

= Grantham Canal =

The Grantham Canal is a canal that runs for 33 miles (53 km) from Grantham , falling through 18 locks to West Bridgford where it joins the River Trent . It was built primarily to allow for the transportation of coal to Grantham . It opened in 1797 , and its profitability steadily increased until 1841 . It was then sold to a railway company , after which it declined , and was finally closed in 1936 .

Because it was used as a water supply for agriculture , most of the channel remained in water , although bridges were lowered . Since the 1970s , the Grantham Canal Society have been working towards its restoration , and two stretches are navigable to small vessels . Full restoration will require a new route where the canal joins the Trent , as road building has effectively severed the original route .

= = History = =

The concept of a canal from the River Trent to Grantham was first raised on 27 August 1791 , as a way of supplying the district with cheaper coal . The intent was for the navigation to join the Trent below Nottingham at Radcliffe @-@ on @-@ Trent . As William Jessop was surveying the Nottingham Canal at the time , he was asked to survey the Grantham route as well , and a bill was put before Parliament in 1792 . It was defeated , as there was opposition from coal suppliers , who delivered coal by road to Grantham , and from those who thought that the River Witham would be damaged by the project . A revised route was developed , with the junction now at West Bridgford , and an additional 3 @. @ 6 @-@ mile (5 @. @ 8 km) branch to Bingham . A second bill was put forward and the act of Parliament received the Royal Assent on 30 April 1793 . Building work on the canal started in 1793 , with Jessop in overall charge , but with James Green and William King as resident engineers : Green , who was from Wollaton , was appointed engineer for the section of canal from the Trent to the Leicestershire border , while King , who was the agent for the Duke of Rutland , was responsible for the rest of the canal , including two reservoirs , one at Denton and the other at Knipton on the River Devon .

The act authorised an initial £ 75 @, @ 000 to be raised to pay for construction , together with an option to raise a further £ 30 @, @ 000 , of which £ 20 @, @ 000 should be raised by shares of £ 100 each among the initial subscribers , and £ 10 @, @ 000 by mortgaging the future income of the canal . However , this amount proved insufficient , and there was also disagreement between the shareholders as to their liability to raise the additional £ 20 @, @ 000 . As a result , a second act was sought . This received the Royal Assent on 3 March 1797 , and made clear the obligations of existing shareholders to pay the extra subscription , and also authorised an additional £ 24 @, @ 000 to be raised . The second act also removed restrictions in the first act , and allowed the company to set whatever rates it chose for using the canal .

The eastern section from the Leicestershire border was opened on 1 February 1797 , with the rest of the canal later that year . The canal was built with locks 75 by 14 feet (22 @. @ 9 by 4 @. @ 3 m) , the same size as those on the Nottingham Canal to allow boats to use both . The branch to Bingham authorised by the first act was not built . The 18 locks raised the level of the canal by 140 feet (43 m) from the Trent to Grantham . Eleven of them were located in the first 4 miles (6 @. @ 4 km) above the Trent , after which there was a level pound of around 20 miles (32 km) before a flight of seven locks at Woolsthorpe , and a much shorter upper pound to Grantham . At Harlaxton , the canal passed through a deep cutting (effectively crossing the watershed between the River Witham and the River Trent) , which was only wide enough for a single boat , but this situation was partially rectified in 1801 when the cutting was widened in two places to allow boats travelling on opposite directions to cross . At Cropwell Bishop and Cropwell Butler , the route passed through gypsum beds , which resulted in problems with leakage .

= = = Operation = = =

The canal made sufficient money to repay substantial debts in 1804 and 1805 , after which dividends were paid to the shareholders , beginning at 2 per cent in 1806 , rising to 5 per cent in 1815 , and reaching their highest level of 8 @. @ 6 per cent in 1839 . The tolls brought in an income which remained below £ 9 @, @ 000 until 1823 , but then rose steadily to reach £ 13 @, @ 079 in 1841 . Traffic towards Grantham included coal and coke , lime , groceries and building materials . Some of it supplied villages along the line of the canal , and some of that which travelled the full distance was distributed by land to villages beyond Grantham . Downward traffic was largely agricultural produce , including corn , beans , malt and wool . Such produce was normally loaded at Grantham or Harby .

Initially , some of the coal carried on the canal had been transported in boats owned by the canal company , but they had given up this practice in 1812 . They resumed carrying coal in 1827 , because they felt that coal stocks at Grantham were not adequate , but were accused of price @-@ fixing . Although the penalty imposed by Lincoln Assizes was small , they ceased this trade , and the coal merchants agreed to maintain stocks of 2 @, @ 660 tons at Grantham . In 1833 , J. Rofe and his son made a proposal for a canal to connect Grantham and Sleaford , but this was not pursued .

= = = Decline = = =

In common with most canals , competition from railways posed a major threat , and in 1845 the canal owners agreed to sell it to the Ambergate , Nottingham , Boston and Eastern Junction Railway when their line from Ambergate to Grantham was opened . Although the railway was completed in 1850 , the railway company did not honour the agreement . The canal company brought a large number of cases against the railway company , and successfully opposed several bills which the railway were trying to get passed in Parliament . Eventually the railway company agreed to pay , and shareholders received £ 45 per share in cash , with the balance being in railway mortgages . The agreement was reached on 1 June 1854 , and the transfer of ownership took place on 20 December . Railway mergers meant that the canal came under the control of the Great Northern Railway in 1861 , and later the London and North Eastern Railway .

Traffic declined as the railway companies neglected the canal , and were down to 18 @, @ 802 tons in 1905 , on which the tolls amounted to £ 242 and an Act of Parliament was passed in 1936 , formally closing the canal , though there had been no boat traffic since 1929 . The closure act stipulated that water levels should be maintained at 2 feet (60 cm) to support agricultural needs . This effectively guaranteed the continued existence of the canal channel , but structures such as locks and bridges deteriorated , and in the 1950s 46 of the 69 bridges over the canal were lowered as part of road improvement schemes . Although the low bridges act as barriers to navigation , large parts of the canal are still in water .

In 1948 Britain 's railways , and hence the canal , were nationalised , and became the responsibility of the British Transport Commission . In 1963 control of the canal passed to British Waterways . Under the terms of the Transport Act 1968 , all waterways within the jurisdiction of British Waterways were classified as commercial , cruising or remainder waterways . Remainder waterways were those that were deemed to have no economic future , and maintenance would only be carried out where failure to do so would create health or safety issues . The Grantham Canal was listed in this latter category .

= = Restoration = =

A plan to fill in a section of the canal in Nottingham resulted in a number of letters appearing in the local press in 1963 , and a student at Kesteven College produced a report on the state of the canal , which was presented to the Grantham Civic Society . In 1970 , the British Waterways Board attempted to obtain an act of parliament which would have allowed them to cease maintaining the water levels of the canal . The Inland Waterways Association campaigned against the bill , and the clause was amended . The Grantham Canal Society was formed soon afterwards , to promote restoration of the waterway . In 1974 , a National Boat Rally was held at Nottingham , to gain

support for the restoration scheme , and to promote the idea of a new link to the Trent , which would pass through old gravel workings .

Together with British Waterways , the Inland Waterways Association and the Waterway Recovery Group , the Society began the work of restoration of the canal to navigation , a process which is still ongoing . A major development was the granting of permission in 1992 to remove an old railway embankment , which blocked the route near the top of the Woolsthorpe flight of locks . The task was completed by a number of Waterway Recovery Group workcamps . New gates were fitted to the top three locks , and rebuilding of Casthorpe bridge was funded by Lincolnshire County Council , opening up 4 @. @ 4 miles (7 @. @ 1 km) of the canal for navigation . Further down the canal , restoration of a 2 @. @ 3 @- @ mile (3 @. @ 7 km) section between Hickling Basin and Hose was funded by a derelict land grant of £ 400 @, @ 000 , received in 1993 . The Grantham Canal Partnership was formed in 1997 , as a way to take the project forwards . It consisted of representatives from each of the six local authorities through which the route passes , British Waterways , the Inland Waterways Association , the Grantham Canal Restoration Society and the Grantham Navigation Association , a group which had split off from the Canal Society in 1992 . As a result of the co @- @ operation , British Waterways formulated a draft business plan for the canal .

Following the restoration of the top three locks at Woolsthorpe in the 1990s , a 10 @- @ mile (16 @- @ km) section from the A1 to Redmile will be completed once the bottom four locks of the flight are restored . The rebuilding of locks 6 and 7 , completed in 2000 , brought the number of locks restored to five , and approximately one quarter of the canal has been restored to navigable standard . Much improvement of the towpath has also taken place , and access to it is possible at most of the bridges .

A major setback occurred in 2007 , when one of the walls of Woolsthorpe top lock had to be propped to prevent it collapsing , and British Waterways took the decision to fill it in , as funding was not available to rebuild it . The Inland Waterways Association received a legacy of £ 100 @, @ 000 from the estate of Fredrick Woodman , designated for the Grantham Canal , but British Waterways ruled that no work could start until the whole cost of £ 175 @, @ 000 had been found . The balance was made up by grants of £ 40 @, @ 000 from Lincolnshire County Council and £ 35 @, @ 000 from the East Midlands Development Agency . The wall was demolished and rebuilt in three sections , utilizing 290 cubic yards (220 m3) of concrete and 7 @, @ 500 new bricks .

Restoration of most of the canal does not present major problems , but challenges are presented by the final sections at both ends . The original route to join the Trent has been severed by the building of the A52 road . A route was identified which followed the course of the Polser Brook , which passes under the A52 to the north of the canal , but by 2009 , three possible solutions were under consideration . These pose additional problems in finding funding , since they do not count as restoration , and many of the traditional funding sources are not then available . At Grantham , an embankment carrying the A1 road blocks the line of the canal , and the terminal basin has been filled in . There are plans for a tunnel under the A1 as part of a cycle route to improve access to Grantham , and the basin could be redeveloped in due course .

There is also a 5 @- @ mile (8 km) dry section between Cotgrave and Kinoulton , which has presented problems since construction in the 18th century : gypsum in the soil reacted with the waterproof clay leading to leaking .

In early 2005 , the Grantham Canal Partnership appointed a full @- @ time Grantham Canal restoration manager , Kevin Mann , for an initial 18 @- @ month trial period . He would be responsible for planning and managing funding schemes for the restoration , identifying development opportunities and the promotion and interpretation of the canal . The trial proved to be successful , as he was still doing the job in 2009 .

= = Points of interest = =

= = Belvoir tramway = =

The Duke of Rutland also constructed a private wagonway or tramway between the wharf at Muston Gorse and Belvoir Castle . It was constructed in 1793 in anticipation of the opening of the canal . It was constructed with fish belly rail set into stone chairs , some of which , and some wagons , still exist in the castle cellars . The gauge was 4 ft 4 1/2 in (1 333 mm) , and the rails were supplied by The Butterley Company . Some are in the collection of the science museum , and the National Railway Museum where there is the chassis of one of the wagons .