## MEETING REPORTS THE ALDWYCH BRANCH

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## A report of the LURS meeting at All Souls Club House on 9 December 2008

The story of the Aldwych branch began back in 1899 when the Great Northern & Strand Railway received parliamentary approval for a line from Wood Green to Stanhope Street. Although originally backed by the Great Northern Railway, there was trouble raising finance and the scheme was acquired by Charles Yerkes in 1901. Earlier that year Yerkes had acquired the Metropolitan District Railway, which had a scheme called the Brompton & Piccadilly Circus Railway. This was planned to branch from the Deep Level District Railway scheme at South Kensington, but construction had not commenced.

The two schemes were merged in 1902 as the Great Northern, Piccadilly & Brompton Railway, abandoning the section north from Finsbury Park where the Great Northern Railway were to construct the sub-surface station beneath their line alongside a similar station for the Great Northern & City Railway. A convenient link between Piccadilly Circus and Holborn, left Strand off the line of route, and a junction was now required at Holborn.

The first tentative plans for Holborn show all tracks at one level with a flat junction, but this would not have met Board of Trade requirements. In 1903 a more detailed design saw the southbound platform at a lower level than the two northbound platforms, whose tracks merged just north of the station, with a run-off tunnel to prevent an over-running train from Strand colliding with a departing train from Piccadilly Circus. The southbound platform tunnel was to continue south of its headwall to allow a junction for the Strand branch. This station layout was almost a mirror image of that intended at South Kensington, where parts of the never used Deep Level District Railway tunnels still remain. It would permit a through service from Finsbury Park to both Strand and Hammersmith, with twin platforms in the converging direction to permit trains to conveniently await their passage onward.

It was now realised that passenger traffic would be much heavier on the main route, and the one station branch could be more efficiently served with a shuttle service. A 1905 plan shows the southbound line to Strand replaced by a bay platform at the northbound level, but to the east of the through platform. This would have required its own access stairs, and passengers could have been unclear which platform for the next Strand train, perhaps arriving as it left and having to return to the other Strand platform. This seems to have been rectified without reference to Parliament by relocating the bay platform between the two northbound platforms and within the limits of deviation of the original powers.

Between Holborn and Strand construction was required to await completion of the London County Council (LCC) roadworks which created Kingsway and Aldwych on the site of cleared slum housing. The original Stanhope Street terminus would have been on the east side of Kingsway near the current London School of Economics block, just south of the Peacock Theatre. However, the transformation of the area by new roads led to a 1902 plan to extend on to a terminus beneath the Temple station

of the District Railway, sharing the station building and providing interchange. Local objection resulted in an amended scheme, further west, through to Waterloo, which was approved only as far as the station eventually constructed. But hope for an eventual extension never faded.

The top station at Aldwych took the site of the Strand Theatre, which was principally located in Surrey Street, with only a long narrow passage connecting with the Strand. The Surrey Street façade was required to be set back to allow future road widening, although it remains the only building in the street on this alignment! Kings College now owns all surrounding land, and occupies the station basement, first floor and the building above. No doubt they would seek to acquire the site should LU consider disposal. In the 1960s, when an extension to Waterloo was under consideration, they offered to pay for the lifts to be resited from the western shaft to the centre shaft if they could purchase the western end of the site.

Construction of the Piccadilly Tube was undertaken from both ends, but was not allowed by the LCC in the vicinity of the Kingsway roadworks. This allowed further time to determine the form of junction to be built. Access to the Holborn site was not achieved until October 1903, and this was the final part of the main line completed, in February 1906. Tunnelling on the Strand branch commenced the following month, working from south to north, and was completed in February 1907. Running tunnels were constructed first, and then widened to form the Strand platforms. At Holborn the northbound line connected into the already completed branch platform, after which the bay platform connection and southbound branch junction was constructed.

The Board of Trade inspection was undertaken by H.A. Yorke in November 1907, and approval granted for opening on 30 November. The official report shows that it was by now intended to operate the service with a short two- or three-car train shuttling in the western tunnel to and from the Holborn bay platform, with the northbound branch platform used only for stock transfers. The eastern tunnel could be used to operate a parallel one-train shuttle service should traffic ever justify it. The sharpest curve on the western line was 15 chains, whilst that on the eastern line was only 10 chains. Holborn bay platform was 261 feet, whilst the through platform was only 241 feet long. Strand platforms were about 250 feet long, but only 150 feet was finished for passenger use, with the remainder screened from view. Only one of the three lift shafts was equipped with a pair of lift cars.

A signal box at Holborn was equipped with 19 levers, of which 6 were spare, although operation of the shuttle service on the western line required no use of signals and the crossover was normally padlocked out of use, except at the start or end of the traffic day if required. The eastern line was to be controlled by signals in the usual way.

The connection with the eastbound line was originally intended only for rolling stock access to and from the branch, but management were keen to operate an evening through train from Strand to Finsbury Park for the convenience of returning theatre goers, non-stopping quieter stations. This was agreed on condition that both northbound platform starter signals were moved as far south as possible, and that all trains should stop in these platforms, to avoid risk of a junction collision in the event of a train overrunning a red signal. This was because the originally planned overrun tunnel was never constructed. It is likely that, whilst the shuttle train worked in the western tunnel to and from Holborn bay platform, a through train was worked down the eastern tunnel to stand at Strand until required to work the theatre special.

In 1908 it was decided to adopt a corporate branding of UndergrounD for all stations, and the word 'tube' became unacceptable. The original Strand station façade was shown to display 'Piccadilly Tube' on the frieze, but both frontages were changed to show 'Piccadilly Rly'. A couple of years later, permission was sought to erect blue canopies outside many station entrances, the original plans for Strand (like many others) featuring a more ornate style, with decorative lettering and ornate clock above, although the final result was more restrained in style.

By 1912 the shuttle train was operating between the Holborn through platform and the western platform at Strand, nearest the lift shaft, the crossover padlocked in the reverse position. All signalling had been removed, except that required for the junction with the main line. This position was officially approved in 1917, when the Board of Trade allowed removal of the crossover and its replacement with plain track. Until that time the shuttle train had returned to Lillie Bridge depot at the end of the traffic day by working forward onto the northbound main line, and then running wrong direction to the crossover at Covent Garden, where it accessed the westbound line. With removal of the wrong road signalling in 1917, it was necessary for the shuttle train to work northbound to York Road station, where a crossover enabled it to reach the southbound line for return to Lillie Bridge. In later years the shuttle reversed at Wood Green or Arnos Grove, and at times has been scheduled to also work some 'rusty rail' moves on its way to Northfields depot.

Winston Churchill was a keen advocate of using the Underground for air-raid sheltering, but this was resisted by other senior cabinet Ministers, who preferred that transport took priority. Churchill allowed this view to prevail, but was very soon afterwards surprised to read in The Times newspaper that the same Ministers had been discussing with the Chairman of the LPTB the possibility of allowing sheltering in the Aldwych branch. This was expedited, and the Aldwych branch was closed on 21 September 1940. Strand station had adopted this name in 1915, when the tube station outside Charing Cross mainline station became known as Strand in connection with construction of a new terminal loop and station by the Charing Cross station of the District and Bakerloo Railways.

The disused eastern tunnel was divided off, and used as a repository for treasures from the British Museum, the Victoria & Albert Museum and from Buckingham Palace. The Public Record Office rejected this location, for fear that the damp conditions would damage its papers. The western tunnel was used by the Westminster Council as an air-raid shelter, and in 1941 this was extended from the crossover into some of the repository space. There was no public access provided from Holborn station, although emergency access was available. Toilet facilities were provided in the eastern tunnel near Aldwych, with access through a 'bolt hole' for shelterers. The track had already been removed in the eastern tunnel, whilst that in the western tunnel was removed in places and boarded over at others. Lighting, heating and ventilation were provided. The repository was not fully emptied until the late 1950s.

A photo of early days in the shelter showed men laying on the track-free ballast of the eastern tunnel, and children in hammocks tied across the anti-suicide pit between the running rails at Aldwych western platform, the current rail having been removed.

A quick review of rolling stock on the branch began with 2-car gate-stock trains, a motor car with control trailer. However, this was an over-provision for the traffic offering, and by 1908 two double-ended motor cars had been created, providing a

spare for maintenance cover. In 1914 the trial car with centre doors was used on the branch, its operation on the main line having proved the concept. However, air operation of the doors was replaced by cable linkage to the gate position. By 1930 this was replaced by double-ended cars again, the last of the Gate Stock to serve in London, although the gates had been replaced by the second cab. Stored during the War, they were rehabilitated and returned to the service on reopening in 1946. Drivers complained at the lack of electro-pneumatic brakes, to which they were now familiar on the main line service.

In 1950, a 2-car train of standard tube stock was used. Then in 1954 the prototype 1935 tube stock, those with flat-ended cabs as adopted for the 1938 fleet, arrived on the line. These lasted only until 1957, when they moved to the Ongar branch upon its electrification, and standard stock returned until 1964. By then 1959 stock was serving the main line, but a unit had not been ordered for the branch. In the interests of standardisation, it was decided to add a 3-car unit to the order for Central Line trains, and therefore a slightly different 1962 stock train was purchased. In 1979 sufficient units of 1973 stock were available to allow a 3-car double-ended unit to work the branch, again ordered in the interests of standardisation. This stock remained on the line until its closure in 1994. A photo showed the unique "ALDWYCH SHUTTLE" destination carried by unit 114-688-889 in the final years of the branch.

Just before closure one of the 1986 prototype trains appeared on the branch in connection with a London Transport Museum open day. The preserved Craven 1960 stock train has been used for filming on the branch since closure. However, in 1999 a 1972 Mk I tube stock 4-car unit was stabled on the branch for film and training use as required, and remains there to this day.

The only official accident report for the branch dates from 1955, when a series of overruns with the 1935 prototype stock occurred at Aldwych. The line falls from north to south, and entry to the platform is around a curve into the darkened northern end of Aldwych platform. This culminated in a train colliding with a pile of rubble in the short overrun tunnel, injuring five people. The damaged train was seen as recovered to Cockfosters depot, but was later rebuilt like a 1938 stock motor car.

A virtual tour of Aldwych station showed the familiar long sloping passage between the platform stairs and the western lift shaft. Long disused was the footbridge over both lines from the top of the platform stairs, connecting with similar stairs down to the second platform. Never tiled or painted were staircases from the south end of both platforms, connecting with a passage to the east of the lift shafts to reach the rear of the lifts. This was originally intended to be the platform access route, with the passageways always used in both directions intended for exit only. Consequently, this was the only one of the London Electric Railway stations allowed to have only a single access to and from the platforms. At the upper level passengers were intended to exit the lifts to the rear, but this was long disused. Most of the station has therefore been unused for most, if not all, of its life.

Why three lift shafts? The current Aldwych layout was designed and approved in 1905, at a time when a Waterloo extension was again under consideration. If this had been approved, then perhaps passenger demand would have justified the unused lift shafts which, perhaps, were constructed in anticipation. Later construction of additional shafts within this restricted site may have risked distortion of existing shafts and tunnels through ground pressure changes causing earth

movement. Possibly for similar reasons, a short section of platform for the planned Deep Level District tube line was constructed beside the South Kensington lift shafts.

Photos of the platform in use showed how the red stopping light had been moved north after the Moorgate collision, allowing only room for a train to berth with its rear just inside the headwall. This northern end had never been lit or decorated in the past, and the bare concrete render within the iron tunnel segments was hastily whitewashed. The northern tunnel mouth never received the decorative keystone pattern seen at the southern tunnel mouth, and featuring widely on stations of the time. The platform "WAY OUT" sign also stated "and to Temple Station District Line", although a route in the opposite direction was not signed. Since closure the platform has received luminous paint markings as a precaution against loss of lighting power.

The eastern Aldwych platform, disused from at least 1912 and officially closed in 1917, was shown to still have the original ballasted track in place. This is the only remaining tube platform not equipped with an anti-suicide pit. The platform wall shows signs of decorative experiments, some since applied at stations such as Tottenham Court Road, Holborn and Piccadilly Circus. Flooring finishes have also been trialled, together with vending machine designs and direction signage.

In 1935 plans were drawn up for driverless operation of this branch and also the South Acton branch. It was envisaged that two trains would shuttle between the existing platforms, but use both running tunnels in order to pass on route. This would have required construction of a new crossover outside Aldwych platform. The Board of Trade objected to unstaffed trains, being concerned about the risk of persons falling onto the track, etc., and the idea faded away.

Another interesting plan showed an interpretation of the RATP rubber-wheeled trains of 1951, adapted for LU track. Paul Garbutt suggested the Aldwych branch as an ideal test bed, with baulks of timber laid outside the running rails to widen the surface available to support rubber tyres. Metal wheel flanges could be used to guide the train in the conventional way, whilst the rubber wheels provided traction and suspension improvements. It was thought that the stock could transfer over the main line empty at reduced speed after the last service train, the rubber tyres only being supported on the edge of their tread by the running rails. To save costs, electrical equipment could be used from the trolleybus system. When rubber wheels from the RT bus fleet proved too large, it was envisaged that those used under low-loader trailers might be suitable.

Possible extensions of the Aldwych branch were reviewed, starting with the already mentioned 1902 plan to link with Temple, and the 1905 plan to reach Waterloo by a single line, which was approved on condition a double-track line be built. At this time only the Bakerloo Line crossed the river here. Waterloo also featured in 1919, and again in 1922 when it was hoped to reach the City & South London Railway, perhaps at Oval. A Waterloo link was again revived in the 1930s, this time with a full junction at Holborn to allow through trains to the north. In the 1960s a Waterloo link came close, being justified by overcrowding on cross-river routes, but the Brixton extension was given precedence for funding, after which the Fleet Line gained favour. In 1974 a Waterloo extension became the core part of a planned Chelsea-Hackney line, which would have dived below the Holborn platforms to a new station aligned towards Farringdon. Any savings from using a fifth of a mile of the existing tunnels would probably have been offset by the restriction on alignment of the new route.

The Jubilee Line (alias Fleet Line) in 1979 was envisaged to run east from Charing Cross to serve Aldwych, Ludgate Circus, Cannon Street (for Bank) and Fenchurch Street, and then on to stage three. In fact the running tunnels for stage one were constructed as far as Waterloo Bridge, for use as sidings and overrun protection. Ten years later, the Central London Rail Study also showed possible extensions east from Charing Cross, to London Bridge or Whitechapel, but without Aldwych to save on costs. The Jubilee Line options paper of the following year considered routes to Docklands, principally the extension as now built, but with an alternative option of linking from London Bridge, through Upper Thames Street and Ludgate Circus to Charing Cross. Aldwych was only provisionally shown as a possible station on this route.

A plan of the intended Aldwych Fleet Line interchange station showed the old station passages, lift shafts and buildings abandoned, the eastern lift shaft being used as a ventilation shaft. A new ticket hall would have been built under the Strand at its junction with Surrey Street, to be constructed under a temporary steel umbrella bridge as was done at Oxford Circus. The top triple-escalator shaft would have descended westward to an intermediate circulating area adjacent to the Piccadilly Line disused overbridge, to which it would have connected to provide a new route between shuttle trains and the surface. A second circulating area to the north of the first, and connected to it at the same level, would have led to a lower triple-escalator shaft descending eastward to the planned Fleet Line platforms of stage two of the line. This second circulating area would have been connected at its west side to a new Piccadilly Line overbridge with new stair accesses to both platforms (!) providing a route for passenger interchange between the two lines. If this new station had eventuated, it would almost certainly have justified retaining the shuttle service.

In 1992 LT did well with Government funding allocations until the autumn, when recession forced a Government economy drive resulting in severe cut-backs. By January 1993 LT announced its plans to adapt to the new restrictions, including closure of the Aldwych branch to avoid the £3 million cost of lift renewal for only 450 passengers daily. These were the last remaining 1907 Otis lifts on the system; although modernised in 1954 they were life expired. At the time nine bus routes paralleled the branch line. A lengthy closure procedure to review objections included consideration of the implications of extending to Waterloo in single or double track, of providing an inclined passage link to Temple station in preference to new lifts, and of replacing trains on the branch with a series of moving walkways in each running tunnel. The end result was closure on 30 September 1994.

**John Hawkins**