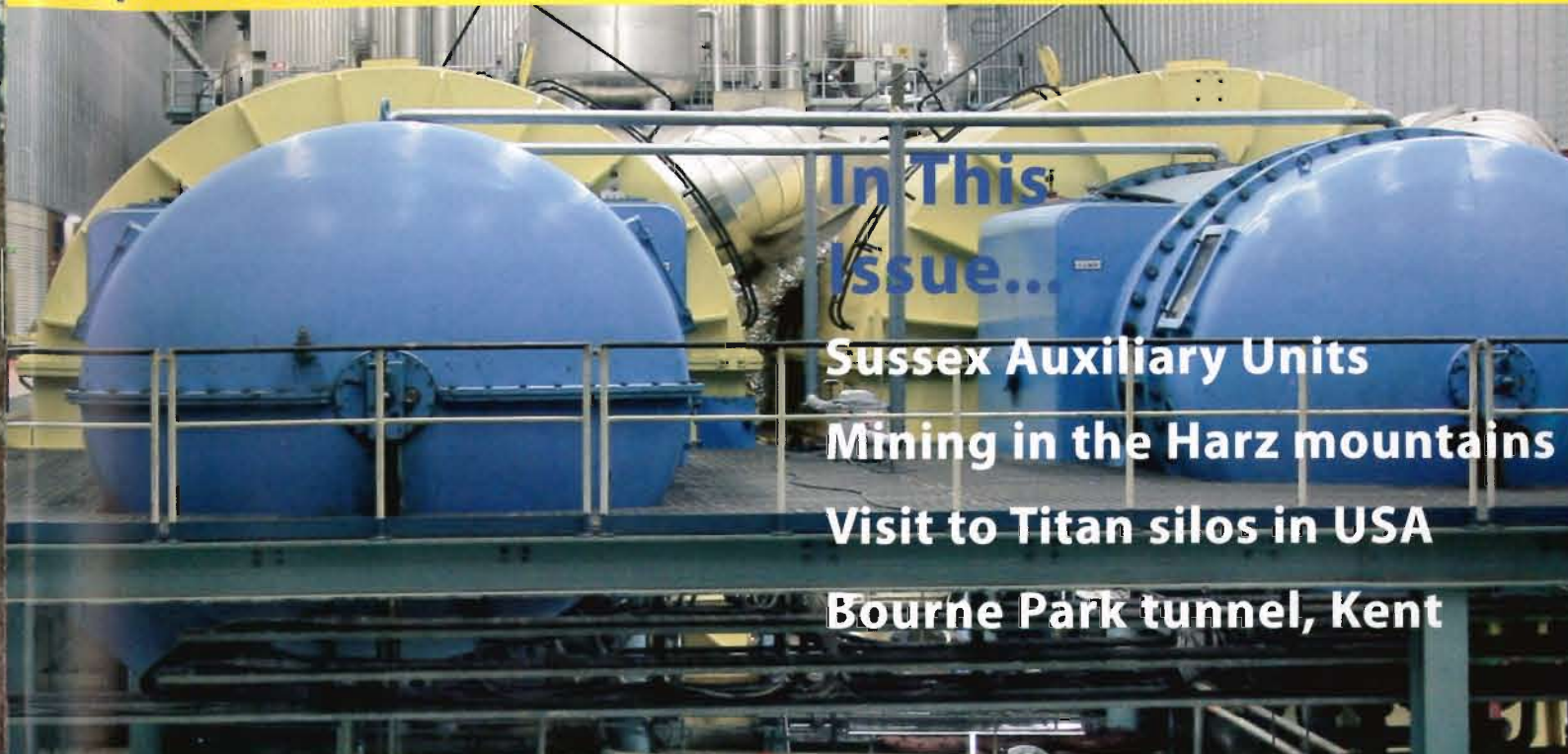




Subterranea

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In This Issue...

- Sussex Auxiliary Units
- Mining in the Harz mountains
- Visit to Titan silos in USA
- Bourne Park tunnel, Kent



Subterranea Britannica



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Remains of Manchester Picc-Vic tube system unearthed

A mysterious space recently found under Manchester's Arndale shopping centre has been identified as the initial stages of a long forgotten underground railway through the city centre.

The space which has been forgotten for decades and closed off to the public is under Topshop about 30 feet below the surface and was built as part of a subway linking Manchester Arndale to the new station.

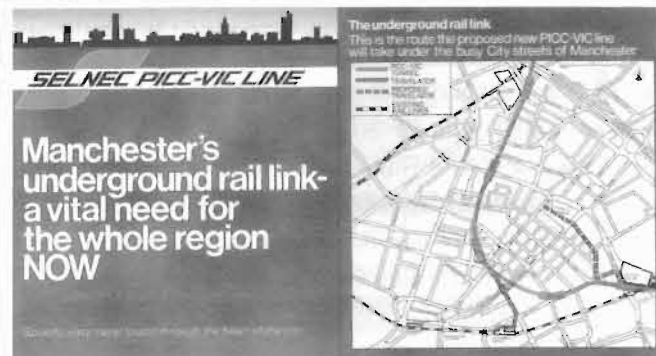


The void beneath Topshop in 2011.

Photo Charlotte Martin – Arndale PR manager

The South-East Lancashire and North-East Cheshire Public Transport Executive (SELNEC PTE), the local transport authority which became the Greater Manchester Passenger Transport Executive (GMPTE) in 1974, made a proposal in the early 1970s to connect the various railways running through Manchester city centre under the Picc-Vic scheme. The Picc-Vic proposal envisaged joining the two halves of the rail network by constructing new 18ft-diameter tunnels (costing £9,271,300 at January 1973 prices) under the city centre, connecting Manchester's two main railway stations, Piccadilly and Victoria. This new underground railway would be served by three new underground stations, joining together the regional, national and local rail networks with an underground rapid transit system for Manchester.

As well as linking the two mainline stations, Picc-Vic tunnel would improve the distribution arrangements from the existing railway stations which are on the periphery of the central core and improve passenger movement within the central area.



The proposed line formed part of a four-phase, long term strategy for GMPTE over 25 years, which included bus priority, an East-West railway network, as well as a light rapid transport system.

Parliamentary powers were obtained in 1972 and formal plans were made to start construction works in September 1973 with a target completion date of 1978.

An underground excavation and construction project required a large initial outlay of public funds, and when the Greater Manchester County Council took on the project, it was unable to secure the necessary funding from central government. The infrastructure grant application was turned down in August 1973 by John Peyton, Minister for Transport Industries. The minister cited announcements of £500 million reduction in public expenditure by Chancellor of the Exchequer Anthony Barber saying, "there is no room for a project as costly as Picc-Vic before 1975 at the earliest." The Picc-Vic scheme was abandoned in 1977.

The proposed new link would have been 2.75 miles long, and run from Ardwick Junction, a mile south of Piccadilly Station, to Queens Road Junction on the Bury line, about three-quarters of a mile north of Victoria. Just over 2 miles of the new line would have been in tunnel, most of which would be 60–70 feet beneath the centre of Manchester. The southern approach ramp would have been built on the surface and in a shallow tunnel.

There would be two separate tracks, each electrified on the 25kV AC system. In the deep tunnel section there would be separate bores for each track. The track would consist of continuous welded rails on concrete foundations known as 'slab track'. The tunnel would be controlled by BR's standard three-aspect colour light system together with their automatic warning system (AWS). This would permit train frequencies of 90 seconds, although initial proposals envisaged a 2.5 minute headway. Five new central area stations were planned on the Picc-Vic line, including two low-level platforms at Piccadilly and Victoria stations. Each would have been built on a straight section of track and would have taken trains of up to 8-cars. There would have been escalators to the surface level, and lifts for the disabled. CIS and PA systems would be installed, along with CCTV to make high staffing levels unnecessary.

Piccadilly Low Level would be a side-platform station, built in a 'cut-and-cover' section, with a mezzanine level concourse. Escalators would take passengers to both the Picc-Vic and East-West platforms, along with a subway-escalator link to the mainline station concourse, and a direct link to a new 12-stand bus station, next to the new station. Victory House, a planned development by UMIST (now the University of Manchester), would also be served by the station.



Princess Street (or Whitworth) would have been built on the site of the present Whitworth House, with a direct link to the proposed major development north and east of the station, as well as serving the Manchester College site (formerly City College Manchester, previously Shena Simon College, and before that the Mather College of Education), UMIST, as well as other developments.

Water Towers with Deep Roots, Cologne Julian Allason

The views from the Hotel-im-Wasserturm ('hotel in the water tower') must be the best in Cologne, the cultural centre of the Rhineland in western Germany. Built in 1862 on the highest hill in this fairly flat city it was – at 118 feet – the tallest water tower in Europe of the time and an impressive example of structural engineering with deep roots. It was used for almost 130 years to provide a large quantity of water under gravity pressure through an extensive network of deep mains until superseded by an underground canal system.

During WWII the tower was also used for anti-aircraft observation. That it was simultaneously employed as a refuge by civilians says much about the ferocity of Allied bombing of the city, from which 90 percent of the population were driven out, wounded or killed. Despite being listed as an historic monument in 1987, the by-now derelict structure was converted – ingeniously – by French architect/designer Andrée Putman into an elegant business hotel which opened in 1990 and remains locally owned.

The original brickwork has been preserved, creating an atmospheric interior, the old pump rooms now being used as the bar. On the 11th floor the hotel now has a two-Michelin-starred restaurant, La Vision, patronised by Brad Pitt who likened the hotel to Rapunzel's tower. It is certainly full of blondes. The kitchen also commands one of the best views in Europe including the Dom, Cologne's great gothic cathedral, which also miraculously survived WWII bombing. Guests with rooms or suites on the 8th, 9th and 10th floors enjoy glass walls and may circumnavigate the walkway. An idea of the comfort levels may be gleaned from Hotel-im-Wasserturm's affiliation to Small Luxury Hotels.

Albert Square/St. Peter's Square (or Central), serving the administrative and entertainment parts of the city, would have six entrances in St Peter's Square, together with a bus lay-by, part of a redesigned square. Albert Square would also be redesigned, with a concourse beneath the square, along with a direct link into the Heron House development and a travelator link to Oxford Road railway station.

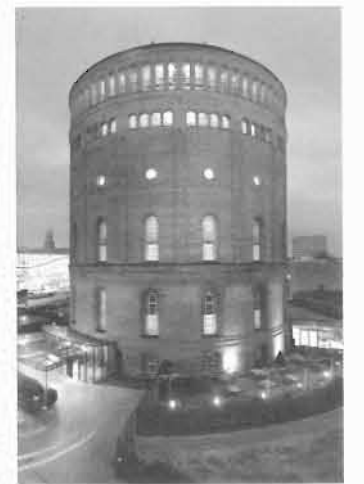
Market Street (or Royal Exchange) would have lain beneath the junction of Corporation Street, Cross Street, and Market Street, directly linking into the Royal Exchange, Marks & Spencer, as well as the Arndale Centre.

Victoria Low Level would have a concourse below Long Millgate, serving the Co-operative HQ and the Corn Exchange. Development of the Picc-Vic would also allow the main line station to be rationalised and redeveloped, along with a proposed new bus station.

A prototype SELNEC interactive display board is now on display at the Museum of Transport, Greater Manchester.

Source: Wikipedia and Martin Dodge

Beneath the ground-floor hotel lobby are the subterranean floors, not open to guests, used for storage and utilities, and subject to careful monitoring for structural integrity. The foundations are necessarily deep – no one is now quite sure how deep, but miners were employed in the construction. They are also of necessity wide given the issues of top-weight and stability, the location being close to the Rhine.



Some of the original large-bore pipes survive and have been reused as cable ducts in certain parts of the city, although the connections to the tower are understood to have been removed during underpinning works and the construction of a restaurant and banqueting suite adjoining the base at ground level.

A similar, though later, water tower in Hamburg has more recently been converted into a 14-storey hotel run by the Swiss group Movenpick. Even taller is a gothic water tower in Warsaw, Poland which rises to 203 feet (62m). It has been converted into the Restauracja Wieża Ciśnień and serves traditional Polish dishes like *Pierogi* (dumplings of unleavened dough), appropriately a favourite among miners who also worked on its construction.

<www.hotel-im-wasserturm.de/en/aboutus.htm>