### STANWELL PARK

### Illawarra

## **Opening Dates:**

Sydney to Hurstville – 15 October 1884
Hurstville to Sutherland – 16 December 1885
Sutherland to Waterfall – 9 March 1886
Waterfall to Coalcliff – 3 October 1888
Coalcliff to Clifton (Scarborough) – 25 July 1887 (Coalcliff Tunnel)} isolated from Clifton to Wollongong – 21 June 1887
Wollongong to North Kiama (Bombo) - 9 November 1887
North Kiama to Nowra (Bombaderry) – 2 June 1893

# **Duplications:**

Sydney to Hurstville – opened as a double line
Hurstville to Oatley – 28 March 1890
Oatley to Georges River – 8 November 1890
Georges River Bridge – 19 November 1972 (gauntlet track: 26 February 1894)
Como to Sutherland – 22 March 1891
Sutherland to Waterfall – 12 December 1890
Waterfall to Helensburgh – 26 January 1914
Helensburgh to Otford (including new Helensburgh Station) – 30 May 1915
Otford to Coalcliff – 2 August 1920
Scarborough to Wollongong – May 1923 (except for two short sections)

### **Deviations**

Mortdale to Como Bridge – 7 July 1905 Old Como Bridge to New Como Bridge - 19 November 1972 Waterfall to Helensburgh (temporary junction to north) – 26 January 1914 Helensburgh to Lilyvale – 30 May 1915 (included Helensburgh Station) Otford to Coalcliff – 2 August 1920

### **Electrification**

Dapto to Kiama - 7 November 2001

Central to Oatley – 1 March 1926
Oatley to Sutherland – 24 October 1926
Sutherland to Loftus (and National Park) - 24 December 1926
Loftus to Waterfall – 7 July 1980
Waterfall to Helensburgh – 7 May 1984
Helensburgh to Otford – 15 December 1985
Otford to Coalcliff 4 February 1986 (delayed due to problems with Stanwell
Creek Viaduct)
Coalcliff to Wollongong (and Port Kembla) – 15 December 1985
Wollongong (Coniston) to Dapto – 24 January 1993

### **Otford Tunnel**

This tunnel took the railway through Bald Hill. It is 5080 feet (1550 metres) long. A steep gradient of 1 in 40 faced Sydney bound trains. In an attempt to overcome the problems of soot and smoke, the construction shaft (located about two thirds of the way down the tunnel) was opened out in 1891 to create a ventilation shaft. A blower system was installed at the northern portal in 1909. The tunnel closed to traffic when the deviation around Stanwell Park opened in 1920. A short section of tunnel near the south portal was blown up during World War II (1942) to see if this could be done to other tunnels in the event of a Japanese invasion as part of a "scorched earth" policy.

### Stanwell Park - old site

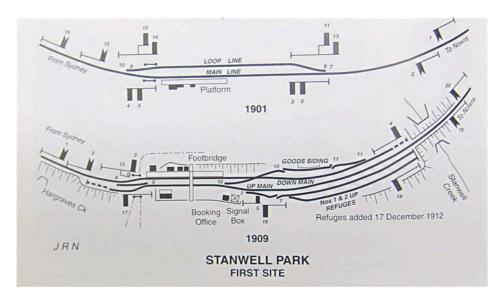
The village of Stanwell Park was located on the land grant of Matthew John Gibbon, and was named after a suburb of London. The station opened on 14 March 1890 for the use of Lawrence Hargrave, who is known for his research into flying. A platform was provided on the Down side on 24 April 1890 but was moved to the Up side to make way for the crossing loop that opened on 23 December 1901. It was 32 miles 51 chains (51.9 km) from Sydney and 101 feet (31 metres) above sea level. Station buildings were added on 4 June 1903.

One lady passenger was killed in a derailment at Stanwell Park on 25 January 1908. A steel tyre came off the wheel of a passenger car. Five people were injured.

The signal box opened on 17 May 1909. The system of crossing was then changed from "Main and Loop" to "Down and Up" working so that trains from the north and south could approach at the same time – runaway sidings were provided in case they overshot.

A second platform (on the Down side) was added on 31 July 1909 and a footbridge was installed on 9 October 1911.

The provision of refuge sidings for Up trains on 17 December 1912 meant that the rear portion of divided trains could be shunted clear of the main line. Goods trains were frequently divided at Stanwell Park because of the problems of steep grades in tunnels between Stanwell Park and Waterfall.





Stanwell Park Station on the original line showing the two platforms and footbridge.

The distance from Sydney to the old Stanwell Park Station increased by 2 miles 28 chains (3.8 km) when the deviations between Waterfall and Lilyvale opened in 1914 and 1915 and higher fares were charged accordingly!

Chellow Dene Drive has taken over most of the formation between the south portal of Otford Tunnel and the site of the original Stanwell Park Station.

A large brick culvert took the line over Stanwell Creek just south of the station. It now carries the road (Lawrence Hargrave Drive), which follows the formation between Stanwell Park and Coalcliff.

There was a gradient of 1 in 40 (facing Up trains) through the Otford Tunnel and down to Stanwell Park Station followed by another of 1 in 40 (facing Down trains) south of the station.

### Stanwell Park - new site

The deviation around the Stanwell Park amphitheatre opened for Up goods trains on 2 August 1920. Passenger trains and Down goods trains continued to use the old line until 20 October 1920. From that date, all trains used the deviation and the original line closed.

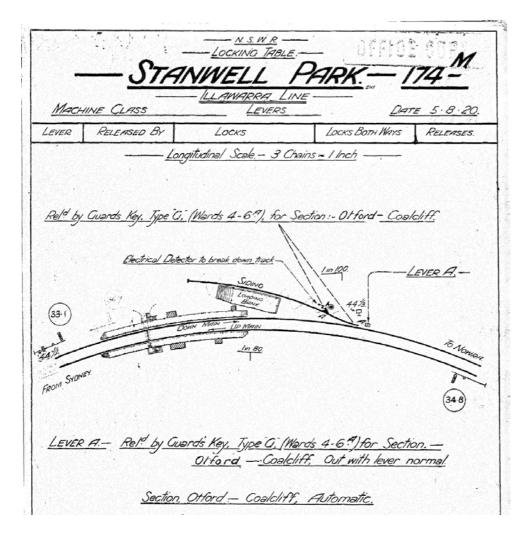
When the deviation around Stanwell Park replaced the original formation in 1920, a new station was constructed at a higher level. It is 34 miles 62 chains (56 km) from Sydney and 289 feet (88 metres) above sea level. The deviation is a double line and the station features two side platforms. The platform faces were of the concrete block design. Most of the platform faces of this design have had to be replaced, including those at Stanwell Park. However, one remains at Jannali.

The station office (where tickets were sold) was located at street level at the entrance to the subway on the Down (eastern) side of the line. The Down platform was reached by stairs and the Up platform via a subway and stairs. Timber buildings were provided on both platforms. There was no road on the Up

(western) side but a steep walking track leads up the escarpment to Stanwell Tops.



Stanwell Park showing the Down platform and the stairs from the entrance.



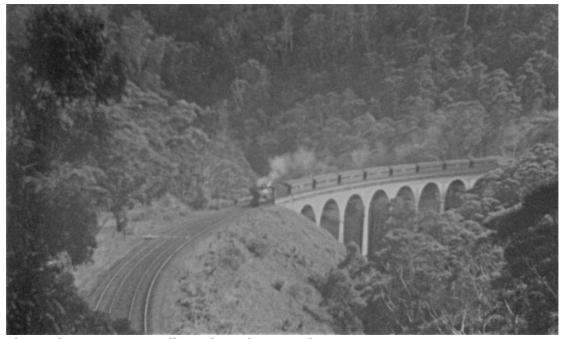
A goods siding was connected to the Down line at the Down end of the Down platform (south end). A loading bank was provided. The siding was a dead-end that could only be shunted by Down trains. The siding closed on 4 June 1963.

The gradient on the deviation is about 1 in 80 from just south of Stanwell Creek Tunnel to the northern end of Bald Hill Tunnel. It faces Up trains.

Note that automatic signalling using upper quadrant signals was employed on the deviation between Otford and Coalcliff from the opening. However, manual signalling was still in use between Helensburgh and Otford and south of Coalcliff until the time of electrification.

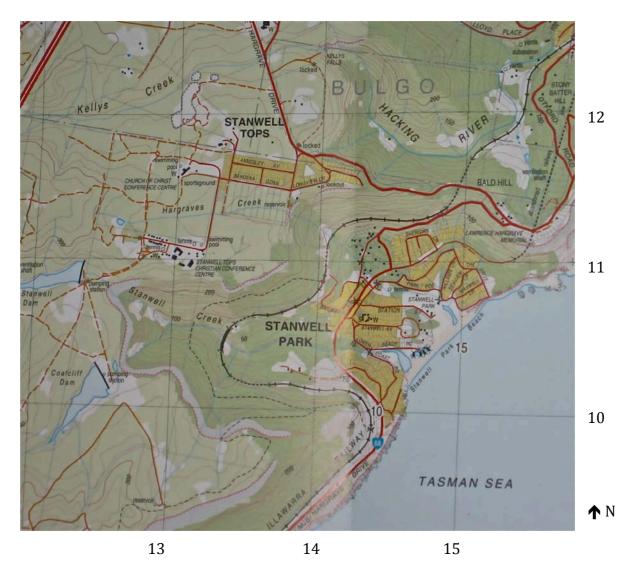
A viaduct of eight arches takes the deviation over Stanwell Creek. Stanwell Park Tunnel (117 metres) is located north of the viaduct and Stanwell Creek Tunnel (277 metres) to the south. The viaduct is on a 12 chain curve. Each arch of the viaduct is 13 metres long. The highest pier is 30 metres in height. Structural damage to the viaduct delayed the opening of electrification between Otford and Coalcliff. The spans are numbered in the Down direction, that is north to south. On Christmas Eve 1985, Span No. 6 was close to collapsing and Span No. 4 was badly cracked. The main problem was that a brick viaduct had been the wrong choice of structure for the site. Brick arches require rigid foundations. The viaduct is located on an unstable talus slope that is also affected by ground subsidence caused by mining. Movement of the ground allowed the arches to flatten out and crack. Horizontal steel rods were inserted in the piers to tie them together. Span No. 6 was completely demolished and replaced by sliding steel beams. Span No. 4 was strengthened by placing a concrete arch underneath it.

A few electric trains had used the viaduct before it was temporarily closed. While it was out of action, interurban electric trains from Sydney terminated at Otford and a shuttle service of interurban electric trains operated between Coalcliff and Port Kembla. The viaduct reopened on 4 February 1986 and normal services resumed.



The viaduct over Stanwell Creek on the 1920 deviation.

During construction of the Stanwell Creek Tunnel, Gordon Lloyd, the father of Reg Lloyd (of the Luncheon Club), was working with a team of horses. They were working in the tunnel when the horses became unsettled. Mr Lloyd let them go and followed them outside. Part of the tunnel then collapsed in a rockfall. The horses had saved Mr Lloyd's life!



To follow the original line, the Otford Tunnel is marked "abandoned railway line" and shown ------. From the south portal of the tunnel, shown by the symbol ) [map reference 153110], follow the road without turning off to the left or right until you reach the blue shield numbered 68 [map reference 144098]. The squares formed by the grid lines are 1 km x 1 km. CMA 1:25,000 map for Appin.

- John Oakes