



The great loco moves! Part 2

After the ground-breaking road movements of Sandstone 3'6" gauge locomotives from Bloemfontein in August (see Heritage Railway UK Issue 285. The story of the recent loco moves to Sandstone. (sandstone-estates.com) we have moved in early November the Sandstone 3'6" gauge locomotives and other assets in storage at the old Germiston Steam Depot 400km to Sandstone Estates in the eastern Free State of South Africa.

The locomotives that were moved are Class 15F 3052, "Avril", previously owned by the late David Shepherd, Class 25NC 3488, GMA/M Garratt 4079 plus auxiliary water tanker, ex-Rhodesia Railways Class DE2 diesel electric 1207 and ex SAR steam crane number 578.

The logistics of this move were coordinated by Mercor Transport together with Munro Transport. In total nine heavy haulage rigs were used, comprising five multi axles units and four conventional lowbed trailers. A total tonnage of 745500kg!



The bottleneck at Germiston, the limited clearance exit tunnels. Picture by Shaun Ackerman, Fairlie Projects.

The logistics of the move were quite complex as the old Germiston Steam Depot can only be accessed by road through two very narrow and height restricted tunnels. These were originally railway tunnels from the old depot in steam days to allow locomotives to crossover numerous main line tracks without hindering traffic. The rails were lifted many years ago. Together with Shaun Ackerman of Fairlie Projects (Pty) Ltd, who operate from the old steam depot, calculations were made to allow access through these tunnels for the massive trucks and trailers.

The maximum width is 3 metres which allowed the trailers through but the height was another issue for the trailers when loaded. The maximum height of any of the locos or other rolling stock is the original SAR loading gauge height

of 3,962 metres but this needs to be added to the trailer bed height of 1 metre, giving a 5 metre high load. The tunnel floor was graded and a maximum tunnel height of 5, 1 metres was achieved, a clearance of only 100mm! There was some flexibility in being able to lower some of the trailers slightly but it was a tight squeeze. One lowbed trailer was millimetres too wide and the load (in this case 15F 3052) had to be taken through the tunnel on a multi axle trailer and transferred to the lowbed after exiting the tunnel.

The access road itself was also a challenge. A small track exists from the Germiston to Knights road that cars and pickup trucks can use to access the tunnels but it involves a 180 degree hairpin on a steep slope which no heavy vehicle could use. A more direct and suitable road originally existed directly from the tunnel exit straight to the tar road running from Germiston to Knights. Over the years this had become an illegal dumping site, completely blocking the road. Fairlie Projects, with the assistance of Transnet Engineering, cleared and graded the road for safe access by the heavy trucks and trailers over a period of three days prior to loading operations.



The poor state of the access road need serious attention. Picture by Shaun Ackerman, Fairlie Projects.

On November 2 loading began. The heavy vehicles were brought in as required and two separate loading station were established. For the lowbed trailers a line was prepared which could be connected to the rails on the trailer once the goose neck at the front of the trailer was lowered. The load was then winched up onto the lowbed with assistance from the amazingly strong 150hp Hunslet diesel shunter from Fairlie Projects.



Fairlie Projects' Hunslet Diesel shunter assembled all the locos and rolling stock for loading. Picture by Shaun Ackerman, Fairlie Projects.



The first lowbed in position to load 15F 3052's tender. Picture by Sandstone Heritage Trust.

For the multi axle trailers a loading dock was prepared. This involved excavating a small pit to back the trailer into making the rail height of the trailer at the same level as the ground rails. In the Bloemfontein moves during August this was not an option and the goose neck trailers were literally used as loading ramps. A first time innovation by Mercor Transport! For unloading at Sandstone this system was also used as it gave flexibility as to which line the loco could be moved on to.



The Hunslet Diesel moves 25NC 3488 on to the multi axle trailer. Picture by Sandstone Heritage Trust.

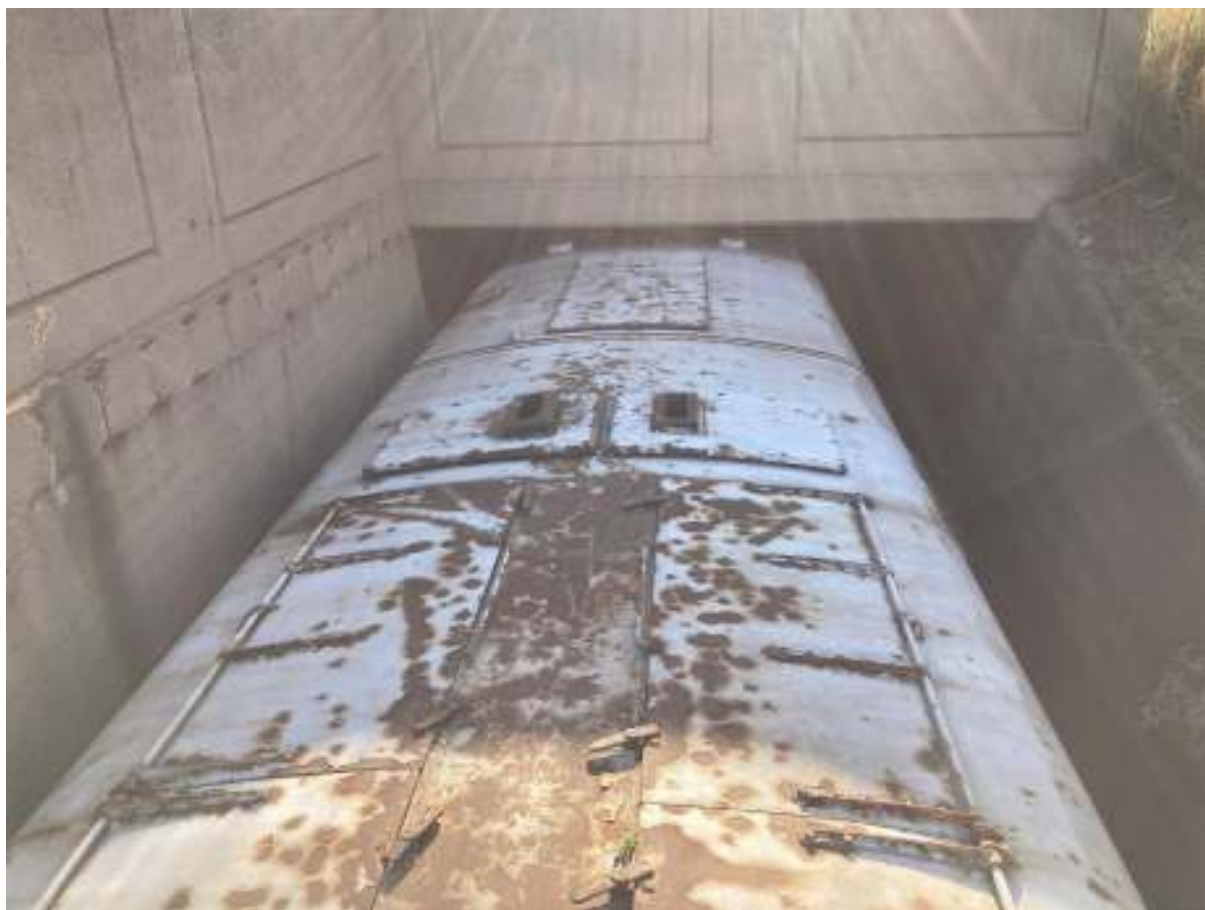


GMA/M 4079, "Lyndie Lou" is winched on to the multi axle trailer. At 154000kg, just too much for the mighty Hunslet! Picture by Sandstone Heritage Trust.

Loading was completed for the low beds by Wednesday 3 November. These four low beds left for Sandstone with 15F 3052, the tender of 3052, the GMA/M water tanker and a 0-6-0 diesel shunter. Their first stop was the Munro Transport depot at Heidelberg for weighing. These four units arrived at Sandstone on Friday 5 November and were unloaded at their new home on Saturday 6 November.

Our photo gallery below, from Shaun Ackerman of Fairlie Projects, shows the tight clearances involved in exiting the Germiston site with DE2 1207, 25NC 3488 and 15F 3052.







The multi axle trailers, with heavier loads than the low beds, required full police escorts and a different type of road permit which can only be issued after weighing. This was duly done at Munro Transport at Heidelberg and four of the five multi axle trailers duly arrived at Sandstone on Thursday 11 November after a slight delay in the issue of the permits. Ex-Rhodesia Railways DE2 diesel 1207, 25NC 3488 and GMA/M 4079 were safely at Sandstone. The fifth and final piece of rolling stock, ex SAR steam crane number 578, was delayed a week as it was found to be heavier than originally calculated and a late trailer swap was required to a unit suitable for the weight.



Traffic chaos as 25NC 3488 leaves the Germiston site for Sandstone. Picture by Shaun Ackerman, Fairlie Projects.

The route to Sandstone was not a simple one. From Germiston to Heidelberg for weighing then to Villiers but on secondary roads not the highway as the bridges were too low! From Villiers the route was via Warden on the old R103 Durban main road then to Bethlehem and Sandstone. The permit delays were also complicated by the route encompassing three provinces, Gauteng, Mpumalanga (a short 10km on the R103!) and then into the Free State.

Below: 25NC 3488, GMA/M 4079 and DE2 1207 navigate the streets of Bethlehem, just 90km from Sandstone.
Picture by Ystervaark News.





At Sandstone a great deal of preparation was required by Gert Jubileus, the Heritage Railway Manager, and his crew. 3'6" gauge track panels had to be prepared for each new arrival plus the area where the locos and other units were to be displayed needed much work of a civils nature to level and stabilise it. This was done with just days to spare before the first arrivals and was only concluded as the last units arrived. The main display area for the 3'6" units is near the security entrance to Sandstone, some 3,5km from the main R26 Ficksburg to Bethlehem road.



Sandstone's 1965 Caterpillar Scraper prepares the ground for the new arrivals. Picture by Sandstone Heritage Trust.



GMA/M 4114, originally at Bloemfontein awaits its new neighbours. Picture by Sandstone Heritage Trust.



Newly fabricated 3' 6" gauge track panels are brought on to the display site for the impending arrivals. Picture by Sandstone Heritage Trust.



DE2 1207, a long way from its original home in Zimbabwe arrives at Sandstone. Picture by Sandstone Heritage Trust.



GMA/M 4079 eases into Sandstone. Picture by Sandstone Heritage Trust.



25NC 3488 arrives at Sandstone with double headed Volvos! Pictures by Sandstone Heritage Trust.

While Sandstone has been committed to 2ft gauge operation since 1999, over the years many 3'6" gauge items have been rescued and brought to Sandstone. The new display area, which features the locos and rolling stock from both Bloemfontein and Germiston, is now home to seven steam locomotives, two steam cranes, three GMA/M water tankers, a mainline diesel and a diesel shunter. This now increases the 3'6" gauge collection at Sandstone to 64 items as follows:

Ex SAR steam locomotives 15, Ex SAR Diesel 1, Industrial Steam 9, Industrial diesel 1, Ex RR Diesel 1
Ex SAR Coaches 16, Ex SAR Freight wagons 17, Mobile Cranes 3, Inspection Trolley 1.



The massive size of the multi axle trailer and its GMA/M load is evident in this picture. Picture Sandstone Heritage Trust.



Ron Nell of Frameline Productions braved the dust and heat to capture the whole move from Germiston for a forthcoming Sandstone video. Picture by Sandstone Heritage Trust.



*Unloading GMA/M 4079 at Sandstone from the multi axle trailer. A lowbed gooseneck trailer is being used as an unloading ramp. An innovation introduced by Mercor during the move of the Sandstone locos from Bloemfontein.
Pictures by Ron Nell.*



*Sandstone's mighty HET military truck had to offer assistance at times to ease the locos off the trailers. Picture by
Ron Nell.*



Rhodesia Railways DE2 1207 takes up position at the display site. Picture by Sandstone Heritage Trust



An aerial view of the new 3'6" gauge display area as 25NC 3488 is eased off the multi axle trailer Picture by Sandstone Heritage Trust.



Another aerial view of 25NC being unloaded. Picture by Sandstone Heritage Trust.



15F 3052, named after David Shepherd's wife, Avril, in position next to GMA/M 4114. Picture by Sandstone Heritage Trust.



An impressive line-up of South African main line steam locomotives! GMA/Ms 4114 and 4079 next to 15F 3052 and 25NC 3488. Picture by Ron Nell.

Sadly many items will not run on the rails again but all are now in a safe environment and the future may hold new life for some of the units.