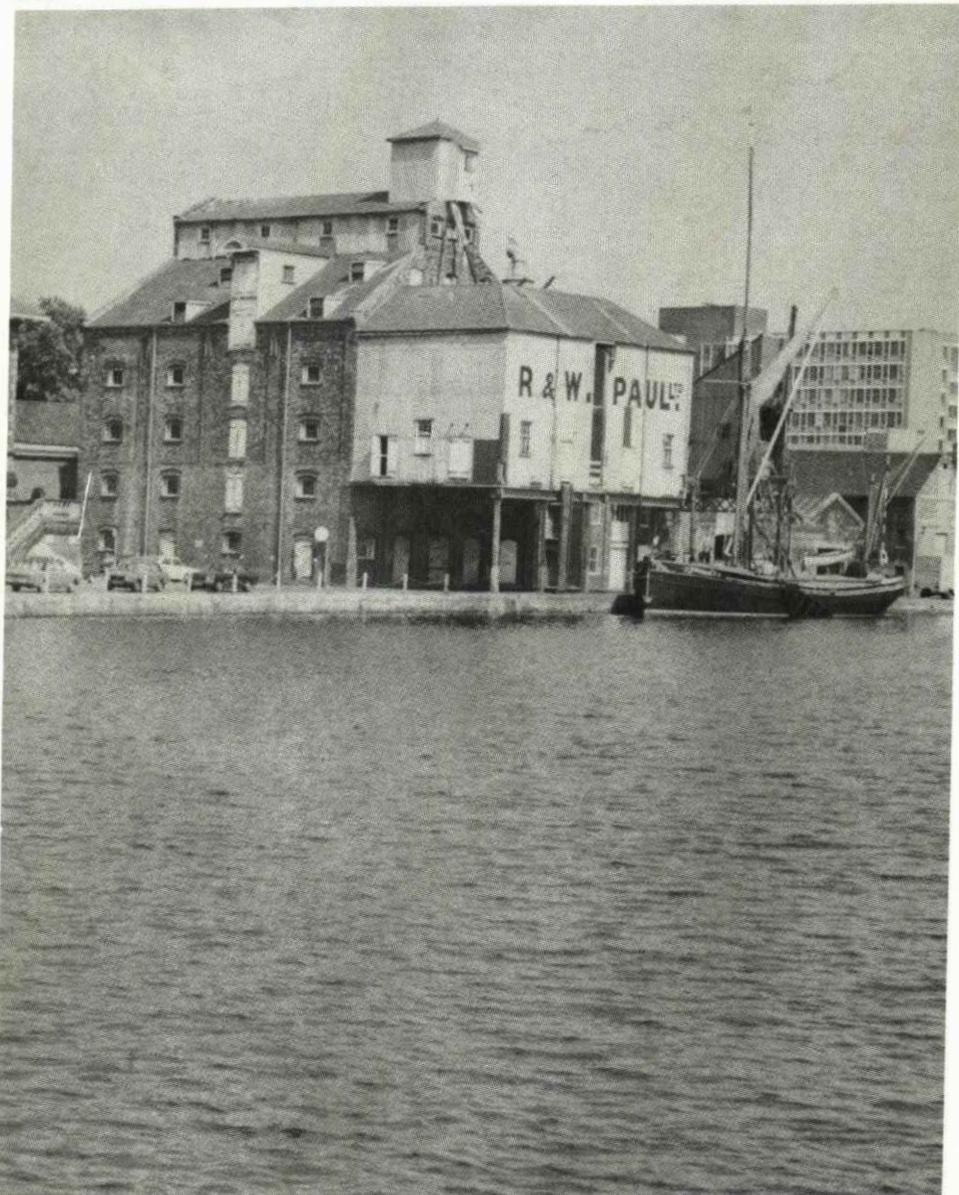


Industrial Archaeology in and around

# NORFOLK



# Industrial Archaeology in and around **NORFOLK**

by David Alderton

The purpose of this pamphlet is to draw attention to some of the sites of industrial archaeological interest to be seen on or near the main routes leading into East Anglia and particularly to Norwich. It includes museums which have substantial collections of industrial items and preserved industrial buildings. The main criterion for selection has been accessibility: sites have only been included if they are open to the public (though in some cases an appointment is needed), or may be adequately viewed from a public right of way. Within this criterion, an attempt has been made to cover a range of sites, but with some concentration on items which are especially well represented in East Anglia.

To write about the industrial archaeology of a rural county like Norfolk may seem somewhat perverse, especially to those from the major industrial areas of Britain. Norfolk, after all, lost its worsted industry to the steam mills of Yorkshire in the 1830s, and the county had no exploitable coal or mineral reserves to establish new heavy industries. However, such a view omits a number of factors.

Firstly, it is arguable that farming, and especially the high farming pioneered in Norfolk by men like Coke of Holkham, should be regarded as an industry. Certainly it required specialised buildings and increasingly used new power sources and specialised machinery to enhance production and reduce labour demands. Many of the great estates practised virtual self-sufficiency, with their own water-supply (that at Houghton Hall dates back to 1730), their own workshops, including forges and foundries, their own brickworks and limekilns and eventually even their own gas or electricity works. Secondly, agriculture created demands of its own for agricultural machinery and for fertilisers. The former was supplied by a multiplicity of foundries and workshops processing imported pig-iron, brought in by the coasters which took away grain. Some, like Burrells at Thetford, exported all over the world, others concentrated on local needs such as the demand for drainage mills and pumps in the Broads area met by Smithdales of Panxworth and Acle. Some of the first factories in the world for the production of artificial fertilisers were built in East Anglia, like James Fison's plant at Two Mile Bottom near Thetford. Considerably earlier, the rural limekilns were supplying lime for dressing the land as well as building. There was also the need to process agricultural products: with East Anglia being a major barley-growing area, a considerable number of maltings were built, most especially where coal imported by rail or sea could be used to malt barley brought by road or inland waterway, as at East Dereham or Yarmouth. Equally important were the steam roller mills which in the later 19th C began steadily to replace the multitude of wind and water mills, again at docks and railheads. However, natural power fought back, and East Anglian water and wind mills were improved and modernised. The Norfolk windmill, in particular, became a virtually automated piece of plant



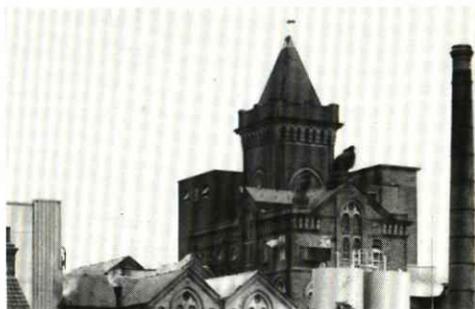
Thurne Dyke pumping mill

with the widespread use of patent sails and the fantail: some sails were even fitted with air-brakes. Finally, agriculture required a rapid system of communications for perishable foods, and a cheap system for bulk grain: rail provided the former and sea the latter.

In addition to the industries dependent on agriculture, there were a number of others which while having perhaps some connection with the land, were encouraged more by factors such as the availability of a pool of labour with certain skills. One example is the Norwich shoe industry, partly encouraged by the availability of leather from Norfolk tanneries such as that at Whitwell, but more by the availability of small 'garret' workshops and unemployed textile workers. In Diss coconut matting was woven, and in North Lopham some linen. Other industries grew in response to the demand for building materials: lime, bricks and cement were all produced, the latter two for sending to the London market in some cases. There were the industries supplying the needs of the local population, such as brewing and baking. Finally, there were the industries dependent on Norfolk's sea-coast — harbours, boat-builders and repairers, fish-preserving whether by curing or with ice (there is evidence for both in Yarmouth) and from the later 19th C, tourism. Yarmouth has an early cinema and one of the country's two hippodromes, purpose-built circus buildings.

Quite apart from the particular range of industries Norfolk has to offer, there are other factors which may make Norfolk of interest to the industrial archaeologist. Many of the firms were small scale, family businesses, supplying local needs which changed little between the mid 19th and mid-20th centuries. Thus there was little incentive to modernise or replace plant, especially in the years of agricultural depression before the Second World War. Because land was relatively plentiful and cheap, disused sites were not necessarily cleared. Buildings were often re-used. The ability to supply small-scale orders for specialist items has kept foundries like Thurton and Walsingham in business to this day, and it is possible to see plant and techniques in use in East Anglian industries which have died out elsewhere. Furthermore, there are certain regional variations in design of buildings or plant which are of some interest: for example, East Anglian limekilns are of a pattern not found elsewhere in England. There is much work

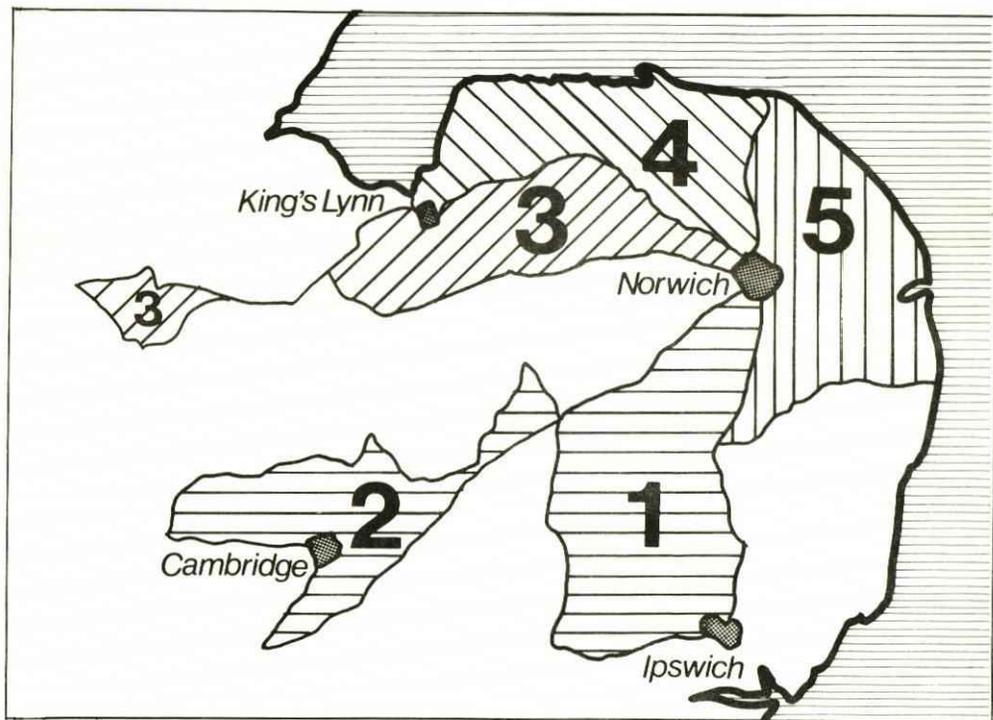
to be done on the reasons for such local variations, and also on the industries mentioned earlier in which East Anglia was a pioneer. Norfolk certainly has a contribution to make to the understanding of industrial change in development in England.



*Paine's Flour Mill, St Neots*

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East Anglia: Map showing route sections described in this guide

## Section 1 The Southern Approaches

This section is concerned with those roads which approach Norwich from the South, the main routes from East London and the South-East.

### 1. **Sudbury:** Navigation warehouses (TL 873408).

Fine pair of 18th C warehouses by basins at head of Stour Navigation. Basin holds the recently restored Stour lighter, which apart from the necessary addition of a rudder (Stour lighters worked in pairs, with a beam projecting from the bow of the rear lighter which became in effect the rudder for the fore lighter) is very similar to those shown in Constable's paintings. Also in Sudbury, buildings representing the stages of development of the silk industry: domestic workshops (Melford Rd, TL 871420) larger unpowered workshops to hold a number of handlooms (Cornard Rd, TL 880410) and modern factories.

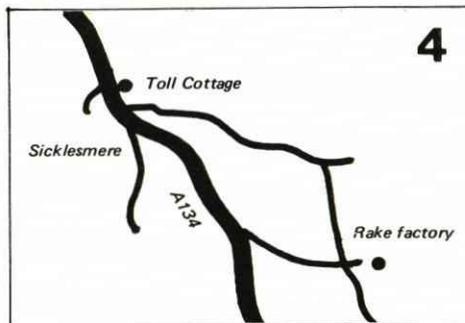
### 2. **Long Melford:** Maltings (TL 859443). Fine large range of 19th C maltings, between railway and A134 to S of town. Excellent example of a type very common throughout East Anglia.

### 3. **Glemsford:** Horsehair Manufactory (TL 832483). Sole surviving representative of a trade once common throughout the district. Buildings constructed in mid-19th C and little altered since. Not open to public, but buildings may be viewed from the B1065 through the village.

### 4. **Sicklesmere:** Rake factory (TL 897591). Wooden rakes and scythe handles still being made by craftsmen in factory equipped with overhead line-shafting. Open to public Mon-Fri 0730-1630 plus weekends July-Sept. Toll cottage (TL 877607). Nice 2-storey

octagonal cottage with pyramid roof and central chimney, 'Gothick' windows. To E of A134.

5. **Lavenham:** Horsehair manufactories (Barn St TL 917492, Water St. TI 917491, now the Lavenham Press, off High St TL 915495). Well-lit workshops still standing from the days in the 19th C when horsehair weaving was the town's main activity. Also in Prentice St (TL 917493) a good example of a 19th C steam corn mill. The display on the Guildhall (N T) includes photographs relating to local industries. The whole town is a monument to the Tudor cloth industry – the decline of which is revealed by the lack of later reconstruction.
6. **Layham:** Watermill (TM 033405). Late mill of 1905, with machinery from earlier timber mill destroyed by fire. Unusually for East Anglia, an exterior wheel, in iron.
7. **Hadleigh:** Coir-matting factory (TM 026422). Solid workshops with large windows and heavy buttresses to take the weight. Nearby (TM 025422) brick-built 3 arch medieval bridge over the Brett.
8. **Bentley:** Railway station (TM 119368). Interesting small station in the classical mood, built for the opening of the Eastern Union Railway in 1846.
9. **Ipswich:** Dock (TM 167442). The present dock was created in 1842 by digging a new cut across a bend in the river, and embanking the old river to create a sizeable basin which includes the Common Quay (in existence since at least the 13th C). The present lock is an improvement of 1881. The dock is worth visiting for the fine range of 19th C industrial buildings on the N side – mostly roller and oil-cake mills – and for Isaac Lord's warehouses (TM 169441). This complex is the oldest in Ipswich and one of the oldest in England. Furthest from the present quay lie the oldest buildings, including a house (almost certainly much older than the 1636 date on the frontage), 15th C and Tudor warehouses. Nearer the quay are 18th and 19th C stores and maltings. Permission to view from the owners, Isaac Lord Ltd, Ipswich 53669. Corset factory, Tower Ramparts (TM 162448).



Fine 4 storey block of 1881, representing one of Ipswich's most important 19th C industries, and still making underwear.

Tramway Depot & Power Station, Constantine Rd (TM 155443). 8 track depot built for electric trams in 1903. Now used for buses, but traces of tracks remain. Behind, in similar style, the corporation power-station of the same date.

10. **Baylham:** Watermill (TM 113527). Fine and well-preserved example of typical Suffolk mill: brick ground-floor on bridge over stream, 2 further weather-boarded floors plus attic above. Complete with wheel and plant, but not worked and not open. Beside the mill one of the best examples of an Ipswich & Stowmarket Navigation lock (but note that the top gates are a modern replacement).
11. **Needham Market:** Church roof (TM 087552). Remarkable 15th C timber engineering : 'the culminating achievement of the English carpenter' (Cautley) – 'a whole church with nave and aisles and clerestory seemingly in the air' (Pevsner). Most remarkable feature of the design is that this is an open roof with no outward thrust on the walls.
12. **Combs:** Webb's Tannery (TM 053562). Most of the 18th C buildings of this tannery established in 1720 have gone, but a number of 19th C buildings remain, including a typical drying shed with louvres to the top floors. In place, but not generally accessible to the public, a complete steam plant of 1851 with a single cylinder grasshopper engine. Sheepskin shop at tannery open Tues – Sat 9.30 – 1.00 & 2 – 5. Nearby (TM 042566) Webb's Model Farm, prizewinning design of 1865.



13. **Stowmarket:** Museum of East Anglian Life, Abbot's Hall (TM 047584). Large collection of farm implements and machinery, plus re-erected buildings which include a smithy, Alton Watermill, and Minsmere Windpump, all in working order. Open 1/4 to 31/10, Mon-Sat 11 – 5, Sun 2 – 5 (2 – 6 in June to August). Railway Station (TM 051589). Much admired station in the Jacobean style, designed Frederick Barnes, built for Ipswich & Bury Railway in 1846. All the stations on this line are worthy of attention.

14. **Drinkstone:** Windmills (TL 964622). Post-mill, probably of 1689, 2 common + 2 patent sails. Worked occasionally until recently, now needing restoration. Nearby a derelict smock-mill.

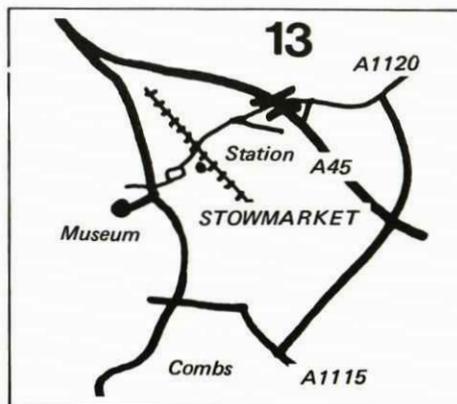
15. **Bury St Edmunds:** Thingoe Maltings, off Fornham Road (TL 852653). Fine late 19th C maltings in two parallel ranges by railway. Still used for floor malting. Greene King Brewery, Westgate St (TL 856638). A number of brew-houses and maltings line Westgate St. The oldest, beside Bridewell Lane, is dated 1789, prior to the establishment of the present company. Many buildings done up in Edwardian Tudor style.

16. **Pakenham:** Watermill (TL 937695). 18th C with 19th C frontage. Recently restored to full working order by the Suffolk Preservation Society. Has 16' iron wheel by the local Bury firm of Peck and 3 pairs of stones. Open to view 18/4 to 30/9 Tues, Thurs, Sat, Sun and BH Mons, 2 – 5. Windmill (TL 931694). Fine tower mill, still occasionally worked. Occasional open days, readily visible from road.

17. **Saxtead Green:** Windmill (TM 253644). Magnificent example of a Suffolk post-mill at the peak of its development sadly over-preserved and over-protected by the DoE. Built in the late 18th C, thrice raised on an ever higher roundhouse, provided with patent sails and a fantail. Immediately N of A1120. Open Mar-Oct, daily 09.30 – 1800 (but closed for lunch).

18. **Framdsen:** Windmill (TM 192597). Fine large post-mill, second tallest in the country at 48'

high. Built 1760, raised and enlarged 1836. Restored, but not regularly worked. Occasionally open to public: may be viewed from B1077.



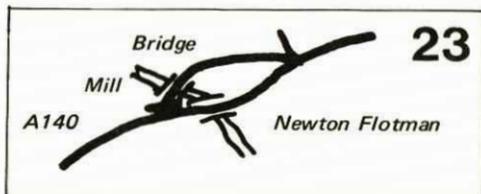
19. **Debenham:** Cyder House, Aspall Hall (TM 170653). Early 18th C cyder House, containing preserved horse-powered crusher and hand-press. Used as shop for sales, and thus viewable weekdays 9 – 12.30 and 1-30 – 3.30 On B1077 1½m N of Debenham.

20. **Billingsford:** Windmill (TM 167786). Last working tower-mill in Norfolk, now in ownership of Norfolk Windmills Trust. Fully equipped. Open Suns in Summer, or key may be obtained from nearby pub. 100 yds S of A142, 2m E of junction with A140 at Scale.



Aspall Cyder House, Debenham

21. **Scole:** Coaching inn (TM 149789). Scole Inn, very fine example of 17th C inn, modernised in a way which allows the old building to be seen. At junction of A140 and A143. Access in licensing hours – and it serves real ale.
22. **Bressingham:** Live steam museum (TM 080807). Over 50 steam engines of various types, many in steam whenever the collection is open. Includes main-line locomotives (with footplate rides), narrow-gauge steam lines, road locomotives and steam-driven fairground gallopers. Open 3/5 – 27/9 Suns 1.30 – 6, 28/5 – 10/9 Thurs 1.30 – 5.30, plus Weds in August and Bank Holidays between Easter and August. On A1066, 2½m W of Diss.
23. **Newton Flotman:** Packhorse bridge (TM 213979). Narrow stone bridge of 3 arches buried in later turnpike bridge – needs to be viewed from side. On cut-off section of A140 immediately W of modern bridge (access from N side).
24. **Hellesdon:** Railway bridge (TG 200100). Fine example of M & GN's A-frame type – unusual in Britain, if common abroad. River bridge (TG 199100). Early 19th C cast-iron.
25. **Earlham, Norwich:** Horse engine, Earlham Hall (TG 192080). Wooden horse-gin with own house in a corner of the courtyard, driving triple-throw pump. Hall now part of University of East Anglia, access any reasonable time.
26. **Besthorpe:** Road monument (TM 083977). Monument to Sir Edwin Rich, who in 1675 gave £200 towards the cost of repairing the Attleborough-Wymondham Road. On S side of A11 – to view, park in layby on N side of road, some 200 yds on Norwich side of King George V pub. The monument is just across the road at the Norwich end of the layby.
27. **Thetford:** Bridge (TL 868831). Single span cast-iron bridge of 1829 on original main road through the town. Immediately NW the last survivor of the many warehouses and maltings which once lined the river banks. Immediately NE the Bell Hotel within which can still be traced the galleries surrounding the courtyard of the coaching inn it once was. St Nicholas Ironworks (TL 867833). Many buildings remain of Burrell's traction-engine works, notably the paintshop, with curved roof and tall doors, adjacent to St Nicholas St. A plaque marks the office blocks.
28. **Weeting:** Grimes Graves (TL 817987). Extensive remains of neolithic bell-pits, dug to obtain the high quality flints to be found in a layer some 20' below the surface. Worked from c2,000 BC for over 300 years. Access to one pit, small museum. In care of D of E, open daily 9.30 – 6.30 (Summer), Mons – Sats 9.30 – 4 Suns 2 – 4 (Winter).
29. **Banham:** Motor Museum (TM 060877). Collection of motor-cycles and cars from 1920's to 50's. Open 23/5 – 30/9, daily 10 – 6 plus winter Suns. On B1113.

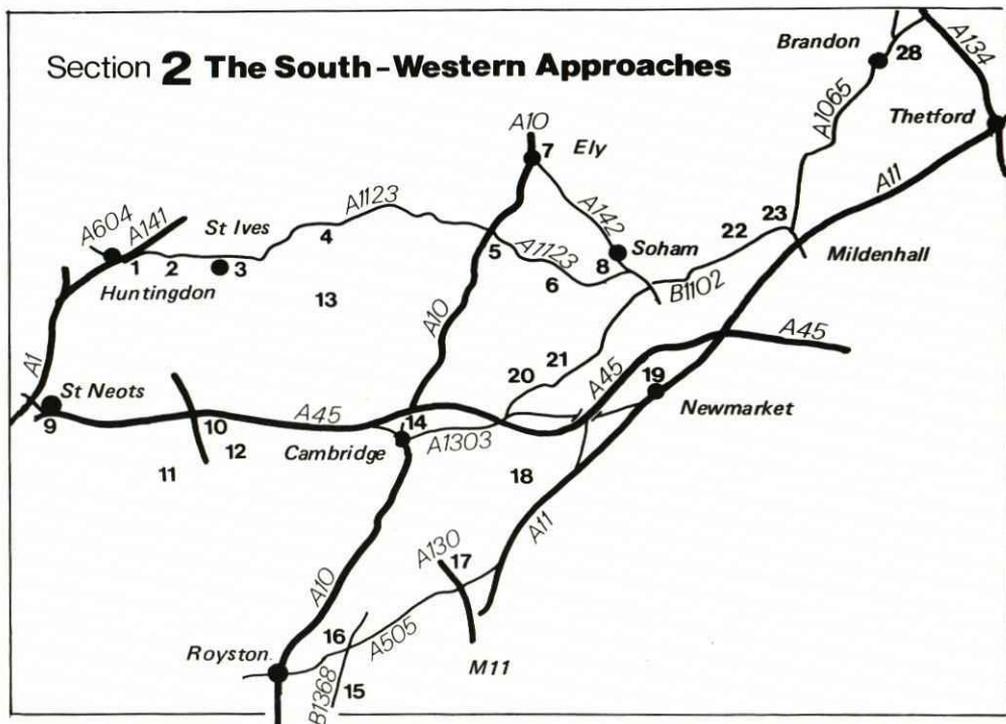


## Section 2 The South-Western Approaches

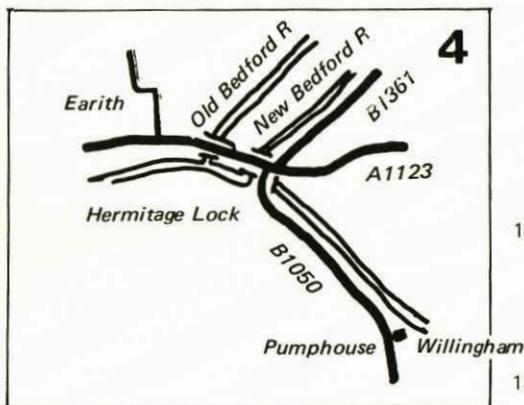
This section covers the roads which approach Norwich from the South-West, the main routes from the Midlands and North and West London.

1. **Huntingdon:** Bridge (TL 243714). Multi-arched stone bridge of c1370, carrying the Old North Road across the Ouse. Immediately E (technically in Godmanchester) a fine 3-storey steam mill c1858, recently restored and converted. Built for corn, later used for hosiery.
2. **Houghton:** Watermill (TL 282720). Large wooden mill, in care of NT but leased to YHA. Most machinery removed: small amount including pit-wheel and drive-shafts remains. Access by permission of the Warden.

## Section 2 The South-Western Approaches



3. **St Ives:** Bridge (TL 313712). Multi-arched stone bridge of c1415, one of the few medieval bridges to retain its chantry chapel (dedicated to St Lawrence). Across the river, S of the bridge (TL 313710) a superb 6-storey steam corn-mill, built in early 1860s between river and railway. Some of the river warehouses of the 18th C survive N of the bridge, the best preserved now the premises of the St Ives RC (TL 312713). On the A1123 E of town tall 18th C pillar giving both directions and distances – one of a series erected in Hunts in the 1770s. At junction with B1040.
4. **Earith:** Fen Drainage. At E end of village the waters of the Ouse are diverted along the New Bedford River, built by Vermuyden in the 1650s. Somewhat W of this, Vermuyden's earlier Old Bedford River of the 1630s which serves as the main drain for the Middle Level. To the E of these, Hermitage Lock (recently rebuilt) marks the start of the Old West River, the original course of the Gt Ouse. Many pump-houses survive in the area: that at Willingham (c¼ mile SE along the B1050 from Hermitage Lock, TL 406735) contains a preserved Ruston & Hornsby diesel and 1902 turbine-pump in working order plus other engines and drainage equipment: open occasionally.
5. **Stretham:** Fen Pumping Engine (TL 517730). Oldest surviving Fen engine, built by Butterley Co in 1831. Large beam engine, with scoop wheel for lifting the water. Some minor modifications of 1909, otherwise as built: worked to 1941. Open daily, 0800 – 2000. Access by minor road off A1123 in centre of Stretham village, marked by a rather easily-missed sign.
6. **Wicken:** Wind-pump (TL 562706). The only remaining Fenland windpump, a tiny smock-mill built as a trestle mill in 1908. Common sails and tailpole. Removed from original site on Adventurer's Fen and rebuilt on Wicken Fen in 1955. Working order, but not normally open. May be viewed from NT's Wicken Fen Reserve, signposted from A1123.



7. **Ely:** Cathedral (TL 541803). While cast-iron addicts may gloat over the Gurney stoves, and railway enthusiasts the tombstone in the S porch with its complex railway metaphor, the cathedral's most remarkable IA feature is the timber engineering of the octagon, suspended in space over the crossing. Turnpike marker (TL 544794) to E of A142 in Bridge Rd – unusual survival marking the boundary of the turnpike to Soham. Nearby the classical railway station of 1845 is worth a look.

8. **Soham:** Downfield Mill (TL 608717). Fine tower-mill, converted from a smock mill, hence its rather unusual shape. Largely restored, and in working order. Open Apr-Dec, 1st Sunday in month + B H Mons, 1400 – 1800. At junction of A1123 with A142.

9. **St Neots:** Flour Mill (TL 184606), Bedford St. St Neots' answer to St Pancras Station. Massive mill in Victorian Gothic, designed 1872, though present building is a 1906 rebuild after a fire. Further E along the road a maltings in related style.

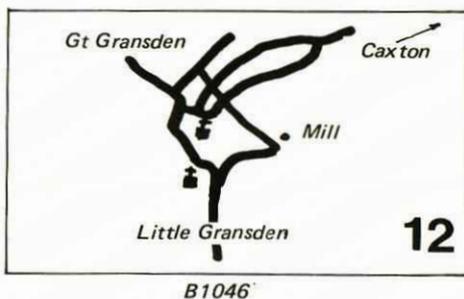
10. **Caxton:** Gibbet (TL 297606). Immediately S of roundabout where the A14 and A45 intersect. One of the few surviving gibbets: a reminder of 18th C road hazards.

11. **Bourn:** Windmill (TL 312580). Post-mill in very early style, though seems to have been rebuilt with many of original parts after being blown down in 1741. Certainly represents the medieval tradition in the style of the buck (body) and in the lack of a roundhouse, though

most of internal machinery is 19th C. 4 common sails and tailpole. Whatever the doubts about the date, externally as close as you will find to a 16th/17th C mill. Open Apr-Sept daily, 10.00 – 18.30. Easiest access from A14 by minor road running E towards Bourn in Caxton village, 1½m S of Gibbet roundabout.

12. **Great Gransden:** Windmill (TL 277555). Early post-mill, very likely that built on this site in 1612. Tailpole, no roundhouse, 2 common, 2 spring sails. In poor state of preservation, not open.

13. **Over:** Brownhill Stauch (TL 370727). Still retains many 19th C features, including winch operated upper gates. Least altered lock on the Great Ouse. Windmill (TL 381689). Privately restored to working order. Tower mill with unusual conical cap. Open occasionally.



14. **Cambridge:** Cheddars Lane Pumping Station (TL 465593). Sewage-pumping station of 1894 retaining the original Hathorn Davey compound engines and later plant driven by gas and electricity. These form the nucleus of a collection of industrial and scientific material gathered from the Cambridge area. Run by a trust, and restoration by volunteers. Open 1st Sunday in each month, 1400 – 1800. Off the A1303 (ex A45) ½m E of city centre. Jesus Lock (TL 450593). Typical Cam Commissioners lock, built 1830s. Unusual curved balance beams. Adjacent cottage. In Jesus Green.

The bridges across the Cam along the Backs (behind the colleges) illustrate most styles and building materials from Renaissance stone to post-tensioned concrete of 1960.

15. **Great Chishill:** Windmill (TL 413388). Post-mill rebuilt 1819 using timbers from its predecessor. Unusually for mill of this period, no roundhouse. Fitted patent sails and fantail in 1890. Complete machinery. Preserved in non-working order, access any reasonable time by procuring the key from the holder (details at the mill). On B1039 between Barley and Gt Chishill.

16. **Melbourn:** Milestone (TL 408430). Particularly fine example of a 'Trinity Hall' milestone, one of the first regular series in the country. Erected 1731, this series marked distances from Cambridge on the old route to London (the present B1368). This stone at the junction of the A505 and B1368 has distances for both roads and the Trinity Hall shield.

17. **Sawston:** Tannery (TL 488481). Eastern Counties Leather Co, producing chamois leather. Louvres drying sheds visible, especially if visiting the factory shop. Established 1879, beside the road on S side of village. Further N on same road the rather older buildings of Hutchings & Hardings (mid 19th C).

18. **Fulbourn:** Fleam Dyke Pumping Station (TL 539549). Water pumping station completed 1921, retaining Hathorn Davey compound engine of 1921 and associated pump. Worked until 1976, now preserved. Access by permission of the Superintendent.

19. **Newmarket:** Racing stable (TL 649633), off Vicarage Rd. Perhaps the finest example of a Victorian stud stables, in elaborately decorated red brick. Many other examples in and near the town, which is **the** place to study the industrial archaeology of the horse-racing industry.

Mileposts (TL 655647). Fine pair of mileposts, one in cast-iron, the other stone with cast-iron plaque. One each side of the road at the junction of the Norwich and Bury St Edmunds roads on NE side of town.

20. **Lode:** Anglesey Abbey Watermill (TL 530626). Small timber-built mill on NT estate, with iron undershot wheel. Being restored to working order. Can be seen from Lode village: full access through the NT estate.



Chamois tannery, Sawston

21. **Swaffham Bulbeck:** Commercial End (TL 556632). Inland port on Swaffham Lode (which is probably Roman in origin). Many of present buildings provided by Thomas Bowyer who built up a substantial trade here in the early 19th C. Buildings include maltings, warehouses, granaries and cottages, plus a later steam-mill. Access by signposted minor road off B1102 immediately NE of village.

22. **Worlington:** King's Stauch (TL 692743). Substantial remains of a flash-lock, including lock island, some timber-work and adjacent cottage. Initials TGC stand for Sir Thomas Gery Cullum, who rebuilt the navigation in the 1830s and 40s.



23. **Mildenhall:** Navigation locks (TL 707743 & 710743). Downstream lock was originally a flash-lock: converted to a turf-sided pound lock in 1890. Upstream lock a conventional pound lock provided at the same time (when the navigation to Bury St Edmunds was being revived). The B1102 crosses the river between the two. Also a small warehouse (probably originally a mill) and a little NE the large Lark Mills of 1908 and navigation pub.

## Section 3 The Western Approaches

This section covers those roads which enter East Anglia from the West and North-west, the main routes from the North and the North Midlands.

1. **Stamford:** Stamford Brewery Museum, All Saints' Brewery (TF 026070). Preserved 19th C brewery with additional exhibits including the equipment from the estate brewery at Kimbolton Castle. Sells real ale during licensed hours. Open Weds-Suns, 0900 – 1600. BH weeks open Mons, not Weds.

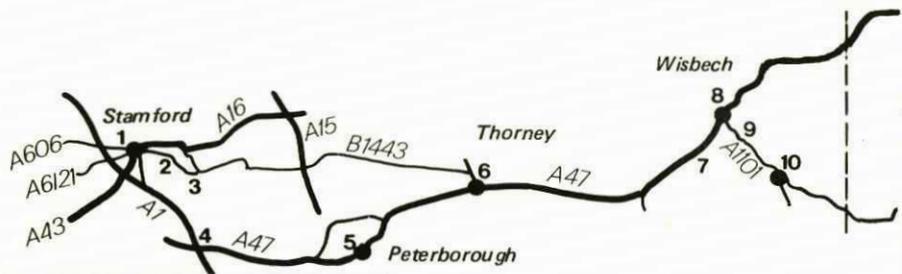
4. **Wansford:** Road bridge (TF 074992). Mostly 16th & 17th C stone bridge across the Nene, carrying the Great North Road. Southern arches rebuilt to provide clearance for barges on the navigation in 1795.

Sacrewell Mill (TF 079000). 18th C stone-built mill with working waterwheel and collection of bygones. Open by appointment (Stamford 782222).

Railway Station (TL 093980). Large stone Jacobean style buildings, now the headquarters of the Nene Valley Railway. Steam services every weekend Apr-Oct, plus Weds & Thurs in June, July & Aug. Train times BR Table 500, or ring Stamford 782854.

5. **Peterborough:** Man-powered crane in cathedral (TL 194986). Medieval crane, may be seen by arrangement with verger.

## Section 3 The Western Approaches



Midland Railway Station (TF 028066), still in use, and Great Northern Station (TF 038072), in commercial use, are both good examples of 19th C design, the latter being designed to be in line with the nearby Burghley House.

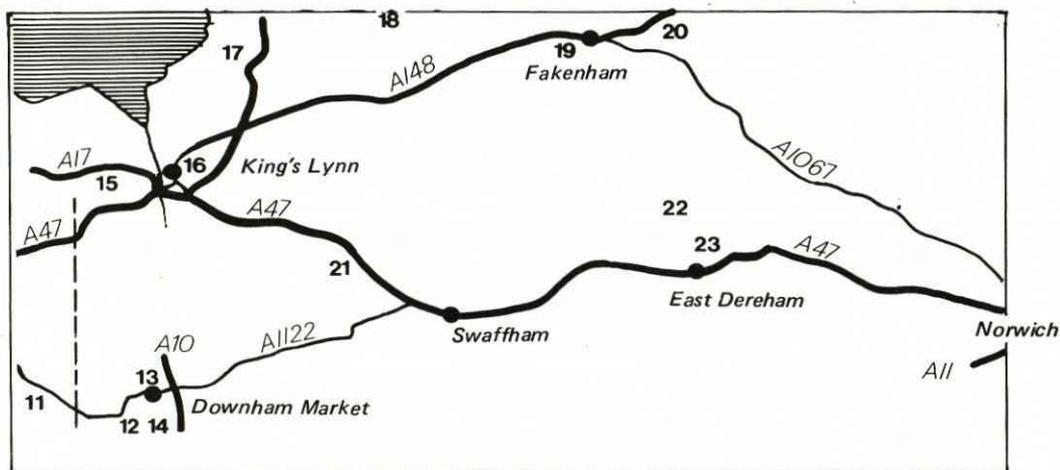
2. **Uffington:** Stamford Canal (TF 066069). This early canal of the 1670s may be traced at various points between Stamford and Market Deeping, but is clearly visible from the road at this point to the S of Uffington Park.
3. **Barnack:** 'Hills and Holes' (TF 075045). Roman and medieval stone quarries and spoil heaps. Barnack stone was used for many Fenland and East Anglian abbeys and churches: it was, of course, transported by water.

Railway bridge (TL 191982). Fine cast-iron bridge of 1850, still carrying main-line trains across the Nene, albeit with some reinforcement. May be viewed from the riverside walk. Although many of the 19th C railway buildings have been demolished, some survive S of the new station, notably the fine tarpaulin works visible from Bourges Boulevard (on the inner ring road, TL 190983). Brickworks (TF 204022). Many of the 19th and early 20th C works using the Oxford clay have been closed and demolished, but the Star-pressed Works at Dogsthorpe retains early 20th C Hoffman kilns and a steam-pressing shop of the same period.

6. **Thorney:** Estate village (TF 28x04x). Fine

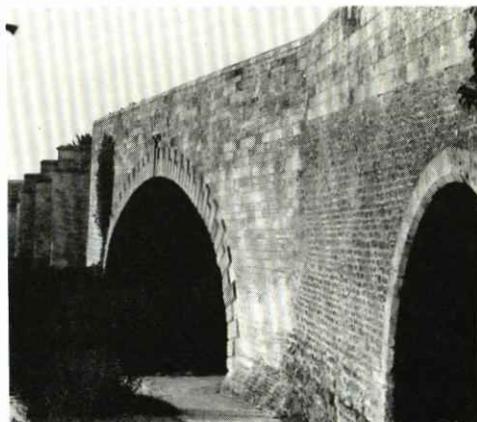
example of 19th C agricultural estate village, built by the Dukes of Bedford. Most terraces dated with the ducal crest. Main village lies along the A47: the estate works (off the B1040 at TF 2830440) provided a water supply and fire service. It is claimed that this is the first place in England in which every house had piped water and adequate sewage facilities.

7. **Redmoor:** Walderssea engine-house (TF 433062). One of the best preserved of the steam pumping engine houses, though engine removed. Chimney a prominent landmark just E of A47. Across the river may be seen the chimney of the Wisbech St Mary pumping house.



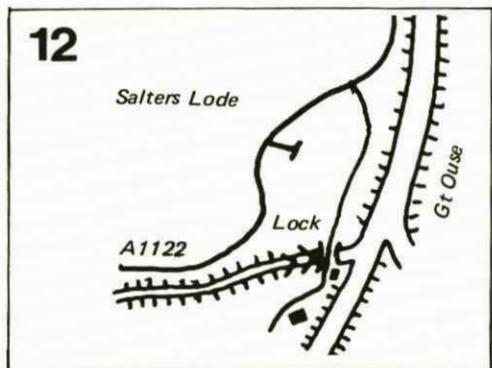
8. **Wisbech:** Elgood's Brewery, North Brink (TF 455092). Fine late 18th C building with 19th C additions. Warehousing, Nene Quay (TF 462097). Reminder of Wisbech's importance as an interchange port – even today, small coasters reach the town. See also warehousing on North Street (TF 461097).
9. **Wisbech & Upwell Tramway:** Ran beside the A1101 – note wide verge on S side of road and occasional reserved areas (especially on bends), though standing structures are now scarce. The Wisbech Canal also ran S of the road, but has now been filled in: its course may be discerned with a careful eye.

10. **Well Creek:** The A1122 runs along the N bank of Well Creek from Outwell to Salter's Lode. Despite its meandering, an artificial cut of c1290 which linked the Ouse (which at that time ran out to the sea via Wisbech) with the Nar and thus provided both communication across the Fens to the important part at Lynn, and a way of diverting some of the surplus floodwaters. At Mullicourt Priory (TF 531029) an aqueduct carries the Creek across the Middle Level Drain of 1848 – in the Fens archaeology is reversed, and the newer is lower than the old. Each side of the aqueduct, typical timber bridges, now concrete reinforced. A few yards E a good cast iron milepost.



Great North Road bridge, Wansford

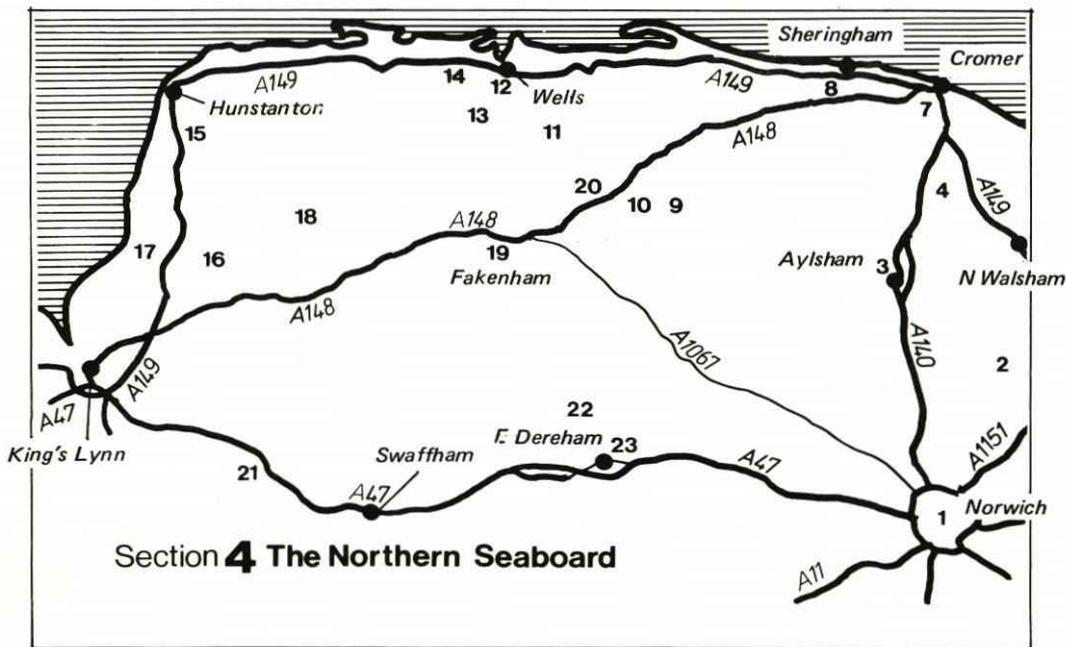
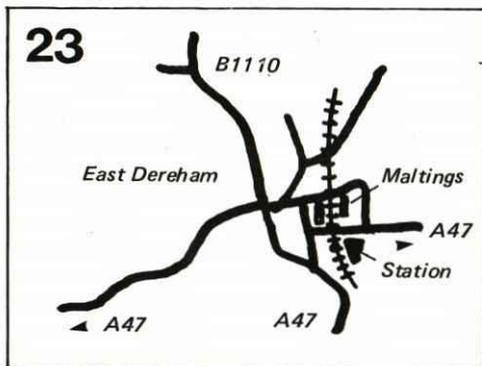
11. **Nordelph:** Windpump (TF 562009). On S bank of the Creek may be seen a cottage with octagonal brick base and timber first storey, converted from a smock drainage windpump. One of the few drainage mills still standing.
12. **Salter's Lode:** Lock (TF 586015). As is common in the Fens, the lock has two pairs of gates each end, pointing in opposite directions, so as to be able to cope with any combination of tide and floodwater. Fine cast-iron winch covers with inscription and dated 1827. Lock-keepers cottage, and adjacent a toll-house in typical 'Telford' style which collected tolls on animals driven along the banks.
15. **Clenchwarton:** Toll cottage (TF 579203). 'Telford' type with hipped roof and central bay to road — only found in Norfolk in the Fens. On S side of A17.
16. **King's Lynn:** South Quay (TF 617195). 19th C warehouses and mills, with older buildings in the streets to the rear (the line of the waterfront has, as is common, advanced over the years). Especially noteworthy are the Hanseatic Warehouse of 1475 in St Margaret's Lane, Hampton Court, a 14th C merchant's house with medieval warehouse on Nelson St, and Clifton House on Queen St, with a 15th C brick tower for spotting ships coming up-river (open weekdays 10.00 — 16.00).



13. **Downham Market:** Railway station (TF 603033). Attractive small station, rather unfeelingly repaired by BR, which like many buildings in the town is constructed from the local dark-brown carstone — though as the conglomerate is almost impossible to shape, bricks have been used for corners. On the opposite side of the A1122 the Eagle Mill, large steam corn-mill built 1854 and retaining some roller mills of 1888. Clock tower (TF 611032). Rather jolly Gothic cast-iron tower of 1878, in town centre.
14. **Denver:** Windmill (TF 605013). Large 6-storey tower mill of 1835/6, with adjacent small engine-house still containing oil engine. Fully equipped, and restored by the Norfolk Windmills Trust, though not working. Open Mon-Sat by appointment (Downham Market 2285). Sluice (TP 587009). Rennie's sluice and lock of 1834 survive with later control gates.
17. **Wolferton:** Wolferton Station Museum (TF 660286). The Royal apartments of 1898, built for the use of royalty travelling to Sandringham House. Contains much of the original furniture plus other railway by-gones. Open Apr-Sept, weekdays 11.00 — 13.00 & 14.00 — 18.00, Suns 14.00 - 18.00.
18. **Great Bircham:** Bircham Mill (TF 760327). Fine tower mill, largely restored. Attached Victorian bakery. On signposted side road running W from the B1135; the junction is on the S side of the village. Open Easter-Oct, Suns & Weds 10.00 — 16.00, daily in Aug.
19. **Fakenham:** Gasworks (TF 919293). Last surviving small gasworks in England, recently taken into the care of the DoE, and eventually to be opened to visitors. Complete plant, including horizontal retorts, plus some general items relating to the local gas industry. May be viewed from A1065 on S side of town.
20. **Thursford:** Thursford Steam Museum (TF 980345). Collection of steam road locomotives, fair-ground equipment and mechanical organs — the latter demonstrated daily. Signposted from the A148. Open Suns and BH Mons throughout the year, daily Easter-Oct. Hours: 14.00 — 17.30.
21. **Narborough:** Maltings (TF 746133). Substantial range of 19th C maltings and granaries at head of Nar Navigation. Across the road Narborough Mill, brick watermill recently rather heavily restored — in the process of which the older W end collapsed.

22. **Gressenhall:** Norfolk Rural Life Museum (TF 974170). The usual range of farm equipment, but more than usual attention to rural town industries, such as iron-founding, and power-sources — there is a fine collection of engines. N of East Dereham, signposted from the B1146. Open mid-May - mid-Sept, Tues-Sats 10.00 – 17.00, Suns 14.00 – 17.30.

23. **East Dereham:** Maltings. Like many East Anglian railheads, Dereham attracted the malting industry. Several fine ranges survive, though some in increasingly derelict condition, to E and N of station (TF 994132).



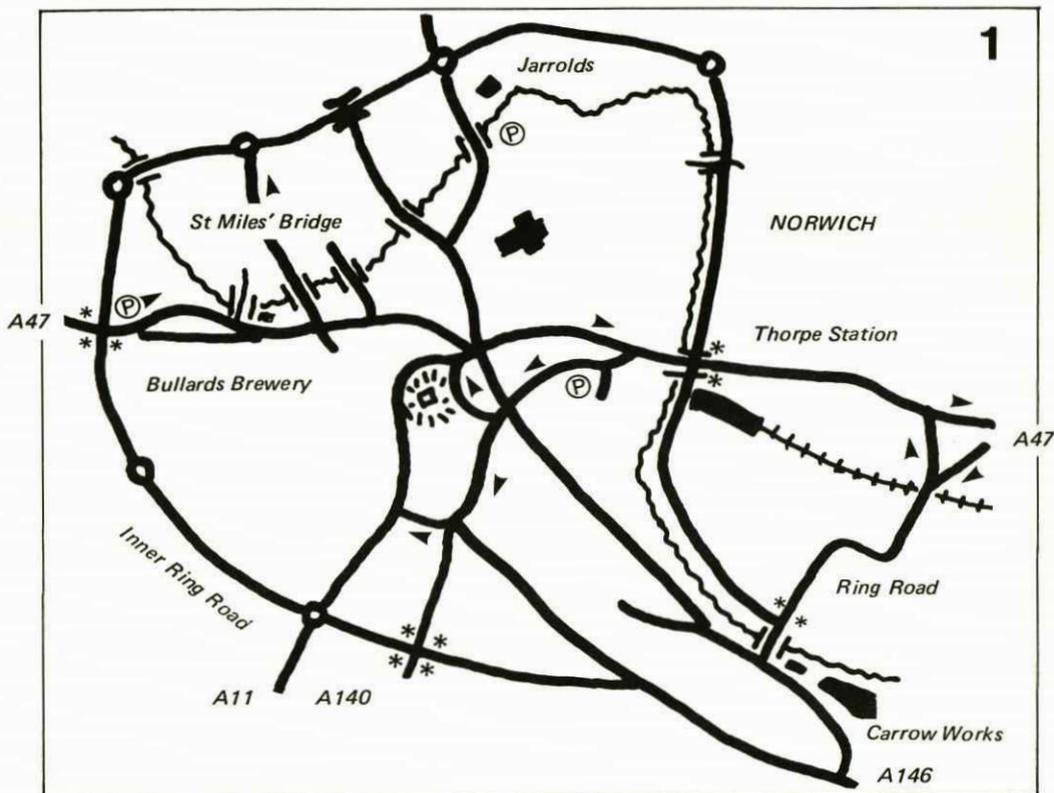
## Section 4 The Northern Seaboard

This section covers the Northern coastline of Norfolk from King's Lynn to Cromer and its hinterland.

1. **Norwich:** Bullards Brewery, Westwick St (TG 228088). Largely demolished apart from

some listed items, most notably the fermenting block on the corner with Coslany St, the chimney stack and base with the Anchor symbol, and the 18th/19th C office block and yard by the river.

St Miles Bridge (TG 227088). Cast-iron bridge, dated 1804, carrying Coslany St across the river. Jarrolds mill, Cowgate (TG 235093). Six storey brick steam mill for producing worsted yarn, built 1839 in an attempt to keep the worsted industry of Norwich alive. Fine



classical style, now part of Jarrold's printing works. The works also has a small private museum of printing.

Bridewell Museum (TG 231087). Museum of local crafts and industries, in 15th C merchant's house with superb knapped flint wall. Off Bridewell Alley which runs between Bedford St and St Andrew's St.

Carrow Works (TG 242075). Home of Colman's mustard, with many fine buildings remaining from the later 19th C – mostly 4/5 storey brick mills. Only open to organised parties, but much may be seen from the riverbank near Carrow Bridge (a bascule bridge of 1920s).

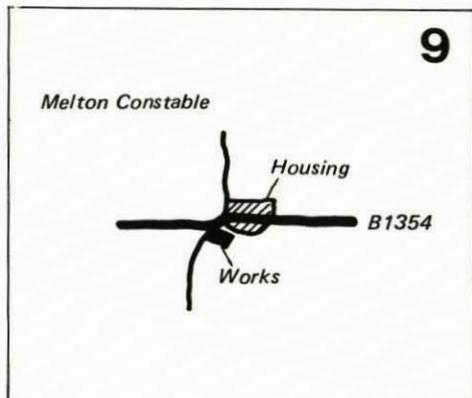
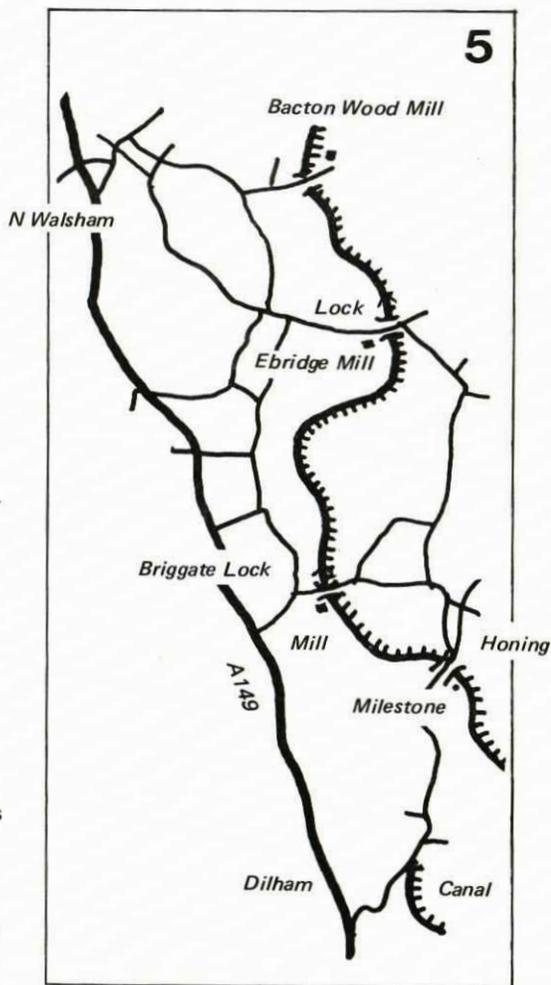
2. **Coltishall:** Lime-kiln (TG 269202). Fine example of an East Anglian lime-kiln, with circular underground chamber surrounding the pot in which lime was burnt (though the pot has now been filled). Behind the Railway Inn on the B1150; access by permission of the landlord.

3. **Blickling:** Pumping Station (TG 174282). Built 1907 to supply Blickling Hall, equipped with Hornsby hot-bulb oil engine and Smithdale pump. To be opened when restoration complete, possibly on a trail which will also include the estate brickworks (TG 169284) with its pair of kilns.

4. **Gunton Park:** Sawmill (TG 224335). 18th C thatched water-powered sawmill, with unusual and early vertical cut 'coffin' saw. Under restoration by the Norfolk Windmills Trust. Occasional open days.

5. **Honing:** North Walsham & Dilham Canal. Some of the best surviving features of the canal (built 1826) to be seen here, notably Briggate Lock (TG 315275) with inscribed cast-iron paddle gear and cast-iron balance beam to the bottom gates, and brick bridge at foot, and a milestone (TG 329273) near another bridge.

6. **North Walsham:** Ebridge Mill (TG 311296). Large 19th C water and steam mill, beside Ebridge Lock. Still in use. Bacton Wood Mill (TG 300307). 18th C water-mill complete with wheel and most plant, and 1908 standby diesel. Not normally open.
7. **Cromer:** Beach Station (TG 213421). Half-timbered terminus of the Eastern & Midlands Railway (later M & GN) — nice cast-iron work. Station still in use, but buildings in private occupation. Beside A148. Lifeboat museum (TG 221422) in ornate disused lifeboat station. Open daily May - Sept, 10.30 — 17.30. On Front.
8. **Sheringham:** North Norfolk Railway, Sheringham Station (TG 157430). Sizeable but relatively plain station buildings with fine awning. Preserved locomotives include two from the GER. Details of services BR timetable 501 or from Sheringham 822045. Clearly visible from A149. Lifeboat (TG 157436). Preserved rowing lifeboat, the Henry Ramey Upcher, built 1894 for a private lifeboat company (see Gorleston). Open Weds, Sat, Sun afternoons, Apr-Sept. On Front.
9. **Melton Constable:** Railway town (TG 045330). The Crewe of North Norfolk. The railway and its station have gone, but the housing erected by the M & GN remains, as do most of the works (at TG 043330).
10. **Barney:** Brickworks (TG 005331). Open-topped kiln with two firing tunnels, drying sheds. Now a caravan site, access by permission of the owner.
11. **Great Walsingham:** Iron foundry (TF 946377). Typical small foundry, established 1809, 19th C buildings. Less typically, still casting using a cupola furnace and greensand casting. Beside B1388.
12. **Wells:** Quayside (TF 917437). The only remaining port on the North Norfolk coast, kept open by heroic efforts. Steam-mill on quay, maltings on streets leading from it, mostly 19th C in origin.
13. **Egmere:** Cottages (TF 907374). Cast complete in concrete in 1873/4, still occupied.





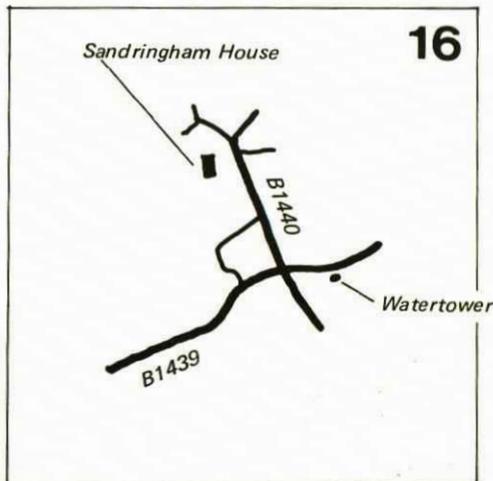
14. **Holkham:** Bygones Collection (TF 885428). The large collection of Dick Joice (presenter of Anglia's TV's 'bygones' programme) with other items from the Holkham estate. Covers farm machinery, equipment from rural crafts and industries and engines, housed in Holkham Hall's stable block. Open 25/5 to 25/9, weekdays, 11.00 – 17.00. Off A14. Also in the park a fine icehouse (TF 882427), 17th C thatched.

17 – 23 See Section 3

24 – 25 See Section 1.

15. **Heacham:** Lavender distillery (TF 685374). Based on Caley Mill, a water-mill built in carstone. Open daily June – Sept, 10.00 – 18.00 with trips round the fields and distillery in season (July/Aug by arrangement). Oct – May, weekdays, 10.00 – 17.00. Beside A149/ A1067.

16. **West Newton:** Watertower (TF 705278). Magnificent late 19th C tower, in Gothic style, built to supply Sandringham House. The associated pumping engine is now at Ironbridge.



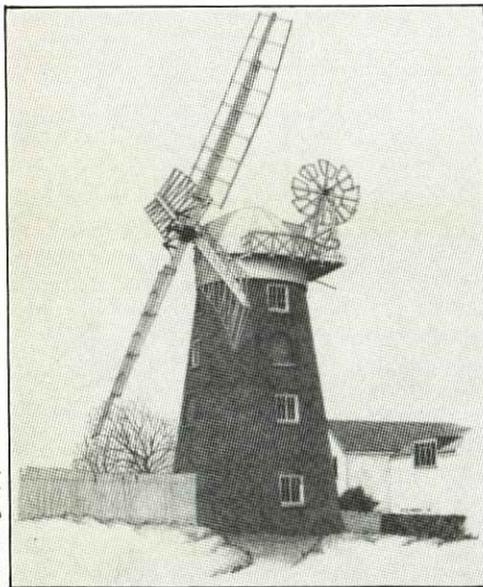


## Section 5 The Eastern Seaboard

This section covers the Eastern coastline of Norfolk and Lothingland in Suffolk, from Sheringham to Lowestoft. The hinterland includes the Broads area.

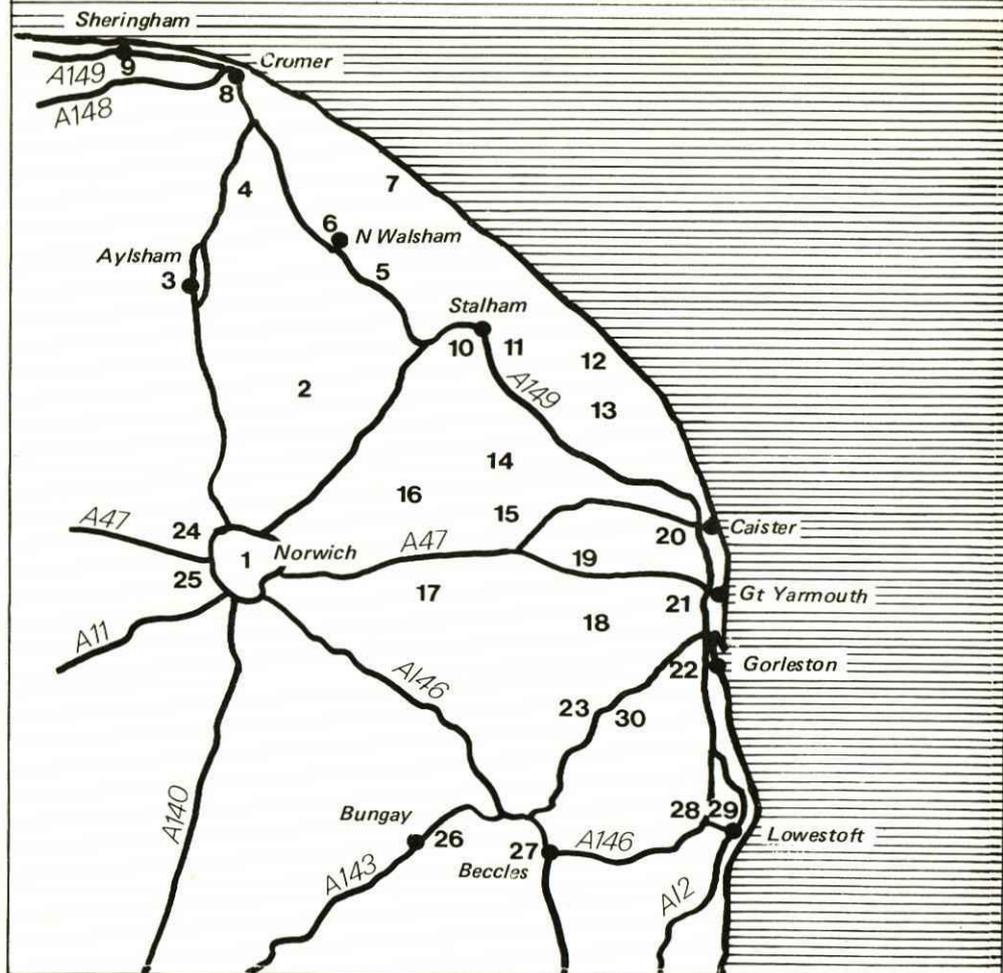
1 – 8 See Section 4.

9. **Paston:** Stow Mill (TG 316358). Small tower corn-mill, steadily being restored by the owner with the help of the Norfolk Windmills Trust. Open Apr – Sept, Weekdays 14.00 to dusk, weekend 10.00 – dusk. Beside the B1159 just south of Mundesley.
10. **Stalham:** Wherry port (TG 373246). Probably the best example of an inland port on the Broads, with 19th C granaries and stores. Now used by the holiday industry.
11. **Sutton:** Windmill (TG 396239). Claimed to be the tallest surviving tower-mill, being painstakingly restored by Mr Nunn, its owner. Open April – Sept, 09.30 – 18.00 daily.
12. **Horsey:** Drainage mill (TG 457222). Late (1912) tower-mill driving rotary pump. Restored by NT but not working. Open Easter – mid-Oct, daylight hours. Beside B1159.
13. **Martham:** Countryside Collection (TG 459180). Rural bygones, farm machinery, working forge. Open daily, 0900 – 21.00 (10.00 – 17.00 Suns). Signposted from village centre (B1152).
14. **Thurne:** Drainage mill (TG 400159). White-painted brick tower-mill, driving turbine pump. Built 1820, later 'hained' (made taller). Complete and restored by the NWT but not working. Open daily through summer or by application to the Craft Shop. At the end of Thurne Dyke, access from Thurne village or by water.
15. **Upton:** Windpump (TG 403129). Small hollow-post pumping mill, moved here and restored to working order privately. By Upton Staithe.



Stow Mill, Paston

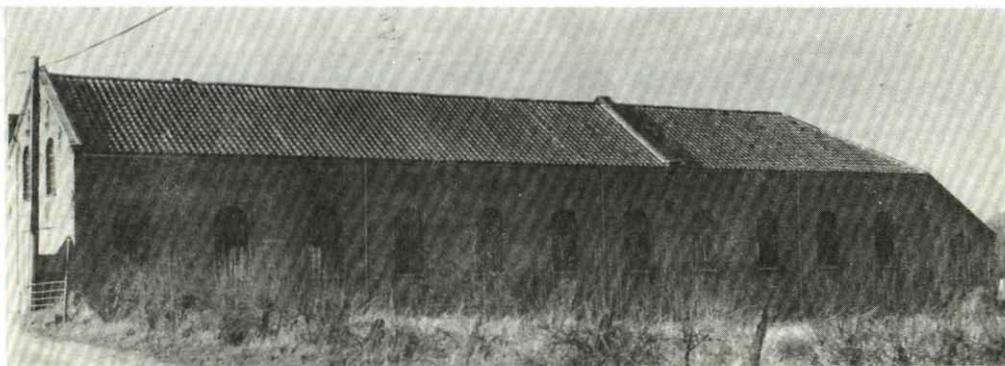
## Section 5 The Eastern Seaboard



16. **Panxworth:** Ironworks (TG 350131). Built 1869 for Thomas Smithdale, a notable general and drainage engineer. Very fine example of fairly small purpose-built works, with cast-iron sills, lintels and window-frames, and adjacent house of similar construction. Now a farm store, with no general access. Beside B1140.

17. **Strumpshaw:** Steam Museum, Strumpshaw Hall (TG 348067). Collection of steam vehicles and tractors. Open June – Sept, Weds & Suns, 14.00 – 17.00

18. **Berney Arms:** High mill (TG 465049). Highest drainage mill on the Broads, brick

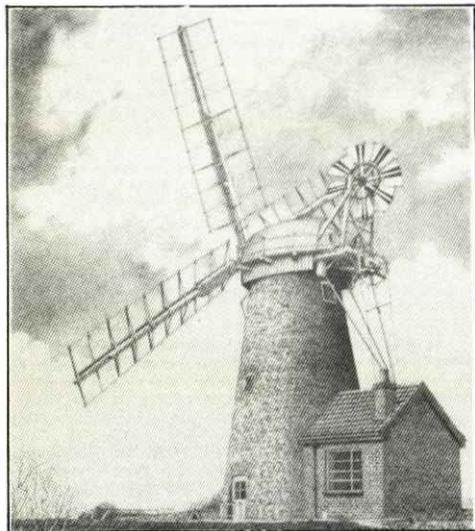


Pannworth Ironworks

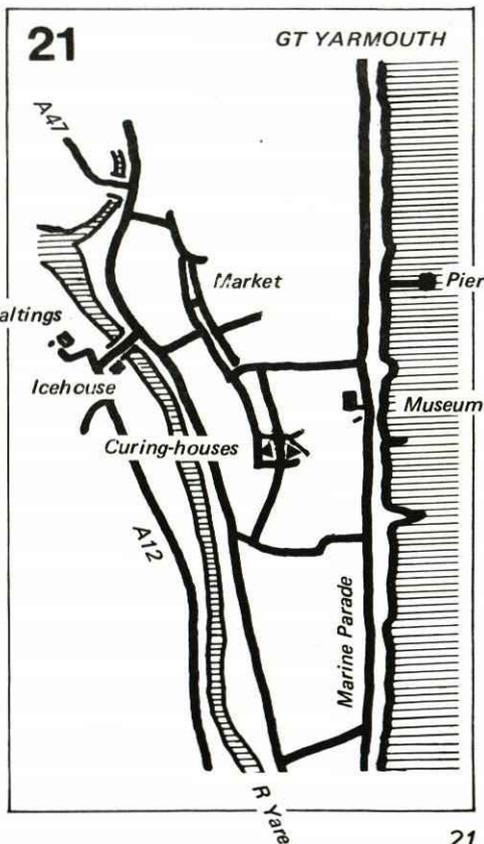
tower with scoop-wheel. Built before 1840 to grind clinker for adjacent cement works (now disappeared), converted to pumping c 1880. Complete, fully restored, but not worked. In care of DoE. Open Apr – Oct daily, 09.30 – 19.00. Access by boat trip from Yarmouth or by rail to its own halt: no road.

20. **Caister:** Motor Museum (TG 504123). Large collection of motor vehicles, adjacent to very early brick-built castle. Open Spring BH to Sept, Sun – Fri, 10.30 – 17.00. Signposted from A1064.

Drawing by permission of The Norfolk Windmills Trust



19. **Stracey Arms:** Drainage mill (TG 441090). Brick tower-mill with turbine pump, built 1883. Complete and restored by the Norfolk Windmills Trust, but non-working. Open Easter – Sept daily, 09.00 – 20.00. Stands between A47 and R Bure between Acle and Yarmouth: limited parking on verge.



21. **Gt Yarmouth:** Fish-curing house (TG 527069). Small curing-house in Trinity Place, probably oldest in Yarmouth. Now a pottery, accessible in opening hours. Nearby Tower Curing Works of 1880 a fine example of large works, not normally open to the public. Maritime Museum for East Anglia (TG 531073). On the Marine Parade, once a Sailors' Home. Collection on herring fisheries and wherry traffic. June – Sept, open daily, 10.00 – 13.00, 14.00 – 20.00, Oct – May, open weekdays, 10.00 – 13.00, 14.00 – 17.30. Icehouse (TG 521074). Beside Haven Bridge. Heavy brick walls, thatched. No access. Maltings (TG 51x07x). Southtown area contains many very substantial maltings, built to take advantage of its position at the meeting of rail, inland waterway and sea-going trade.

22. **Gorleston:** Storm House (TG 530036). A feature of the East Coast was the number of life-saving and salvage associations which sprang up in the 19th C: this was the headquarters of one of them, with its watch-tower projecting from the roof. Now a cafe. A little north, at TG 530040 two lifeboat houses, one the RNLi house of 1883, the other that of the Gorleston Volunteers. The Towers, High St (TG 526049). House with large tower for observing the return of the fishing fleet, built by Harvey George, a substantial fleet-owner in 1885.

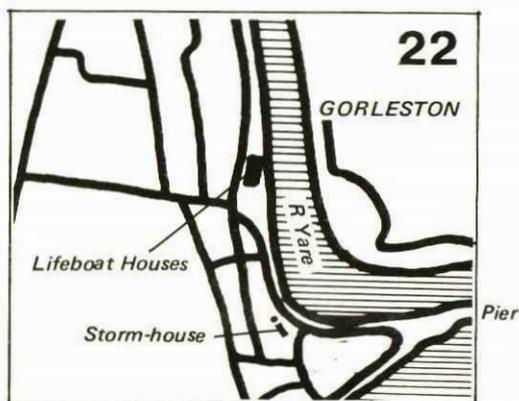
23. **St Olaves:** Bridge (TM 457994). Unusual bridge with bow-string girder made from cast-iron segments, built 1847. Carries the A143 across the Waveney. Windpump (TM 458997). Small smock mill of c1910, recently restored. Access from beside the bridge. Haddiscoe Cut (TM 454992). A ship canal, built in 1832 as part of the Lowestoft & Norwich Navigation, intended to help coasters reach Norwich.

24 – 25 See Section 1

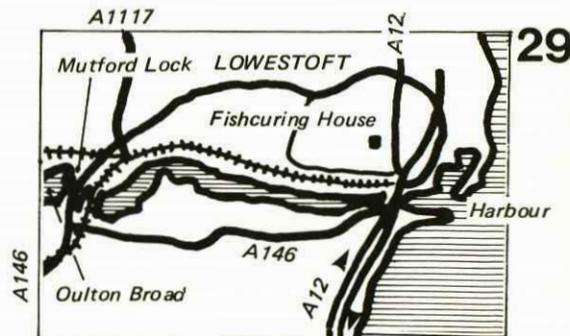
26. **Ditchingham:** Maltings (TM 340906). Working maltings, unusual in that the block fronting the A143 was built as a silk factory. The kilns and other blocks are typical 19th/20th century maltings. Wainford Maltings (TM 350901).

Built 1891, and the oldest box-maltings still at work in the country. From outside has the kilns, but not the extensive malting floors of the typical maltings.

27. **Beccles:** Maltings (TM 426904). Very large range of late 19th C malting blocks, the largest maltings in the world under one roof when built. Beside station, which is signposted from the Q146 through the town. Timberyard (TM 420911). Darby Bros sawmills, founded as steam saw-mill in 1846, and retaining the buildings and chimney. Straddle A146, west of bridge over Waveney.



28. **Oulton Broad:** Mutford Lock (TM 521927). Built for the Lowestoft & Norwich Navigation, to link Lake Lothing with the Waveney via Oulton Broad and an enlarged Oulton Dyke. Rather small for the coasters it was intended to serve, and with double gates both ends. These are





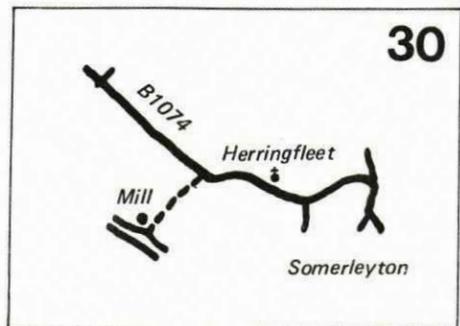
Fishcuring house, Lowestoft

needed because as the only lock in Britain to link two quite different stretches of tidal water, high tide the Broad side is some 1½ hours later than Lake Lothing side. Nearby is Carlton swingbridge, carrying the Ipswich – Lowestoft line. The lock is almost under the A1117.

29. **Lowestoft:** Fish-curing house, Raglan Road (TM 547931). Typical of the small curing houses still to be found all over Lowestoft: this one, owned by R A Reynolds is still at work and can be seen by anyone buying its fish. Fishing harbour (TM 550927). A 19th C creation, the work of William Cubitt who built the first harbour as part of the Lowestoft & Norwich Navigation, and linked it to the brackish Lake Lothing. Sir Morton Peto enlarged it and brought the railway, and between 1883 and 1903 the fishing harbour was greatly enlarged and transit sheds built: these still stand, though the rail link has been removed.

30. **Herringfleet:** Drainage mill (TM 466976).

The last full-size smock pumping mill, built in 1830 to a very old pattern. Common sails, and a tailpole to turn her into the wind. Restored to working order by the Suffolk CC and occasionally demonstrated. Access to exterior at any time by path across the marshes, signposted from the B1074.





Old maltings, Stowmarket

## AIA Bulletin Extra

This booklet is published by the **Association for Industrial Archaeology** in conjunction with the **Norfolk Industrial Archaeological Society**. It sets down brief details of industrial archaeological sites adjacent to the main routes leading into East Anglia. If you live in Norfolk you may like to know that **NIAS** (The Norfolk IA Society) arranges WEA courses, maintains close links with the Norfolk Museum Service, publishes a **Journal** and carries out detailed surveys of particular industries in the County. It has already studied the iron-working industry, lime-kilns, blacksmiths and is currently making a record of brick works. There are also IA societies

in Suffolk and Cambridge.

Nationally, industrial archaeology is represented by the **AIA** which produces a **Bulletin** four times a year, and 'special publications' (of which this booklet is one), **Booklists, Exchange and Mart leaflets** and organises a **Conference** each year in September. The Association also represents local and national 'interests' at Public and Planning enquiries and plays a large part in the forming of opinion on conservation issues. David Alderton, the writer of this guide is a member of the National Council of the **AIA**, Editor of the **Association's Education Newsletter** and is the person to get in touch with if you would like more information about industrial archaeology in East Anglia. His address is: 353 Unthank Road, Norwich NR4 7QC.

The **AIA** can be contacted through Stuart Smith, the AIA offices, The Wharfage, Ironbridge, Telford, Shropshire TF8 7AW, telephone 095-245 3522.