

YCCART 2024/Y2

Early river systems: a pioneering study by Derek Lilly (1991)

**YATTON, CONGRESBURY, CLAVERHAM AND CLEEVE ARCHAEOLOGICAL
RESEARCH TEAM (YCCART)**

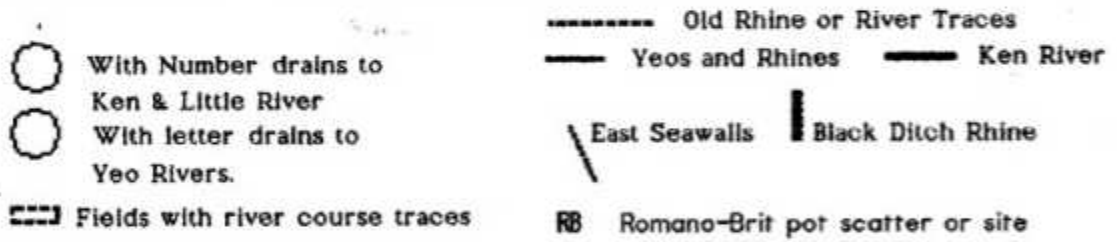
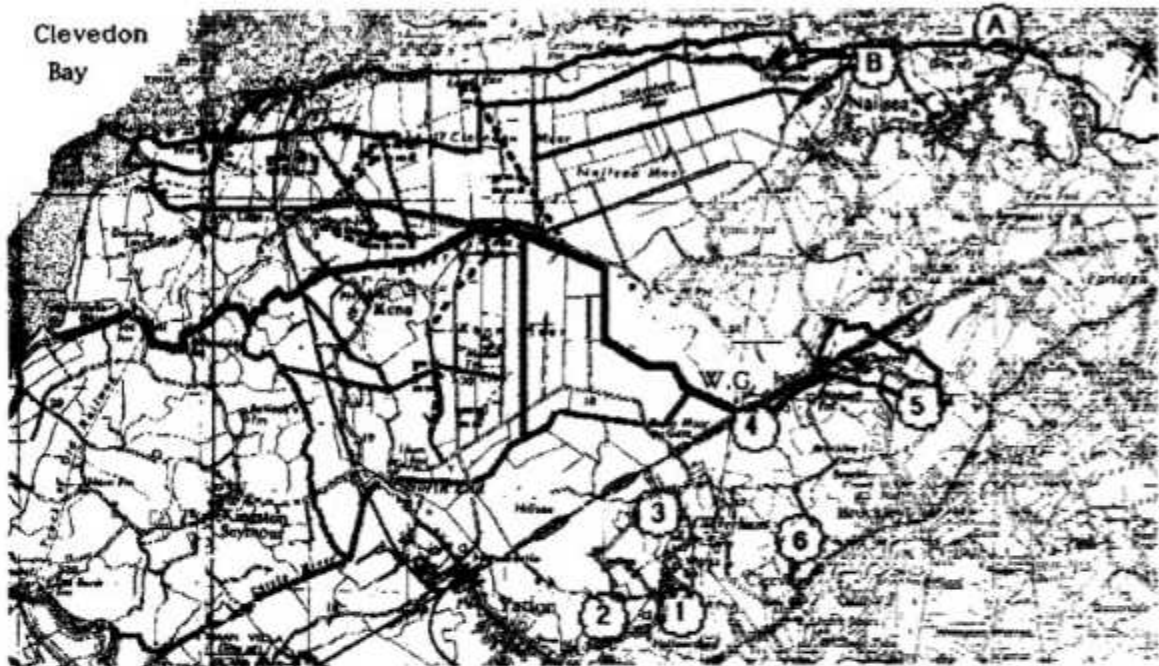
General Editor: Vince Russett



Culverting the Middle Yeo, Clevedon Town, 1960s
(and risking instant dismissal under modern Health and Safety rules!)
Photograph by Derek Lilly

Early River Systems

Maps 1



A study of the drainage of the North Somerset Moorlands

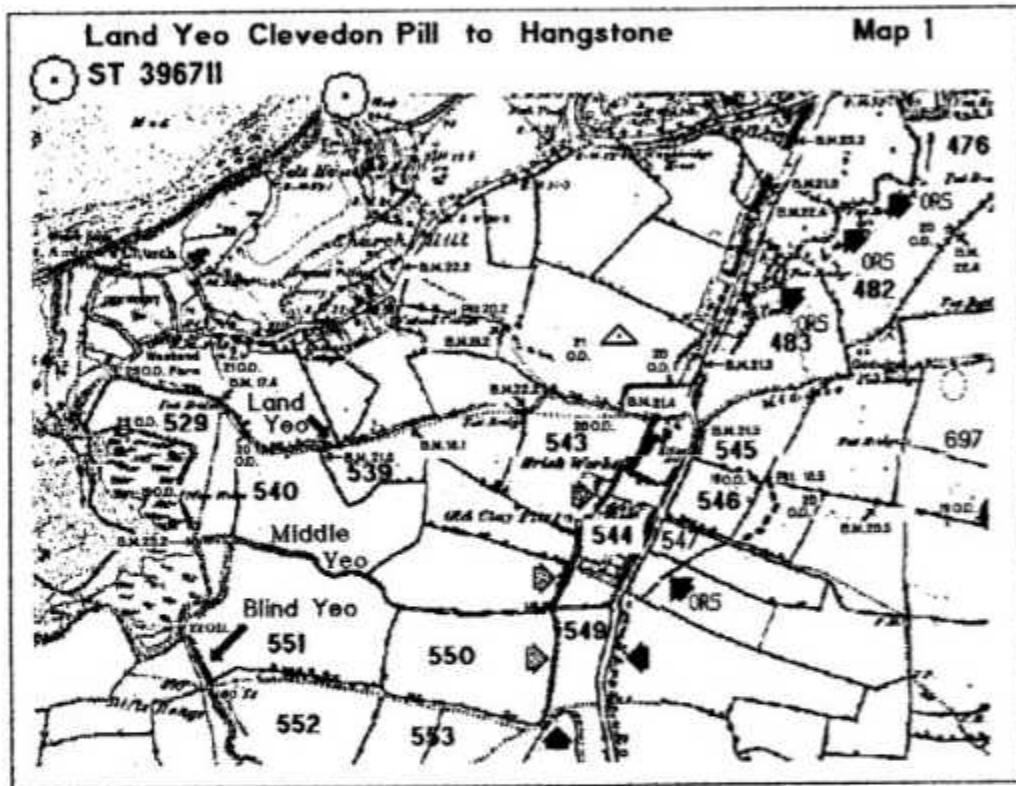


Copyright D B Lilly July 1991

Studies in the Northmarsh of Somerset Vol 0 by Derek Lilly

Early River Systems

Maps 2



Symbols in use.

- Centre spot identifies position of site.
- ↑→ Points to a finely defined spot.
- ⊕ Tentative RDL & ORS
- ▲ Used as RDL & ORS indicators.
- ⊞ Rom/Brit site POT Rom/Brit pot scatter.
- ORS Original River System
- RDL Rhine/Ditch Line
- PB Parish Boundary
- OD With Number Ordnance spot level.
- B.M Ordnance Survey Bench mark. → ✓

- Line of East Sea Wall.
- ORS showing as gripe or field mark on Aerial Photograph
- Mark on Aerial Photograph
- (A) With associated letter or number mentioned in text.
- (I) With associated letter or number mentioned in text.
- (•) Point indicator for map reference
- △ O.S. Triangulation point.

Editorial by Vince Russett 2024-01-12

The subject of the archaeology of wetlands has always been a source of fascination, which has led to my research in this field in a more focussed way each year.

I was personally inspired by the works of Stephen Rippon and Keith Gardner, but as late as 2022, I had no idea that Derek Lilly had published on the subject.

Remember that our ability to publish via web and other electronic means seems natural today, but it was not practically available for publication by non-academics until relatively recently, and it remains a sad fact that much research, amassed with such effort by avocational groups in Somerset remains either unpublished, or worse has been lost when its researcher's papers and files are (almost inevitably) thrown away when those researchers die or become unable to continue.

Needless to say, wetland archaeology in this geographical area has the double handicap of being, well, wetland archaeology, and of being in Somerset.

Keith Gardner published on the Land Yeo in 1998, and on drainage and other watery matters south of the Congresbury Yeo in 2000. He also mentored Stephen Rippon in the early days of his work in North Somerset, culminating in Stephen's, 'Landscape, Community and Colonisation', his 2006 opus again mainly concentrating on land south of the Congresbury Yeo, with the exception of some substantial work in Kenn/Yatton. Stephen (who is one of the outstanding academic archaeologists of our time) has also studied the wetland archaeology of other parts of the UK and western Europe.

Some other scattered work has been published, mainly in Archaeology in the Severn Estuary (SELRC)

But Derek Lilly's work predated all this by decades, the current work here republished dating to 1991, although clearly based on long experience of the Northmarsh, seeing its landscapes and archaeology through the eyes and thoughts of a man with a lifetime's living and working in the same. Derek was also part of North Somerset Archaeological Research Group, many of whose excavations have never been written up and published: the blame for this lies entirely elsewhere - if Derek had not privately made written and photographic records of these on his own volition, much of the information would have been lost.

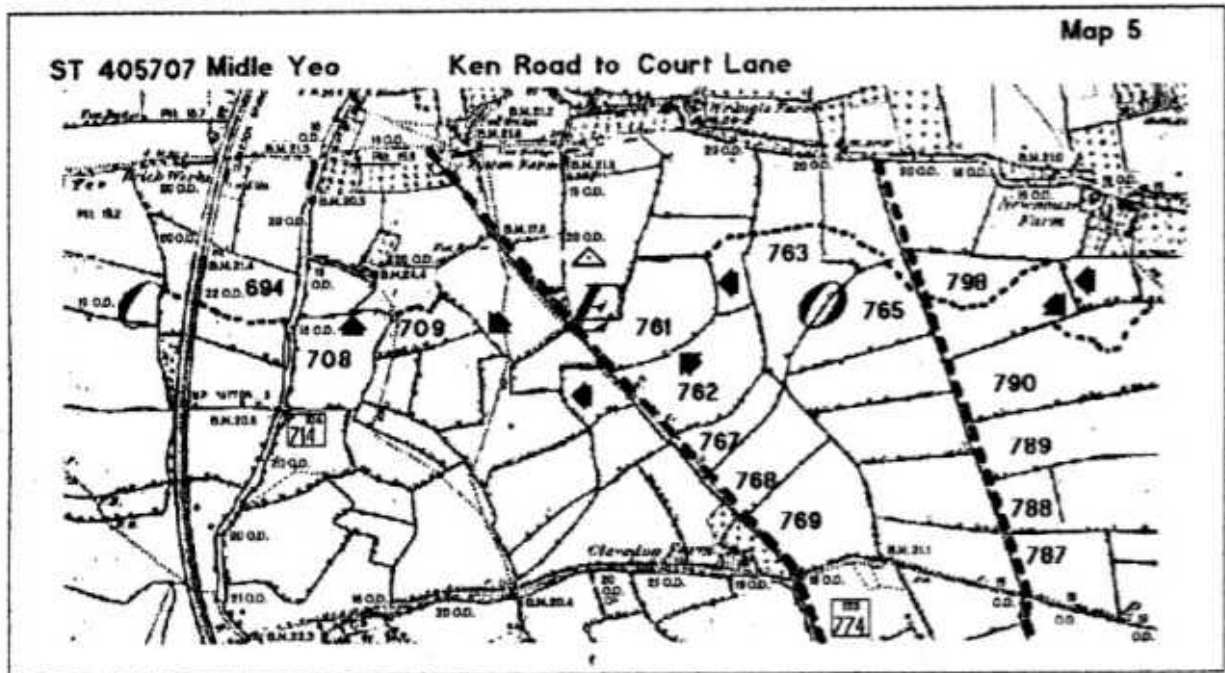
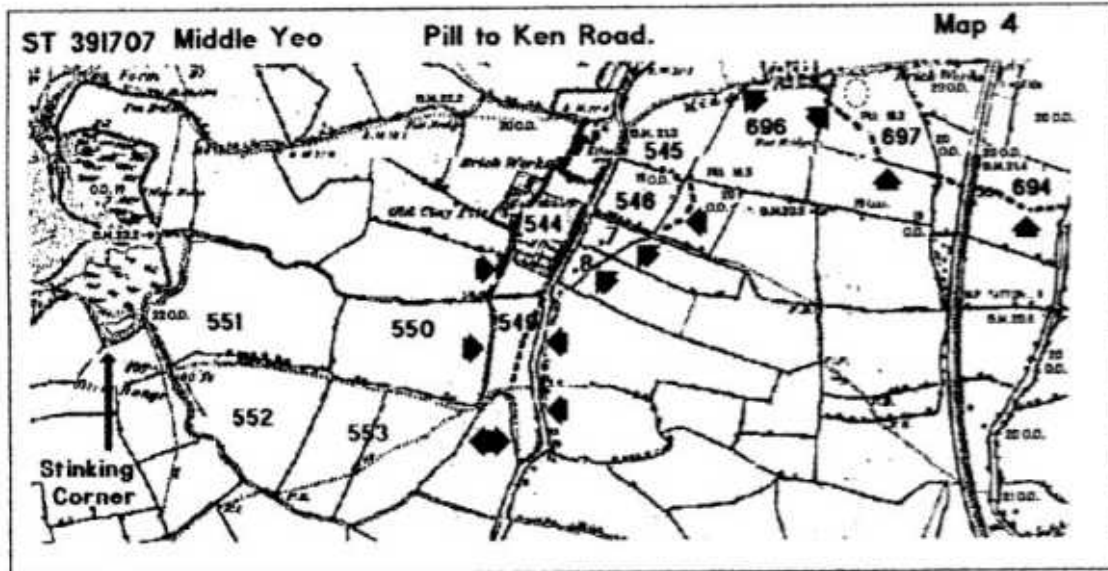
Although I did contemplate redrawing Derek's maps, I believe this (historic) document deserves to be reproduced in its original form as entirely Derek's own work, only allowing some extras and embellishments of mine where appropriate.

Forgive me if with hindsight, I subtitle this publication Studies in the Northmarsh Vol zero, as the title volume one is already taken, and this report must take precedence.

There is almost certainly much more pioneering and stimulating research 'out there': where it is as important as this current paper, and it can be retrieved and copyrights sorted out, YCCCART will be happy to make these documents more available today.

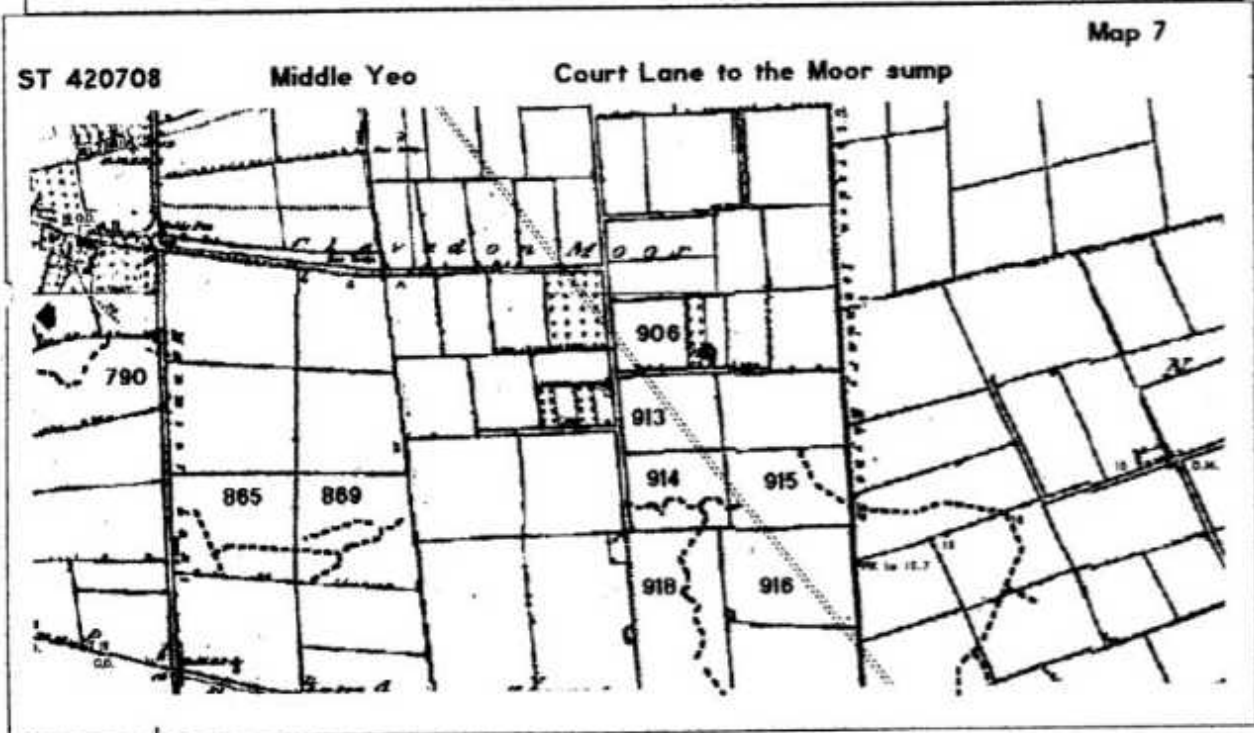
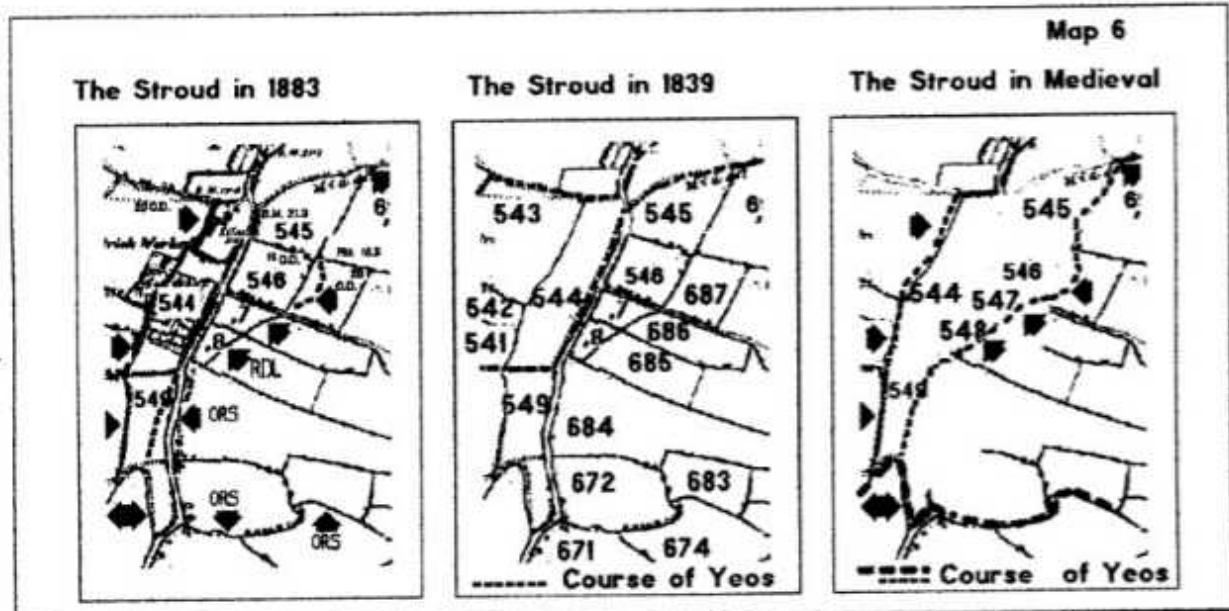
Early River Systems

Maps 4

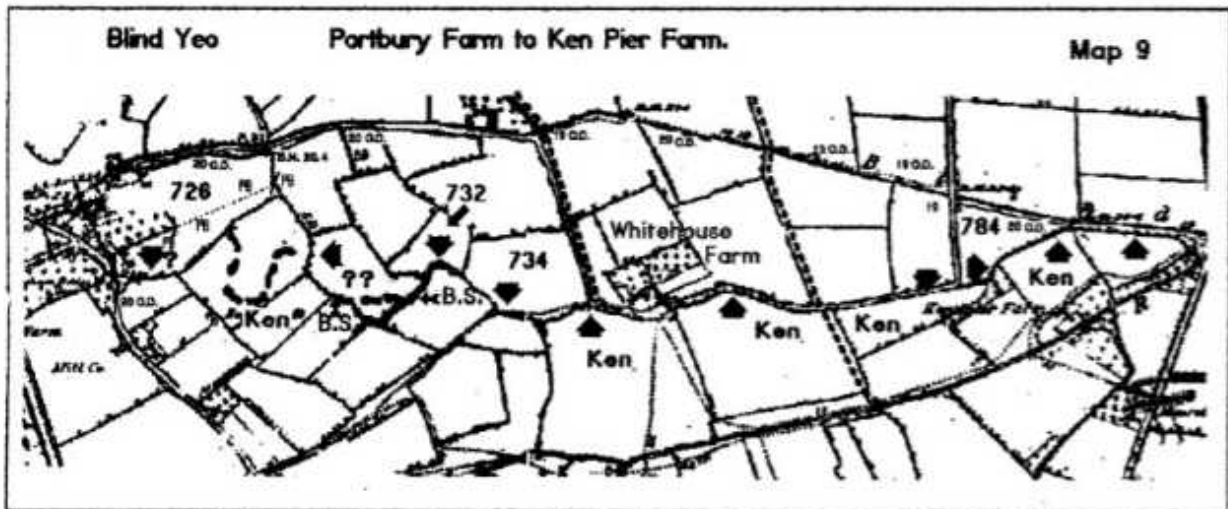
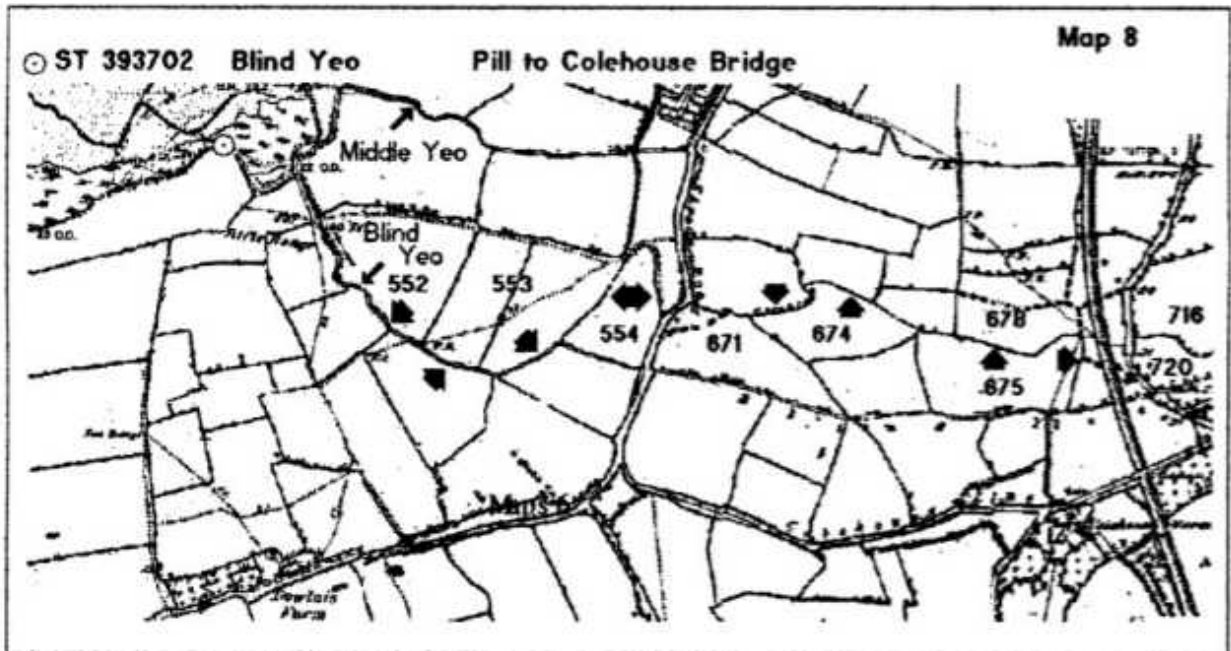


Early River Systems

Maps 5

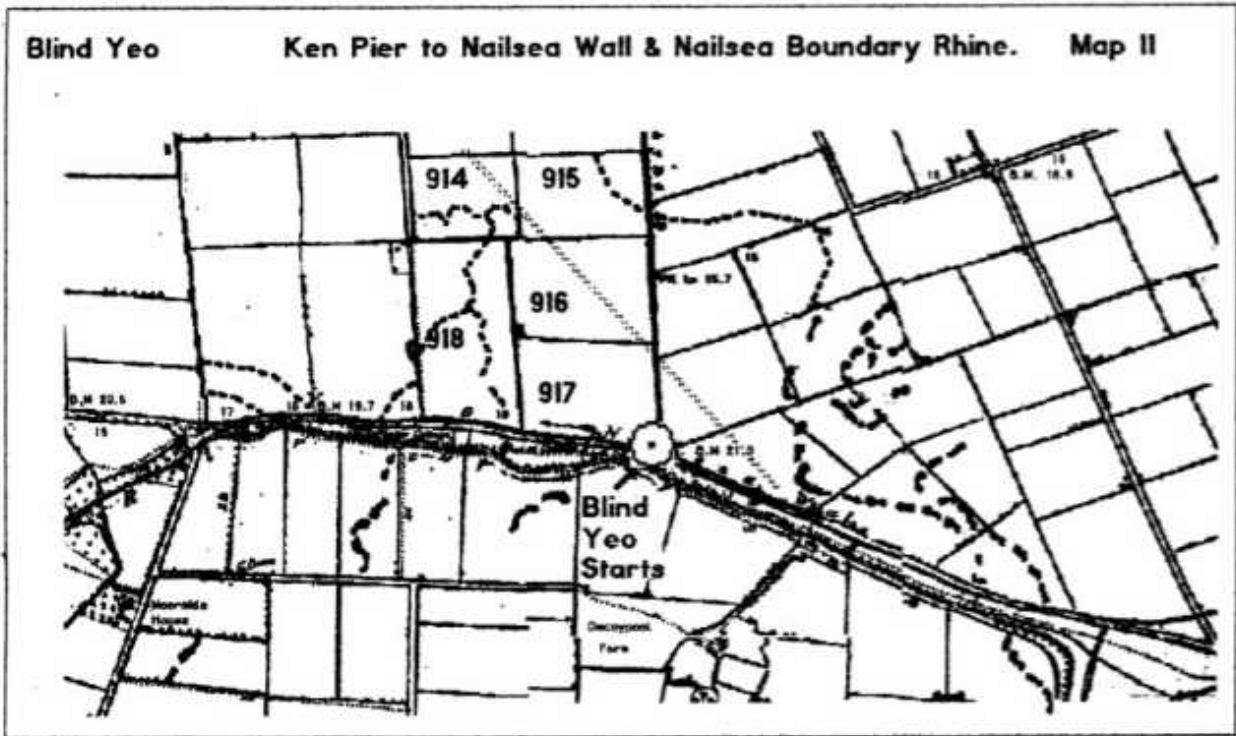
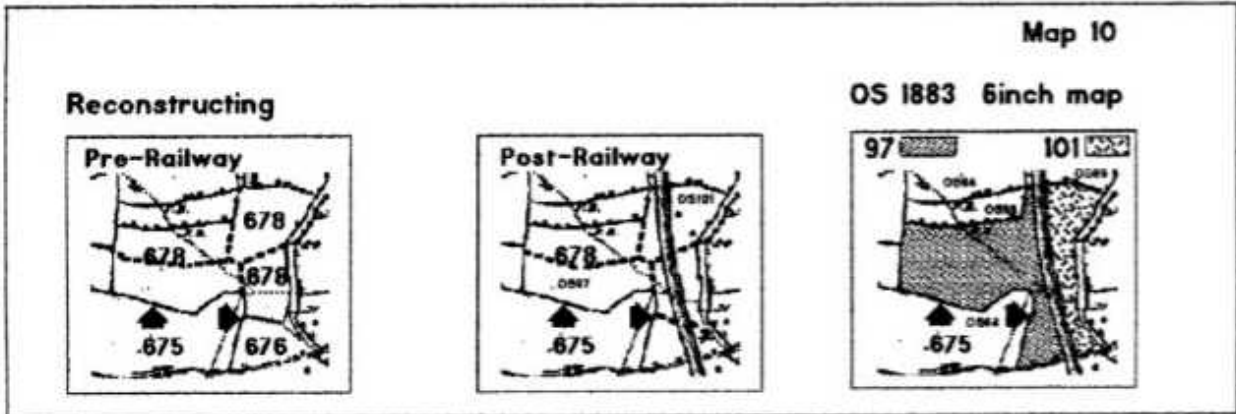


Early River Systems



Early River Systems

Maps 7



EARLY RIVER SYSTEMS

Western man is essentially lazy. Most of his inventions have come from ideas which have eased his lot or made the days work either more quickly done or more productive. The ideal shape for a field is rectangular. This is mathematically the best way to get the greatest number of efficient units of land from a newly cleared area.

However the making of essarts was the only way that medieval man could claim land from the manorial waste. The tools which he had, limited him to making simple fields and he was unable to do massive clearing.

Therefore any unusual shape or curve in early field hedge lines meant they had come upon a physical boundary limiter which was more than they wished to override, or alternatively, they had reached some point which they were not allowed to remove or change. Trees for example were very strictly regarded as being manorial property, and many leases or land grants required that no trees should be destroyed or lopped unless specifically granted as a 'Bote'.

One piece of evidence of this are the fields numbered 550, 551, 552, 553 on the Tithe Map for Clevedon of 1839, [Middle Yeo Map1]. These fields had originally comprised one field, The Great Ham, which was later subdivided, and shows straight line boundaries to the subdividing. It has a curved southern boundary because the Original River System (ORS) was the Field Boundary Line (FBL) at the south, and made a boundary line which imposed a natural limitation. Some fields to the North east, from Tithe Plot Numbers 'TMN's 544 to 549 combined into rough piece of land called the Stroud. Poor grazing and sandwiched between two early river courses, it was not worth at that time, the effort of clearing, and so was left until later. It is this latter series of fields from which Stroud Road takes its name.

Some of these boundaries still show in field shapes today. Whilst brushwood was cleared and burned off, river courses which were too large, or drainage areas of floodwater which were too vast to handle with only the help of neighbours or a restricted number of workers, had to be left, and formed the limits of the various clearings. The East Sea Wall of Clevedon was one such limit. The essarting started again on the east side of that, and later in its turn the new East Sea Wall was formed, with the fields between it and the secondary essarts being made with straight line dividers.

This produces a series of general rules

- 1 That most early fields are irregular in shape
- 2 That even or straight line divisions within an irregular outline, tend to be that of later subdivisions of an early large field.
- 3 That all square or rectangular field shapes, stem from later mass enclosures, or subdivisions of early essarts or common fields.
- 4 That a long curving line or FBL forming a continuing line past the end of the enclosure to which it acts as a limiter, originated as a physical boundary which restricted the further clearing at that time.

5 That on high ground this was in all probability caused by contours or geological fault lines which acted as a natural boundary.

6 That on moorland or wetland enclosures this was in all probability caused by a water boundary too large to be overcome.

7 It is possible to reduce essarting to a formula which shows the reasons for giving up square or rectangular field shapes. Let R = the Reward and E = the Effort which is put into the work. R/E as a fractions smaller than 1/1 shows that the effort to gain the reward is too great to show a profit, whereas a result of ex. say 3/2 shows the reward to be worth the effort and more.

Facts

Nature abhors a straight line, or a perfect circle. As water always follows the lowest ground to find its level, the courses of most rivers meander backwards and forwards in loops and bows. Therefore any straight lines seen on aerial photographs, or maps, can be assumed to be either geological fault lines, or man made Roads, Rhines or Ditches (or Rhines which have down graded into ditches). These rhine and ditch lines will be called RDL's in future references.

It has been calculated by Professor Kidson of Aberystwyth University, that in the year 7000BC the coast line at Hinkley Point was approximately 5 kilometres further out than the existing coastline.

In the mid 1600s there were approximately 120 acres of Salt warth in Clevedon, not including Hick's Wharf, TMNs 585, 586 [Green page 31, Som Arch Proc 1881 (account of storm)] by mid 1800s there was including Hicks Warth only 60 acres at most left. The land carried away was 'about seven feet higher than the shore, forming a natural bank of earth against the sea, and which had never been repaired by anybody'.

The Ordnance Datum Line (ODL) of the moors is an average of just over 5m, the lowest recorded being recorded as 4.5m. The average ODL of the land running between the moors and coast is approx 6m. At present high tide levels (7.5m) without a seawall lower Clevedon would be approximately 1.5m below tide level, the Clevedon/Tickenham moorland would be 2.5 metres under water.

The North Somerset Levels are much smaller than those south of Mendip, which were at one time second only to the flats of East Anglia in size. There was little covetousness on the part of either Glastonbury Abbey or of the Diocese of Bath and Wells for ownership or control of these smaller moors. It is therefore not as well documented as the moorlands of the Bishop and Abbot, where even the placing of a new hatch caused letters to be sent and recorded.

The northern limiter is the range of hills known geologically as the Failand Ridge, and the southern one is Broadfield Down and the Mendip Hills. The encroachment by the Cadbury Hill spur of Broadfield Down extends out to Yatton, and splits the moors into two sections. There is a higher ridge of alluvial clay of approximately 2.4km wide lying between the moorlands and the sea.

Despite the low lying flats evidence has appeared to show that there was extensive Romano-Celtic occupation, some dwelling sites having been found as low as 5.1m ODL. The depth below ground surface is amazingly little. In some instances, Romano/Celtic period pottery shards have literally been found in the grassroots of turves lifted on an excavation site; but the average depth is probably 25 to 30cms. In the majority of cases, these sites have been found to the high ground side of the ORS.

In early Clevedon, there were two roads running North/South. Ken Road and Stroud Road. Both of these were established on ground some 1.25m higher than the average levels on the moor. There were also two 'roads' running East/West; Old Church Road and Old Street (originally one road called 'Village Street') and Colehouse Lane and Davis Lane, the latter way was purely a connecting trackway, and there is, as yet, no firm evidence that there was a good road through to Nailsea until after the enclosures. Donn's map of 1769 shows no road whatsoever on the moorlands.

There was one road which came in from the north, Walton Road, and one from the east, Tickenham Road; both of these roads forked near the boundary. One road came in from the south through Yatton, it split into two at Yatton Northend to come to Clevedon via Kingston Seymour also, but still had no entry other than Yatton.

Yatton was mainly built on higher ground, the ODL going from 15m down to 8.5m along the High Street north to the lowest point of 5.7m at ST418671 where the line of Yatton Little River crosses through the ridge.

There are references to Blind Yeo and Middle Yeo in Clevedon Court land leases of them mid 1600s, therefore these Rhines were in existence at that time. There has been no positive dating of the establishment of these Rhines, but they could not have pre-dated the medieval 'Land Yeo'. Certainly they must have been cut early, in order to assist the removal of the water from Ten Springs and Moor End Sprout (B) after the contouring of the Land Yeo.

The Middle Yeo is contoured around the slope to the south of the Tickenham church in order to lift the water above the level of the Moor at Tickenham Causeway. The Blind Yeo was run due south from Ten Springs and along the higher ground to the south of the moor, on the northern side of West End Nailsea in order to prevent drainage water from running down into the low spot (4.5m) of the moor at ST450703. Tickenham Boundary Rhyne and the cuttings through the middle of the moor were made when the common land was divided between the three parishes Clevedon, Tickenham and Nailsea (1799, 1803 and 1819).

There were references in the Clevedon Apportionment of Seawall responsibility, to the East Seawall. On aerial photograph 3089¹ there are two lengths of RDL. First from ST410707 (Tutton Farm / Middle Yeo) to ST416699 (Clevedon Farm / Blind Yeo) the second one from ST418707 (Middle Yeo) to ST419699 (Blind Yeo) which are very suggestive in pattern [Front map].

The latter line also continues as an RDL, to the river Ken at ST421694, passing through in that line, the ORS of the earlier river. The first line continues in the same way to the ORS

following the line of Davis Lane, Here it has no further connecting RDL. This strongly suggests that the old River Ken was diverted from its original course in the time period between the establishment of the two sea walls.

There has been the discovery of a straight cut section of RDL showing positive evidence of Roman period drainage planning in Ken, this was excavated by North Somerset Archaeological Research Group (NSARG).

Most of the fields enclosed in the area Moor Lane , Ken Road, Old Street, Court Lane have square corners between Ken Road and the easternmost RDL have typical Essart shapes.

All fields in the 1799 enclosure award have straight line dividers. [Sheet IV 12a]

Along the line of First Level drainage there were a series of farms and small holdings. Those **underlined** now gone or replaced, These are on the road line of Village Street with the exception of The Hide Hall (now called Highdale) which stands 250m to the north of that line.

William Spore's tenement [the moorgate control?] ST418715

Mulgreys tenement and freshwater fishery ST413713

Bow Cottage (ST412712)

Hide Hall [house still stands] (ST411713)

Myrtle Farm 1 (Richard Cox) (ST409712)

Marson Farm (Griffin ST408711)

Childs & Mainstones (ST416711)

Maskell's (ST416711)

Myrtle Farm 2 [house still stands, now called Coleridge Cottage but is not, and has always been a small farm](ST415711)

Strode Farm [house still stands] (ST402712)

Salisbury/Bullocks Farm (ST401711)

Buryatts [house still stands, now called Whiteladies](ST397699)

West End Farm [house now called Tennyson Cottage] (ST395697) and

Phelps / Pristons farm (ST392697)

Second level drainage has an abbreviated line set along Moor Lane. Newhouse (replacing Burnhouse) (ST421706/416707), Hillview [house still stands] (ST412707), and **Tuttons** [district here called Clevedon Marsh 1841 Census] (ST411707), **Godwins TMN480/481** (ST404706). Further west there were no places on the middle level except the small cottage in Mid Stroud Road, . Pomroy's 'nest'. TMNs 484-500 and lower down on Level Three, Taylors nest TMNs 555, 556 557; places built in the late 18th early 19th century.

Dowlais farm, which was variously also called Perry's West Marsh Farm and Knights Tyled House in the Marsh, and indeed on some documents all three at the same time, seems to have built below the Great Ham very early. It is referred to in Proceedings of the Som. Arch & Nat Hist. Soc. for 1881 (page 31) in Mr Greens account of the destruction and loss of the sea bank, and 80 acres of Salt Warth, and the court case that followed, in the 17th century.

Along the southern boundary of Clevedon on Third Level Drainage there were

Poplar Cottage TMN 925⁷(ST433697)

Moat Cottage TMN 927⁷(ST426697)

Ken Pier Cottage TMN 923⁷ [These three built on enclosure land from the road verges approx 1800.]

Whitehouse Farm (ST417696)

Colehouse (ST405693)

and Fourth Level

Stamfords Pen (ST403688)

Burnt House (ST399687)

Bakers 6 Acres (ST394687).

They were complemented by some running in the parishes of Kingston Seymour, Ken and Nailsea; comprising

Seawall Farm (383684)

Treblehouse Farm

Riverside Farm,

Bulbeck Farm (403786)

Wilcox's Cottage (Sanders Tenement?) still in existence but used as an implement store and no longer lived in,

Ken Pier Farm, [a long house building of early date]

Decoy Pool Farm (434694) &

Nailsea Wall farm (442693).

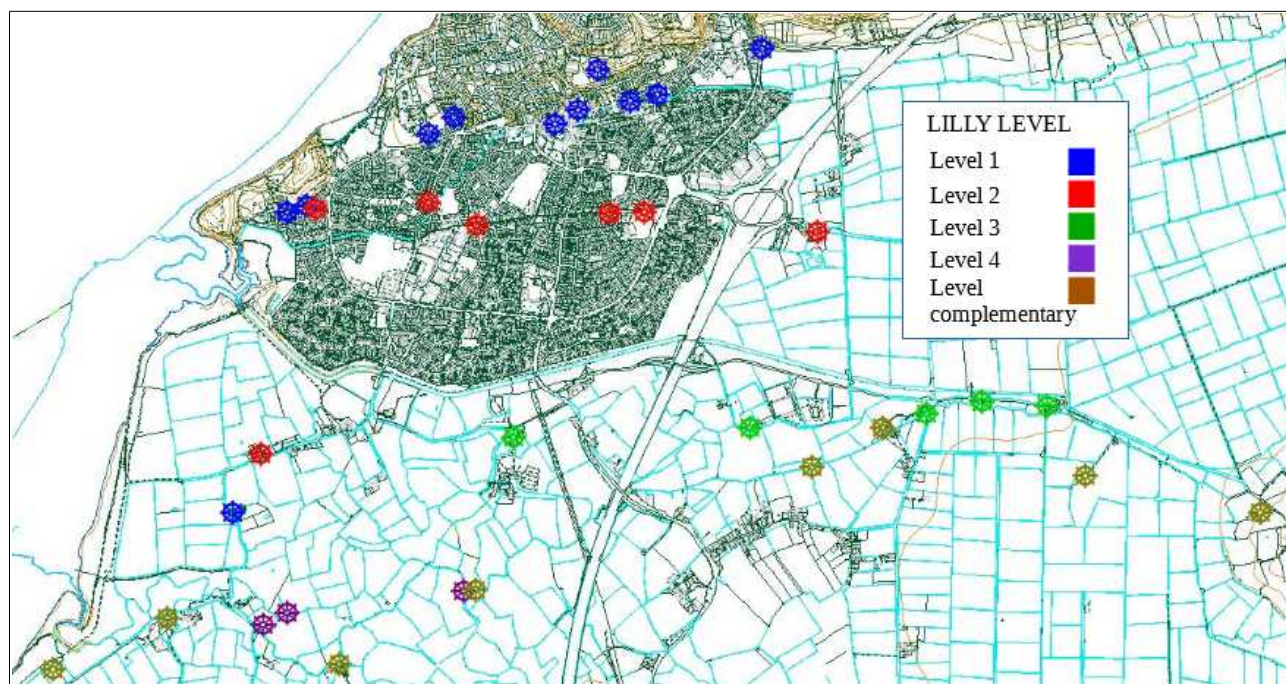


Fig Add 1: Places in Levels mapped by Lilly (1991)

Need of drainage

Post Glacially there were vast flood waters each summer melt off for many years. Some of these flood waters flowed through the North Somerset Plain, carving river courses and depositing the Ken Gravels as they did so. One of the ORS showed as a trench trace, at (ST460765) in the gas mains trench at Tickenham, where a 7' deep peat gully occurred; necessitating piling of the gas pipe. This was noted and reported⁶ by the NSARG whilst keeping observation on the line of excavation.

Another ORS was noted at Ken (ST 412683) where, in the Sewer Trench to the pumping station at Kingston Seymour, a contour line showed beneath the clay at a depth of approx 5m; showing the infilling of a sandy soil with alluvial clay. Rough rounded stones and small boulders occurred here also (mainly limestone similar to that at Long Ashton but not positively identified) and seashells⁶.

It was these heavy flows of water that shaped the present moors. The moorland enclosures are not flat areas, but saucer shaped depressions, the land at the coast being some 2.75m higher than the lowest area of Moor (4.5m ODL ST450703)¹. The average ODL is probably slightly less than 5m on the moorlands between Clevedon / Nailsea / Tickenham.

The escape routes of these river systems must have been through the lowest points of the land, on the ridge which lies between the Moors and the Sea. Two such points can be established in Ken Road, one near the present roundabout at Great Western Way (ST409708) and one at point near the gates of the old TRW plant (ST408703). A third one I have calculated to be at the road boundary of Clevedon and Ken (ST406698).

Any drainage attempt by making new river courses, or cutting Rhines⁵ must, if possible, use the ORS outlets which cut through the higher ridge of land running in a North South direction in Clevedon over which Ken Road & Stroud Road run. If these low points were not used, the new channels would need to be dug through this higher ground, in artificial construction. Nevertheless the old low points, would be subject to flooding unless they could be drained off into the new cuts also.

ODL spot levels in those roads vary from 5.5m to 6.5m. Those parts of Ken Road which were prone to flooding (ST409708 & ST408703), prior to the restructuring of the sewerage system, are upon the calculated courses of the ORS catchment area. It is significant that the ODL between TMN 707 and 708 in the Ken Road is only 5.4m whereas one field above it is 5.7m and one field below it is 6m.

Unfortunately, the OS83 map has buildings showing on it, in the top half of Ken Road, and ODL spot marks are used less, Bench Marks are set some small distance above ground and vary. The suggested ORS nevertheless has a spot mark of 19 feet (5.8m) showing at the Junction of TMNs 438, 435 with TMN 443, against spots either side of 20 feet (6.1m) and bench marks of 22 feet (6.75m) and 23 feet (7m) in the area.

There has never been a serious flooding problem in Stroud Road. Here both rivers, Land and Middle Yeo run through one of the calculated ORS/ODL low points.

The area by Tutton's farm [map 2b] and further south was, right up into the 1800s called Clevedon Marsh.

The enclosure act of 1790 for Clevedon Moor and Tickenham Moor suggests it to be likely that a new drainage system had been overlaid upon the old RDLs. There is reference in documents of the 1730s to a 'New Cut'; it could be recutting the RDLs of the Moor prior to enclosure.

Drainage

The area in Clevedon commonly called 'Moors' was drained naturally until the 13th century when through the work authorised either by the Augustinian Friars of Bristol, or Nicholas Fitzroger Lord of the Manor of Tickenham. [1262 St Marks Priory was granted Rights of Turbary in Tickenham when the Lord of the Manor of Tickenham granted to the Priory, the right to dig turfs and collect rushes and sedge; 'in suitable and accustomed places and at times when others were accustomed to dig and cut'.] It was stated that care was to be taken not work land which he and his heirs had reclaimed (Hearne Adami de Domerham volume 2 Oxford 1726), the river 'Land Yeo was recut so that the water from Barrow Spring (its source); and the 'Whirley Pool' at Birdcombe (A) [Front map] would not flow into the moorland. The ORS of this was across the flats of the moor, carrying with it the waters from Ten Springs, and Moor End Spout (B) (ST 467715) [Front map]

The level of the river presently called the 'Land Yeo' [Level One] was raised above the moor level at Jacklands Bridge (ST 470717) and carried along the contour line north of Tickenham church² until it reached the higher ground level in Clevedon (ST409711) it was here app ODL 6.75m and the natural fall enabled it to carry on to the sea in its original course without further contouring. It is a curious fact that the old North Somerset Drainage Board (rumoured to have been established before this occurrence) would never let water from this upper level be drained into water of the Middle Yeo or level two.

To further drain the moor, the river now called 'Middle Yeo' [Level Two] needed to be formed, and raised in level in its turn. In consequence of this, Ten Springs, and Moor-end Spout ['B' on Map] (ST 466716) became the source of its new, artificial drainage channel, which was carried around the South of Tickenham church, at an ODL level, higher the moor on the Tickenham Causeway, but lower than the Land Yeo.

In turn the lower ground again had a new 'Rhine' [Level Three] which started as did Middle Yeo at Ten Springs, but ran through the lower ground at the south of the moor to the north of West End Nailsea. Called Nailsea Boundary Rhine, it entered into and became the Blind Yeo when it reached ST 432697.

Clevedon Boundary Rhine, Tickenham Boundary Rhine, North Drove Rhine, and Ten Foot Rhine; were all cut later during the enclosures of 1799, 1803 and 1819, these merged one into the other and all entered and emptied into the Blind Yeo³.

Kenn River [Level 4] has its main source at Chelvey Spring (5 on map) with a secondary one at Midgall Ponds (4 on map) where a series of springs rising in the fields cause a boggy patch of ground, ([16] Littlewood Lane Spring is now a spasmodic flow and runs through the area of 4). Ken River has over the years had much course re-routing done on it, and now drains the Ken /Yatton Moor only although in this thesis I shall prove that it originally ran out through Clevedon Pill, and not through Kingston Seymour.

Yatton Little River [Level 5] a wholly artificial river, runs into the Congresbury Yeo at ST395652⁴ and the southeastern part of the parish of Kingston, together with the small area of Yatton Biddle Street Rhines, and Gang Wall, Well Lane (2 on the map) and Claverham Springs (Nos 1 and 3) also drained mainly through Yatton Little River into the Congresbury Yeo. Although in Kingston Seymour there exists a complete series of interlocking rhines which always linked the Ken River to the Yatton Little River and the Congresbury Yeo.

We shall not be concerned with level five drainage or ORS, in this essay except briefly.

After the primary draining was done on Levels one, two and three, some thousand acres was opened up for summer grazing. Many of the fields in the area of the 'Village Street', and between there and the Middle Yeo, would have been used originally under the open field system, therefore it will not be surprising to find them with straight line boundaries, no doubt given when they were parcelled into individual fields. Unfortunately, this early use has also destroyed the traces on Aerial Photographs of many of the ORS marks which would have been there.

Below the line of Middle Yeo many fields show irregular boundary shapes. These suggest essarts, with the PRS used as boundary lines, it would be normal, being good drainage, to use the then existing rivers as field boundaries in the area referred to as Clevedon Marsh.

Once past the RDL of the Eastern-most or second Sea Wall, almost all of the field boundaries are square shaped; this suggests the parcelling up of reclaimed land as a whole, rather than individual efforts to shape a field out of the Manorial Waste.

The Coast line between Clevedon and Woodspring Promontory is broken by 4 Pills⁵ one at Clevedon, one at Kingston, one at the mouth of the Congresbury Yeo (this river also has a small pill creek approximately 950m from its mouth) and one under St Thomas Head at Woodspring where the river Banwell enters the Bristol Channel. The Hatch⁵ at Clevedon Pill, which was blocked when the new hatch was made, for the 'New Blind Yeo' was an artificial structure and river exit, probably made when the Middle Yeo was cut.

Prior to this, there could have been two river mouths, one about where the present Land Yeo exits; whilst the other river [The ORS River Ken] had a natural exit from its run in a curve to the 'Stinking Corner' well known to Clevedonians even as far back as the 17th century (see Middle Yeo map 1). The probability is that there was only one exit [See The Stroud above Middle Yeo map 3]. This will explain why the Seawall was so deeply

indented here; if there was a large river mouth with a muddy estuary the wall would naturally follow the easiest line, under general rule 7 R/E.

The Aerial Photographs 3091¹ and 3093 show this place well. A study of the APs, shows that the present Land Yeo has been canalised once it crosses the line of Stroud Road, and a more natural exit line shows as a faint RDL through the fields below the present river. Unfortunately, much of this ORS is covered by the Brick Works situate in Stroud Road at the time of the APs. That there was a mill near the top hatch is certain, because the field to there is called Mill Ground in the Tithe Apportionment list of 1839. Parallel thinking always puts the possibility that the mill could have been at the South end of this field, but there are no indications on the APs of Mill Leat or buildings there, whilst on the AP there are marks at the north end of the field.

Generally speaking, all water south of the Land Yeo flowed into Middle Yeo, all south of Middle Yeo into Blind Yeo, All south of the Ken Pier / Nailsea Wall road into Ken River. Near Ken-moor Gate and Ken River Water Gage (ST450680) a side rhine has been cut, which also links with Yatton Little River, and re-links via Black Ditch Rhine with Ken River.

The APs 3085, 3087¹ show many definite RDLs cut into the levels which have now been supplanted. Some which show near the 'New Blind Yeo' Rhine have now been destroyed on the ground, but still show in the prints. Many of the ORS traces remaining in the fields are referred to by farmers as 'Sucker Gripes'.

One of the most easily seen on the aerial photograph is at ST710423/OS83 Clevedon Field Number 622 (map 1) this is a continuation from the new Middle Yeo, which at this point used a small section of ORS (pre-medieval) before it was 'RHINED' due south to ST425705 at Cooks Lane where it was turned West, but with a connecting 'Hatch'⁵ and ditch to Blind Yeo.

One not so evident, even on the photograph is the straight cut, RDL which runs from ST436696 to ST427708 here it would appear to join into the small section of ORS which is incorporated into the new Middle Yeo.

It is significant that the northern-most section of ORS traces should be so difficult to spot, once the bounds of the Clevedon settled area is reached. This is the very place which has been longest in cultivation, and one would expect ridge and furrow to have smoothed any signs of the original gullies left on field surfaces, and that they would be confined purely to FBLs. The second level down, running through the Clevedon Marsh, had not had such a long history of field use and here the traces show well both on the field surface and in hedge-line. When the watershed of Ken Road is crossed they become fainter, and one can only predict as for instance the eastern FBLs of TMNs 545/6/7/8 on Middle Yeo map 1 as being probabilities. I think that the ORS here ran into the lower river of the three and that they make a joint outfall at Stinking Corner.

The lowest of the three shows best the ORS traces, as the land only having been disturbed for farming consisting mostly of grazing, haymaking and very little arable until

historically recent times; field surfaces have not been much disturbed, and gripes and grouts show readily.

A glance at the 1882 6inch Ordnance Survey Sheet IV SE shows that, at the time the boundary was fixed, had the road been in existence, it would have been a more regular and better boundary.

A similar thing occurs at Tickenham, where the RDL of the Clevedon Boundary Rhine acts as the Parish Boundary, and goes in a line from Nailsea Wall to the Land Yeo. Here it continues for a short time along a rhine in the field north of the river, until it takes the line of Doggetts Fosseway to the road. The short stretch between the Fosseway and the river would have been better along a Field Boundary Line than the short stretch of Rhine (50 yards at most) had those fields existed at the time the boundary was set.

Care in the use of Aerial Photographs

Care must be taken in interpreting Aerial Photographs. The series used, which were taken in the December of 1946, show how many marks would not be seen today. Kale as a winter feed shows height marks as this was often fed by fence controlled cropping, leaving the kale standing in the field. There were no muck spreaders, and manure was carted to the fields and heaped for later spreading by hand, using a dung fork or peek. These heaps will show as an orderly row of dots across the ground.

Track marks show infields as lines which can often be mistaken for ORS markings. Tracks generally go to a hedge line unless here are deep gripes in a field. They are also inclined to be darkest in the middle and fade to the outside. If careful observation is made the gap line of the gate frequently shows as a bright mark in the dark line of the hedge.

Local knowledge as to depth of ditches etc can be a great help. These vary tremendously and the ORS ditches or RDLs are most often the deepest. They were the natural drainage channel in the first place, and other ditches were dug to drain into them. This has kept them as the natural sucker ditches ever since.

Some ORS lines in the river courses which are still in existence have been slightly straightened out by the continual 'throwing' of the river and recutting of the banks. A certain amount can be reconciled as normal, but a straight cut of more than a few feet is almost certainly caused by 'Rhining'

Drying marks on the film surface can be mistaken as a trace mark on the ground. It can be distinguished by the fact that it will run in a complete return to the original mark in an irregular shape. It mainly shows as a colour variation, as do spot marks on the print, although these are inclined to be oval in shape.

Abbreviations

AP Aerial photograph followed by number
FBL Field Boundary Line

Nest I freely confess to having abstracted this term for a small collection of cottages from the Clevedon Sanitation Report of 1851. So apt was it for describing the little hamlet of cottages at Salthouse Gates (Hack's Nest) that we have used it ever since.

NSARG North Somerset Archaeological Research Group

ODL Ordnance Datum Line, of feet above sea level

ORS Old River System

OS83 Ordnance Survey map 1883 Series

RDL River or Rhine Ditch Line, either still in use or as a trace upon the aerial photographs

TMN Tithe Map Plot Number

Annotations

1 These low level places show well on the RP CPE UK 1869 041212Z Dec 46 16400 ft 19/100 aerial photographs numbers 3085 and 3087. They are particularly useful in showing the way the Tickenham / Nailsea Moor was drained.

2 It would appear at first sight that this is the earliest drainage attempt on the Tickenham / Clevedon Moors. A Romano-British site excavated by NSARG at Ken ST423687 shows signs of artificial drainage cuts of that period. A farmstead site excavated at Tickenham ST431712 was at a level of 16-17ft OD there is however doubt about sea levels.

3 The Blind Yeo was replaced in the 1960s by the new Rhine cut through roughly along the same course but a straightened one. This drained much of the water which formerly flowed through Middle Yeo, which in its turn was culverted, on most of its passage through Clevedon in the 1970s-80s.

4 The cutting of the new Blind Yeo has resulted in many changes. Ken River now discharges into it at Ken Pier and the Sea hatch at Kingston Pill is blocked off. The motorway has also caused changes at Phipps Bridge at Congresbury / Kingston ST395652 which was formerly the highest position pre-motorway to which the tides flowed. In the 1800s boats did go as far up as Congesbury Village where they unloaded at the Ship and Castle wharf.

5 see J Skeggs Somerset Dialect printout at SRO. Gripes, Keeching, Outfall, Pill, Rhines, Slubbing, Throwing etc if necessary.

6 See Hawkins report on the levels. The two instances noted here were seen and reported to him by NSARG. The stones varied in size from goose egg to larger than football in size. They showed no sign of polishing only roughly bruising into shape.

7 The lines of rivers here are only about 100 foot apart strictly speaking all these counted as third level would be getting the advantage of the River Ken as a water supply and drainage system.

8. There has been some juggling here and exchange of fields for tithing purposes, to even out the balance of half fields. OS83 114 Clevedon is not on the 1839 map as a

Clevedon field. Field Number Clevedon 108, of which one third is in Ken field number 3, is reckoned as Clevedon for tithing purposes.

Authors

Derek Lilly, Clevedon

Date

1991