to the central focus of the scenic area - the turntable. This is a Heljan DCC turntable and it allows full control over the



position of the deck to connect with any of the 27 roads accurately at the touch of a button. Steve says it takes some time to set up all the positions, but that the results are worthwhile.

Locomotives coming onto the layout arrive via a small one-track storage yard. On arrival they are sent to the fuelling shed before being

stabled on one of the tracks that lead off the turntable. There is also a one-track storage yard used to remove the locomotives after they head off scene.

On a depot layout, it's the locomotives which star, and the roster has something like 50 renumbered, renamed, weathered and detailed

locomotives with crews and headcodes added. There are a variety of liveries on show from blue to maroon, and BR green with a variety of full yellow and small yellow ends.

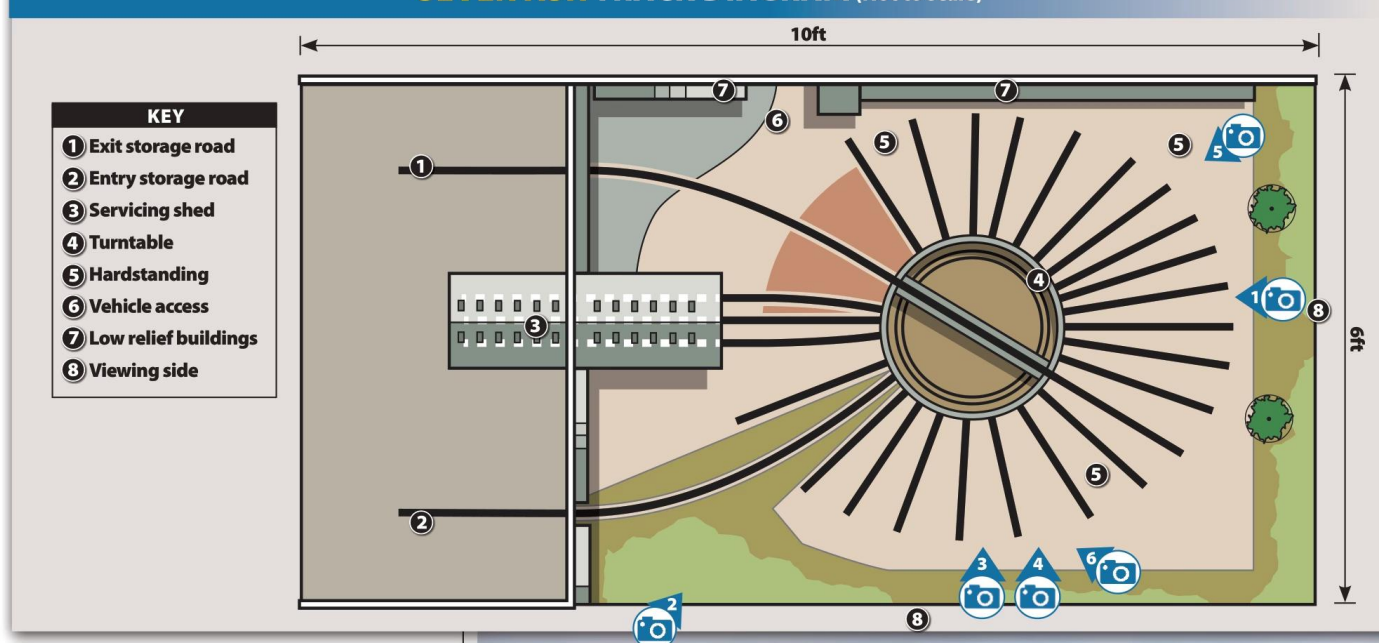
Diesel-hydraulics from classes 22, 35, 42, 43 and 52 are present coming from the Bachmann, Dapol and Heljan stables. All wear »



A lone diesel-electric Class 47 has arrived at Seven Ash amongst a sea of Class 22, 35, 42 and 52 hydraulics.



SEVEN ASH TRACK DIAGRAM (Not to scale)



Above: The contents of another barrel are checked by a depot fitter.

pre-TOPS numbers and the timescale of the layout is set when the first 'Warships' were starting to be withdrawn and the first examples of the English Electric Type 4s (later Class 50s) were arriving. No representation of Old Oak Common would be complete without a Class 47 or two as well and there are Western Region examples on the roster in BR two-tone green and BR blue liveries. Also on shed are classes 08 and 31, which appeared at Old Oak too. A Class 33 and a Class 37 also make appearances from time to time – but they are very much the exception rather than the norm.

Pride in grime

Seven Ash is quite a different take on railways from the gloss and glamour of many layouts, but Steve is happy with that: "I take great pride in taking the time to weather and detail the locomotives, and many a pleasant lunchtime has gone into getting Seven Ash ready for the exhibition circuit. It has already received several invites but we are always looking for more."

Old Oak Common will live long in railway folklore, and Seven Ash brings some of its more recent history vividly to life. ■



5 Right: A Heljan turntable serves to move locomotives between stabling sidings and the three-road fuelling point at the rear.

6 Below: The period modelled by Seven Ash allows for a variety of colour schemes including green, maroon and blue.



Calverdale

Built by the great 'N' gauge modeller **ANDY CALVERT**, this superb LMS through station is kept as a lasting memory of his contributions to the hobby.

PHOTOGRAPHY, MIKE WILD

CALVERDALE is something of an historic layout. It was built in the mid-1980s by respected 'N' gauge modeller Andy Calvert as a London, Midland & Scottish Railway (LMS) through station.

Sadly Andy passed away in 2002, but his legacy of high standard 'N' gauge exhibition layouts lives on through Calverdale and others. Calverdale was Andy's third layout, but his first for exhibitions. Future projects included the well-known Nether Stowey modelling a Great Western branch line terminus and a modern traction maintenance depot called Welham Green.

Andy was an inspiration to thousands of 'N' gauge modellers and even went on to spearhead the N Gauge Society's wagon kit projects – taking the series from an initial proposal for one kit to more than 20 and ultimately leading the society to commission »





A 'WD' 2-8-0 approaches the station. All of the track is Peco code 80, suitably weathered and ballasted.



Scratchbuilt 'Super D' 0-8-0 49361 rumbles through Calverdale with a rake of empty steel wagons. This stunning 'N' gauge layout was originally built by Andy Calvert in the 1980s.

ready-to-run products including an LMS Stove R, BR snowplough, Collett BG and a Rover cube wagon.

The design for Calverdale was drawn out of Andy's desire to show what could be done in 'N' gauge. He aspired to trains running at sensible speeds, hands free shunting operation and a high standard of detail for locomotives, rolling stock, buildings and scenery. When he started this layout, 'N' gauge exhibition layouts of this standard were rare – a situation which has changed dramatically in recent years.

The layout called for a double-track main line set in the 1930s and operated with LMS rolling stock. Derbyshire was the location and features included a substantial goods yard set to the front, a milk depot with a single siding accessed by two single slips and the opportunity to see scale length trains running through the landscape.

A storage yard to the rear could host 18



With a long rake of iron ore wagons behind, a 'WD' 2-8-0 passes through the countryside on the approach to Calverdale.



A Fowler '4F' 0-6-0 enters the station with a mixed goods. The goods yard in the foreground features hand-free uncoupling – an impressive feature in 'N' gauge.





Above: An Aspinall 0-6-0ST shunts the yard as an Ivatt '2MT' 2-6-0 enters the station with a parcels working.



different train formations to create a visual feast of operation on the scenic section for the viewing public, all operated with analogue control and running on Peco code 80 track with electrofrog points. Over a five-year period Calverdale attended more than 50 exhibitions. The advent of Andy's Nether Stowey in the 1990s meant that Calverdale needed a new owner.

New outlook

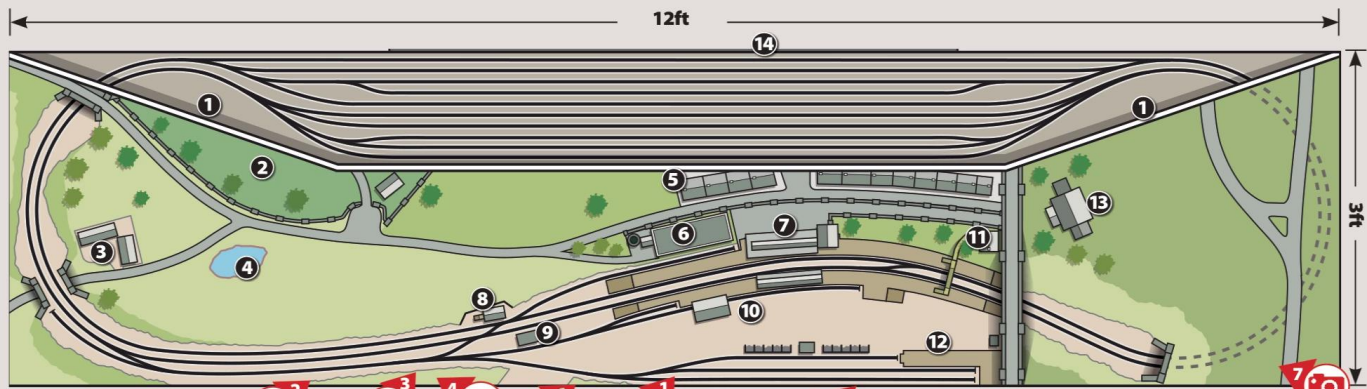
When looking for a new home Andy approached John Warner, then the owner of N Gauge Lines, as to how best to dispose of Calverdale. John purchased the layout and it was renamed Long Clawson.

John takes over: "When Calverdale came to me Andy had already changed the station name boards and signalbox to Long Clawson together with the light box. Its reincarnation as Long Clawson came about because of my interest in the former Great Northern Railway (GNR) and London & North Western Railway (LNWR) joint line through east Leicestershire running from Welham Junction (Market Harborough) to Bottesford on the Nottingham-Grantham line with its GNR extension northwards to Newark and the East Coast Main Line."

The landscape fitted in with the area north of Melton Mowbray in the Vale of Belvoir and the period was also brought forward to the 1948-1952 period. The layout attended a number of exhibitions in this form. Locations included Whitby, Sunderland, Keighley, Huddersfield, Pennine and others.

Around about 1998/1999 my interest in the railways of Cumbria was developing and I had aspirations of constructing a model based upon Cleator Moor Junction. At this time I persuaded Andy to do a makeover and »

CALVERDALE TRACK DIAGRAM (Not to scale)



1 Line of backscene	4 Pond	7 Station	10 Goods shed	13 Church
2 Grounds of Calvert Hall	5 Houses	8 Signalbox	11 Public house	14 Control panel mounted over storage loops
3 Farm	6 Milk depot	9 Water tower	12 Cattle dock	





07 Viewed from on top of the tunnel, the sweeping mainlines through the station are clear to see as a Thompson 'B1' 4-6-0 leads a rake of BR carmine and cream liveried Stanier stock under the road bridge.

08 Above: A Robinson 'J11' 0-6-0 arrives at the station with a short two coach stopper formed of ex-LNER teak stock which has yet to receive BR's new corporate colours.

rename Long Clawson to Cleator Moor North. The period was to be pure LMS in the 1930s. After a few mumbblings and mutterings the station nameboards and signalbox name duly appeared together with the light box suitably renamed. This was ready for the Kidderminster show in 2000 - this was the only public outing of the layout as Cleator Moor.

The layout returned home and was not re-erected until September 2002 by which time it was ready to find a new home again. "It went to a new owner in Yorkshire, but came back to me again in 2007," John comments. Now renamed Calverdale, the layout was refurbished once more to bring it back up to standard and now operates with a cross pollination of ex-LMS and ex-London and North Eastern Railway motive power with a combination of Graham Farish, Dapol and Union Mills locomotives to head up the trains. These include 'WD' 2-8-0s, 'B1' 4-6-0s, '4F' 0-6-0s, 'Black Five' 4-6-0s, 'Crab' 2-6-0s, '3F' 0-6-0s, '2P' 4-4-0s and a magnificent scratchbuilt LNWR 'Super D' 0-8-0. There is even a Lancashire & Yorkshire Railway 0-6-0ST to shunt the goods yard. Rolling stock is made up of a mixture of ready-to-run and kit built vehicles.

Refurbished

Since Calverdale's latest refurbishment it has been out on the exhibition circuit several times. The layout was well received and comments were favourable. It is intended to keep the original name Calverdale but it will retain its East Leicestershire location. This is down to the good offices of the original Barrowfield team to whom I am grateful for their patience, time and friendship. ■



NEWTON

CENTRAL

Finescale 'OO' was the gauge of choice for **ANDY STATHAM**, who drew on his military modelling skills to create this brilliant slice of the 1960s near Chesterfield.

PHOTOGRAPHY, MIKE WILD





Below: A suitably workstained

'WD' 2-8-0 clanks underneath the road bridge across the station entrance at the head of a through goods. Note the platform clutter, signage, signals and superbly weathered cardboard structures.



Above: A Ford Thames 400E van stands in the staff parking area across the tracks from the depot as an 'O4' 2-8-0 passes with a coal train.

NEWTON CENTRAL IS AN 'OO' gauge layout built to finescale standards. It is set between 1957 and 1967 and runs as a continuous loop in a purpose-built room at Andy Statham's home.

As with many modellers, childhood memories inspired Andy, particularly of the railways around his home towns of Chesterfield and Sheffield. It is these memories that have informed the design, structure and tone of the layout. There was another connection too: "Having a grandfather who was a locomotive driver based at Hasland formed my early and ongoing fascination with railways generally but in particular steam. Some of the locomotives on the layout were shedded at Hasland and my grandad would almost certainly have driven them at some time," says Andy.

In 2000 he designed and had built an extension to his home which created a study and library on the ground floor and a very handy first floor room which quickly became the 'railway room'. Planning for the layout, which is the first he has created, followed straight after.

Great Central theme

The layout is set in a fictitious location in the Sheffield/Chesterfield/Rotherham area. It represents a section of the former Great Central Railway now under British Railways control and has a through station with terminus platforms to one side.

The layout is a fixed layout and as such has been seen by very few people. It has been developed and built entirely by Andy. As a longstanding military modeller and figure painter he felt he possessed a range of modelling skills but at the start of this project had never held a soldering iron let alone attempted any form of wiring. However, assisted by numerous videos, DVDs, books and regular reference to the internet, he gradually practiced and mastered the necessary skills to create the layout: "It is this aspect of the hobby - learning the range of skills necessary to build a model railway that has been so enjoyable and satisfying." »

The baseboards are standard width chipboard sheets mounted on 50mm x 50mm timber frames onto which 4mm cork sheet is laid, the entire layout is 11ft x 14ft following the shape of the room. Digital Command Control (DCC) was the preferred method of control due to the simplicity of the wiring. The layout is controlled by the ECoS system which takes control of all locomotive and point movements on the layout and provides ample power and flexibility.

There is a continuous bus running under the baseboards formed from two self-adhesive copper foil strips from which positive and negative droppers are connected from every section of rail and from the 'toe' end of every point on the layout. Andy determined early on that the track had to be formed, electrically connected and laid to the highest standards if good running was to be achieved particularly as sound fitted locomotives were to be a feature of the layout. The old rule applies – if the track is poor, the running will be too.

The layout is built using Peco code 75 track. The use of colour and tone for the track and the scale of ballast used is very important to Andy and on a well-used urban set railway, track is not a bright rusty red colour: it is a dark often oil-stained brown so his track is sprayed with Railmatch sleeper grime lightly dry-brushed in places and oil-stained in other locations where locomotives frequently stop.

Scenery

Andy's ambition when starting out was to get the 'tone' of the model right: "Anyone who remembers Sheffield in the early-1960s will recall that almost everything in the built environment was a uniform black colour. It was a revelation

3 The builder's yard has all the supplies you could need and a great view of the motive power depot.



in the 1970s when buildings started to be bead blasted revealing glorious honey coloured stone and intricate brickwork!"

Buildings had to be accurate to the period and suitably weathered to capture the general patina that Andy remembers. Andy explains his approach to the colours and scenery: "Many good layouts are spoilt in my opinion by unrealistic scale (oversize ballast for example) and the use of overly bright colours, particularly scenic materials. Bright green is a rare colour to find in nature. Even in early summer, when new growth is at its most vigorous, grasses have a mixture of greens, ochres and yellows in them that are amplified

when scaled down."

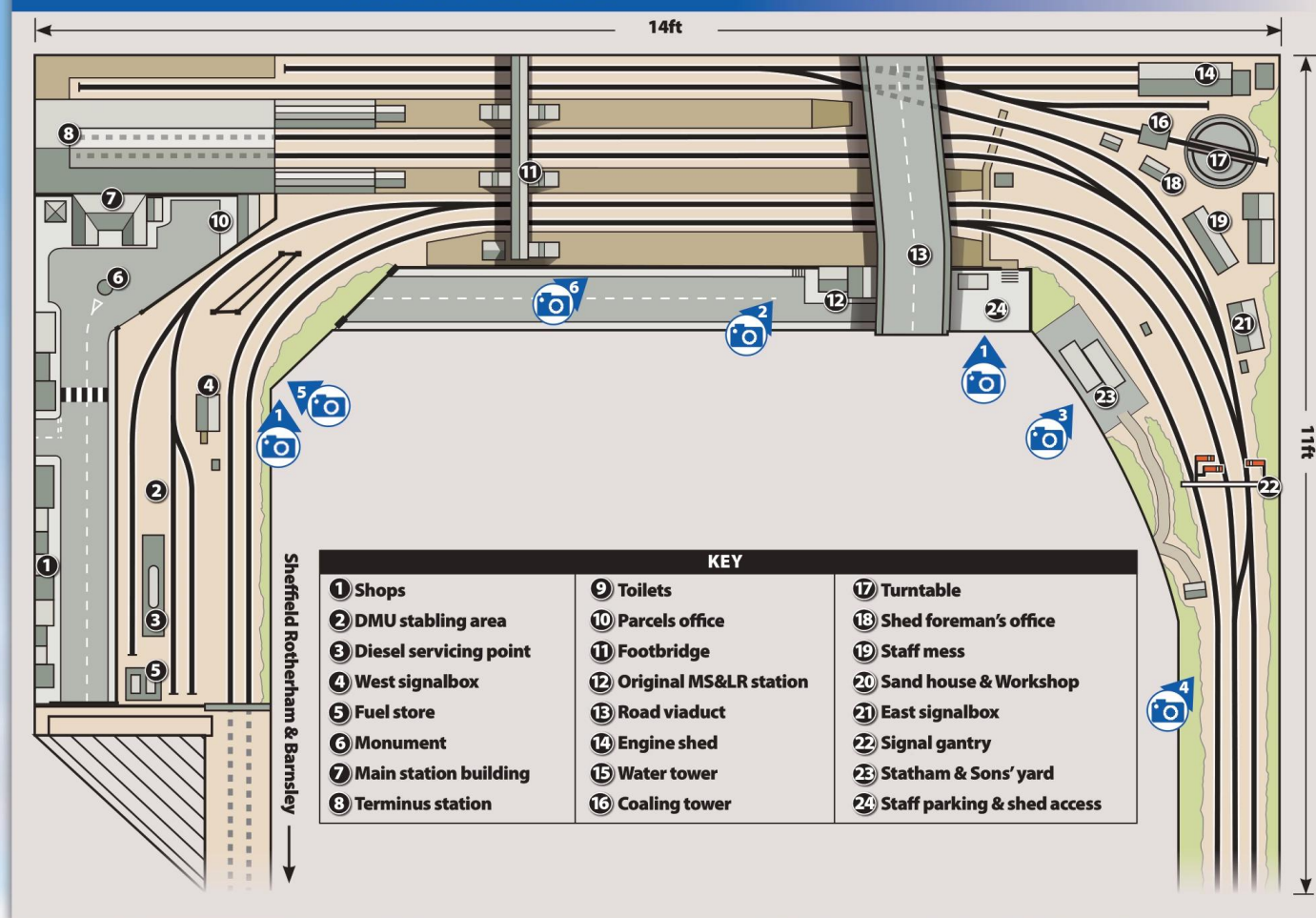
Andy says that one of the things he enjoys most is creating buildings: "I have always had a passion for the Superquick range of card buildings that have been going for years. I was building them simply for the pleasure of putting them together long before I even contemplated building the layout. What is it about them? Simply put they capture the tone of the real scale building they represent and they remind me of railway buildings from my youth now long gone."

All of the buildings on the layout are constructed from card, some from kits, many scratchbuilt. By luck for Andy, during the ➤

4 A Stanier rebuilt 'Royal Scot' 4-6-0 departs from the terminus platforms at Newton Central with a uniform rake of BR maroon Mk 1 stock.



NEWTON CENTRAL TRACK DIAGRAM (Not to scale)



2000s numerous new small manufacturers were entering the hobby and these along with the established companies now ensure that everything is available from an architectural perspective to super detail card buildings with metal and plastic components.

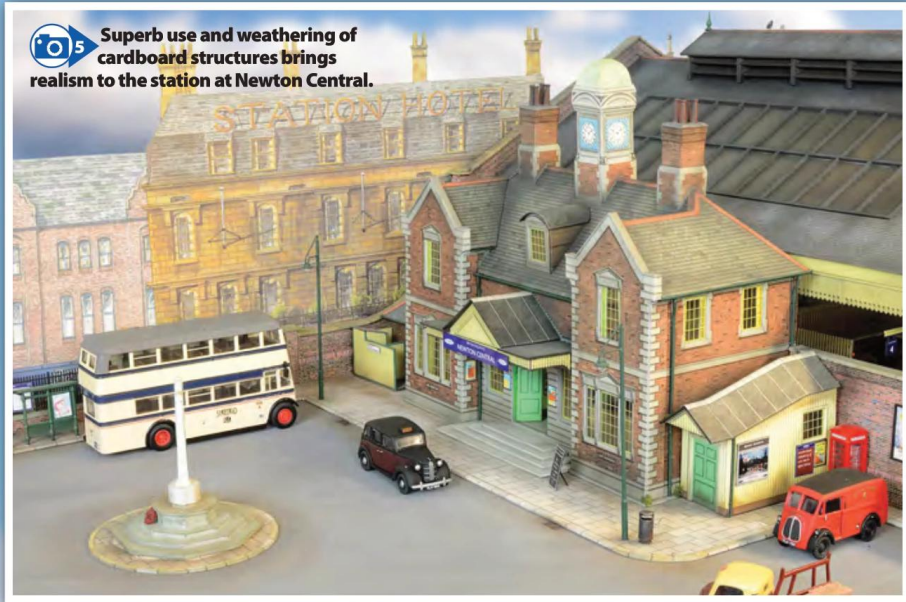
A huge boost for Andy and many others was the emergence of Scalescenes and the ability to download buildings and endless pages of building papers (many of which have featured in *Hornby Magazine*) and then York Model Making which enabled him to design his own structures on the computer and have them produced to exact scale. All the trusses and other components in the terminus roof were manufactured this way.

Andy says that his favourite detail on the layout is Statham and Son's Builders yard. It is based on a real location that was known as Berrys Builders Merchants close to the former Clay Cross station.

Rolling stock

Newton Central has a large collection of steam locomotives and rolling stock covering all four BR regions and all the relevant diesel classes, including Diesel Multiple Units (DMUs) for the period being modelled. The South Yorkshire/ North Derbyshire location of the layout enables Andy to run a variety of former Great Central, London and North Eastern Railway (LNER) and London Midland & Scottish Railway (LMS) locomotives as well as BR Standard designs. Freight traffic was also in abundance in this area with coal being the more prevalent consignment.

During development of Newton Central the main manufacturers produced a wide range of



Superb use and weathering of cardboard structures brings realism to the station at Newton Central.

excellent quality locomotives suitable for the model - Robinson 'D11' 4-4-0s and 'O1' and 'O4' 2-8-0s, 'Black Five' 4-6-0s and '8F' 2-8-0s plus '3F' and '4F' 0-6-0s together with the Beyer-Garratt, some of which were shedded at Hasland.

Bachmann Mk 1s and Hornby's excellent Thompson and Gresley suburban coaches form the passenger stock and all rolling stock is weathered to represent the condition it would have been in during the period modelled.

Andy's favourite element of rolling stock is probably the 'D11' coupled to a rake of Gresley suburban stock: "I have a painting by David

Charlesworth depicting this exact combination at Chesterfield Central in 1959," he adds.

The future

While this half of the layout is a continuous loop with no storage yard, the other half of the layout features Avenue Sidings - a large goods yard complex and an industrial area containing a brewery and a wagon and carriage works. This is in development at the moment, but we are already looking forward to making a return visit to see the second phase of this magnificent home layout. ■





06 A busy moment in the station with a 'Jubilee' awaiting departure with a passenger working while a 'Black Five' at the head of a parcels train crosses paths with a 'WD' hauled freight.



07 A Robinson 'D11/2' 4-4-0 departs with a rake of Thompson designed suburban carriages.

Melton Mowbray

Steve Weston remembered the long gone LNWR/GNR joint station, and after building a beautiful 2mm scale diorama, he and John Spence turned still life into a moving recreation of the past.

PHOTOGRAPHY, TREVOR JONES



A Fowler '2P' 4-4-0 approaches the station with a Midland working as a Gresley 'B17' departs with a rake of ex-LNER Gresley teak stock.



The extensive goods yard has been modelled next to the station. A 'Super D' 0-8-0 takes a mixed freight through on the mainline as a 'J11' 0-6-0 approaches with a passenger working.



MELTON MOWBRAY is in North East Leicestershire and was equally as well-known as fox hunting country as it is for pork pies. Having been born and bred in the town, Steve could remember the line from his childhood and saw the last train depart on the final day of operational service. John, meanwhile had no emotional connection with the line as it had virtually all gone when he came to live in the town in the mid 1970s. Steve decided to model the main station buildings of Melton Mowbray (North) in 2mm:1ft scale and placed them on a small board as a diorama. "As soon as I saw them," says John, "I realised that they deserved more than that simple display. They ought to be part of a working layout but that was as far as it got for many years. Steve finally started the ball rolling a couple of years ago when he announced to me that he'd begun construction of the baseboards!"

History

The line through Melton Mowbray was a joint venture between the Great Northern Railway (GNR) and the London and North Western Railway (LNWR), opening in 1879. The GNR built the northern part of the line to Melton from a three-way junction on the Nottingham to Grantham line, where it also ran north to its mainline at Newark. The southern part of the line from Market Harborough to Melton Mowbray was built by the LNWR as an extension to its line from Rugby. In addition, there was a spur several miles south of Melton at the triangular Marefield Junction to a terminus station on Belgrave Road in Leicester.

After 1945 as social conditions changed, passenger numbers declined and local passenger trains ceased in 1953. However, during the summer months, excursions from Leicester to the east coast resorts were a feature at the weekends. Some freight traffic struggled▶▶

on until final closure in 1964.

Details of the track plan at the station and buildings were obtained and Steve enlarged the plan section by section to 2mm:1ft scale to find how big the layout would need to be.

Although the whole of the line through the town could not be included even in this scale, the gently sweeping arc through the station area had to be the main focus. Using the enlarged map as a basis, Steve marked out the area to be covered and found that the scenic area would need to be about 30in deep and even then some of the features, such as the cattle market, would have to be foreshortened.

Travelling the line

The model starts as the line enters Melton Mowbray from the north. Looking to the left, passengers would see the buildings of a sawmill, known locally as The Woodyard. Beyond the

clerks' offices, with their gated entrance to the site, lay the painting sheds, old and new drying sheds and various other buildings associated with the site. Adjacent to the office is an old farmhouse with more recent additions to the rear of the property. The line then crosses a brick-built bridge, constructed as part of the original agreement when the railway companies were purchasing the land. This gives access to Spreckley's Farm and Wycliffe House to the north of the line, which would otherwise have been cut off from the town.

Beyond here, the north and south yards open out. The line then enters the station itself. A large and rather grand main building stood on the town (Up) side to the south and this building included refreshment rooms, a restaurant and bar. A subway led to the north (Down) platform where, right up until the early 1960s, local families would await the trains to the East Coast

resorts for day trips or their annual holiday. On leaving the station the line crosses Scalford Road, the main road into the town from the villages of the Vale of Belvoir, in the North-East of the county. It then passed on an embankment through the cattle market.

Two double-arched bridges intersected the embankment, both leading to the main parking area to the north of the line, although one of the arches on the east bridge was converted to storage at an early stage. The line crosses Nottingham Road, on the east side of which lies the local fire station, the old laundry as well as more of the cattle market buildings. The other side of the road was, and still is residential. From here, beyond the extent of the model, the line curves to the south.

Recreating the past

"There is always the challenge to make a layout



look realistic, but when modelling a real place there is additional pressure to make it as close to the real thing as possible," says John who thinks few viewers at exhibitions will know how faithful it is. However, closer to home, the scrutiny will undoubtedly increase.

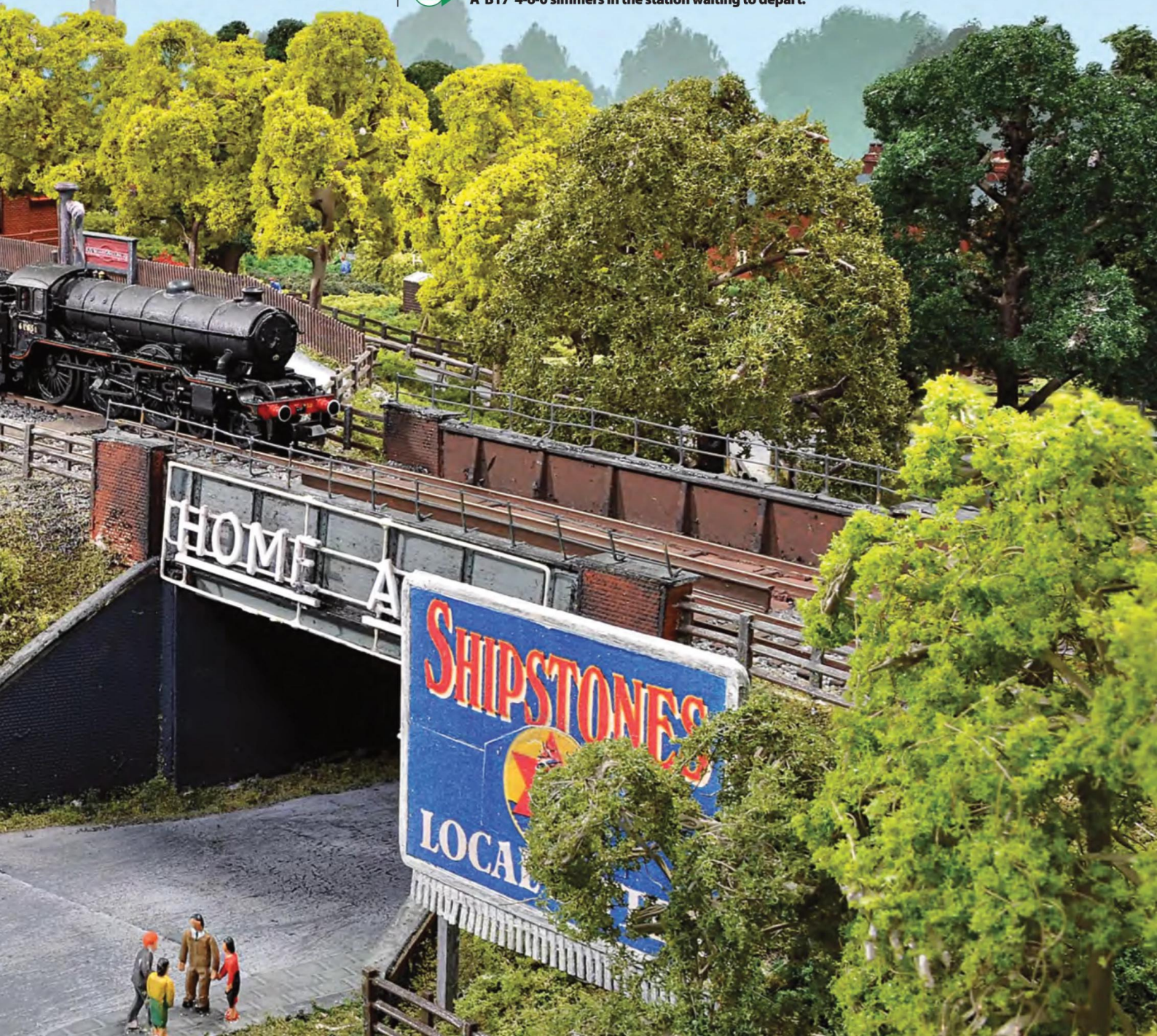
A newspaper appeal drew a huge amount of responses for information, and much detail incorporated. This includes the lovely terracotta crests and ornamentation that adorned each end of the main building (on the south side of the railway) and above the main entrance doors on the platforms. One of these panels was preserved when the buildings were demolished in 1970 and Steve has recreated them on the model, as he has the platform canopies which contain more than 1,000 pieces soldered together with great skill and care. The originals were glazed until the war when the glass was removed and only replaced in the »



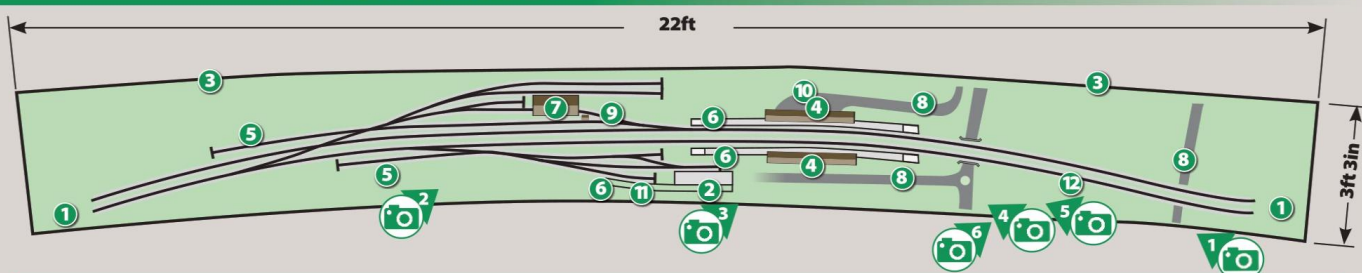
Above: The station canopy has been modelled as it was after the Second World War with only partial glazing. More than 1,000 pieces went into modelling it.



Below: The station was the first part of the layout to be built, originally as a stand alone diorama. A 'B17' 4-6-0 simmers in the station waiting to depart.



MELTON MOWBRAY NORTH TRACK DIAGRAM (Not to scale)

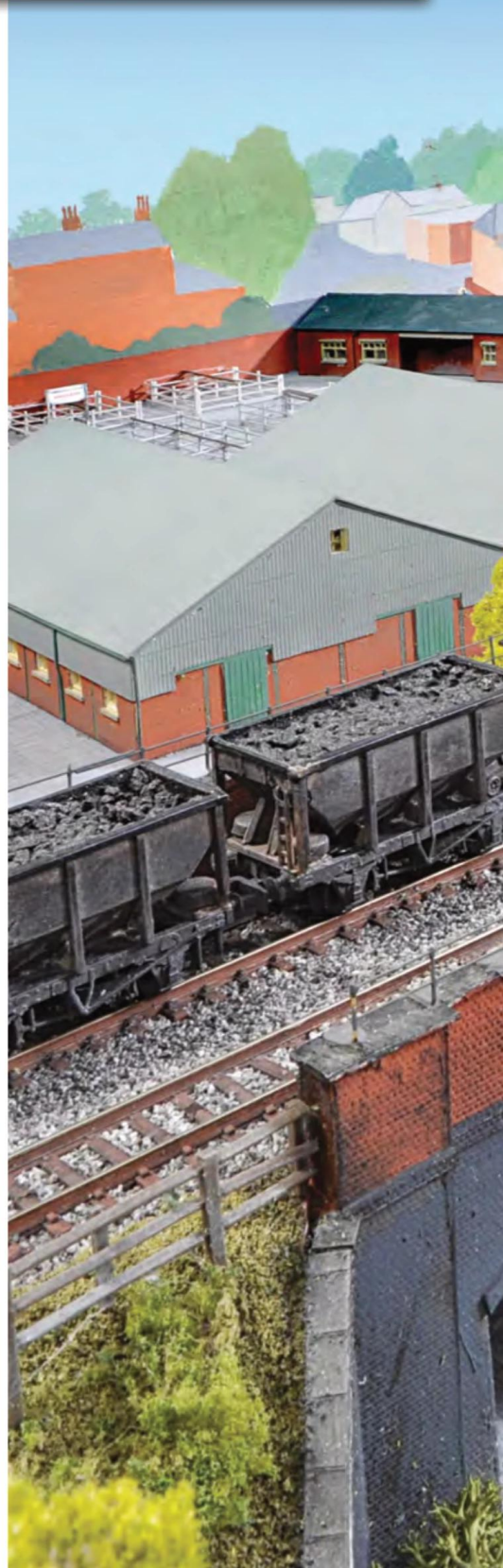


KEY

- | | | | | | |
|-------------------|--------------------|-------------|--------------|----------------------|----------------|
| 1 To storage yard | 3 Backscene | 5 Headshunt | 7 Goods shed | 9 Signalbox | 11 Cattle dock |
| 2 Loading dock | 4 Station building | 6 Platform | 8 Road | 10 Station forecourt | 12 Embankment |



Eastern and Midland operated trains meet at the station.



central sections in the late 1940s and this is what is depicted on the model.

Taking liberties

Inevitably, there has to be compromise. As John explains: "Although we have tried to be as accurate as possible, we have moved some features so as to be included on the layout. Wycliffe House and Spreckley's Farm stood on the north east side of the layout, the left-hand side on the scenic side. The house had been extended over the years, particularly at the time that the line was built. It seems that the owner sought some compensation from the railway companies for the purchase of his land and enlargements were undertaken.

The underpass that lies near the house

was also created to give access to it and the adjacent farm. In reality, these buildings stood slightly further back so that only part of the gardens should have been included on the layout, but, as John and Steve felt that they were significant and connected with the history of the line, they were included. Equally, the large water tower to the North of the Down platform stood further back but was also included.

Taking stock

As one would expect with a joint line, the motive power and coaching stock was a mixture from both original companies. During the earlier period John and Steve have modelled from 1948 to 1953. This comprised of

London Midland & Scottish (LMS) and London and North Eastern Railway (LNER) locomotives with trains made up of coaches from these companies. The layout is also operated in the post-Modernisation Plan era, allowing Steve and John to imagine that, in order to revive passenger numbers, through trains were run from Doncaster to Rugby and beyond, allowing 'Black Fives', 'Jubilees', 'Royal Scots' and 'V2s' as well as BR Standard types to be seen running through the station.

This layout has been a real labour of love which has taken several years to complete and with a great deal of help from many people who have offered their assistance. But thanks to all of those efforts, Melton Mowbray's 'forgotten station' lives again. ■



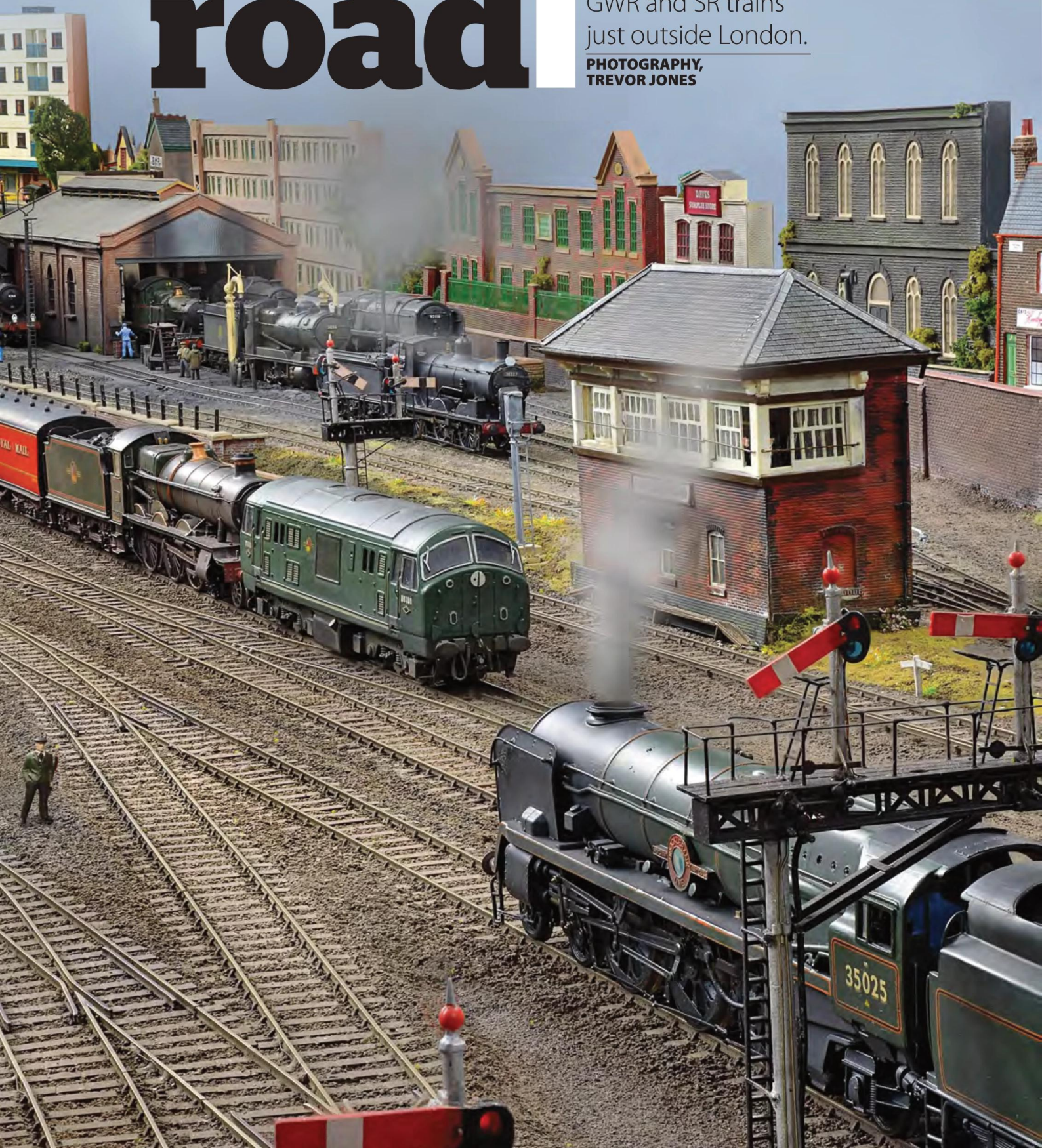
The railway and its surroundings have been painstakingly researched to bring realism to this 'N' gauge layout. A Fowler '4F' heads a coal train as a 'J39' approaches with a stopping passenger.

Old Elms road

Bodmin and District MRC drew inspiration far away from their Cornwall home for their 'OO' exhibition layout which showcases GWR and SR trains just outside London.

PHOTOGRAPHY,
TREVOR JONES

 A Bulleid rebuilt 'Merchant Navy' 4-6-2 departs Old Elms Road as a Class 22 pilots a 'Hall' 4-6-0 into the station with a mail train.





O2 Cameos have been added all around the layout including this caravan site.

MOST OF THIS CORNISH club's members originate from outside Cornwall and have a variety of railway interests and preferences so the first key decision to make, as with any layout, was where should the layout be based and in what time period.

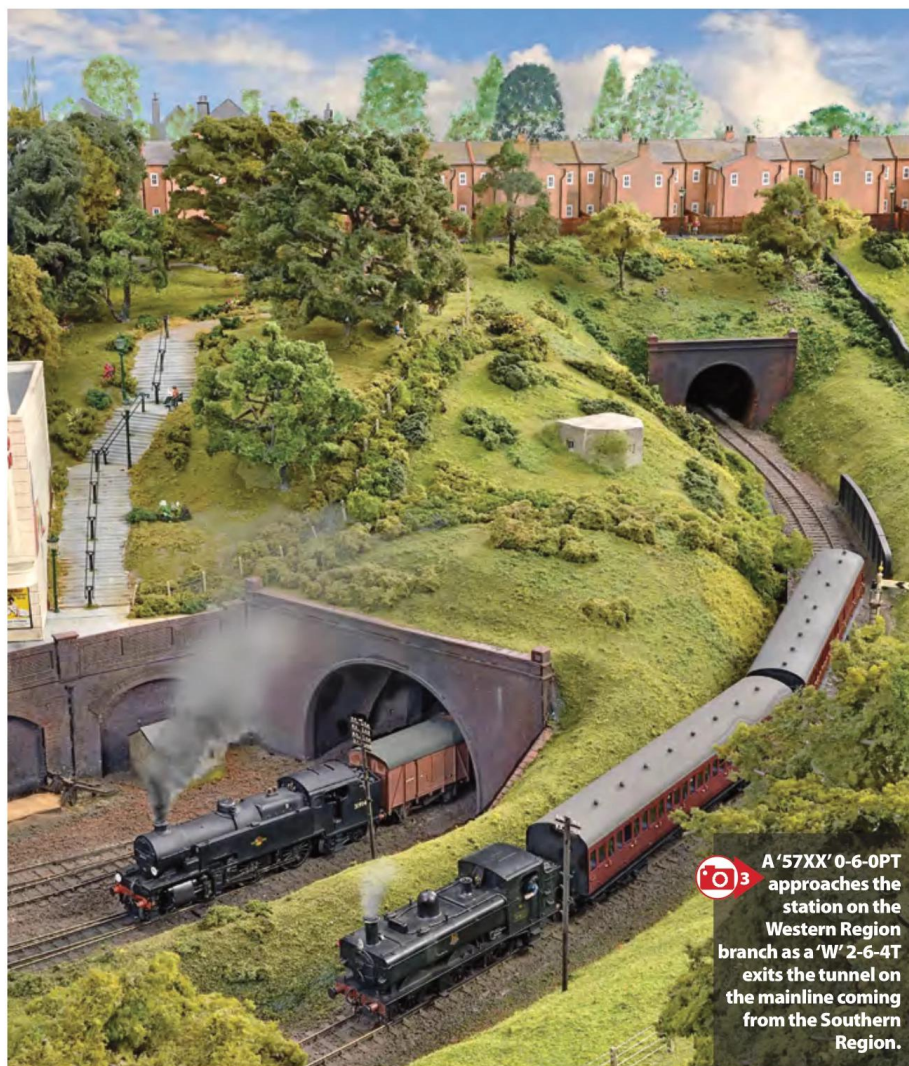
Bob Hoskins says that much discussion around suitable locations during the construction phase ultimately led to Old Elms Road being based somewhere near Reading on a fictitious Western Region secondary mainline linking the former Western and Southern Region lines out of London. Furthermore, by basing it between 1956 and 1962 they would be able to run a variety of steam locomotives in service during that period whilst giving us the option of running a few early diesel locomotives and a handful of early diesel and electric multiple units.

A typical exhibition operating pattern consists of a handful of inter regional services of Western and Southern Region origin which are supplemented by a range of local passenger services. Long distance and local goods trains also use the line

A further quest for additional viewing and operational interest led to a rapid decision to incorporate a modest locomotive depot which serves the fictitious Old Elms marshalling yards which are out of view a mile up the line.

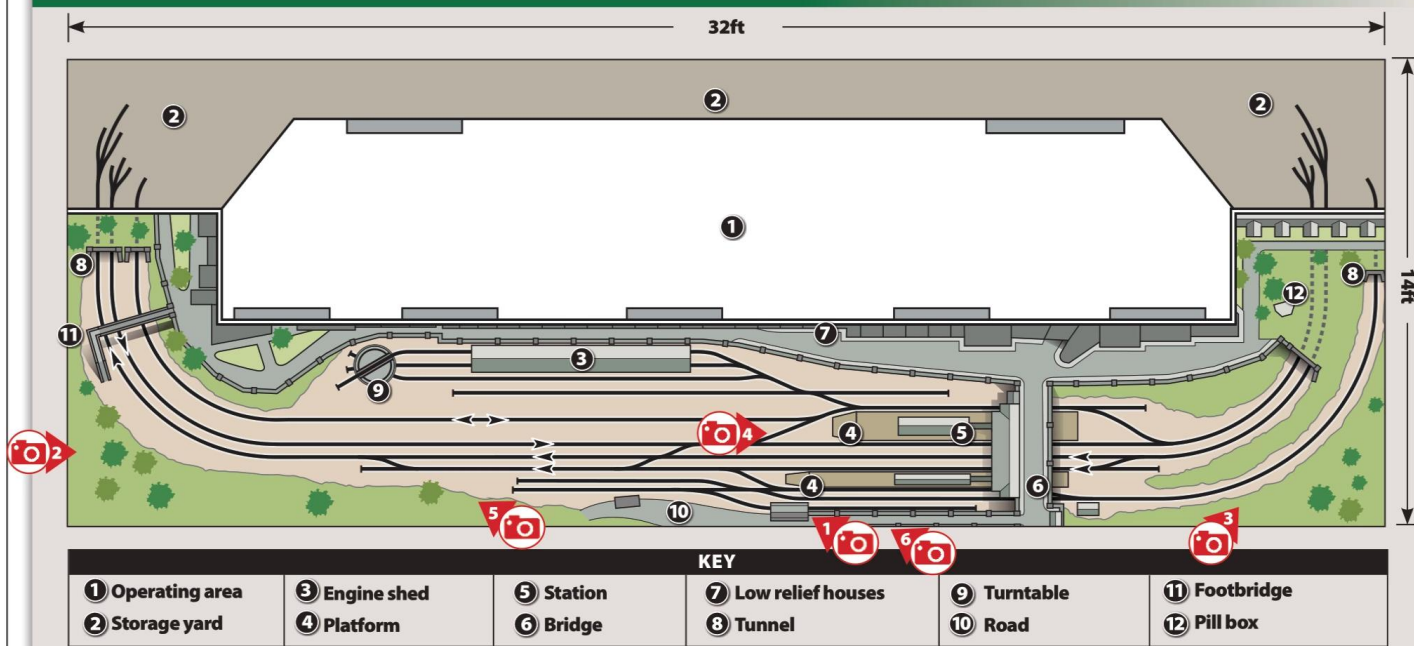
Operation

Bob says of the layout's operation: "Our operational philosophy is that there should nearly always be something of interest going on somewhere on the layout to keep the viewer interested. Added interest is also »



O3 A '57XX' 0-6-0PT approaches the station on the Western Region branch as a 'W' 2-6-4T exits the tunnel on the mainline coming from the Southern Region.

OLD ELMS ROAD TRACK DIAGRAM (Not to scale)



provided by the layout having working road vehicles that run along the road that stretches the length of the layout – a feature that usually creates a great deal of interest at exhibitions.”

The exhibition locomotive fleet consists of a mixture of scratchbuilt, kit built and detailed ready-to-run examples of Great Western Railway (GWR) and Southern Railway (SR) origin together with a few appropriate BR Standard designs. However, the odd rare visitor from further afield may appear from time to time too.

The scenery on the layout was built up using polystyrene foam sheets cut and moulded to shape and then covered in plaster soaked bandages. This was then smoothed off with a mixed coating of builder's plaster and PVA glue before being painted and then covered with appropriate scenic materials. This has produced a light but durable scenic base capable of coping with the majority of bumps and knocks when being transported to exhibitions.

The working road vehicles are modified from the excellent Faller range. Says Bob: “We were inspired many years ago after observing a Faller vehicle layout at the Warley exhibition and subsequently incorporated them on our previous layout. Such was the interest they generated with the public at exhibitions that we simply had to use them again on Old Elms Road. The vehicles are heavily modified including fitting replacement bodies that are appropriate for 1950s Britain (some of which are scratchbuilt).”

The layout is served by an extensive storage yard which gives the ability to run up to 45 different train formations at exhibitions. Trains can vary from ten-coach expresses down to single car Diesel Multiple Units.

Railway features

The track in the viewable scenic part of the layout is all SMP finescale with handbuilt points using SMP components. This is laid on cork strip for smoother and quieter running and has been ballasted with Woodland Scenics ballast materials secured by the tried and trusted method of diluted PVA glue. »



4 Right: A branch line from the Southern Region is electrified with third-rail allowing EMUs to arrive at the rear platform. The station is fully scratchbuilt from the canopies to the platforms and bridge mounted building.

5 Below: A kit built GWR '47XX' 2-8-0 thunders towards the station with a Travelling Post Office train. The buildings in the background are all scratchbuilt.



The working semaphore signals are scratchbuilt using a range of components including brass tubing and handrail wire together with a few accessories from Ratio kits. They are operated using servo control. Bob says that this type of operation provides a slower and more realistic signal arm operation which also cuts wear and tear through continued use during exhibition weekends. Tiny surface mounted clear LEDs are fitted behind the coloured spectacle plates in the signals. The signals on the approach to points are locked into the pointwork so that the correct signal arm is operated depending on the route set.

The Southern Region branch line is operated with three-aspect colour light signals which are a mixture of handbuilt products together with a couple of examples from the Roger Murray range.

Buildings and structures

The buildings on the layout have virtually all been scratchbuilt by club members. The station building was always going to be a prominent feature as it straddles the station platforms on a road bridge. This building was constructed from Wills brick and tile embossed sheets with the windows painstakingly cut from plasticard with further details added from Wills detailing accessories. The building is based on the GWR station building at Tyseley. The two GWR style station canopies were handbuilt and consist of a brass framework together with Wills embossed sheets and Ratio valances.

The layout features a continuous brick retaining wall that effectively runs the length of the layout together with a large number of scratchbuilt low relief terraced houses, flats and shops that run along the high street parallel to the railway. Pride of place in the high street goes to a scratchbuilt art deco style Odeon cinema.

The overall scene is completed with smaller details such as allotments, a play area, street market, junk yards and more - all contributed by various members in order to fill various gaps and to bring the town to life.

The mainline tunnel mouth includes a purpose built smoke generation unit. This enables us to create the effect of smoke/steam from locomotives as they enter or leave the tunnel. This is another feature we had previously used on a club layout. "Once again, the positive reaction of the viewing public meant that we just had to reuse it on Old Elms Road. Our plan is to ultimately introduce a few more units on Old Elms Road in strategic locations such as the engine shed yard," says Bob.

On show

Old Elms Road was exhibited at a handful of shows around the country over the last four years or so and it won a few awards on its journeys. Bob says it is interesting to operate and like most layouts it continues to evolve as club members take on individual projects to add further points of interest.

Very much evoking the likes of locations such as Reading, Old Elms Road is a marvellous evocation of the Great Western and Southern running side by side, just as they used to do in so many places from London all the way down to the club's home patch where the 'Withered Arm' and the GWR met. ■



A Western Region auto train simmers in the bay platform as a Southern operated 'Merchant Navy' steams through the centre road.



PETER'S SPARES

**MODEL RAILWAYS LIMITED
MAIL ORDER & REPAIR SPECIALISTS**



- ✦ New & Used Hornby Spare Parts
- ✦ Our own spare parts made in China
- ✦ Locomotives and Rolling Stock
- ✦ Plastic Kits, Paints, Tools & Glues
- ✦ Digital Decoders & Controllers
- ✦ Locomotive Detailing parts
- ✦ Mega Steam Smoke Fluid
- ✦ Tracks & Train Sets
- ✦ We have it all at Peters Spares

NEED HORNBY SPARES?

Talk to Peter's Spares - over 2500 different Hornby Spares in stock.

East Kent Models parts are being listed on our website.

**OVER 10,000
DIFFERENT ITEMS
IN STOCK**

DON'T FORGET WE SELL:

Locomotives, Rolling Stock,
Scenics and much more!



NEW & USED MODEL RAILWAYS

Specialists in Model Trains since 1994 - Servicing, Repairs & DCC Decoder Fitting
2J Brighthouse Business Village, Riverside Park, Middlesbrough, Cleveland TS2 1RT

PECO

GRAHAM FARHAM
BACHMANN

dapal

Tel: 01642 909794

Open Mon-Sat 10am - 5pm

Web: www.petersspares.com

Email: sales@petersspares.com

HELJAN

GAUGEMASTER

*Supplying scenic models
For use by
Railway Modellers*

Vintage Miniature Models

**GREAT MODEL
LAYOUTS
REQUIRE GREAT
SCENICS!**

Model Designers and Diorama makers
Vintage Miniature Models

17 Wycombe St
Darlington
Co Durham
07946 499237

www.vintageminiaturemodels.co.uk

emailgraham.a.eason@gmail.com

All our model ranges are
British made and designed on Teesside
by a Yorkshireman or
Created on Orkney in association with



Peedie Models

hobby TRAX

For all your railway electronics!



Free postage over £50

Fast delivery

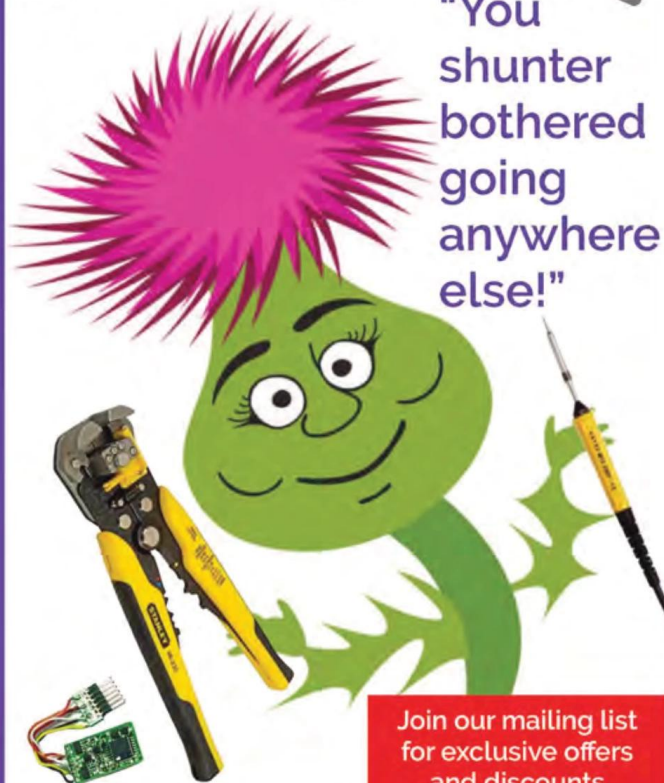
Technical advice

Repair service

DCC fitting



"You
shunter
bothered
going
anywhere
else!"



Join our mailing list
for exclusive offers
and discounts

www.hobbytrax.co.uk

Tel: 0345 065 4472

EVERYTHING YOU NEED FOR YOUR DIGITAL RAILWAY

DIGITRAINS

**Just starting out in DCC and not sure what's available?
Grown out of your system and thinking of upgrading?
Getting into sound and want to know the best decoders?**

DIGITAL COMMAND CONTROL (DCC) is one of the fastest growing areas of the model railway hobby.

As the first new company to set up as a DCC specialist in the UK, DIGITRAINS now has over 12 years experience to share. Working in all the popular scales, we are here to guide you through choosing the best equipment.

We stock a wide range of products as well as offering free advice, a decoder installation service and the best DCC 'test drive' facility around.

Don't leave that major purchase to chance!

Why not visit our shop? Our comprehensive library of loco sounds can be demonstrated.

We stock 1,000s of products from more than 30 leading manufacturers. And don't worry if you're not digital. We're also a traditional model shop, holding all the major ready-to-run lines



- Try before you buy
- Expert advice
- Great service
- Experience
- Major brands
- Worldwide mailing



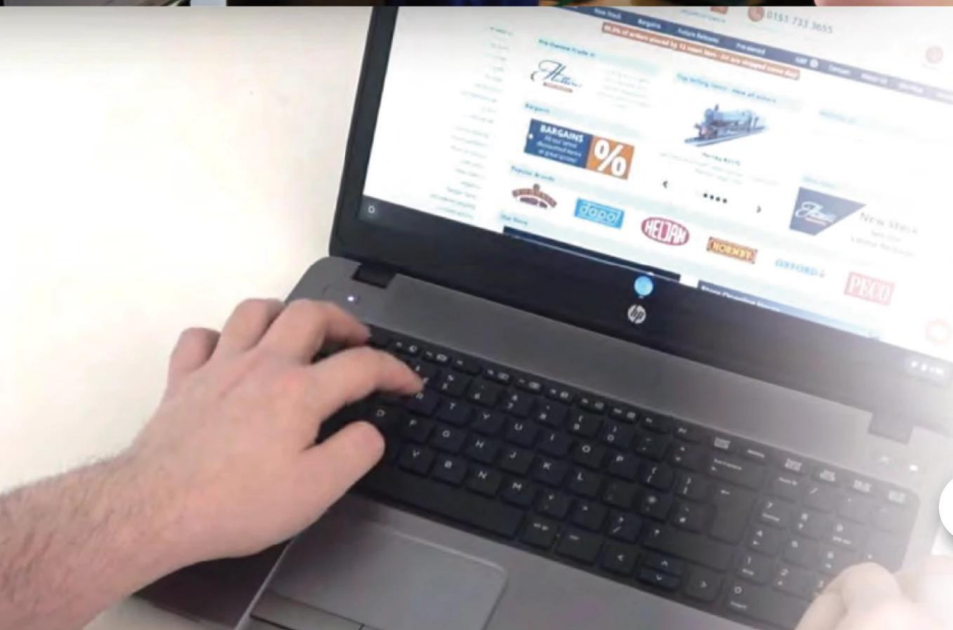
We regularly attend railway shows countrywide. Please check website for details

**15 Clifton Street, Lincoln LN5 8LQ
01522 527731**

**www.digitrains.co.uk
enquiries@digitrains.co.uk**



Your Local Online Model Railway Specialist



NEWSLETTERS

Sign up to our weekly newsletters and get the latest announcements, new arrivals, bargains and back in stock items straight to your inbox!

hattons.co.uk/newsletter

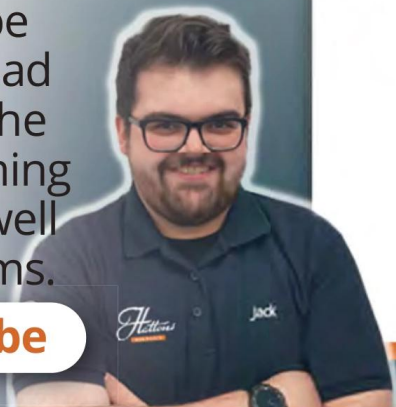
VIDEOS

Check out our YouTube channel where we upload videos showcasing all the latest releases, forthcoming items and bargains as well as our weekly livestreams.

hattons.co.uk/youtube

PLATFORM

1



Keep up to date with the latest new releases, bargains and updates by following our social media pages:



/hattonsmodelrailways



@hattonsmodels

Hattons Model Railways, 17 Montague Road, Widnes, WA8 8FZ
0151 733 3655 www.hattons.co.uk