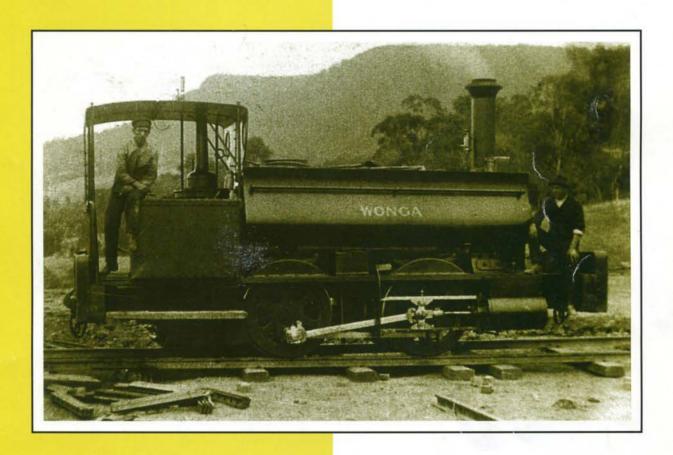
## THE RAILWAYS OF WEST DAPTO

A HISTORY OF THE RAILWAYS OF THE
ILLAWARRA HARBOUR & LAND CORPORATION,
THE DAPTO SMELTING WORKS,
THE WONGAWILLI COLLIERY & COKE WORKS
AND FLEMINGS OR SOUTH KEMBLA COLLIERY.



# The Railway of West Dapto

by D.K.Reynolds

December 2001

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A HISTORY OF THE RAILWAYS OF THE ILLAWARRA HARBOUR & LAND CORPORATION, THE DAPTO SMELTING WORKS, THE WONGAWILLI COLLIERY & COKE WORKS AND FLEMINGS OR SOUTH KEMBLA COLLIERY.

Cover Photograph: "Wonga", the historic locomotive used for the construction of the Wongawilli Colliery railway line. (Wollongong City Council Local Studies Library PO2333)

> D.K. Reynolds December, 2001.

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### THE RAILWAYS OF WEST DAPTO.

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Marked up copies of the maps in the UBD City Link 2000 Street Directory used in the above figures 6A, 6B and 6C are re-produced with permission of Universal Press Ptv Ltd. EG 10/02

Photograph of the Locomotive "Wonga" of the Wongawilli Colliery.

Front Cover

#### Author's Comments and Acknowledgments.

Many people have asked questions about a railway that was supposedly built from a jetty on the western shore of Lake Illawarra to a coal mine somewhere in the escarpment west of Dapto; they have asked what was the route of that railway, where was the colliery located and why was a harbour planned to be built in the shallow Lake Illawarra? Others had heard that portion of this railway was used to haul coal from a colliery on the escarpment to the Wongawilli colliery railway and thence to the South Coast railway at Brownsville.

With the decline of the original Wongawilli colliery since the opening of the BHP Elouera colliery and the impending opening of the BHP Dendrobium colliery, people are asking questions about the history the Wongawilli colliery and its railway.

People have been asking about the old Dapto Smelter, which was located on the northern side of Kanahooka Road, and wondering what connection it had with the above railway line. The erection of this smelter, and its operations was spread over the period from 1895 to 1904. During the bulk of this time the railway line from Lake Illawarra to the escarpment was being built. Another question raised is what did happen to that colliery which the railway was built to serve?

Answers to some of these questions have been answered in the book, "The Old Dapto Smelting Works" written by the Rev Bro. J. P. O'Malley and published by the Illawarra Historical Society. Some questions are answered in L. F. Harper's report, "Geology and Mineral Resources of the Southern Coal Fields. Part 1 - The South Coast Portion" published in 1915. Other answers come from railway historians such as C. C. Singleton, J.L.N. Southern and others in publications on railways. Answers can also still be seen on the ground in several areas, but these are gradually disappearing as urban development progresses.

This book has been written to consolidate much of the available material into a single document which should be a useful tool for students researching local history. It will also help those who want to follow the route of the initial railway before it becomes obliterated.

Many people have given invaluable help in researching the material for this book. In the early years of researching the late Jack Southern was a great help, particularly in locating the route of the colliery end of the initial railway line. Great encouragement has been given by the Illawarra Shoalhaven Region of the National Trust of Australia, the Heritage Committee of Australia's Industry World and the Illawarra Historical Society.

The assistance given by BHP-Billiton Illawarra Coal in having this book published is very much appreciated by those who supported the research carried out to complete this report and by the author.

#### (1). Introduction.

Governor Macquarie, in a notice in the Sydney Gazette of 16 November, 1816, directed that those persons who had been promised land grants in the new District of Illawarra were to meet the Surveyor General (John Oxley) at 12 noon on Monday 2 December, 1816 at Throsby's stockman's hut where the allocation of grants would be made. The allocation of those first five land grants was made by the Deputy-Surveyor, James Meehan. The grants were officially issued on 24 January, 1817. One of those land grants was 1,300 acres to Richard Brooks who for many years had been an officer in the East India Trading Company. Brooks and his family had settled in Australia in the Liverpool area, he was a very successful business man and was also very involved in the social life of the Colony. Brooks named his property "Exmouth" which can be seen in the attached Figure 1.

In later years the land between "Exmouth" in the south and Mullet Creek in the north was broken up into smaller portions with George Brown holding two portions adjoining Mullet Creek; Brown set up quite an active community around his land and the area became known as Brownsville which became the centre of the local community. When the extension of the South Coast railway from Wollongong to North Kiama was completed in 1887 no railway station was provided on the low-lying ground around Brownsville; instead a station was provided approximately one mile further south on higher ground. This station was known as Dapto and as a community began to develop around the station Brownsville gradually went into decline. Brown's large flour mill has long disappeared but the beautiful old St. Luke's Church with its lych-gate (a memorial to George Brown) and the old Illawarra Hotel are still standing. The old hotel is no longer a hotel but has been converted into flats.

# The First Five Land Grants in Illawarra Mr.Throsby's Stockman's Hut (Wollongong) 1, R. Brooks Exmouth, 1,300 acres 2, G. Johnston Macquarie Gift, 1,500 acres 3, A.Allan'Waterloo, 700 acres 4, R. Jenkins Berkeley, 1,000 acres (Port Kembla) 5.D. Allan Illawarra Farm, 2,200 acres Red Point Dapto (Shellharbour) Albion Park) Miles L

Figure 1. Map Showing the Location of the First Five Land Grants in Illawarra.

From "The First Five Land Grantees and Their Grants in the Illawarra by B. T. Down Published by the Illawarra Historical Society October, 1960

#### (2). The Illawarra Harbour & Land Corporation.

Seventy three years after Brooks received his "Exmouth" grant and three years after the railway opened through Dapto a major change to the character of this very rural area was about to take place. The section of the South Coast rail between Wollongong and North Kiama (Bombo), which passed through Dapto, was opened on 9 November 1887; it was not until 3 October, 1888 that the line was fully operational between Sydney and North Kiama.

An Act of Parliament in 1890 authorised the Illawarra Harbour & Land Corporation to dredge a channel across Lake Illawarra, build jetties on the western shores of the lake and "the construction of a railway line from Elizabeth, near Lake Illawarra, to Ocean Steam Colliery". The line was to be of 4' 8½" gauge and 6¾ miles long. <sup>2</sup> The colliery was situated in Portion 225, Parish of Kembla, some half a mile west of the old West Dapto Public School site. Robert Amos secured the contract to build the line:

"running generally southerly into Portion 60 then turning easterly, crossing Mullet Creek and railway line about half a mile south of Dapto Railway Station, thence easterly along south to Dapto, Parish of Calderwood, thence south-easterly to Lake Illawarra between Elizabeth and Tallawarra Points" <sup>3,4</sup>

Very little evidence of any progress on the building of the harbour or the railway line prompted the local press in 1893 to report that the previously rosy prospects of Lake Illawarra becoming a harbour seem to have altogether vanished. 3,5

When questioned on possible progress on building the harbour, Robert Amos, the contractor for the work, stated on 25 September, 1895:

"The dredging was to be done in making a channel through the lake, from the mouth to Tallawarra Point. This channel, and the entrance between the Lake and the sea, were to be 23 (twenty three) feet deep at low water. He did not think the dredging would be difficult in any way. The making of the entrance, however, between the sea and the Lake would not be easy work". 6

Figure 2 is a plan showing the proposed harbour works within Lake Illawarra and its entrance.

It appears strange that the IH&LC would spend 200,000 pounds to build a harbour and railway line to export coal from an undeveloped and unproven coal mine. No firm evidence has been found of any mention of their approaching northern Illawarra collieries to use the IH&LC harbour facility although they may have made approaches to some northern miners. Several of the northern Illawarra coal mining companies had earlier built private railway lines and jetties to enable them to export their coal but none of them would have absorbed as much capital expenditure as was planned for the IH&LC scheme. At that time the northern Illawarra collieries were fiercely agitating for safe ship loading facilities to be provided in the northern or central Illawarra. This proposed lake channel being relatively narrow would limit the use of the harbour steam power ships. The lake

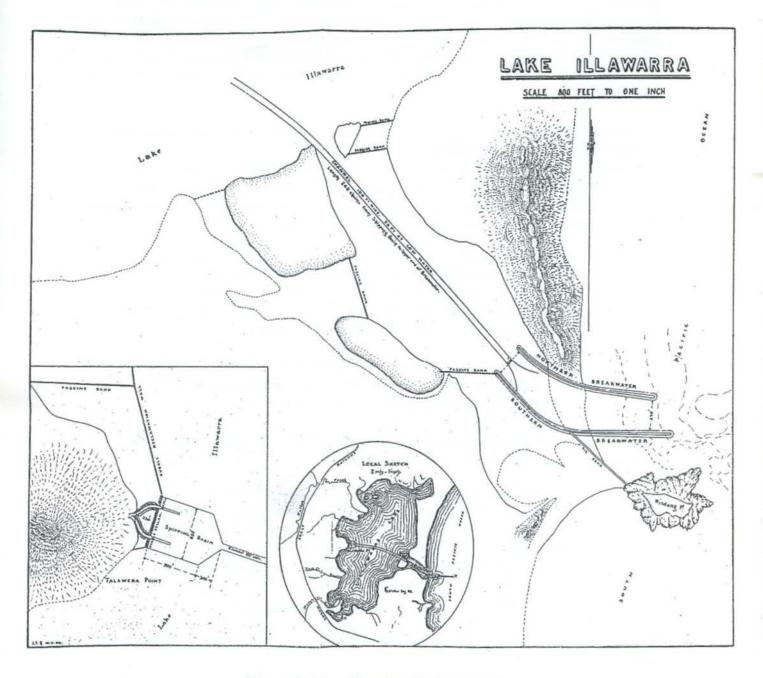


Figure 2. Map Showing the Proposed
Illawarra Harbour & Land Corporation
Harbour in Lake Illawarra.
From "Harbour Improvements. Port Kembla N.S.W."
by T. E. Burrows
A paper read to the Sydney Division of the
Institution of Engineers, Australia
14 April, 1920

bottom would have probably been sand at that time, the black mud which is found on the bottom of the lake today has probably come from run off from the relatively heavy farming and residential development since heavy European settlement.

It appears that work had commenced at the mouth of the Lake with the building of the tie bank from Windang Island to the southern channel training wall but heavy seas destroyed the work that had been completed. In the mid 1980s evidence still remained on Windang Island of work associated with the building of the channel.

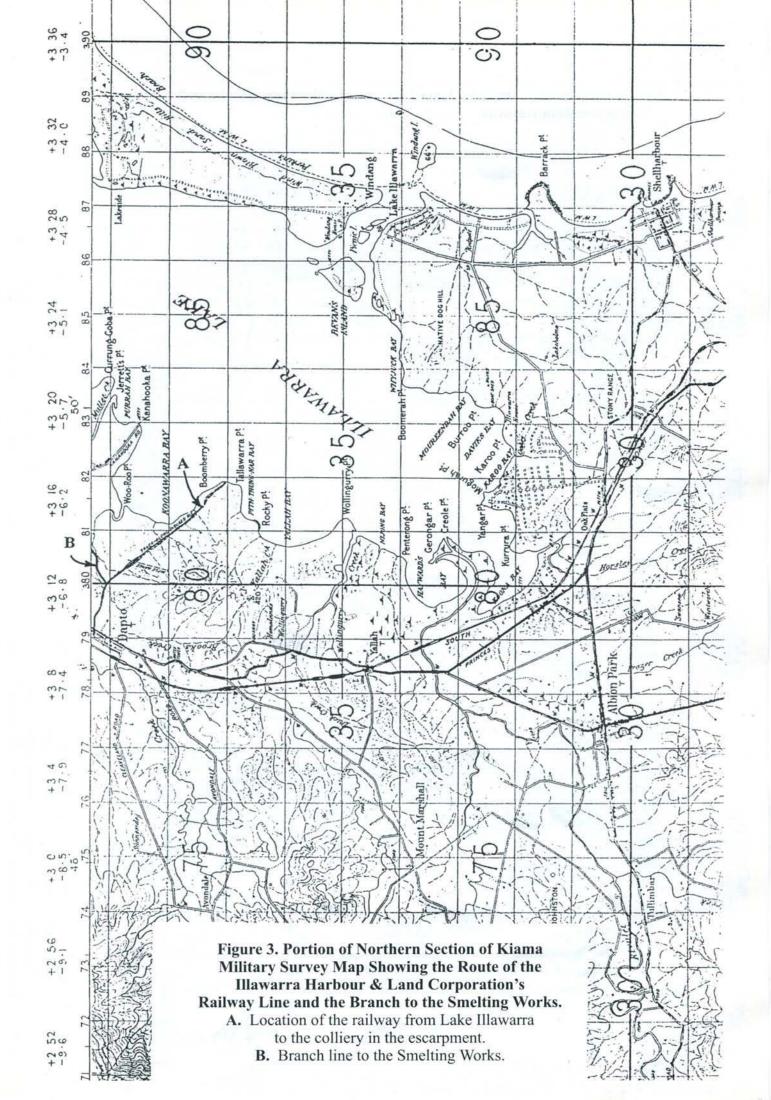
# (3). The Australian Smelting Company and the Illawarra Harbour & Land Corporation Railway.

In mid 1895 the local press announced that a major non-ferrous smelting plant, to be known as the Australian Smelting Company, was to be built at Lake Illawarra. In late July, 1895 the local press announced that harbour works were to be immediately started at Lake Illawarra. This new company appears to have had close ties with the Illawarra Harbour & Land Corporation. The local press reported in November, 1895 that the necessary appliances had been unloaded at Shellharbour for commencing work on the Lake Illawarra Harbour. It is possible the formation of this new company which appeared to have close links with the IH&LC had some influence into the renewed interest into reviving the development of the harbour and its associated railway. A custom smelter needed to move raw materials and products through a port, a smelting company would need coal and coke for its operations. This seems to have been a reasonable marriage of interests.

Mr H.S. Chipman, of the Australian Smelting Company, explained to the local press that the Illawarra Harbour & Land Corporation were responsible for the harbour works and the railway to the coal mine, not the Australian Smelting Company. He said that Mr Amos was about to commence construction of the railway line to the mine, and an interconnection with the Illawarra railway. The above railway work was to be completed by 13 December, 1896 in accordance with the requirements of the Act. <sup>10</sup> Mr Amos was also contracted to construct a branch rail line from the IH&LC line to the Smelting Works site for the Australian Smelting Company. The interconnection of the IH&LC rail line to the Main South Coast Railway passed through the now demolished Clarke's Sawmill in Marshall Street Dapto; the sawmill was demolished about 1999 to allow for Fowlers Road to be extended across the Princes Highway and over the South Coast railway to service the rapidly developing West Dapto area. The connection to the South Coast line was opened on 12 December, 1895. <sup>11</sup>

The management of the Australian Smelting Company quickly took over the management of the Illawarra Harbour & Land Corporation although they were still commercially separate companies.

Work on the railway commenced about 24 September, 1895 with men beginning to clear the line. The line was to commence at Tallawarra Point and go westerly for two miles before crossing the main road (and Illawarra Railway), it was to continues for about another six miles. Three cuttings were required, one of 13,000 feet, one of 4,000 feet and one of 7,000 feet. <sup>12</sup> Figures 3 & 4 are marked up copies of the Wollongong and Kiama Military Survey Maps of the 1920s showing the location of the two railway lines and the cuttings; unfortunately the overlap between these two maps does not clearly show the route of the railway line in what is now the Dapto township. Figure 5 is a part copy of the 1906 Geological Map of the Central Illawarra District which clearly shows the route of the Illawarra Harbour and Land Corporation railway and the branch line to the smelting site on Kanahooka Road. Figures 6A, 6B and 6C are marked up copies of modern street maps taken from the UBD City Link 2000 street directory showing the approximate location of the above two railways. A NSW Lands Department aerial photograph taken in June, 1949 clearly shows the route of the railway over its entire length except for the final section near Sheaffes Road, this photograph is included as Figure 7. By using Figures 6A,



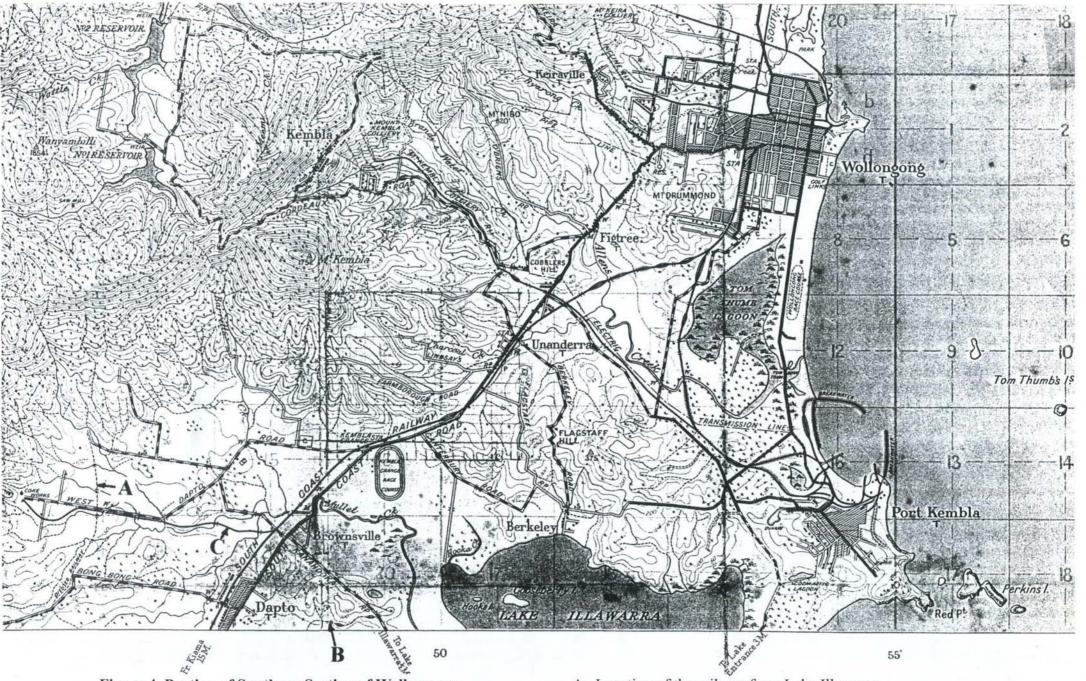


Figure 4. Portion of Southern Section of Wollongong Military Survey Map Showing the Route of the Illawarra Harbour & Land Corporation's Railway Line and the Branch to the Smelting Works.

- **A.** Location of the railway from Lake Illawarra to the colliery in the escarpment.
  - **B.** Branch line to the Smelting Works.
- C. Branch line from the NSWG railway Wongawilli colliery.

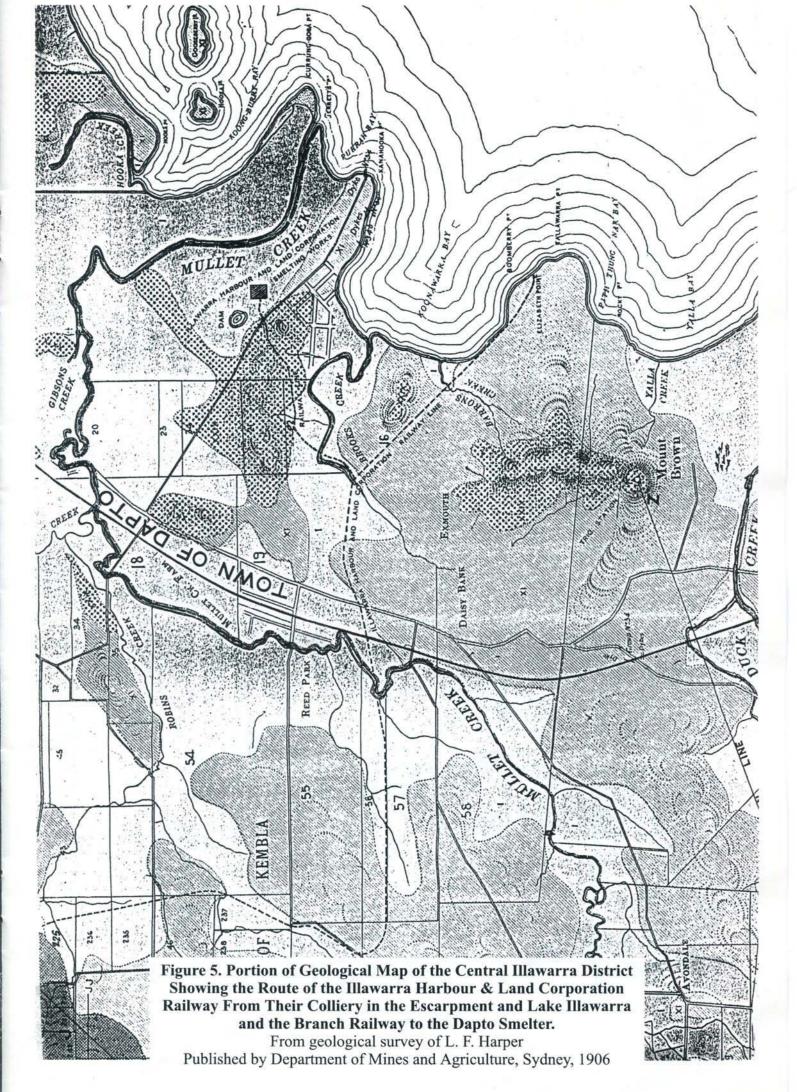


Figure 6A. Marked Up Street Directory Showing the Route of the Illawarra Harbour & Land Corporation Railway From Lake Illawarra to Their Colliery in the Escarpment and the Branch Line to the Smelting Works.

From UBD City Link 2000 Street Directory

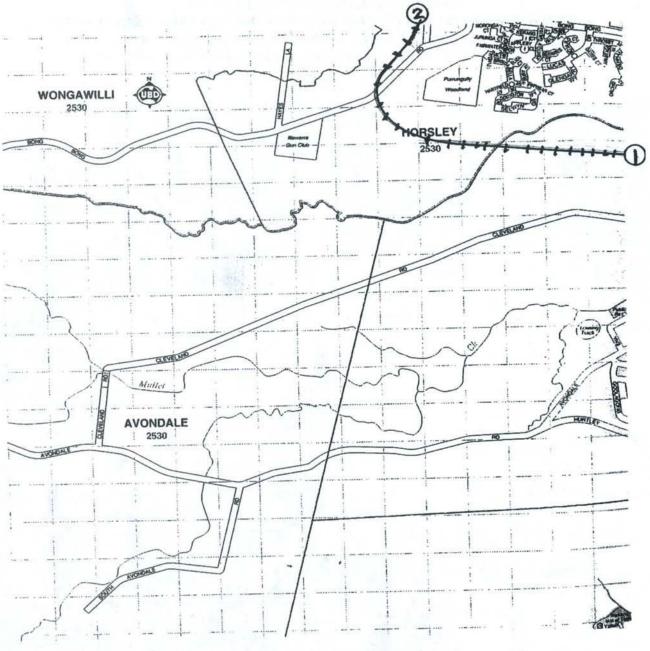


Figure 6B. Marked Up Street Directory Showing the Route of the Illawarra Harbour & Land Corporation Railway From Lake Illawarra to Their Colliery in the Escarpment and the Branch Line to the Smelting Works.

From UBD City Link 2000 Street Directory

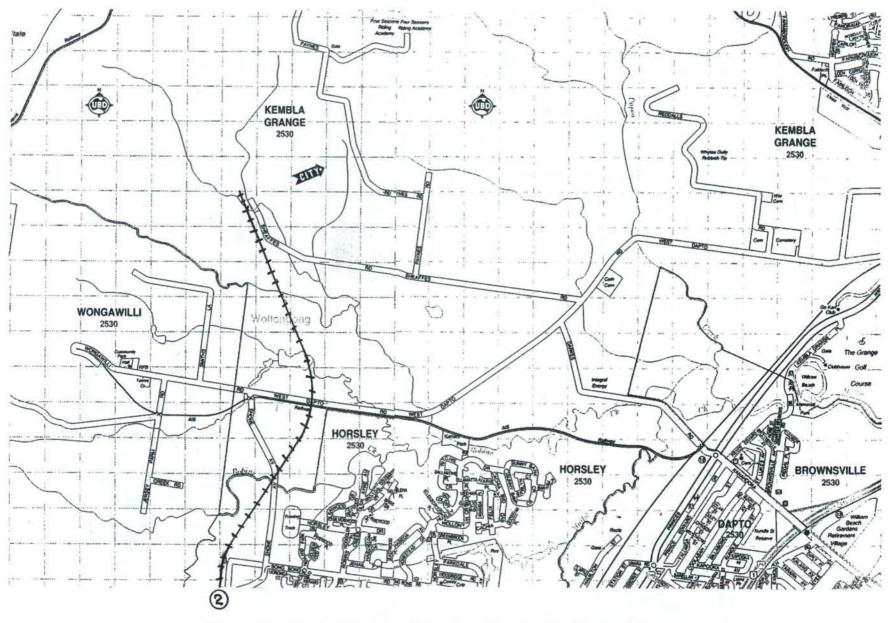


Figure 6A. Marked Up Street Directory Showing the Route of the Illawarra Harbour & Land Corporation Railway From Lake Illawarra to Their Colliery in the Escarpment and the Branch Line to the Smelting Works.

From UBD City Link 2000 Street Directory

6B and 6C it is possible to trace the route of the line as shown in Figure 7. The Select Committee appointed by the Parliament to inspect the progress being made by the Illawarra Harbour & Land Corporation visited the site in mid October, 1895; they were impressed with the progress of the earth works associated with the railway line. 13

In October J. Howell, Managing Director of the Australian Smelting Company stated that his company intended to use some of the coal from the IH&LC's coal mine with the balance being shipped out via the Lake Illawarra Harbour. He also stated that the smelting works would purchase its coke requirements from existing Illawarra coke works. <sup>14</sup>

The Illawarra Mercury on 19 October, 1895 carried an advertisement for the supply to the Australian Smelting Company of railway sleepers of a specified size for delivery by 30 November, 1895.

A note published in the local press in December, 1895 states that:

"The contractors engine, carrying rails and sleepers, is now able to proceed from the Dapto station to beyond the deep cutting, and will by next week run right to the Lake." 15

This indicates that the connection to the Illawarra railway had been made and work was well advanced with the run towards Lake Illawarra.

The Illawarra Mercury reported on 19 March, 1896 that the Australian Smelting Company had begun the construction of the railway connecting the Smelting Works with the IH&LC railway; this branch was taken off the IH&LC line at a point near the Public Reserve adjacent to the Bowling Club in Fowlers Road. The Wollongong Argus reported on 18 April, 1896 that the line to the Smelting Works was almost complete.

C.C. Singleton reports that even though the railway line between the jetty area at Tallawarra point and the branch to the Smelting Works had been built:

"No trains ever ran on this first section after its completion and the permanent way was eventually removed, and the earthworks were utilised as a roadway to the lakeside". 16

This would have been section of the railway from near the present bowling club in Fowlers Road and the eastern end of Gilba Road. It is also interesting to note that in maps prepared by Singleton and Ken McCarthy the branch to the Smelting Works line swings off the IH&LC line when travelling east from Dapto; the Lands Department aerial photograph (Figure 7), taken in June, 1945 clearly shows a second branch, or at least the formation for that branch, coming off the IH&LC line when travelling west from the Lake. This second branch would have been logical as when the line was built it was designed to handle ore, fluxes, etc coming via sea from the jetty on the Lake to the Smelting Works. The 1906 plan of Figure 4 shows only a "T" branch in this area and does not help to clarify this matter.

It appears that the Australian Smelting Company had entered into a lease with the Illawarra Harbour & Land Corporation for the coal bearing lands at West Dapto. The opening of the mine was to depend on the analysis of the coal from a 60 foot heading then being driven. <sup>17</sup> According to *The Illawarra Mercury* of 22 August, 1896 a decision had not been made on the suitability of the West Dapto coal. The smelting works management was to purchase



Figure 7. Aerial Photograph Showing the Route of the Illawarra harbour & Land Corporation Railway
From Lake Illawarra to Their Colliery in the escarpment and the Branch Line to the Smelting Works.

NSW Land Department aerial photograph 239-110
Taken in June 1949.

The actual route of the railway has been emphasised to clearly show it!

coal (in the interim presumably) from other local collieries.

John Howell, managing director of the Australian Smelting Company when interviewed by a reporter from the *Telegraph* stated that:

"We also have railway communication with the coal mine, four miles away. We have taken this coal mine on lease, and are now preparing to work it. We do not propose to manufacture coke at once, but for the present we will draw our supplies from the local coal companies." 18

In November, 1896 it was reported that the Smelting Works had entered into an arrangement with the Bulli Coke Works. It was said that the Bulli Coke was superior to the much closer Unanderra coke works of the Australian Coke Making Company. <sup>19</sup>

In evidence given to the Select Committee looking into the progress of the Illawarra Harbour & Land Corporation project in November, 1896 it was stated that progress was being held up by the effects of the depression (there was a very severe world-wide depression effecting all nations at that time) but sufficient funds were available to complete the work. With regards to the work concerning the railway it was stated that this was required to be completed by 18 December, 1896 as stipulated in the Act. It was also said that the rails were on the way out and they were of 60 lb / yard section. The witness stated that the Company does have a colliery and intends to work it. <sup>20</sup> This statement concerning the position of the railway tends to contradict John Howell's statement to the *Telegraph* reporter mentioned above where he said "We also have railway communication with the coal mine, ----".

A press report in July, 1897 mentioned that:

"The coal property owned by the company is still being prospected, but the results so far have not been quite satisfactory. Considerable encouragement, however is derived from the fact that Mr Harris, whose property joins that of the company, has within the last few days discovered coal of excellent quality on his land. The other day, while getting coal for his own use, Mr Harris tried what is known as the Bulli seam, and after driving several feet he decided to have the quality tested before proceeding further. Samples were submitted to Mr Blakemore, who found that the coal contained only 8 percent ash - an excellent result - which has induced Mr Harris to decide upon opening the seam. Meanwhile the Smelting Company is being supplied with coal by the Southern Coal Company.". 21

The Southern Coal Company was formed about 1886 to open a colliery on the south west slopes of Mount Kembla to build a railway to Port Kembla and a roadstead jetty in the south eastern area of the Port. This was the second railway built from the Mount Kembla area to Port Kembla. The Southern Coal Company had problems with their colliery due to faults in the coal seam and in 1906 the lease for their coal loading jetty and railway was taken over by the North Bulli Coal Co.

The author has followed many sections of the route of the IH&LC railway line on several occasions. At the colliery end of the line, where a branch to the west is taken off Sheaffes

Road (not shown on street maps) evidence still remains of the well built stone abutments of a bridge which allowed the railway to cross a small creek. These abutments were built rectangular blocks appropriate for an industrial undertaking, not a farm bridge where rough stones would have been used. A bridge is still there, giving access to a home and farming property, but it has been rebuilt and now has a wider deck of square steel tubes. Very little evidence could be found on the ground of the actual route of the line from that bridge to where it crossed West Dapto Road (and the later Wongawilli railway) at a point about 200 metres east of where Shone Ave meets West Dapto Road. From then on evidence of the formation could be seen in many areas; it runs southwards from West Dapto Road crossing Shone Ave near Robins Creek and runs roughly parallel with Shone Ave along the rear of several hobby farms and crosses the most westerly end of the Bong Bong Road extension adjacent to a sewerage pumping station. It then veers slightly to the west and rises up a hill reaching Bong Bong Road which it crosses at the top of the hill The line then swings in a large radius and travels roughly east. Where the line crosses Bong Bong Road the commencement of a cutting can be seen on the eastern side of the road continuing into the farm with an embankment still visible. The line continues in an easterly direction crossing Mullet Creek and the main South Coast railway between Maccabe and Elizabeth Streets crossing the Princes Highway at what is now Fowlers Road. The line then followed Fowlers Road until the road swings to the north near Lakelands Drive; the railway would have continued straight ahead, over the hill (where one of the cuttings was but has since been filled in), down through the land between Kimbarra Crescent and Kyeema Avenue and on to the eastern end of Gilba Road to Elizabeth Point. The foundations of the section along Gilba Road to Elizabeth Point were clearly visible. Of course when the line was built it is most probable that none of the above streets and roads would have existed, Fowlers Road would have been built on the foundation of the railway line.

. The Kiama Military Survey Map shows two cuttings at the eastern end of the line, one would have been the deep cutting 13,000 feet long mentioned above which would have been where the line ran over the hill between Kimbarra Crescent and Kyeema Avenue; the other cutting was near the eastern end of Gilba Road. As mentioned above there was another cutting, which is still visible in 2001, where the railway crosses Bong Bong Road some 400 metres north of the present Gun Club. At least two cuttings were used in the branch line to the Smelting Works, one is still clearly visible just to the east of Thirroul Street off Kanahooka Road.

In early June, 1898 the *Mercury* reported that there was very heavy rail traffic on the railway system between Dapto and the Smelting Works and the Railways were requested to help by supplying a larger locomotive. <sup>22,23</sup>

In mid September, 1898 a Dapto Progress Committee meeting discussed the subject of the Dapto Coal Deposits. An extract in the *Mercury* report of that meeting gives the following comments made by Mr Pitman, the Government geologist:

"He was quite satisfied as to the superiority of the coal from Brownlee's opening to Harris's, immediately south of Kembla. Where the Smelting Co. had endeavoured to drive a heading was the worst place that could have been picked, as movements had taken place through volcanic influence which precluded the possibility of reaching the best coal without an immense outlay ----". 24

With the passing of the Port Kembla Harbour Act, 1898 all prospects of the building of a new harbour in Lake Illawarra disappeared: the Government would want to ensure that the bulk of the export coal mined in Illawarra was shipped out through the new Port Kembla harbour. It also basically spelt the end of the Smelting Works at Dapto.

In 1964 C.C. Singleton stated that the level crossing of the IH&LC railway of the NSWGR south coast railway was never used except by the IH&LC's contractor when constructing the line. The crossing was removed on 17 July, 1902. <sup>25</sup>

As mentioned above the proposed railway line built by the Lake Illawarra Harbour and Land Corporation (IH&LC) was never placed in service over its entire length: the section between the interconnection to the NSWGR to the site of the Dapto Smelter was certainly placed in service before the end of 1895. What testing had been carried out by the Australian Smelting Company on their coal deposits had found the coal to be unsatisfactory. Professor Edgeworth David had commenting on the coal deposit to the north of the Ocean View Coal Company's (this must have been the Ocean Steam Colliery mentioned above), stated that when the Southern Coal Company had driven a tunnel a half a mile into the mountain, they found that the quality of the coal was poor, presumably due to faults in the seam. This comment was recorded in the Annual Report of the Department of Mines, N.S.W. for 1890 (page 259). It is probable that when the Illawarra Harbour & Land Corporation purchased the lease of the Ocean View Coal Company (later known as South Kembla Colliery) in about 1890 Edgeworth David's information had been kept quiet. Harper had later conducted investigations into the coal deposits in this rather localised region and found that "wash-out" was causing local degradation of the coal seams. 26

The northern end of the Illawarra Harbour & Land Corporation railway, that section between West Dapto Road and the termination of the railway near the end of Sheaffes Road, traverses environmental and heritage sensitive land. This section of the railway line is the only section (apart from the section from Dapto to the Dapto Smelter) of the line that was used to haul paying loads; this is detailed later in this report. This small section of the railway remaining between West Dapto Road and the end of Sheaffes Road passes through "Stream Hill" an old historic farm, complete with homestead and out buildings. Unfortunately "Stream Hill" is not being farmed, its buildings are uninhabited and the property is generally falling into disrepair.

With development in the West Dapto area at sites such as Horsley the physical remains of this railway line are at risk of being swallowed up by developers.

#### (4). Wongawilli Colliery.

A coal seam was being prospected in the Illawarra escarpment at Wongawilli, West Dapto in about 1907 by a Mr Andrew Lang. The tunnel that had been driven was inspected by L.F. Harper, the Government's geological surveyor, during 1907 and comments on his examination in his report of 1915; stated that the seam being prospected by Mr Lang had not previously been worked by any of the South Coast collieries. 27 It was reported by the press in October, 1908 that there was a strong probability that the Wongawilli mine at West Dapto may be sold to a powerful company who would be prepared to carry out active operations on a large scale. They planned to run a branch railway line from the mine to the South Coast Railway at Brownsville but it appears that some legal problems may occur with its crossing of the IH&LC railway. To overcome this problem it was reported that it may be necessary to pass a special Act of Parliament. 28 In December 1909 it was reported that coal was still being mined at Wongawilli with four teams employed to haul the 11 tons per day being mined to Dapto railway station for railing away. 29 In the following February it was reported that the Wongawilli mine was showing great prospects of development with a night and day shift being employed; output was averaging 200 tons per week with about 40 horses and 10 bullocks hauling the coal to Dapto station. 30 Two weeks later it was reported that work at the Wongawilli mine had been partially suspended and all the draymen had been stood down. The owners were intending to provide an incline from the mine entrance to a lower level and connect the property with the Illawarra railway in order to reduce costs. 31 Apparently the coal was being hauled from the mine mouth to Dapto by road.

The Wongawilli Colliery was purchased by G&C Hoskins in 1916 to supply metallurgical coke for their Lithgow blast furnaces. The coke made from the Lithgow coal was proving too weak to satisfactorily support the burden in their blast furnaces, they had trialed coke from Illawarra coke works which had been made from coal produced by collieries working the Bulli No 1 seam and found it far superior to the Lithgow coke. They went looking for a coal lease in the Bulli No 1 seam field but were unable to secure one. They finally had to settle for a colliery in the Bulli No 3 seam (generally referred to as the Wongawilli seam) which had a very much higher ash content than coal from the No 1 seam. Experience later proved that well-washed No 3 seam coal produced a superior metallurgical coke than had been possible from No 1 seam coal.

Hoskins significantly improved the colliery and established a coal washery and beehive coke ovens at the foot of the escarpment below the colliery adit. They also built a branch railway from the main South Coast Railway near Brownsville to the coal washery and coke works. Coal was lowered down the escarpment by a self acting skip incline. The junction to the main line was opened on 25 October, 1916. In November, 1917 coke was being railed from Wongawilli to Lithgow. In November, 1917 coke was being railed from Wongawilli to Lithgow.

The branch line from the South Coast Railway had to cross the old IH&LC railway, the new permanent way was at a slightly higher level than the permanent way of the old ILH&LC tracks, it is presumed that they had overcome the previous problem of crossing the old IH&LC railway and simply built over the old unused line.

Hoskins would not have been the powerful company mentioned above who were considering purchasing and expanding the Wongawilli in October 1908. G&C Hoskins had only just commenced to operate the Lithgow blast furnace in January, 1908 and would

not have had sufficient experience with the plant to appreciate the shortcomings of the coke produced from Lithgow coal.

When Australian Iron & Steel began operating their new blast furnace at Port Kembla in August 1928 Wongawilli coke was hauled to the Port Kembla works and not to Lithgow. When they opened their new by-products coke ovens at their Port Kembla steelworks in January, 1938, washed coal was hauled from the Wongawilli Colliery to the Port Kembla works and the Wongawilli coke ovens were shut down. For a period prior to and during World War II the Wongawilli coke ovens were again placed in service between June 1938 and July 1945 to help meet the increased coke demands of the Port Kembla Works. Initially this increased coke demand was caused by the commissioning of new plant at the steelworks and later by the need to produce the large quantities of steel needed for the wartime demands.<sup>34</sup>

When Hoskins began to build the Wongawilli railway line they purchased a small 0-4-0 saddle tank locomotive from a timber company on the NSW North Coast for use as a construction loco. This locomotive had a significant place in the Australian iron making history; it was built by the large Scottish engineering company of Andrew Barclay in 1875 as part of a supply contact for a new blast furnace to be built by the British Tasmanian Charcoal Iron Co near Beauty Point just south of the mouth of the Tamar River. This was the first blast furnace to be built in Australian using modern equipment (at that time); all previous blast furnaces were rather antiquated in design and generally amateurishly built. In 1876 the loco went into service hauling iron ore from their Mount Vulcan quarry to the blast furnace. Not withstanding the modern blast furnace design the iron produced was not satisfactory as it was very brittle due to its high chromium content. The high chromium content was due to the high chromium content of the iron ore; extensive attempts were made to overcome the problem. The iron works were shut down in about August 1897; the little locomotive was eventually sold to the North Coast timber mill in 1910. After Hoskins purchased the locomotive it was overhauled and named "Wonga". Soon after Wongawilli went into operation the loco was found to be too small and a larger loco was provided with Wonga only used for shunting purposes. In 1927 Wonga was given an overhaul and was transferred to the new Hoskins Iron & Steel subsidiary, Southern Blue Metal Quarries, near Moss Vale, where she saw out her days on the quarry floor hauling the rocks from the steam and electric shovels to the crushing plant. She was taken out of service in September, 1929 and was scrapped in the very late 1930s or very early 1940. 35

According to handwritten notes from the late Jack Southern Australian Iron and Steel, in 1934 acquired another locomotive where they used the name plate "Wonga". This was one of three similar locomotives of the A/E class purchased second hand from the NSWGR.. They were built by Beyer Peacock & Co of Manchester between the late 1870s and early 1880s. They were mineral class locomotives with a wheel arrangement of 2-6-4. One of the three locomotives (2003) was named "Wonga", the second loco was named "Warrigal", these two locos were used on the steelworks track. As far as can be determined the second "Wonga" never operated on the Wongawilli tracks. The third locomotive was used on the railway systems of the AIS subsidiary, Southern Portland Cement Ltd, at their Marulan limestone quarry branch line and at their Berrima cement works and colliery branch line. AIS withdrew the second "Wonga" from service in June 1944 and scrapped it in October, 1946.

#### (5). Fleming's Colliery and South Kembla Colliery.

Gifford Eardley in his book "Transporting the Black Diamond" describing the Central Section of Collieries Railways of the Illawarra District has, on page 5, a map showing the various collieries from Helensburgh in the north to Wongawilli in the south; a table attached to the map states that South Kembla was opened in 1888 (when it would have been known as the Ocean View Coal Company). This was before the IH&LC was even thought of. Someone by the name of Fleming must have worked the Ocean View Coal Company's lease in the early 1900s, the "Geological Map of the Bulli - Mt Kembla District" published by the Department of Mines in 1912 shows "Flemings Tunnel" adjacent to Portion 125. It is reported in April 1916 that coal mined from Flemings mine was transported by road to Dapto and railed to Sydney for use in the Sydney Municipal Council's Pyrmont Power Station. <sup>36</sup>

The local press reports in June, 1923 that at Fleming's mine at West Dapto:

"--- screens are being fitted up and a tumbler and conveyor installed. The old Illawarra L. & H. Company's line is being prepared as far as to connect with the Wongawilli line for the conveyance of coal. The manager is a Mr Fletcher." <sup>37</sup>

It is again reported in the local press in July 1923 that the expansions to Flemings mine were well advanced. It appears that the new work was very extensive with equipment being imported from the UK. The report also indicates that a new line from the colliery bins to the Government's South Coast Railway was to be built, no mention was made in this report of using the existing Wongawilli line. 38

C.C. Singleton reports that in 1924 a company developed the South Kembla Colliery by building an incline from the adit high in the escarpment down to the old IH&LC railway terminus. A short section of the old IH&LC railway north of Hoskins' Wongawilli line was reconditioned and connected to the Hoskins Iron & Steel Wongawilli branch line. Initially HI&S locos hauled the South Kembla coal from the mine to the Brownsville junction where the Government hauled it over their lines. In late 1928 the South Kembla Colliery purchased an old Sydney steam tram motor to operate their section of the line while AIS (HI&S became AIS in mid 1928) then hauled the coal to the Brownsville junction. The new company fell into difficulties and it was purchased by Cam Bros on 24 March, 1932 who purchased an old AIS loco ("Wallaby", ex Lithgow) to replace the steam tram loco. Cams could not make the colliery workable and closed it down, the steam loco was sold back to AIS and the plant at the mine, including the old steam tram lay derelict. In 1935 all the plant was removed from the colliery.

John White, an old time employee of Wongawilli Colliery and ex resident of Wongawilli, has recently said that he recalls some of the above story; he said that Cam Bros sent their coal to Sydney to fuel the Red Funnel line trawlers.

The coal leases held by Cam Bros and South Kembla were eventually taken over by AIS and worked as part of the Wongawilli Colliery.

#### (6). What Remains of These Railways?

The Wongawilli Colliery section of the above railway systems is the only section still operating. It is supplying coal to the BHP Steelworks' coke ovens and receiving coal washery refuse for emplacement at Wongawilli.

No written record has been found as to when the rails and sleepers were pulled up from the old Illawarra Harbour & Land Corporation. Discussions with old Dapto and Wongawilli personalities indicates that the lines were pulled up, together with the sleepers, in the mid to late 1930s. It is known that during that period the Australian iron and steel industry were recovering as much ferrous scrap as could be found to augment steel production to meet the war-time demand.

It has been said that there is still some track left in the ground inside the Avondale Colliery depot between Marshall Street and the South Coast railway line. This would have been the branch connecting the IH&LC tracks to the NSWGR.

#### (7). End Notes.

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- 3. J.P. O'Malley "The Old Dapto Smelting Works", p. 4.
- 4. NSW Lands Dept Records.
- 5. Wollongong Argus, 16 August, 1893.
- 6. The Illawarra Mercury, 26 September, 1895.
- 7. T. E. Burrows, Harbour Improvements. Port Kembla. NSW. Fig.2.
- 8. The Illawarra Mercury. 23 July, 1895.
- 9. The Illawarra Mercury, 2 November, 1895.
- 10. The Illawarra Mercury, 3 September, 1895.
- 11. C.C. Singleton, "Railway History in Illawarra". HIS, 1964, p51.
- 12. The Illawarra Mercury, 24 September, 1895.
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- 14. The Illawarra Mercury, 19 October, 1895.
- 15. The Illawarra Mercury, 5 December, 1895.
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- 17. The Illawarra Mercury, 26 May, 1896.
- 18. The Illawarra Mercury, 10 September, 1896.
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- 22. The Illawarra Mercury, 2 June, 1898.
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- 29. The South Coast Times. 24 December, 1909.
- 30. The South Coast Times. 4 February, 1910.
- 31. The South Coast Times. 18 February, 1910.
- 32. ARHS Bulletin No 47, September, 1941.
- 33. South Coast Times 4 November, 1917.
- 34. Kembla News, January, 1990, p. 5
- 35. J.L.N. Southern's personal notes and Southern & Platt, "The History of Iron Making in Australia 1848-1914."
- 36. The South Coast Times. 7 April, 1916.
- 37. The South Coast Times. 15 June, 1923.
- 38. The Illawarra Mercury. 27 July, 1923.
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#### (8). Bibliography.

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