

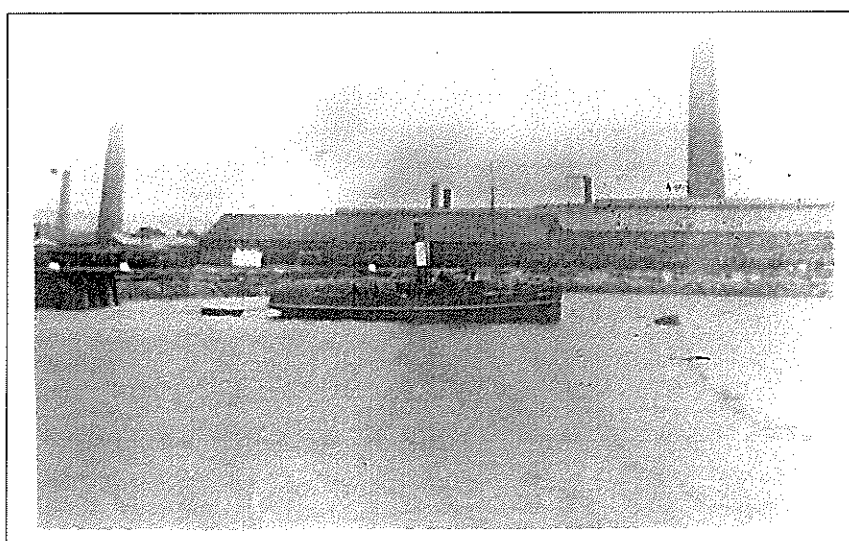
ARCHAEOLEG CAMBRIA ARCHAEOLOGY

BURRY PORT HARBOUR

AN INITIAL ARCHAEOLOGICAL ASSESSMENT

PART 2 - ILLUSTRATIONS

Project Record No. 36920



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PART 2 - ILLUSTRATIONS

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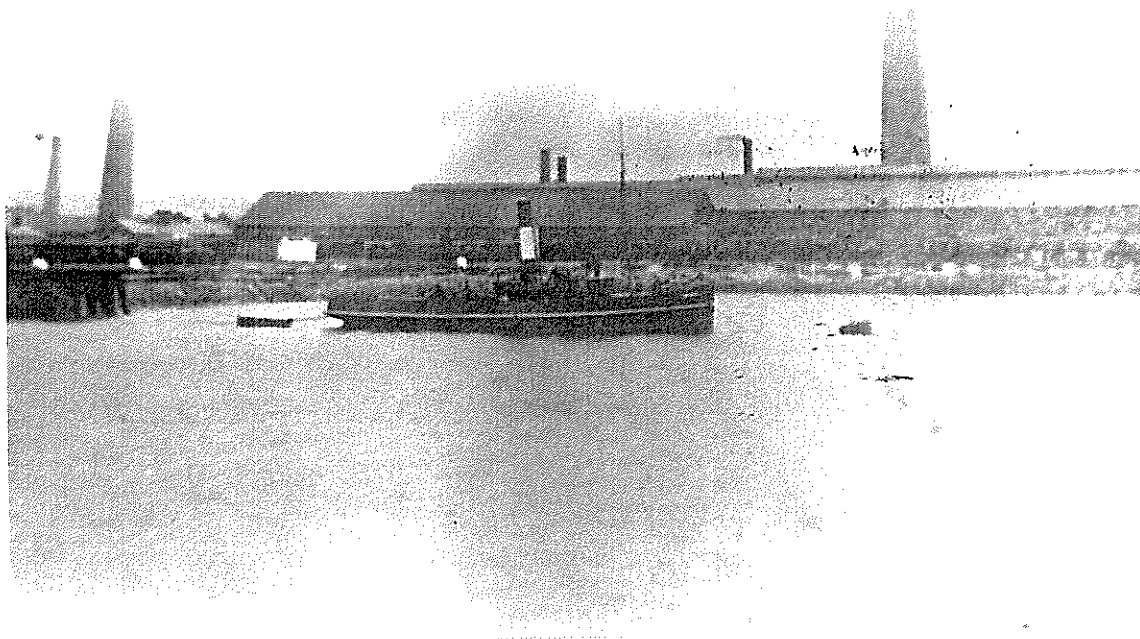


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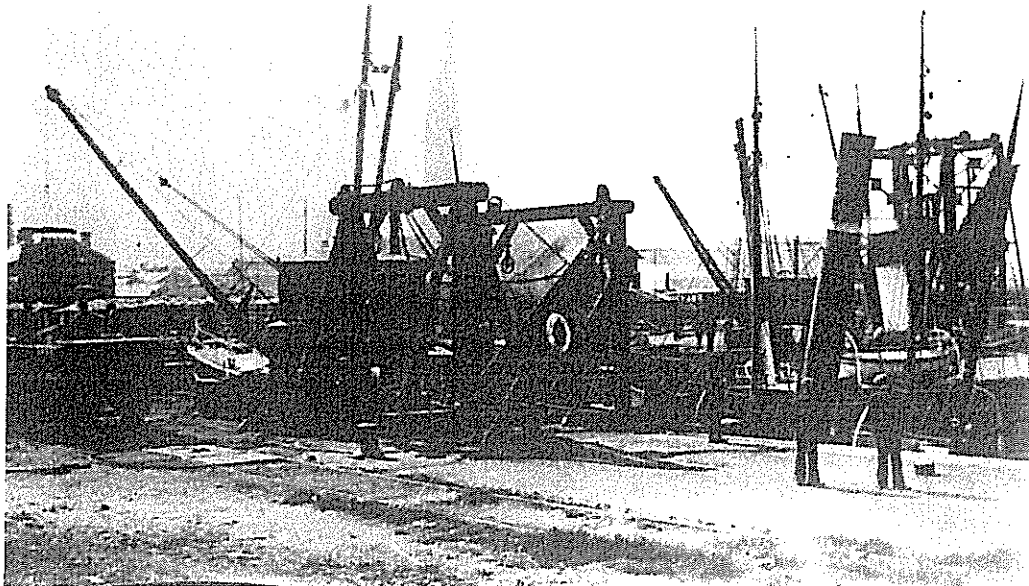


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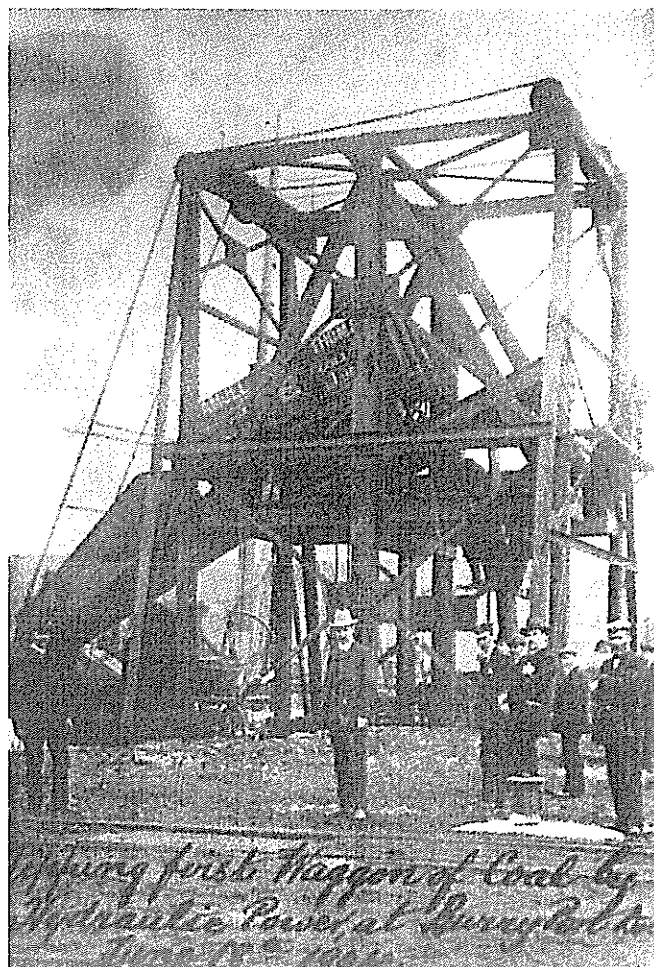


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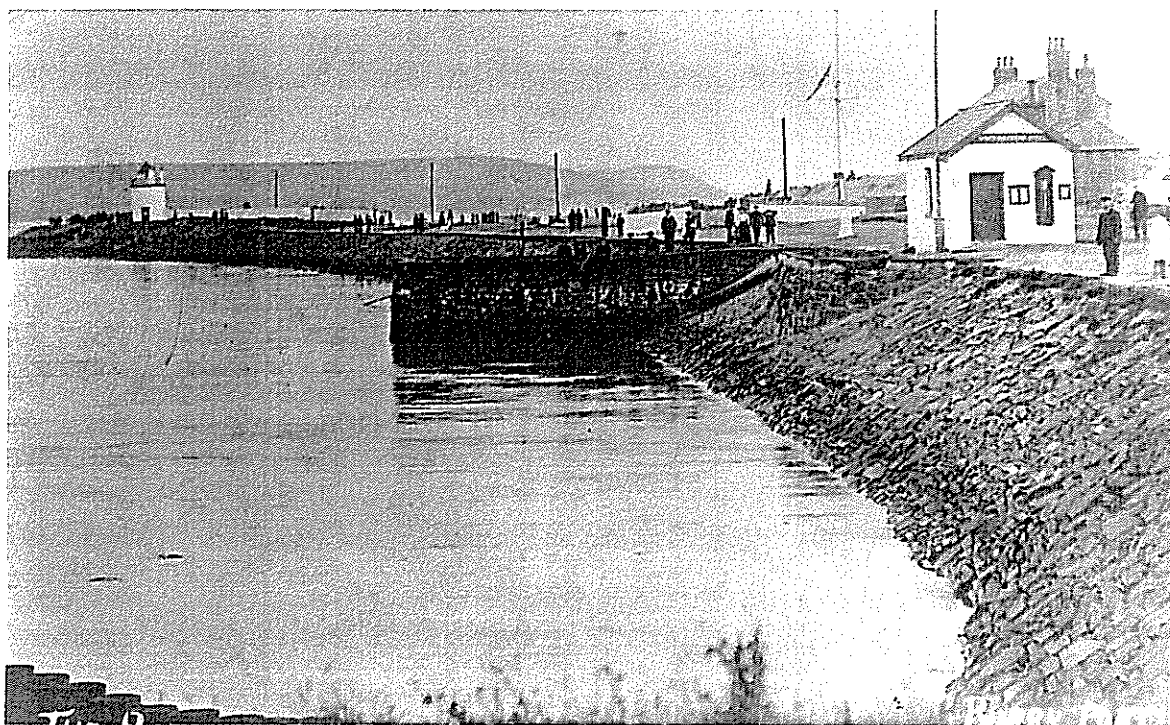
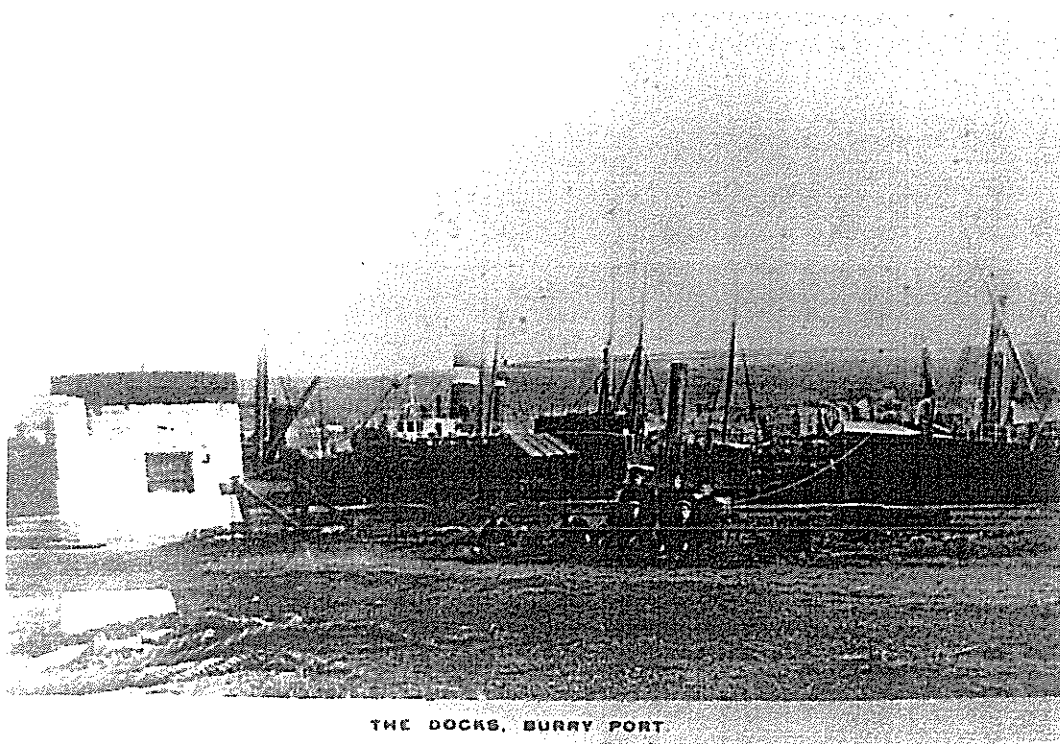


Plate 6. The north-east corner of the Outer Harbour in the late 19th century (from a private photograph collection of J. W. Williams, Harbourmaster, Burry Port).



The siting of an *intended* copper works, on land belonging to the Burry Port Harbour and Dock Co., is discussed in a document of 1854 (Mansel Lewis Papers, Schedule III, p.520, 31, 'Misc. Legal Papers, 1754-1854'), but this may refer to an extension of the works. However, a map of c.1864 (National Monuments Record, '*Proposed Line of the Kidwelly & Llanelly Canal and Tramroad Company*', c.1864) shows the Copper Works as occupying 25% of its later area and comprising four detached buildings, the western representing the present north-south building on the west side of the site.

The original stacks are said to have been very small and according to Thomas, 1937, 15-16, the setting out of new large stack was commenced; however, there is an 'old record of a high chimney bearing the date 1847' (National Monuments Record). The stack was 60ft square at the base, on a 30ft thick concrete bed on which a stone course was laid and then the stack itself, which was 280ft high, of Bridgewater bricks lined by New Lodge Colliery fireclay bricks (Thomas, 1937, 15-16). It was completed in 1852 and was the 'highest stack in the kingdom', still a prominent landmark in 1937 (*ibid.*), and is shown in Plate 1.

The Ordnance Survey 1:10560 First Edition of 1880 depicts the Copper Works as having Copper Works doubled in size since c.1864 but retaining the two north-south buildings and possibly the core of buildings to the east; all had been extended and there was more development to the east. It was integrated with the harbourside rail network, and there was a sidings, with sheds, to the north of the works, but with fewer lines than were later present; Slag from the copper works was tipped into the Outer Harbour to form a 'strong embankment' (Thomas, 1937, 16), the timber staging for the discharge of which (Fig. 2, 38) was visible until recent years (J. Nicholson, *pers. comm.*). Spoil was also deposited south of the works and the map shows lines extending to the tips. In all the works occupied 50% of its later area but its southern boundary remained unaltered. The works received its water from a reservoir at Cwm Capel capable of holding 20,000,000 gallons (Kelly, 1895, 118). In 1864 Mason & Elkington began the excavation of a coal-pit in the copper works yard, but abandoned it after 152 yards (Thomas, 1937, 16).

Mason & Elkington retired in 1884 when the Copper Works - the backbone of Burry Port - were acquired by Elliot's Metal Co. (Thomas, 1937, 18). The site is labelled 'Pembrey Copper Works' on the Ordnance Survey 1:2500 Second Edition of 1907. Large buildings had been added to the south and east of the site, built partly over the spoil-tip to the east, doubling its size from the 1880 map, but retaining all the earlier buildings. The lines leading out of the compound to the spoil-tips to the south have increased in number. The perimeter had also been extended to the east. There was a sand-pit, labelled, to the east of the works.

The works closed in 1911, to be sold the following year (Nicholson, 1991, 134), due to the high cost of importing ore; Elliot's Metal Co. possessed no copper mines of their own (Thomas, 1937, 18) and the heavy cost of sending copper to the Midlands for use was an additional factor (Thomas, 1937, 35). The works was dismantled, but an ore extraction company carried on here for a short while extracting minerals from flue dust etc. Later a small industry, Metallic Chemicals Ltd., was established on the site (Thomas, 1937, 27). It is shown as in 1907 on the Ordnance Survey 1:2500 Edition of 1915 but unlabelled and with very few rail lines; on the 1:10560 Edition of 1921 the works is labelled 'Pembrey Copper Works (Dismantled)' while the sand pit is labelled as in 1907 and the spoil tips were still present.

The site was acquired for a zinc oxide works in 1923, by Messrs. Frickers (Kelly, 1926, 153). The Ordnance Survey 1:10560 Provisional Edition of 1953 shows the site as occupied by the present buildings (see below), which, however, are shown as empty rectangles and may have still been under construction when the site, which is not labelled, was surveyed; the sand-pit is labelled as in 1907. The spoil tips were again marked.

The site is shown on the Ordnance Survey 1:2500, Sheet SN 4400, 1969 and labelled 'Zinc Oxide Works'. Possibly only the south-western Copper Works building had been retained. The works occupied merely the south-western corner of the former enclosure, most of the buildings to the north having been replaced by a number of small buildings, while to the east the works had been truncated by the Burry Port Power

Station, itself demolished in 1991. The spoil-tips had gone and the foreshore to the south of the works had been embanked (with the spoil?) and remodelled. Only one rail line is shown.

Rhône Poulenc Chemicals had acquired the site by 1988 (Hughes and Reynolds, 1988, 33) and were still there in 1991 (Nicholson, 1991, 138). The site is now the premises of the 'Grillo' zinc oxide works. Some 19th century buildings remain, including the large, masonry, two-storeyed office/reception building at the north end of the site, with a slated hip-roof, which is first shown on the Ordnance Survey 1:10560 First Edition of 1880 and appears to have undergone little external alteration. To the north and west, much of the perimeter wall survives from c.1850-1864 and is largely of alternating rubble and copper slag courses; there are several blocked entries to the west, with brick stops, while to the north is a large blind semicircular-headed recess, in brick, and a line of square brick recesses/blocked openings. The large, north-south, low-gabled mill building at the west of the site is also from 1849-1864 but may be of two phases; the lower half of the walling is in copper slag, with wide, segmental-headed entries, now blocked, to the west, the upper half is in rubble with recesses/brick-blocked openings. The gable walls have secondary segmental-headed openings, the southern now blocked, and circular openings above, also blocked; the roof is now sheeted. To the south of this is a large, north-south rubble building from 1880-1907, heightened in brick in around the middle of the 20th century when a second stage, with brick ventilators, was added to the northern half. There are some original, segmental-headed openings in the northern half, now blocked, and early 20th century square, louvered openings in the southern half. The low, gabled roof is now sheeted.

The spoil-tips to the east of the site have been removed, and those to the south remodelled and 'landscaped'.

It is doubtful whether any 19th century copperworks fittings etc. have survived.

The remainder of the buildings appear to be 20th century, and there is little evidence of rail lines which, in the area observed, have been taken up or tarmacked over.

5340 - SN 4456 0050 - EAST DOCK (FLOATING DOCK)

Standing structure; constructed 1836-9; 19th century fittings; fair-good condition; Category B

The East Dock was probably initiated in 1836 and was formed by the construction of a solid quay closing off the eastern quarter of the West Dock (*see West Dock, PRN 5341, below*). It appears not to have formed a part of the Kidwelly & Llanelly Canal Co. engineer James Green's plans for the harbour, drawn up in 1834 (Carms. R. O., CH3; Carms. R. O., Cawdor Maps 2/44/415), but was instead constructed under William McKiernon, later superintendent of both the Kidwelly & Llanelly canal and the harbour, from stone brought from his *Gwar Mac* ('Mac's Quarry') near Cwm Capel Colliery (Nicholson, 1991, 134; Thomas, 1937, 7). It is shown, broadly in its present form, on the tithe map of 1839 (NLW, Parish of Pembrey, 1839) but apparently was not officially opened until 1840 (Nicholson, 1991, 132).

The dock was, and is, a rectangle, with its long axis north-south, occupying an area of half an acre. It was a floating dock, communicating with the tidal Outer Harbour via a lock at the south end, between the central 'island' at the south end of the dividing quay and the east bank of the dock. There was '15ft of water on the sill of the gates at neap tides, deepening to the sea' (Worrall, 1875, 218). The dock was described in 1850 as 'a wet-dock where vessels of 500 tons register can be loaded afloat' (Hunt, 1850, 81; Slater, 1850, 59), a situation that was unchanged in 1875 (Worrall, 1875, 218). Improvements later in the century enabled vessels of 1000 tons register to be loaded in 1895 (Kelly, 1895, 117; Kelly, 1901, 124).

Timber coal-wagon tippers were installed at the dock in 1840 (Nicholson, 1991, 132). These were supplied by harbour railway lines and physically tipped the coal-wagons up, emptying their cargo into the vessels at the harbourside below (Plate 3). Both the 1855 and c.1864 maps (see above) depict two projections, clearly representing coal-tippers, on the east side, and one on the north side of the dock. The rail supply network is unfortunately not fully shown, but a line appears to run, from the east, up to the lock. Both maps also clearly show the lock gates in the chases that exist today. The massive battered sea-wall that lies at the base of the harbour walls is also suggested, and thus appears to be an early addition, though secondary (see below). The Ordnance Survey 1:10560 of 1880 shows the East Dock is in more-or-less its final form, and the battered sea-wall is clearly depicted. Coal-tippers are shown as in 1855 and c.1864, but there were, in addition, two on the dividing quay on the west side; the harbour railway lines to each tipper are clearly shown. The label 'WHARF' lies on the east side; however, no line is shown crossing the central 'island' to the west side of the harbour. Three timber tippers, two on the west side and one on the east, were still present in 1900 (Nicholson, 1991, 132).

The tippers were replaced, in 1904, by two hydraulic steel hoists (Plate 4), one on each side of the East Dock and powered by a contemporary generating plant (Nicholson, 1991, 136). They were made by Tunnett and Walker & Co. of Leeds, who also installed a turntable, weigh-bridge, hydraulic capstan and a hydraulic crane of both sides of the dock (*ibid.*). The dock was dredged in the same year, when the battered base may have been concreted and the massive apron, that was discovered beneath the silt of the Outer Harbour in 1947-8, was laid up to the lock gate (*ibid.*). New lock gates were fitted in 1905-6 (*ibid.*), allowing ships of up to 1800 tons to enter (Kelly, 1926, 151).

The new hoists are shown on the Ordnance Survey 1:2500 Second Edition of 1907, when several more had been added. There were three on the east side, one labelled 'Hydraulic Lift', two on the west side, labelled 'Lift' to the north and 'Hydraulic Lift' to the south, and one on the north side. The new lock-gates are shown and labelled. The label 'WHARF' again lies on the east side. A harbour railway line had been established leading from the west and terminating at the West Dock sluice, but it appears again on the central 'island' where a rail bridge had previously been present (*see West Dock, PRN 5341, below*). More lines are depicted east of the East Dock, with a building that may be another engine shed, and on the division between the two docks. Only one tipper on the west side is labelled 'Hydraulic Lift' on the Ordnance Survey 1:2500 Edition of 1915, a plan unchanged on the Ordnance Survey 1:10560 Edition of 1921.

The dock had been in decline since the 1940s and though its lock gates are shown on the Ordnance Survey, 1:2500, Sheet SN 4400, of 1969, the dock was disused and they were permanently closed. The lock-gates have now been removed. Most of the bollards shown on this map have also gone.

The East Dock today retains most of its structure and some fittings. The lock sluice is approximately 22.00m long (north-south) and 13.10m wide (east-west), with a paved sill approximately 3.00m above the level of the floor of the Outer Harbour (J. W. Williams, Burry Port Harbourmaster, *pers. comm.*). It is constructed from well-coursed and squared rubble from a local source ('Gwar Mac' - see above), with curved quoins to the north and south. The gates pivoted within well-finished semicircular-sectioned chases, at the summit of which are areas of finely-cut flat stones, held together with lead ties and carrying iron guide-pins for the former gate chains. Either side of the lock is an iron hydraulic capstan winch (PRNs 36944 and 36945), made by Tunnett and Walker & Co. of Leeds in 1904 and used for closing the lock gates but now incomplete. There is a further, square-sectioned chase to the north and south on both sides, the southern chases now with 20th century iron ladders. The east lock wall also features a regular arrangement of square sockets. On the summit of the lock sides, to both east and west, and lying north of the winches, are stone lined shafts, now choked with vegetation, presumably representing mountings for equipment (Fig. 2; 1).

On the east side of the lock is an iron crane on a limestone block base (PRN 36943), not *in situ*. Nearby are two surviving pairs of iron 'mushroom' bollards of 19th century date (Fig. 2; 2) and an earlier 20th century concrete lamp-post with iron gas-lamp bracket - *in situ*? (PRN 36946). There is a further bollard

on the west side (Fig. 2; 3). Immediately east of the sluice is a large-bore iron pipe, set in concrete within the battered sea wall of the Outer Harbour, possibly representing an outfall from the East Dock; it is associated with late 20th century concrete steps (Fig. 2; 4). On the north side, towards the sluice interior, is a raised area of quayside wall, possibly staging, and retaining a single timber upright (Fig. 2; 5). The walls of the East Dock interior are in roughly coursed and squared local rubble, all apparently of one build (1836-9 - see above), but the east and west sides have a battered base in cruder rubble which, though secondary, is probably early. The central section of the east side projects into the dock and is not battered; this area was built out in 1904 when the hydraulic hoists were installed; at the summit, in the centre of this area, the concrete base of one of the hoists can be seen in the grass (Fig. 2; 6), associated with two iron mooring rings. To the north, within the batter, is a sluice from the Nant Dyfatty, rebuilt in concrete in 1982 (Fig. 2;7).

The northern sea-wall is lower than the present concrete surface indicating the level of former staging and walkways. An 19th century iron bollard survives at each corner of the north side of the dock (Fig. 2; 8 & 9); the western may be a re-used capstan.

There is now no evidence of any projecting stages on the quay down the west side of the dock, but towards the south end is a concrete plinth, two timber uprights and a sleeper representing one of the pre-1904 tipper bases (Fig. 2; 10); it corresponds with an area of weathering in the battered base.. There is a damaged, ?19th century brick and masonry stairway at the north end (Fig. 2; 11). To the south is a second sluice in the batter, leading from the West Dock and dating from 1900-1901 when the latter was disused (Nicholson, 1991, 135); it has since subsided and the area above is packed with concrete blocks (Fig. 2; 12).

At the junction with the central island the quay wall features moulded iron railings from the later 19th century and probably *in situ* (Fig. 2; 13); a further line of railings to the south-east are different and appear to be re-used from another site. Also lying on the central 'island', near the remains of the Customs House (PRN 5343) are an iron ratchet mechanism set upright in the ground (Fig. 2; 14) and a large iron anchor set in a concrete plinth (Fig. 2; 15); neither are *in situ*. To the south are two flights of 19th century masonry steps in the battered base (Fig. 2; 16), these steps are noticeably wide and may have been intended for the Customs Officer (*see Customs House, PRN 5343, below*).

There are a number of further iron mooring rings and chains, from a number of periods, and iron stairways mainly from the later 20th century, throughout the dock. The dividing quay features several late 20th century lamp-posts.

There is now no visible evidence for any of the harbourside railway lines, which are shown on Ordnance Survey maps until the 1969 edition (*see PRN 5349 below*).

The battered base may first have been concreted over in 1904 (see above), but the present concrete finish was laid in the early 1960s (J. M Williams, Burry Port Harbourmaster, *pers. comm.*) and is very inadequate, having broken away in areas taking the masonry with it.

(See Appendix III for aspects of the harbour constructional history)

5341 - SN 4440 0054 - WEST DOCK (FLOATING DOCK)

Standing structure; constructed 1836-9 and 1872-88; 19th century fittings; fair-good condition; Category B

The present West Dock or Pond Clai ('Clay pond' - possibly a reference to the tidal mudflats rather than to a method of construction) was a 'scouring reservoir', ie. it was used to flush the Outer Harbour clean of silt.

It was established between 1834 and 1839 but was initially intended as a floating dock. The engineer James Green's proposed plans of 1834 (Carms. R. O., CH3; Carms. R. O., Cawdor Maps 2/44/415) depict the dock as a long, regular east-west rectangle, incorporating what later became the East Dock, and labelled the 'Inner or Floating Basin'. Harbour revetment walls appear to be depicted and running along its north and south side are square plots labelled 'Canal Wharfs', for the purpose of transferring cargo from the two arms of the Kidwelly & Llanelly canal which branched at Gors Bridge to the west. Along its eastern side is a large plot labelled 'Railway Wharfs'. The harbour canal branches were constructed, by the Pembrey Harbour Co. (Carms. R. O., Cawdor 2/44), and the northern branch ran, through a sluice, to the north of the harbour before turning, at right-angles, to run down its eastern side; the southern branch ran, also through a sluice, alongside the south side of the reservoir to enter it via a further sluice at its south-eastern corner. Alongside each canal branch ran a 'Public Communication Road', and the pattern of 'canal wharfs' was repeated along the east side of the Outer Harbour. The harbour as completed, however, appears to be depicted on the tithe map of 1839 (NLW, Parish of Pembrey, 1839). The West Dock is shown with a regular, rectangular plan, but was divided, by the present quay, into East and West Docks, and had probably followed this plan since its establishment. The West Dock exhibits revetment walls only on its north and east sides, with which the quay between it and the East Dock is bonded; it is unlikely that the revetment was ever continuous throughout suggesting that it was never used as a floating dock and functioned merely as a scouring reservoir from at least 1836, losing its regular plan in the process. Nevertheless, the lock into the Outer Harbour, and the revetment wall, are very similar to those in the East Dock; both, in their final form, may be the work of William McKiernon (*see East Dock, PRN 5340, above*). The battered base of the sea-wall seen to the east, and partly to the north, is similar to that in the East Dock and is clearly also contemporary; it is shown in a map of 1855 (Carms. R. O., Cawdor Maps 222, Plan No. 6). This map, and a map of c.1864 (National Monuments Record, '*Proposed Line of the Kidwelly & Llanelly Canal and Tramroad Company*', c.1864), however show the West Dock as more triangular than as depicted on the tithe map suggesting that the banks were already weathering, and two sluices at the west end, to the Kidwelly & Llanelly Canal (*see canal, PRN 8822, below*), are suggested. No dockside facilities appear to be represented, and by the time of the Ordnance Survey 1:10560, published in 1880, the West Dock had become an amorphous, sub-triangular pond shown with mudflats. The lock was shown and labelled; similarly the sluice at the west end.

The reservoir was later finally converted into a floating dock, of nine acres in extent. The work was mainly undertaken between 1872 and 1878; however, although the fittings were all in place by the later date, the dock was not finally opened until October 1888 and the first cargo was shipped in January 1889 (Nicholson, 1991, 135). Timber stages were built out from the long east wall, dividing the dock from the East Dock, and the short south wall. Each stage had a coal tipper supplied by rail, and swing bridge was constructed over the lock to connect the railway (Nicholson, 1991, 135). In 1895 the dock was described as '*available for ships of 1000-3000 tons burden. In this dock is a high level stage with steam cranes capable of loading vessels at any time of the tide*' (Kelly, 1895, 117). Two stages are shown on the Ordnance Survey 1:2500 Second Edition of 1907; one is labelled on the east side, and one projects into the mudflats of the south side.

The West Dock proved unsuccessful and, in 1900-1901, the lock gates were removed and replaced with a timber coffer dam, while the railway swing bridge was replaced by a fixed iron footbridge (Kelly, 1901, 124; Nicholson, 1991, 135). It returned to its function as a scouring reservoir, used to flush the East Dock via the sluice noted above, PRN 5340 (National Monuments Record). On the Ordnance Survey 1:2500

Second Edition of 1907 the dock had contracted and its western half was partly dry; the dam and footbridge are labelled while the sluice at the west end of the dock is not. The Ordnance Survey 1:2500 Edition of 1915 shows the West Dock as contracted, the 1907 south side being depicted as an earthwork bank; it is labelled 'Reservoir'. On the Ordnance Survey 1:2500 of 1969 no stages, nor even a projection, are marked.

In 1971 the sluice opening to the Kidwelly & Llanelli canal was visible at the west end of the dock, and there were '*traces of a scouring basin beyond*' (National Monuments Record); the latter was created by the laying of a railway line over the west end of the dock in c.1890, and is shown on the Ordnance Survey 1:2500 of 1969 but has since been filled in. A small feature of the south bank quay, in imminent danger of being destroyed, was a fragment of a wooden pulley (*ibid.*); this has now gone. The West Dock coffer dam was removed in 1972 (*ibid.*) and the lock footbridge was replaced by a pre-cast single-span concrete bridge, with side railings, on rubble abutments (Fig. 2; 17), in 1989-90 (Nicholson, 1991, 135).

The West Dock today retains most of its structure and some fittings. The lock sluice is identical, and contemporary with, that of the East Dock (*see East Dock, PRN 5340, above*). It has the separate PRN 34068 and similarly measures approximately 22.00m long (north-south) and 13.10m wide (east-west), with a paved sill approximately 3.00m above the level of the floor of the Outer Harbour. The construction, lock-gate chases, vertical chases, and sockets are also as those of the east dock. There are no winches and their bases probably lie beneath the concrete bridge abutments, a further ?winch base may lie on the east side of the lock (Fig. 2; 18) and there is no crane. There are similar square shafts/bases to those of the East Dock either side of the lock (Fig. 2; 19). A small, circular iron socket is set at the edge of the quayside summit just north of the lock (Fig. 2; 20), while the flat stones beneath the lock-chain pins have two iron stanchions set upright within - original? (Fig. 2; 21).

A 19th century iron bollard lies immediately east of the lock (Fig. 2; 22), while the truncated remains of the 1900-1901 timber coffer dam be seen to seaward either side of the lock (Fig. 2; 23). A small gauge iron outfall pipe, in concrete, leads from the top of the west side of the lock (Fig. 2; 24).

There has always been less vertical sea-walling around the West Dock than in the East Dock, being confined to the dividing quay with the East Dock, the eastern half of the north side and a small shipping stage to the south-east. All feature the masonry batter but the central section of the dividing wall projects out over the batter as a shipping stage added in 1872-88 (Fig. 2; 25). At the north end is the entrance of the 1900-1901 sluice into the East Dock (*see above*), and here also is a flight of 1872-88 masonry steps, set in the batter, with ?secondary iron railings. A similar flight of steps lies to the south (Fig. 2; 26). A stretch of iron railing on the north side of the dock (Fig. 2; 27) may be 19th century.

The rubble batter continues beyond the vertical sea-wall, right around the West Dock, but is very informal and in poor condition in areas, particularly to the south. There is less 1960s concrete over the batter; however, in areas, particularly the former stage north-west of the lock, it is in even worse condition and has been infilled with rubble dumping (Fig. 2; 28).

There is now no visible evidence for any of the harbourside railway lines, which are shown on Ordnance Survey maps until the 1969 edition (*see PRN 5349 below*).

There are a number of iron mooring rings and chains, from a number of periods, and timber stairways mainly from the 20th century, throughout the dock. A post-1969 concrete slipway leads into the west dock from the tarmacked car park now lying to the south (Fig. 2; 29).

(See Appendix III for aspects of the harbour constructional history)

Plate 7. The East Dock sluice showing the crane, from the east, December 1998.



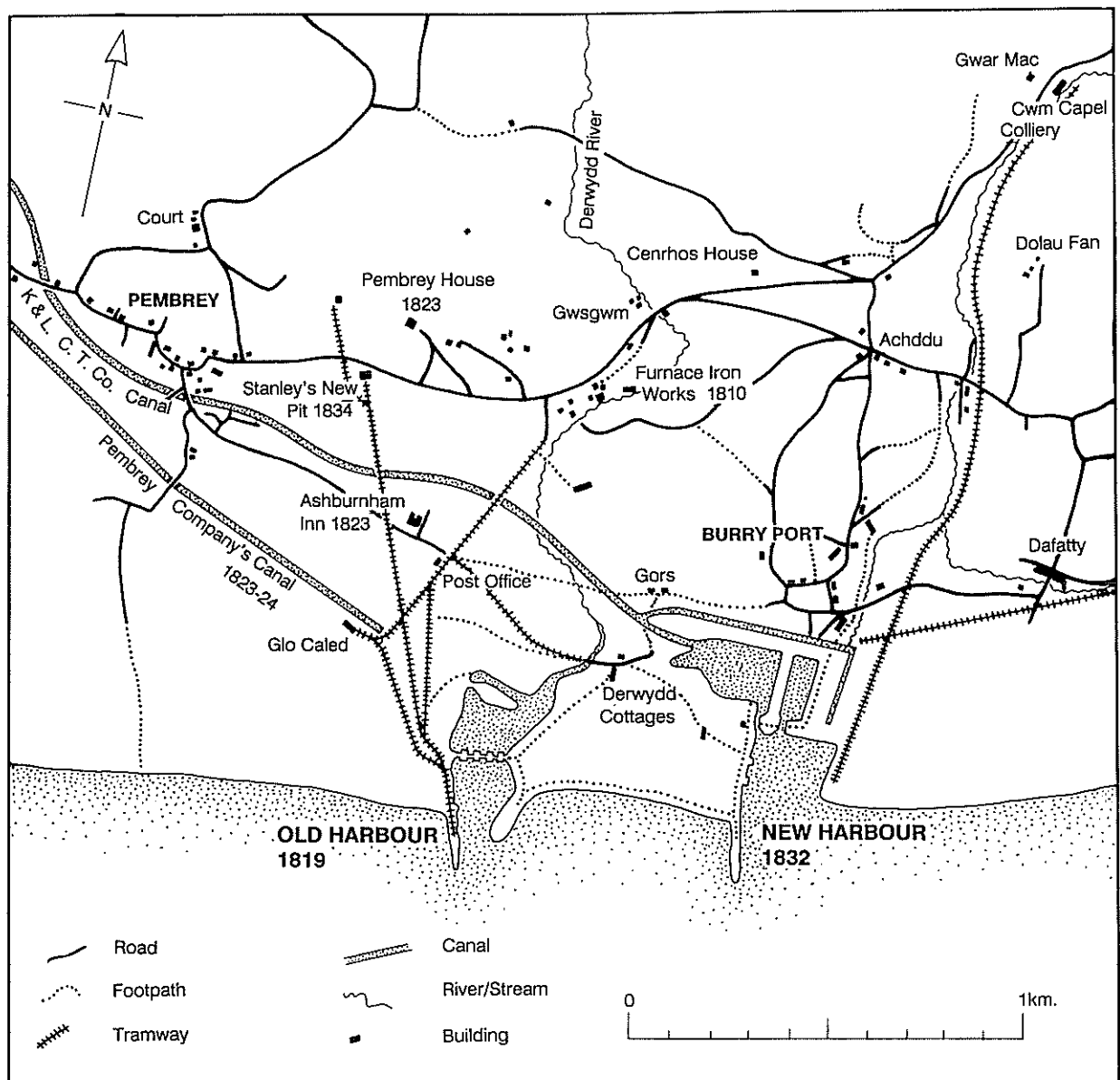
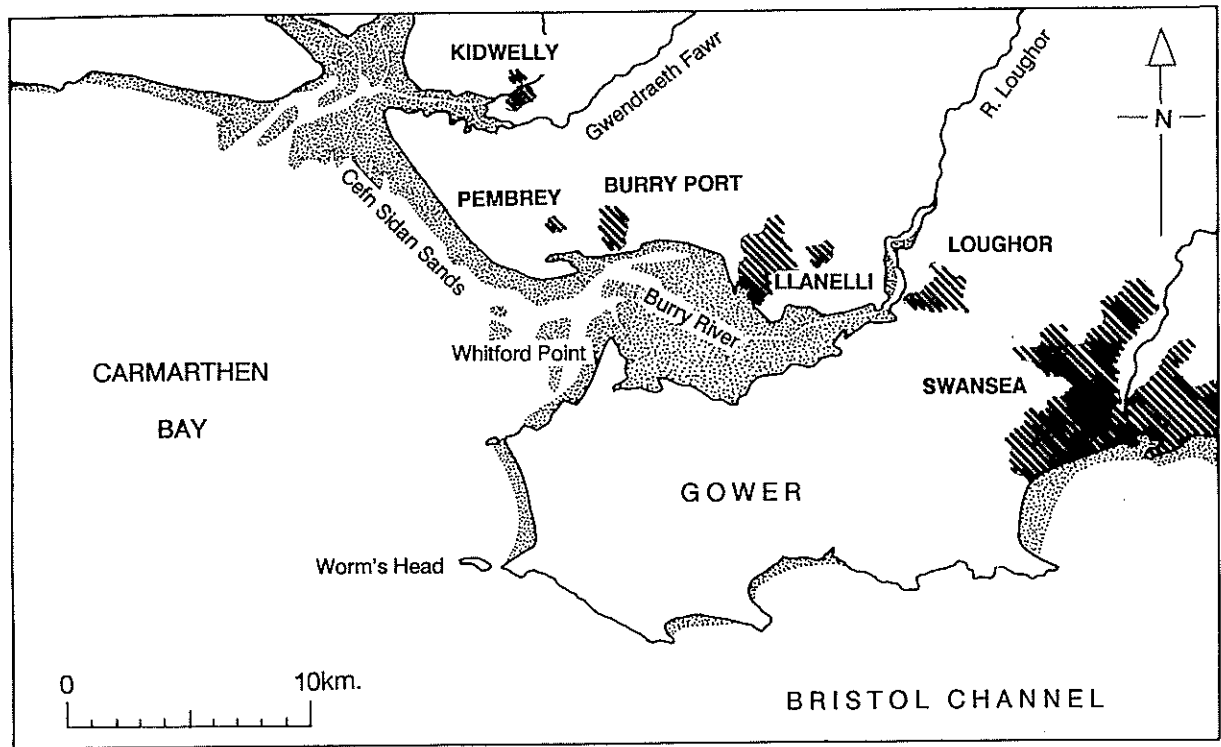
Plate 8. The East Dock sluice showing the winches, from the east, December 1998.



Plate 9. The East Dock sluice showing the lamp-post, from the east, December 1998.



Fig. 1. Site location maps (reproduced from Nicholson, 1991)



Location Map of the industrial and maritime activities in the Pembrey and Burry Port area, c. 1840.

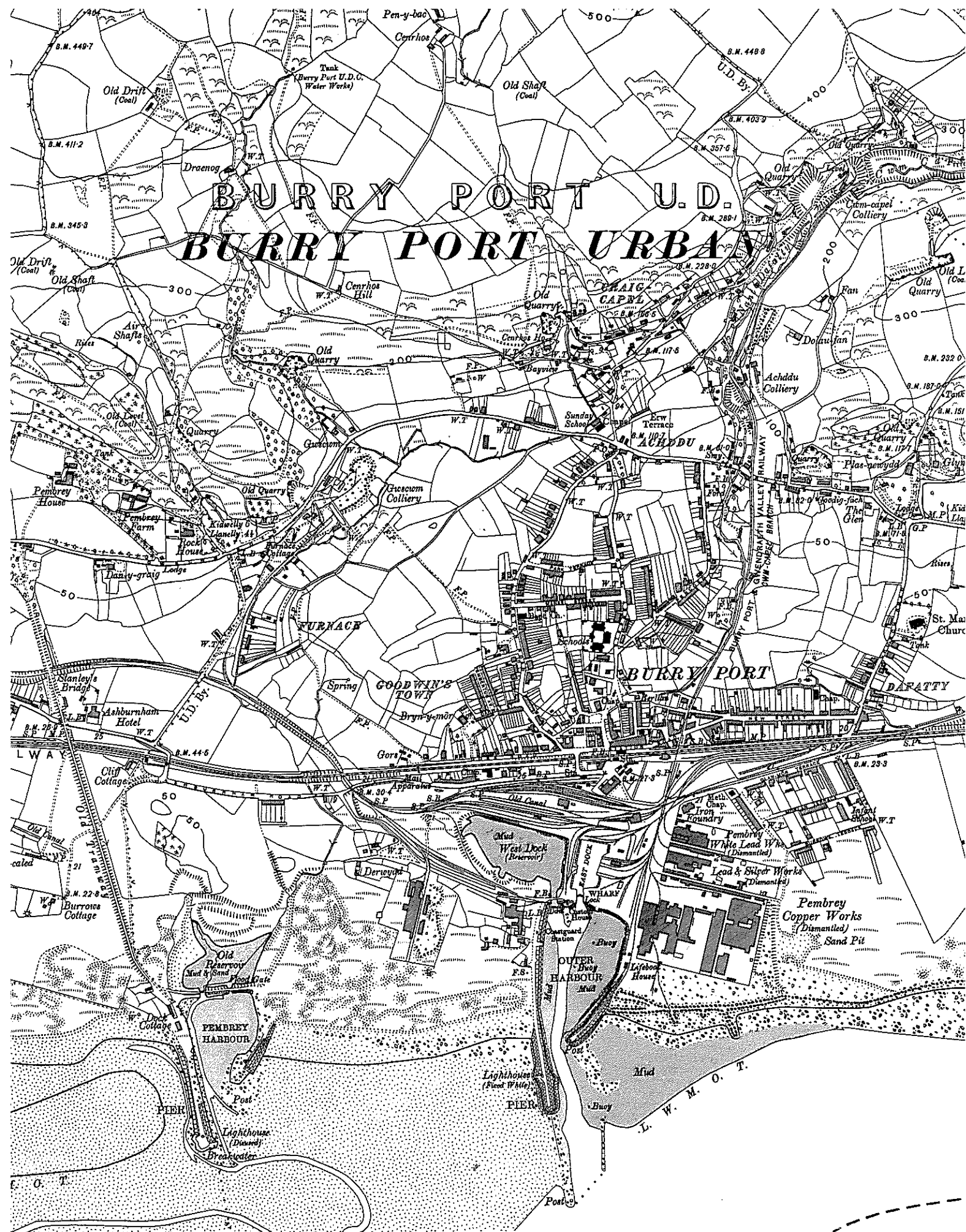


Fig. 14. Copy of Ordnance Survey, 1:2500, Carmarthenshire Sheet LVII.8, Edition of 1921 (surveyed 1878-86, revised 1913).

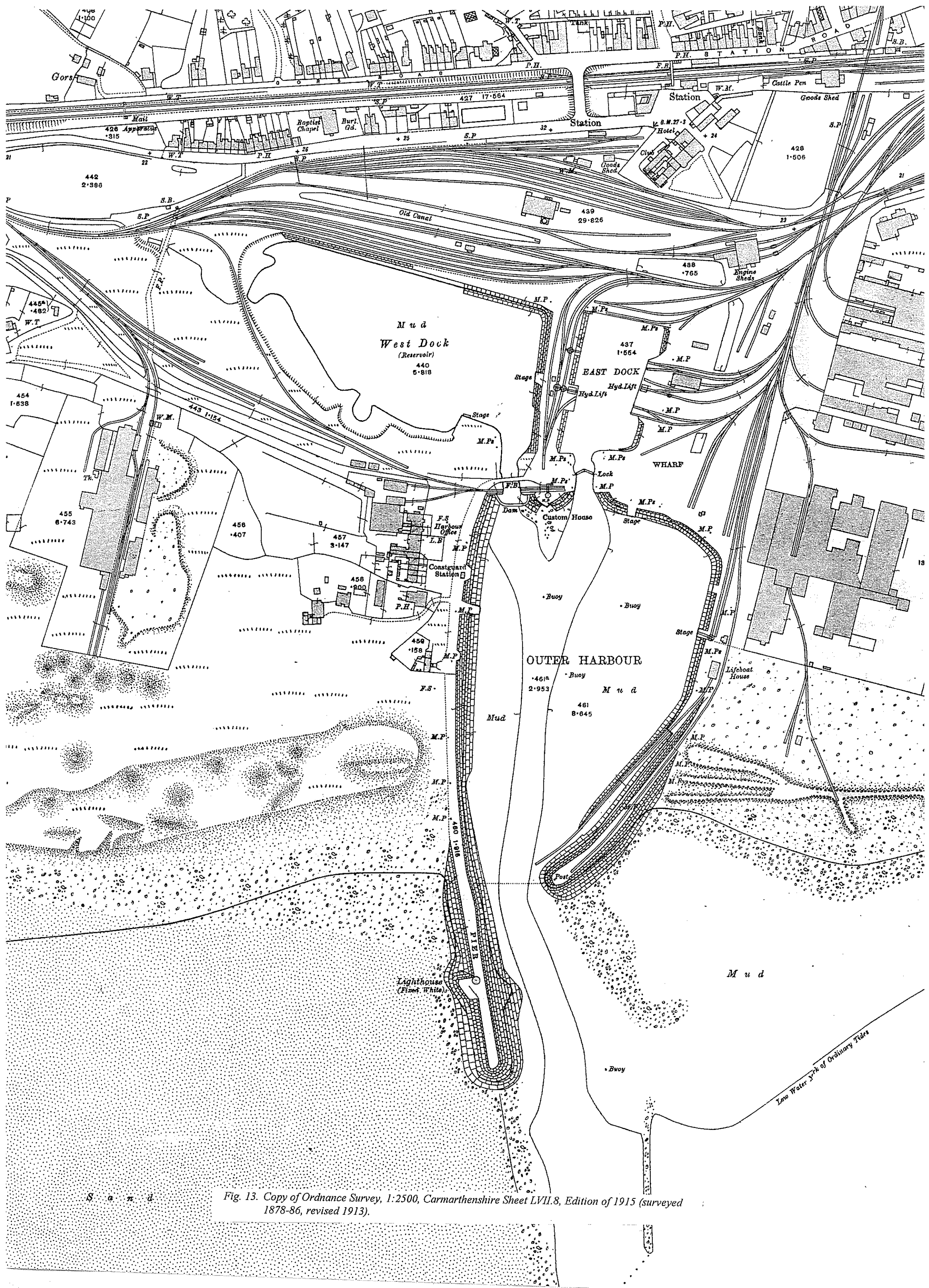


Fig. 13. Copy of Ordnance Survey, 1:2500, Carmarthenshire Sheet LVII.8, Edition of 1915 (surveyed 1878-86, revised 1913).

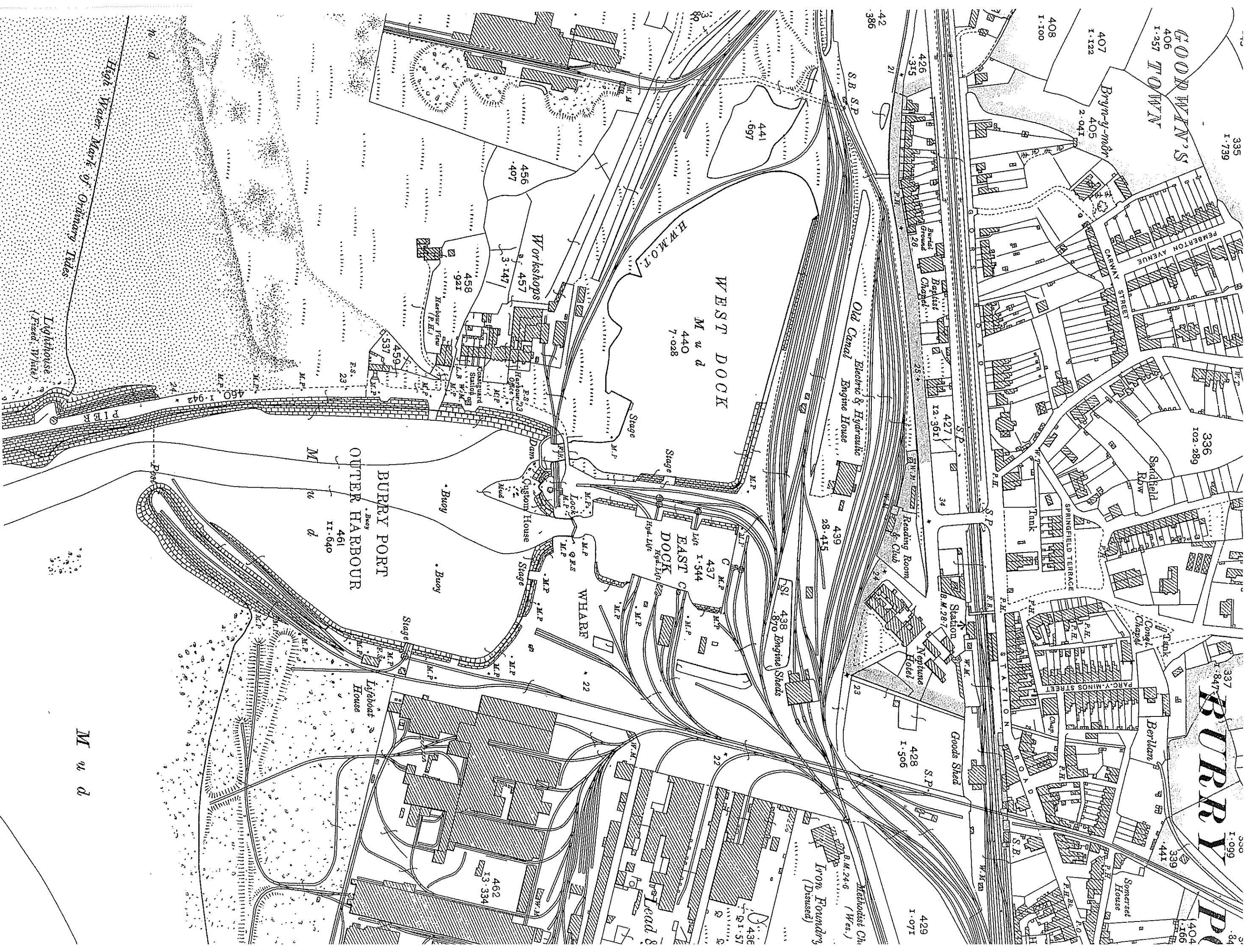
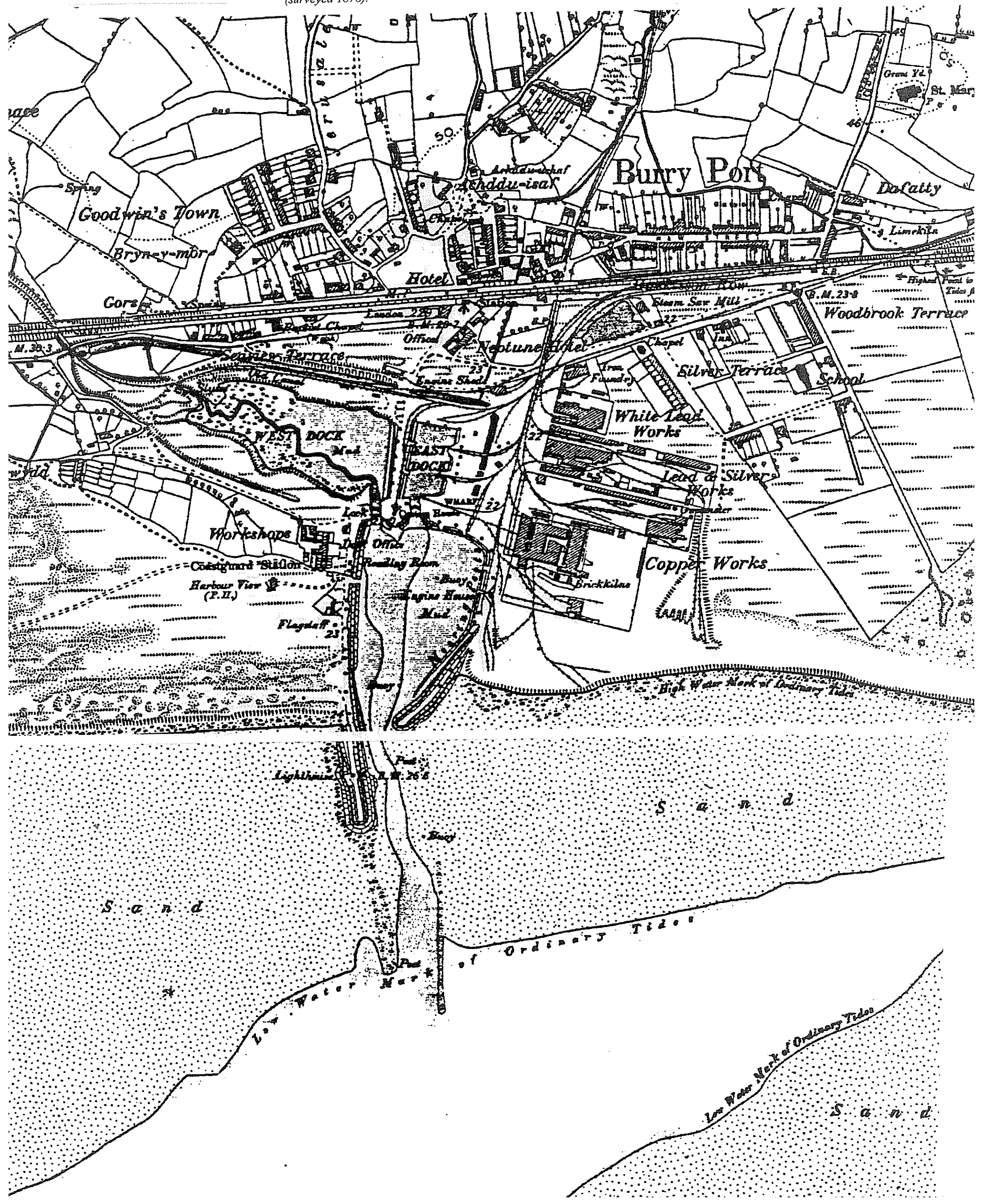


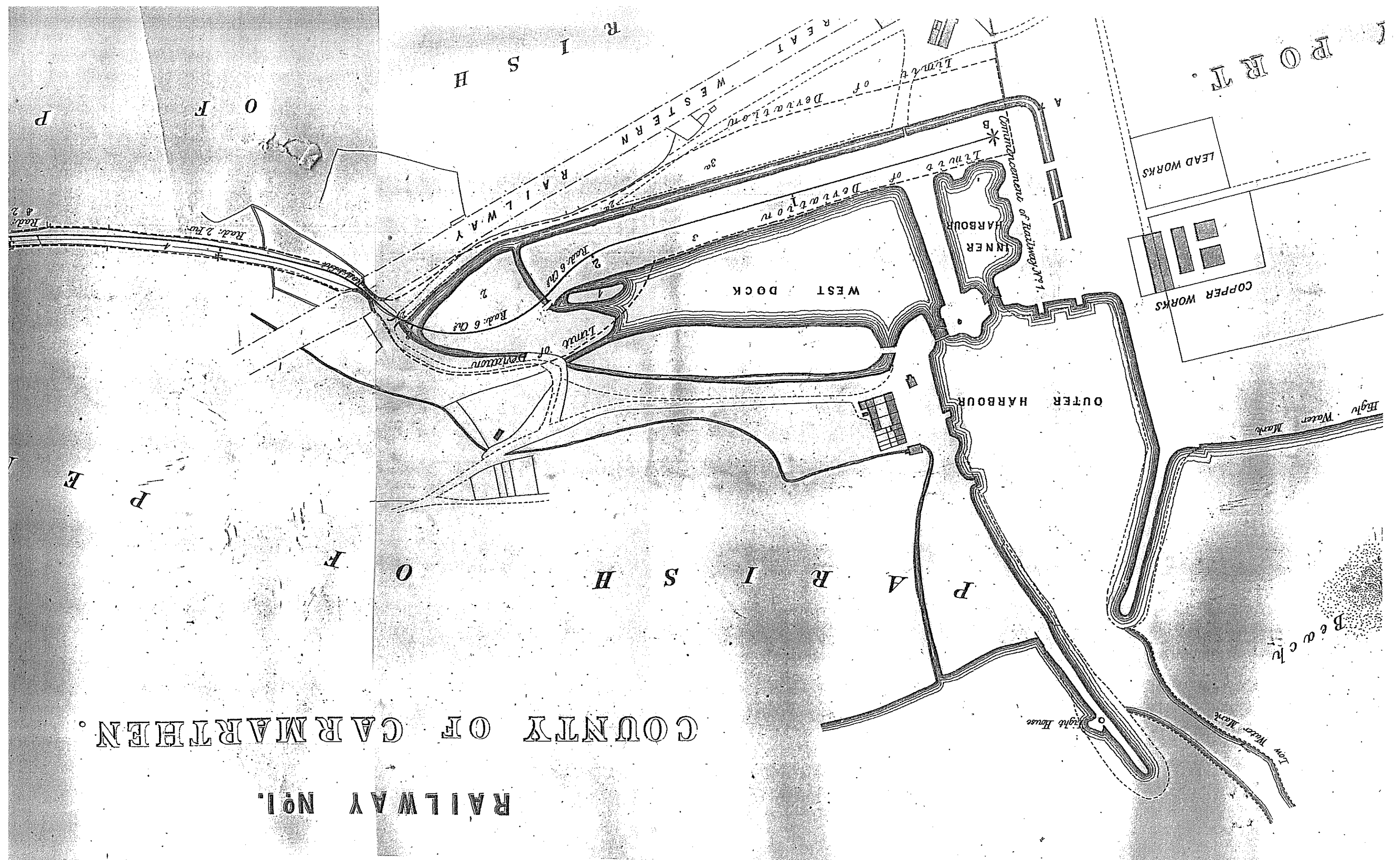
Fig. 12. Copy of Ordnance Survey, 1:2500, Second Edition, Carmarthenshire Sheet LVII.8, 1907.

Fig. 11. Copy of Ordnance Survey, 1:10560, Carmarthenshire Sheet LVII NE, First Edition, 1880 (surveyed 1878).



RAILWAY NO. 1. COUNTY OF CARMARTHEN.

Fig. 10. Copy of National Monuments Record, 'Proposed Line of the The Kidwelly & Llanelly Canal and Tramroad Company', c. 1864.



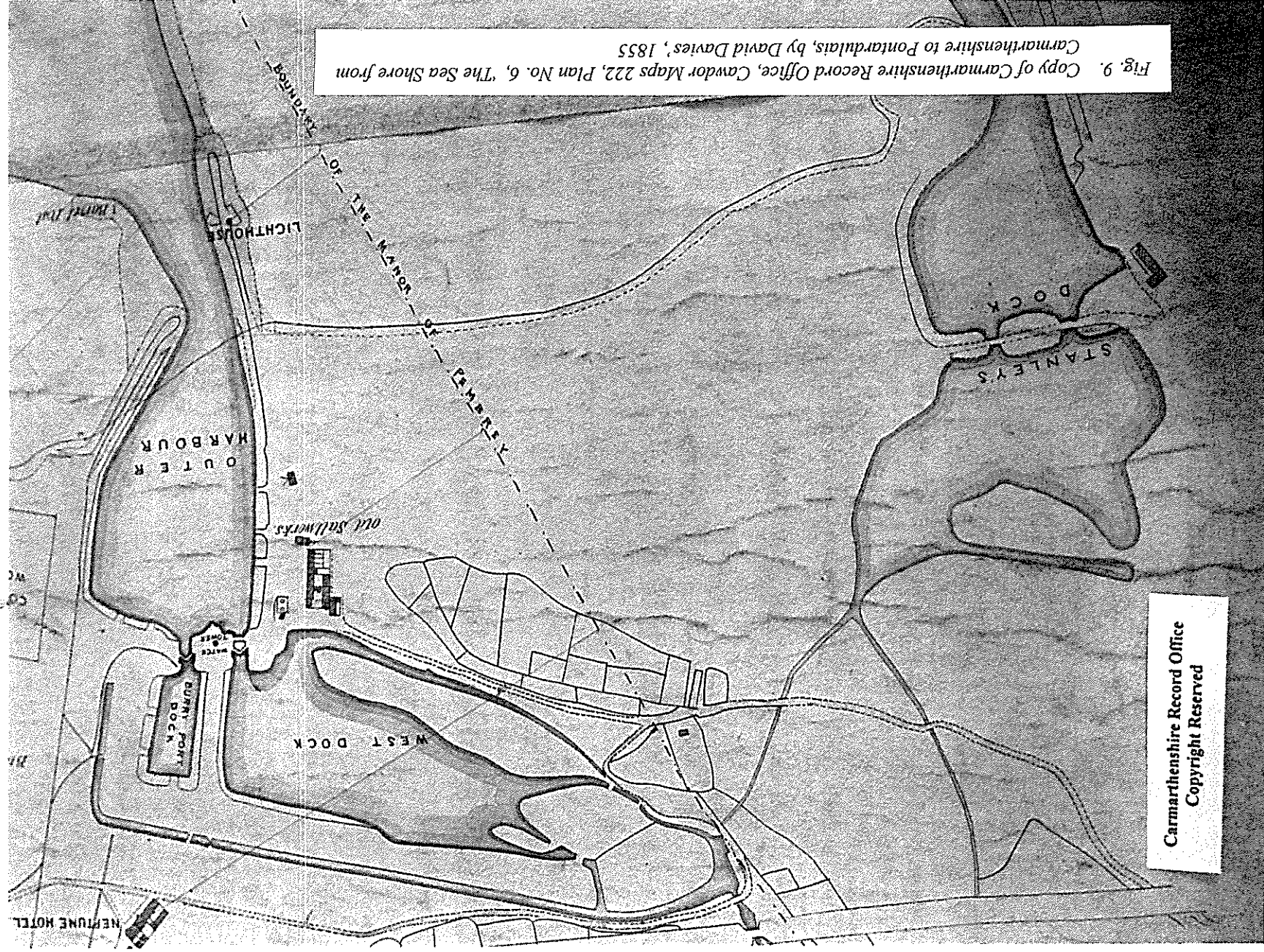


Fig. 9. Copy of Carmarthenshire Record Office, Cawdor Maps 222, Plan No. 6, 'The Sea Shore from Carmarthenshire to Pontardulais, by David Davies', 1855

Carmarthenshire Record Office
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Fig. 8. Copy of National Library of Wales, Parish of Pembrey, Tithe Map and Apportionment, 1839.



Fig. 7. Copy of Carmarthenshire Record Office, CH3, 'Harbour at Pembrey, Carmarthenshire, by James Green, Engineer', 1834.



B U R R Y R I V E R

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Fig. 6. Copy of Carmarthenshire Record Office, Cawdor Maps 2/44/415, 'Plan of the Llanelly and Kidwelly Canal, Carmarthenshire, as proposed to be finished by James Green, Civil Engineer', n.d., c.1833.

Fig. 4. Copy of Ordnance Survey, 1" to the mile Old Series, Sheet 37, 1830

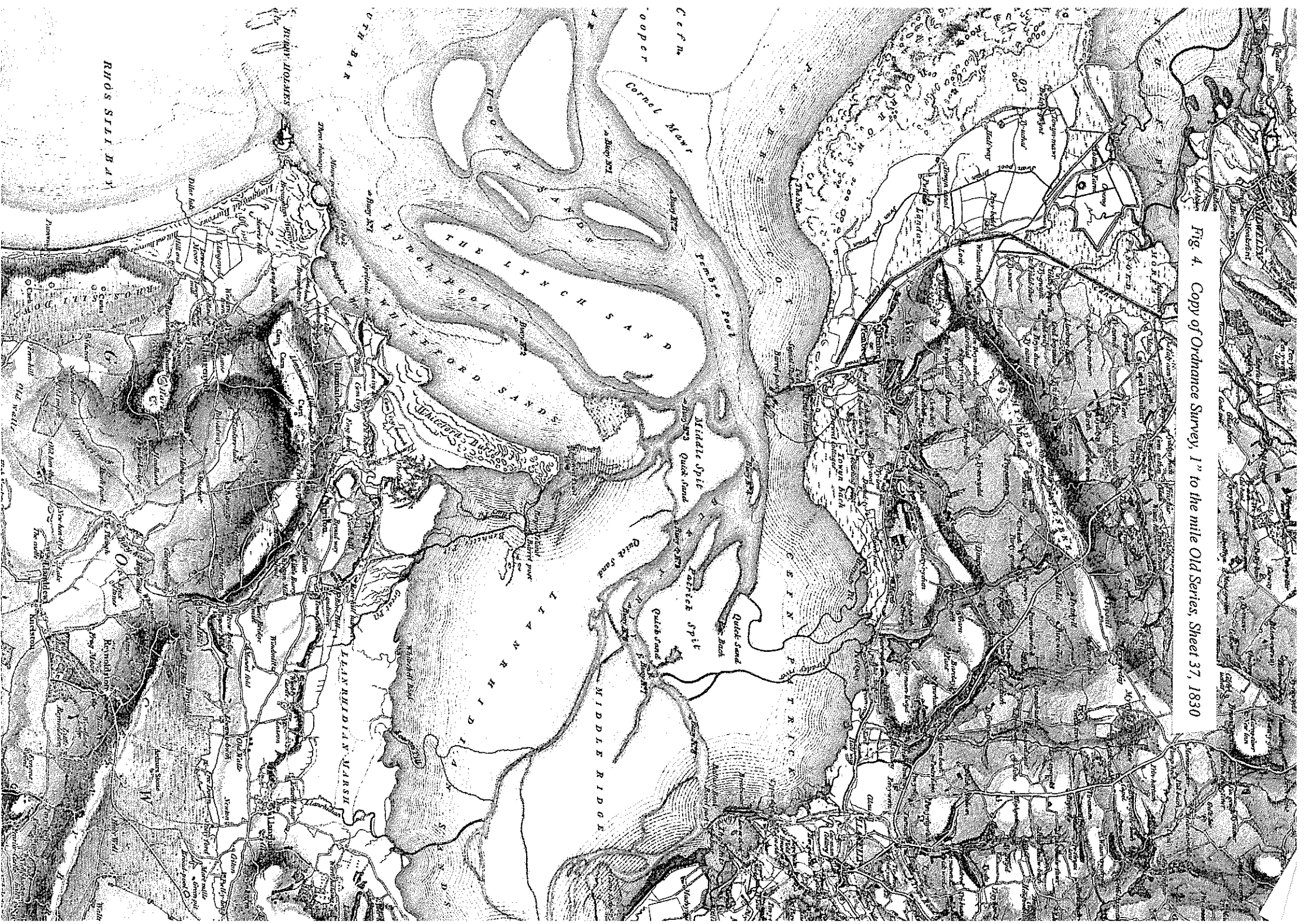


Fig. 2. Plan of Burry Port Harbour showing archaeological sites and features

