St. Margarets Railway Station 1870 to 1930

By Stuart Moye

This article covers a period of time when considerable changes were made to the railway in general as well as specific improvements at St Margarets station on the Hertford East Branch. Changes to the 1864 station building were described in an earlier article which can be found on this website under the title "The New Station of 1864", and are therefore omitted from this article. By 1870 the railway was owned by the Great Eastern Railway [GER] which had been formed by the amalgamation of previously existing East Anglian railways on the 7th August 1862. The Buntingford Line had been opened just seven years in 1870 and had been owned by the GER since the 1st September 1868. The 1870 station represented a mixture of early railway features some dating right back to the opening of the Hertford line in 1843 and recent changes dating from the previous decade. The next 60 years were going to see a series of improvements that both provided greater safety when travelling on the railway and considerably enhanced facilities for passengers using the station.

Early view of St Margarets Station



This view of St Margarets Railway Station looking south shows the gas lighting installed in 1878, which can be seen close to the corner of the building on the left. However the signal box built in 1887 has yet to appear thus enabling the picture to be dated within a nine year period. Also of interest are the early signalling [with a signal arm for both main line tracks on one tall post], the ash ballast covering the sleepers and simple throw over levers to operate the points at track level. The original station and goods shed can be seen in the distance on the far side of the level crossing. The Buntingford line ended in a bay platform with buffer stops behind the station name board to the very left of the picture.

The main event in the 1870s was the change to gas lighting at the station. Having been first considered in 1868, this turned into something of a saga in the 1870s, between the St. Margarets Gas and Coke Company and the GER. The Gas supplier was clearly keen to acquire the business of the railway, who would clearly be a large user of gas, but only if they could convince the GER to abandon the use of oil lamps and connect up to the gas supply. The Gas Company quoted for the supply of gas again on the 12th October 1870 at 6/- [30p] per 1,000 cubic feet of gas. With an estimated gas usage of between 200,000 and 240,000 cubic feet per year for 34 gas mantles the railway company firmly declined this offer. The next serious attempt to add the railway to their list of customers saw the gas company make an offer that was considered by the railway on 26th June 1877. The offer was for a reduced charge of 5/3 [26p] per 1000 cubic feet with installation costs of £80. The railway past this offer to their engineering department for some expert opinion. It is of interest to note that the GER was working at the time with a considerable number of other small local gas companies and would have been aware that the general rate being charged for large users was about 5/- [25p] per 1,000 cubic feet. Not surprisingly we discover an agreement being reached at the 5/- price on the 18th December. The projected ongoing annual cost for gas lighting was estimated by the GER to be £54 10s 0d.

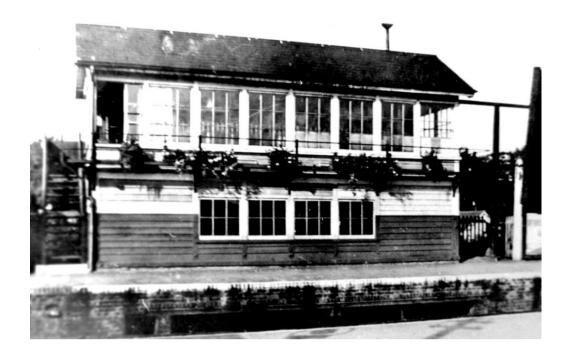
The provision of 34 gas lights may seems at first site a considerable number until one considers how many would be required to adequately light each room in the main station building and the Stationmaster's house. This still however left enough lights to greatly improve the illumination on the platform. This meant that the station was still dimly lit outside by modern standards but would have been a vast improvement on the illumination using oil lamps that had existed before. For villagers the station platforms would have become at night a relative beacon of gaslight in an otherwise quite dark village. In addition First and Second Class passengers had the use of well-appointed waiting rooms well-lit and in the winter months cosily warm, courtesy of a welcoming coal fire in the hearth. These waiting rooms were kept immaculately clean and were equipped with quality well polished wooden furniture often garnished with seasonally available flowers. This quality of provision was to last right through until the late 1950s when reduced funding and less staff led to the inevitable decline in standards.

If the 1870s at St Margarets were about the provision of gas lighting then the 1880s were definitely about increased safety while travelling on the railway. The rather formal and technical wording of the minutes of various GER committees inform us that the provision of a block telegraph between Broxbourne and St Margarets was approved in 1882 at a cost of £490 and extended to Hertford for an additional £120. This facility was extended to Mardock for £140 in 1888 as part of the improvements associated with providing the interlocking of signals and points at St Margarets which had been approved in March 1887. By way of explanation it may well be sensible to explain at this point how the railway had been operated before these changes were made before describing how travelling on the railway was made safer by these improvements.

Up until late 1887 at St Margarets there was no working signal box, with points in the track changed at ground level with throw over levers and were not lockable in either position. The station was equipped on the main line with one large post with two signal arms one for each direction. These were operated from small levers or capstans at the base of the post. The horizontal position for the arm was danger, half lowered caution and fully down the arm disappeared inside a slot in the post as the all clear signal. [See picture on page 1] After a train was sent on its way overseen by the stationmaster no train was despatched in the same direction for 5 minutes, between 5 and 10 minutes trains could be sent under a caution signal and after 10 minutes with an all clear signal. This was called the time interval system of dispatching trains. The driver never knew for certain of course if the line ahead was clear but the implication was that it was safe to travel at full speed if the signal showed all clear.

The Government of the day took advantage of an unexpected glut of money that was circulating where folk with money were finding it difficult to find worthwhile investments. This was caused by a rapid decline in investment opportunities in the colonies where sufficient money was now available to fund their own economic growth. Laws were passed which required large amounts of work and thus investment money in Great Britain. In the case of the railways this included among other things the provision of greater safety on the railway in respect of signalling, the working of trains and the fitting of fully automatic brakes on all vehicles in a passenger train. Safety on the railway before these improvements relied very heavily indeed on the meticulous care taken by the railway workers to ensure the safety of those who travelled on the railway.

St Margarets Signal box



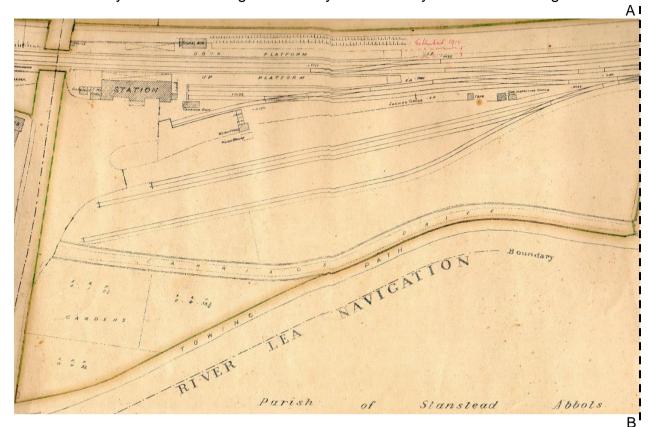
The big visible change for travellers at St Margarets station in late 1887 was the appearance of a large signal box next to the waiting shelter on the down [Hertford bound] platform. The picture shows the signal box as it appeared bedecked with flowers in the summer months of 1934. The building itself was erected during 1887 along with the fitting out of the box with all the equipment needed to comply with the new laws. The box as first built contained a 50 lever frame with just 6 left unused for future additions if needed. These were to operate the points and signals from one central place as required by the new law. Within the locking frame signals were interlocked with the positions of point blades so that signals could not show a proceed indication if the points were not set correctly. In the box were also located the block bell instruments which allowed the St Margarets signalman to communicate with the adjacent boxes at Ware and Rye house. This was done by using an agreed list of bell code signals tapped out using a piece of equipment not unlike a morse code sender key. Passengers soon became aware of the 3 pause 1 bell code as this indicated a passenger train would soon be arriving to take them on their journey. The use of the block instruments also prevented a train being sent to the next station along the line before the previous one had safely been seen to have arrived there. Complimentary changes outside the new signal box saw all the old signals removed and replaced with more modern semaphore signals, greater in number than before to more safely manage the movement of trains. The level crossing remained as it was, being opened and closed by a gateman from his small hut down by the level crossing on the village side of the line. Communication with the signalman being provided in the form of a plunger and bell at both locations allowing them to communicate using a prescribed code. It was not until 1897 that a lever in the signal box was brought into use that locked the level crossing gates in position against road traffic before the signals that allowed train to pass over the level crossing could be operated. This safety improvement was carried out as part of a new level crossing being needed when the road was widened. Although it is not known for how many hours a day the signal box was in use when first opened in 1887, it is known that in 1897 it was manned 24 hours a day every day of the year. It is an interesting thought that a person was on duty in St Margarets signal box, except for the odd strike and Christmas day closures in the latter part of the C20th, 24 hours a day every day between 1897 until the box was closed for good on the 27th May 2003.

St Margarets Station about 1905

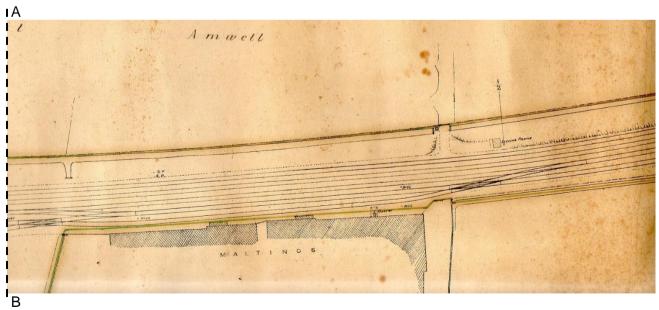


This view illustrates the modernisation that had taken place at the station in the 20 odd years since the picture on page 1 above was taken. Although the signal box is the most obvious addition, the new signalling, telegraph poles and the overall quality of the track are all signs of the progress made in two decades. Also it shows more fully the positioning of platform gas lamps erected in 1878. In the foreground at track level can be seen a shunting signal operated from the signal box and planking between the rails, the latter covering the locking mechanism for the points, an important safety measure added in 1888. Connection of such equipment to the signal box was by thick wire or square section metal rodding activated by pulling the correctly numbered lever in the signal box. A long planked cover can be seen between the tracks leading from the shunting signal right back passed the level crossing and almost as far as the present bypass bridge over the railway. This covering enclosed the operating wires and rodding heading out from the signal box to various pieces of equipment along the railway. Installation of such covers occurred after a considerable number of shunting horses and their human companions were injured stumbling over the wires and rodding on the GER system. In 1896 an order was sent out that where there was considerable horse hauled traffic along a main line the boxing in of rodding and wires was to be carried out. At St Margarets in the C20th before WWI the level crossing gates were frequently closed against road traffic to allow heavy horses pulling a couple of wagons each to pass through. They were hauling sand and gravel as well as bricks from the Hailey Brick Company and the sand and gravel quarries located to the south of the station on what is now the 100 acre estate. Rail access to the brick works and quarries having been opened in June 1899 and a new siding to cope with the considerable extra traffic being laid in the railway yard to the north of the level crossing in May 1901 The new siding along with a roadway cost £1,367 11s 0d and also helped to deal with the growing general goods traffic which the small original goods yard south of the crossing was struggling to cope with. Along with the weighbridge added in 1892 this brought the goods facilities at St Margarets up to what would be its maximum development before the decline in goods traffic in the 1930s precluded any further investment. Looking back to the picture at the top of the page it is interesting to note how many enamel signs adorned the station, advertising such things as Pears Soap and Liptons Tea. This was a common feature of stations at the time and reflected the range of branded consumer goods that had become available in the later Victorian Period. The railway had played a major part in creating this change providing firms with the ability to sell their goods nationwide rather than the more locally produced often unpackaged non branded goods of earlier times. This led to the development of High Streets of shops which were to flourish in the first half of the C20th.

Railway Plans of St Margarets surveyed in 1904 by the GER Land Agent

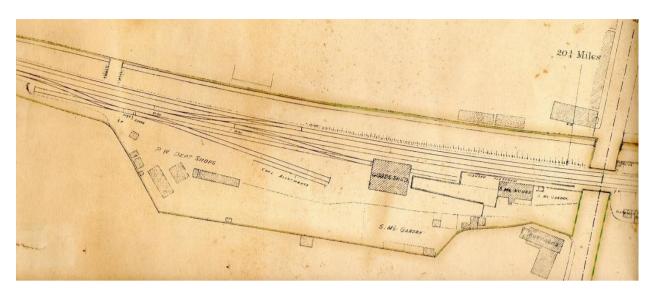


The plan above shows the main part of the station to the north of the level crossing and shows an additional handwritten note in red which indicates the extension to the Hertford bound platform was completed in 1912. The additional siding of 1901 is the long siding closest to the river with the new road of the same date between it and the adjacent siding. It will be noted for trains from the London direction on the down line that there was no direct access to the Buntingford Line. Such a movement required reversal of the train using the crossover between the platforms, necessitating a second closure of the level crossing gates across the road, before moving forward again in the wrong direction on the up line to gain access to the Buntingford line.



The above plan is included for completeness and shows the tracks that ran alongside Mr Hunt's Abbey Maltings. The Buntingford Branch being the centre one of five tracks alongside the malting. The level crossing still exists today and leads to Stanstead Lock and the Cruising Club.

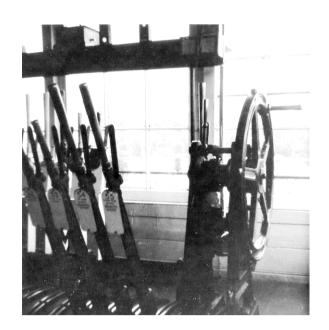
1904 Plan of the Old Station Goods Yard and Stationmaster's House



This plan shows without many alterations the original station layout as it would have been a few years after the Hertford line had opened in 1843. The bulk of the coal traffic was dealt with in the original yard well into the C20th. The Permanent Way [PW] department shops dealt with the minor track repairs on the branch. It is suspected to be where the tarpaulin was borrowed from to act as a windbreak when a sheep was roasted on the river during the very cold winter of 1894/5. The Gateman's Hut can be seen to the far right edge of the plan conveniently close to the level crossing. The Twenty and quarter miles marker close to the level crossing indicates the distance by rail from Liverpool Street as measured via Hackney Downs, Tottenham Hale and the Lea Valley Line. Further changes took place in 1911 when on the 4th May the GER agreed to extend the down platform by 50 yards at a cost of £350 at the standard height at the time of 2 feet 6 inches above rail level. The work was completed in 1912 as indicated on the first plan.

Not surprisingly the 1914 to 1918 War saw little investment at a small station like St. Margarets. It was not until 1921 that changes to the level crossing and how it was operated was authorised. The change involved moving the control of the level crossing gates away from the gateman manually operating the gates from his small hut next to the crossing to the signalman in the signal box. This of course would reduce the number of staff and in that way was seen as a worthwhile investment. However the practicalities of doing this presented a few problems. The lever frame in the box had to be extended at the level crossing end to provide extra levers to control the main gates and wicket gates. This addition increased the frame from 50 to 56 levers [with just 4 spare] but left little space for the installation of a wheel to wind the main gates. The signal box at St Margarets was about as far away from the level crossing as one really wanted to be for using hand wound gates. The most capable type of winding mechanism available was a long horizontal threaded rod some 4-5 feet long turned by a large wheel at one end. This being all supported on a substantial cast iron frame giving the signalman a well geared down wheel making it easier to open and close the four gates. Unfortunately, there was insufficient space in the signal box, [once the lever frame was lengthened at the crossing end of the box], for this type to be used. A solution was found in modifying a redundant smaller gate wheel mechanism said to have come from an East London signal box. This had been used in a box close to its level crossing and was of the ships wheel pattern with handles around the rim. It also had a less geared down mechanism ideal for much lighter jobs than the rather heavy job it had been chosen for at St Margarets. However, it would fit the limited space available, so modifications were made so that it could do the job, but presented a heavy wind for the signalman. The most obvious modification involved the removal of the ships wheel handles around the rim and replaced by a side handle which would give enough purchase for the signalman to wind four heavy gates. The square section rodding and cranks which joined the wheel to the gates would bend and strain against their guides and pivots, making winding the gates even more difficult.

The Gate Wheel in St. Margarets Signal Box



This picture of the gate wheel in St. Margarets Signal box was taken in August 1970 the last summer it was in use. The remains of one of the cut off ships wheel type handles can be seen on the top of the wheel as well as the shiny steel replacement on the side. The position of the levers in this view suggest that the gates are closed against the road and the signals for a train from Rye House have been pulled off as the train runs along the track between Rye House in the St Margarets direction. The bulk of the wheel mechanism is hidden out of site beneath the floor. It was so arranged to turn the circular motion of the wheel into a push or pull of the rods that stretched all the way to the level crossing.

The Level Crossing viewed from the Signal Box



An additional problem at St Margarets was how little of the level crossing could be seen from the signal box the view being blocked by the roof of the down side waiting shelter. This was to some extent mitigated by providing two mirrors, one located opposite the box and the other on the far side of the crossing. However, there was still at least 25% of the crossing that the signalmen could not see clearly which was to lead to at least one serious incident where lives were put at risk. This 1950s picture also shows the semaphore type signals in use from 1887/8 with later improved versions until 1959. The picture shows the view the signalman had when winding the gates. The actual winding was a difficult skill to master and required a real effort to get the gates moving and then immediately required back pressure on the wheel to slow the gates down. If the gates were wound too fast at the end of the gates swing, they would jump out of the gate locks set into the crossing surface. A real danger for signalmen was if a vehicle tried to jump the gates as the impact with the gates made the wheel suddenly jerk backwards with considerable force. At least two incidents of signalmen being thrown out of the open signal box window occurred with one landing seriously injured on the platform the other bruised and upside down on the narrow balcony outside the box window.



This view of the signal box interior was taken in August 1970 in the last few months of the wheel being in use. It was removed in October 1970 and replaced by a box with push buttons to operate the newly installed lift up barriers at the level crossing. The signalman Mr Sam Vincent is seen about to operate number 56 lever as he starts the sequence of closing the gates against the road traffic for the imminent arrival of a train. Part of the lever frame and other signalling instruments are also visible in the picture.

A view of the level crossing also taken in August 1970. The gates are somewhat battered and mended due to recent damage caused when a vehicle tried to jump the gates. This crossing was one of the first in the country where road traffic was controlled by traffic lights, brought into use in the late 1930s. The police would visit this spot regularly due to the high frequency of drivers trying to squeeze through the gates as they closed to avoid being delayed.



Following the modification to the level crossing under the GER in 1921 the railway was taken over by the London and North Eastern Railway [LNER] on the 1st January 1923. The LNER like most new companies soon rebranded the railway which at St Margarets led to a large sign to be erected above the main entrance to the station as well as large running in boards on the platforms which stated "St. Margarets for Stanstead Abbotts change for the Buntingford Line".



A 1934 view of the station approach boldly showing the new ownership by the LNER. On the right can be seen the station café a feature on the station approach for many years



A Stationmaster stands proudly in front of the running in board erected near the buffers stops of the Buntingford branch. The two part enamel sign was very impressive not just for its size but also its distinctive white lettering on dark blue background. Hung on the right of the board can be seen a mirror, provided to afford the signalman a view of part of the level crossing blocked from his direct view from the signal box.

In 1926/7 it was decided to improve the limited facilities on the downside platform for those waiting to travel to Ware or Hertford. The open sided shelter had for some 80 years been the only cover provided for passengers on the down platform. A gent's toilet and a ladies room with toilet were added to the level crossing end of the canopy. At the other end a brick wall was built across the end and a toilet for use by the signal man was built between the new wall and the signal box steps. The open fronted shelter was fitted with a wooden screen with windows in the upper part. This blocked in the half of the open front at the signal box end. Within the glazing were two unusual station name signs made of two layers of glass. The wording simply stated St. Margarets in the then new LNER house style of white lettering on dark blue background. These improvements provided considerably more shelter from the wind and driving rain than had previously been the case.



These two pictures show the additional facilities added to each end of the covered shelter by 1927. The signalman's toilet being hidden behind the low wall between the shelter and the signal box. Part of the screen and one of the two glass St Margarets signs in the screen can be seen in the right hand picture. The left hand picture shows the gent's toilets with the ladies room behind accessed from under the canopy



ST. MARGARETS FOR STANSTEAD ABBOTTS CHANGE FOR BUNTINGFORD LINE

The LNER provided St Margarets with four large enamel signs which attempted to make clear that St Margarets was the station for Stanstead Abbotts. The confusion with Stansted on the mainline north of Bishops Stortford caused quite a few passengers over the years to catch the wrong train. During the times that the majority of visitors to the village came by train village public houses, notably the Red Lion, would emphasis in their advertising that St Margarets was the station for Stanstead Abbotts. The lower part of the sign would remind passengers as the train was running into the station that they should change at St Margarets for the Buntingford Branch. After the Buntingford line closed to passengers in November 1964 the bottom part of the signs were crudely obscured with grey paint.

By 1930 the station at St. Margarets had reached the zenith of its development as far as the traditional railway was concerned. However signs of future decline of goods traffic particularly on the Buntingford line were beginning to be seen with some local goods journeys moving over to the road. At the same time a fledgling local bus service was developing which was to attract increasing numbers of passenger away from the railway. The dramatic rise of commuter traffic from St. Margarets station to London was still something for the future. 1930 therefore represents a time when the local railway was still busy and well patronised before the gentle decline of the 1930s, the damaging effects of austerity / heavy use during WWII and the enormous changes that electrification brought with it in the late 1950s and early 1960s.

The reader may be interested to read articles on this website which provide further insight into the history of the local railway station. The articles cover the following topics.

The Railway Station 1843-63
The New Railway Station of 1864
The Railway Wharf that never was
The Ditton Family of Stationmasters at St Margarets
The Hailey sand and gravel quarries and brick works