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"Old Series Sheet 10 - A Concise History"

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The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

Old Series Sheet 10 – A Concise History

Fraser Donachie

As George Orwell might have said, 'All maps are created equal, but some are more equal than others'. Sheet 10 of the *Old Series* is, for me, one that stands out from the crowd. This is partly because I've spent all my life living and working in the Solent region. But it's also because sheet 10 is a fascinating example of an early Ordnance Survey map, having an interesting history and several unique features that qualify it for special attention.

This article sets out the context for the map, describes its key characteristics and examines its pre- and post-publication history. I have inevitably drawn upon many pre-existing sources of information but I hope that, by consolidating the information into a unified narrative, this survey provides some useful insights.

Figure 1. Old Series, Sheet 10 (State 4)

Context

The one-inch *Old Series* were the first maps to be surveyed and published by the Ordnance Survey. Their development and publication were progressed under the direction of William Mudge (1762–1820). The sheets were to be sold in sets as 'Parts' of a General Survey of England and Wales. As Hellyer & Oliver[1] explain "The earliest Parts were in effect county maps, but, as sections of a national map, the component sheets

1 Roger Hellyer & Richard Oliver, '*The First Ordnance Survey Map*', CCS 2015.

were filled to the neatline …". Their inception was chiefly driven by military needs, as a response to the French Revolutionary Wars (1792-1802) and the Napoleonic Wars (1799-1815).

Privately published county maps had preceded the *Old Series*. An excellent example is Yeakell, Gardner and Gream's map of Sussex, published by William Faden (1750?-1836) in 1795 and based on the Board of Ordnance trigonometrical survey. Faden also published a map of Kent in 1801 using trigonometrical and topographical surveys conducted by the Board of Ordnance. The Faden maps were effectively prototypes for the *Old Series* that ultimately covered the whole of England and Wales to the 'Preston-Hull' line.

The progression of the series is described within the Harry Margary *Old Series* volumes,[2] Hellyer & Oliver and Rob Wheeler's article.[3] The series started with Essex (Part I, 1805) and progressed to Devonshire (Part II, 1809). Sussex was 'bypassed' (presumably the Yeakell, Gardner and Gream map was considered fit for purpose) and so the priority became the 'gap' between Sussex and Devonshire; i.e. the coastal areas of Dorsetshire, southern Hampshire (including the major naval port of Portsmouth) and the Isle of Wight.

Work on two Dorsetshire sheets had begun in 1808 but these were delayed.[4] It seems likely that the invasion of the Isle of Wight by Napoleonic forces could still have been regarded as a credible risk when Mudge was juggling his post-Devonshire priorities.[5] Thus sheets 10 and 11 were to follow on from Devonshire. Of the first twenty-five sheets in the *Old Series*, only four were land-locked – see *Figure 2*.

2 J B Harley & Y O'Donoghue, *The Old Series Ordnance Survey Maps of England and Wales*, Lympne: Harry Margary, 1975 et al. In particular, see Volume 3 covering South Central England.

3 Rob Wheeler, William Mudge and the General Map of England, *Sheetlines* 97 (August 2013).

4 As recounted in Hellyer & Oliver's *The First Ordnance Survey Map*, in September 1808 outline proofs 'of the coast, from Lyme to Lymington' were 'to be struck soon' (Mudge to Handfield, 6 Septmeber 1808 in TNA WO 55/960). This date is clearly well in advance of the engraved publication dates on sheets 16 and 17 that are both 10 April 1811. This is evidence of shifting priorities and perhaps indecision. It also demonstrates that the engraving process could stretch over prolonged periods.

5 In 1777 Gen. Charles Dumouriez had proposed landing 12,000 troops on the Isle of Wight to form a bridgehead for an invasion. See Richard Glover, *Britain at bay. Defence against Bonaparte, 1803-14*. London, 1973 p122.

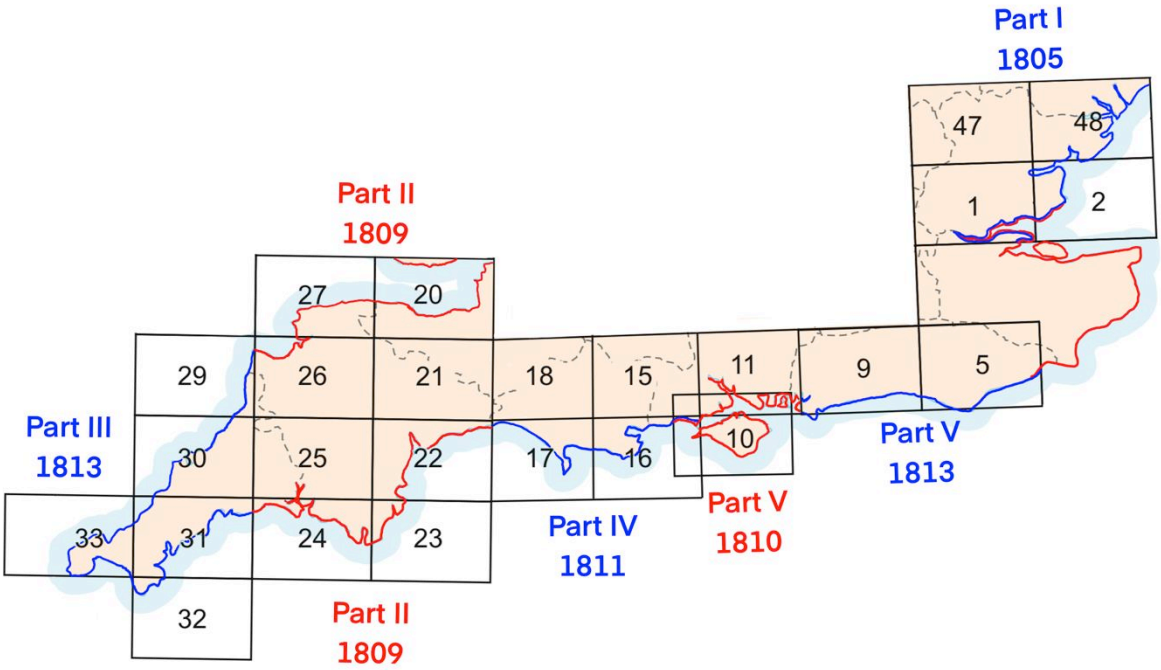

Figure 2. One-Inch Old Series – Coastal Coverage

Characteristics

Sheet 10 has a number of unique characteristics. Perhaps the most obvious is that it's displaced from the *Old Series* pseudo-grid of sheet lines. The Devonshire sheets and the early start made on the Dorsetshire sheets suggest that the grid concept had been firmed-up by 1808/09. A logical extension of this grid to cover the island would result in an extremely awkward sheet – see *Figure 3*. Mudge must therefore have felt compelled to depict the island centrally on a sheet, despite it breaking away from the grid. He therefore gave himself *carte-blanche* to position sheet 10 wherever he wished. As Dr J Brian Harley observed,[6] this design would reflect "the custom of many private cartographers who had published [the island] as a unit independent from Hampshire". The design took advantage of the (broadly) standardised sheet size of c. 35.2 x 23.6 inches between the neatlines, enabling the southern coast of Hampshire to be included.[7] The coverage therefore extends between Highcliffe in the west (but failing to reach the Dorset boundary) and Hayling Island in the east (stopping just short of the Sussex boundary).

6 Dr JB Harley, Cartographical Notes to Accompany the David & Charles Re-issue of Sheet 10, 1970. Prior to 1890 the Isle of Wight was administered as part of the County of Southampton (Hampshire), albeit that it had its own militia. Northern Hampshire, including sheet 12, was covered after 1816.

7 See also Richard Oliver, *The sheet sizes and Delamere sheet lines of the one-inch Old Series*, *Sheetlines* 77 (December 2006).

Figure 3. Sheet 10 As It Might Have Looked (Mock Up)

Brian Adams, writing in *Sheetlines* 38,[8] states that, "my measurements show [sheet 10's] central meridian [sic] to have been … [parallel to] 1° East". The decision to align the sheet to this meridian seems idiosyncratic, given that it could easily have been aligned to the meridian of Greenwich instead. Engraved lines, just outside the neatline, identify the meridian of Dunnose on a slanting angle with respect to the border.

Sheet 10 is also unique in terms of the depiction of relief. The *Old Series* sheets include hachured hills to give an impression for the variation in height of the terrain. This was an important element of the military map specification. However, sheet 10 is a 'hybrid'; the island includes hachures but the 'mainland' is depicted in outline only, without relief. In addition, the Hampshire coast excludes certain place-names that were included on sheets 11, 15 and 16. The reasoning behind this decision is unclear. One theory is that Mudge needed to demonstrate some form of saving to the Board of Ordnance, at a time when his costs had perhaps been creeping ever upwards. After a period of time it was felt necessary to explain this 'hybrid' treatment to the map users and so, from state 3 onwards, the sheet includes the following notice in the top margin: '*The Coast of Hampshire in this Map is given in a Skeleton state only with a view to shew the connection of it with the Isle of Wight, for a*

8 Brian Adams, '*Parallel to the Meridian of Butterton Hill"— do I laugh or cry?*', *Sheetlines* 38 (January 1994).

perfect representation of the Coast of Hampshire, see the finished Sheets of that County'.

Finally, sheet 10 includes some interesting cosmetic features. Hellyer & Oliver state that sheet 10 "was the first sheet to have a decorative border on all four sides". The presence of the engraved border implies that Mudge regarded the island as an important entity in its own right, even though it was not a county. Sheet 10 is also well known for being the first to carry the words 'Ordnance Survey', rendered in a bold title within the top border thus: 'ORDNANCE SURVEY OF THE ISLE OF WIGHT AND PART OF HAMPSHIRE' – see *Figure 4*.

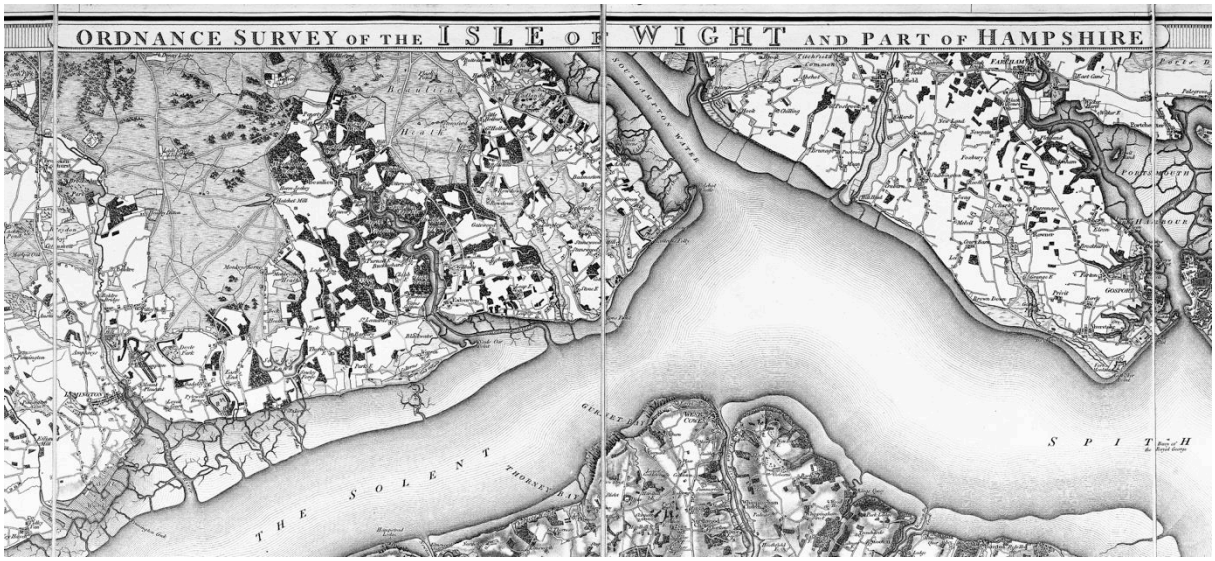

Figure 4. Old Series Sheet 10 Border Title

Pre-Publication Chronology

The trigonometrical survey had begun as a scientific exercise in 1784 under William Roy (the Anglo-French Survey). After a hiatus, the survey was re-invigorated in 1791 using an improved Ramsden theodolite and now under the leadership of Major Edward Williams, Lieutenant William Mudge and Mr Isaac Dalby. In the spring of 1792 a planning expedition by Mudge and Dalby resulted in Dunnose, high up on the Downs between Shanklin and Wroxall, being selected for one of the principal trigonometrical stations [9] and marked using a buried cannon ('the muzzle of the gun is above the surface of the ground'). Return visits to the island were made in 1793 "to determine the directions of the meridians", in 1794, in 1795 for levelling and again in 1801 and 1802 to measure the arc of the meridian between Dunnose and Clifton, Yorkshire, using Ramsden's zenith sector.[10]

9 *Phil Trans*, 1795. Article XX '*An account of the trigonometrical survey carried on in the year 1791, 1792, 1793, and by order of his grace the Duke of Richmond, late Master General of the Ordnance*'.

10 *An Account of the Measurement of an Arc of the Meridian, extending from Dunnose, in the Isle of Wight, Latitude 50 37' 8", to Clifton in Yorkshire, Latitude 53 27' 31", in*

As well as the trigonometrical survey, the Board of Ordnance wished to prioritise the topographical survey of the Solent area based on the prevailing military risk assessment. In 1791, the Master General had ordered "Mr William Gardner, the Chief Surveying Draftsman, to proceed with the survey of the Isle of Wight" and had approved his taking with him "as many assistants as he might want, exclusive of Messrs Yeakell and McLauchan, from the Drawing Room at the Tower".[11] William Gardner (*c.*1739-1800) had already been employed to make similar topographical surveys at Plymouth, Jersey, Guernsey and in Kent "for short term military objectives".[12] There is evidence that topographical surveys on the island were indeed undertaken as early as 1791, prior to the extended trigonometrical survey, as follows:

- nineteen small field sketches survive at three inches to the mile, dated 1791 and attributed to Thomas Yeakell.[13] The wrapper is signed by Lieutenant-Colonel Frederick George Mulcaster (1739-1797).
- eleven separate drawings survive dating between 1791 and 1793.[14] These are at six inches to the mile and catalogued as 'fragments of 'foul plans' made as part of the Topographical Survey, showing trigonometric lines.'[15]

A further phase of topographical surveying was undertaken in 1793-94, after France had declared war on Britain, most probably based on the trigonometrical control points established at Dunnose, Mottestone Down and Brading Down. Mudge and Dalby,[16] writing in 1799, recorded that "In the years 1793 and 1794 Mr. Gardner, and the gentlemen of his department, accompanied us in the [trigonometrical] Survey of the coast of Hampshire and the Isle of Wight, and have since finished a military description of both, drawn on a scale of three inches to a mile: but these plans … are lodged in the Tower, for the use of Government, and not

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the course of the Operations carried on for the Trigonometrical Survey of England, in the years 1800, 1801, and 1802." From the Philosophical Transactions.

11 Board of Ordnance minutes in TNA WO 47/117, f.775 covering the period January to June 1791.

12 WA Seymour (Editor), A History of the Ordnance Survey, Folkstone, 1980.

13 TNA MPH 1/776. The catalogue states "these are probably Dawson's original field drawings", referring to Robert Dawson (1771-1860), surveyor, draughtsman, and RK Dawson's father.

14 TNA MR 1/489 includes six items extracted from the former reference WO 78/1648. TNA WO 78/1648 contains a further five drawings. One item is endorsed 'Dawson's foul plan of the country about Newport'. Another item is identified as 'W Gardner's Plan of the Isle of Wight …'. Three items are signed by Lieutenant Colonel Frederick George Mulcaster, R.E. Mulcaster was a former Surveyor General of East Florida and was alleged to be an illegitimate son of George II.

15 Hodson & Campbell state that 'foul plans' were field sketches, made to augment the angle and distance measurements recorded in field books.

16 Mudge and Dalby (1799) *An account of the operations carried out for accomplishing a trigonometrical survey of England and Wales, etc.* Vol 1 p. xii and also Mudge (1801) Vol 2.

submitted, from obvious motives of policy, to public inspection". Mudge, interviewed much later in 1811, recalled that the Duke of Richmond had directed him to formally begin the topographical survey ('filling up the triangles') "*about* four years after the [Trigonometrical] Survey commenced, and when it was carrying on in the Isle of Wight."[17]

Ordnance Surveyors' Drawings (OSDs) 75-1, 75-2 and 75-3 include manuscript annotations stating 'Date of survey 1797', implying that a topographical survey of the Hampshire coast was made in that year. Other surviving drawings, catalogued as 'Budgen's Rough Plans[18]', made at three inches to the mile are perhaps further evidence for this, albeit dated 1798. Contrary to the impression given by the use of the word 'rough', these original protractions were detailed topographical maps showing buildings, field boundaries and indications of land use.[19]

Two sets of fully worked-up or 'finished' OSDs were created using the amassed material [20] :-

- Eight plans were drawn covering the island (OSDs 67-74) under the direction of William Gardner. These are at the large six-inch scale, as adopted by Gardner on his earlier surveys in e.g. north Kent. Each plan measures c.31 x 53 inches. OSDs 68, 69 and 71 include manuscript annotations stating 'Surveyed *circa* 1793-4'
- A finished plan of the Hampshire coast (OSD 75) was made at the three-inch scale. The map doesn't quite align to the full east-west extremities of Hampshire; the western edge reaches Christchurch rather than the county boundary with Dorset.[21]

The OSDs were most likely drawn shortly after the topographical surveys, as there was an urgent need to furnish the military with accurate maps during the French Revolutionary Wars. They are drawn

17 British Parliamentary Papers (HC) 1812 (5), IV, 137. *The Seventeenth Report of the Commissioners of Military Enquiry*. Mudge's recollection that the topographical survey was authorised "*about* four years" after the extended trigonometrical survey had begun would make that *c.*1795. However, he may have been thinking about the production of printed maps as opposed to preparatory drawings. The date could perhaps refer to the Gardner, Yeakell and Gream map of Sussex.

18 TNA MPHH 1/220 'Budgen's Rough Plans': four sheets of the Topographical Survey of Hampshire. (1) Plan showing Lyndhurst, Lymington, Brockenhurst and New Forest area. (2) Plan showing Titchfield and Hamble area. (3) Plan showing Ringwood and Christchurch area. (4) Plan showing Portsmouth, Gosport, Porchester, Havant, Emsworth and Cosham area. Approximate scale: 3 inches to 1 mile. Endorsed on (3): by Charles Budgen, Royal Military Surveyor and Draughtsman, 1798. See also MPH 1/580 dated 1804.

19 See Figure 4 within 'Early Military Map Surveyors of the Board of Ordnance', by Rose Mitchell and Emma Down, *Sheetlines* 118 (August 2020).

20 Held by the British Library with scans available via Wikimedia Commons.

21 The missing portion of Hampshire on both OSD 75 and the resulting printed map would, in *c.*1810, have been regarded as 'wasteland' and of little interest to anyone. After this date it rapidly became Bournemouth.

on rectangular sheets with black ink borders and contain topographical details, hachured hills and place-names. Vivid colours are used to distinguish roads, rivers, settlements and different types of land use. As Harley & O'Donoghue observe, "these plans were regarded as among the best examples of the art of the English military draughtsman" – see *Figure 5*.

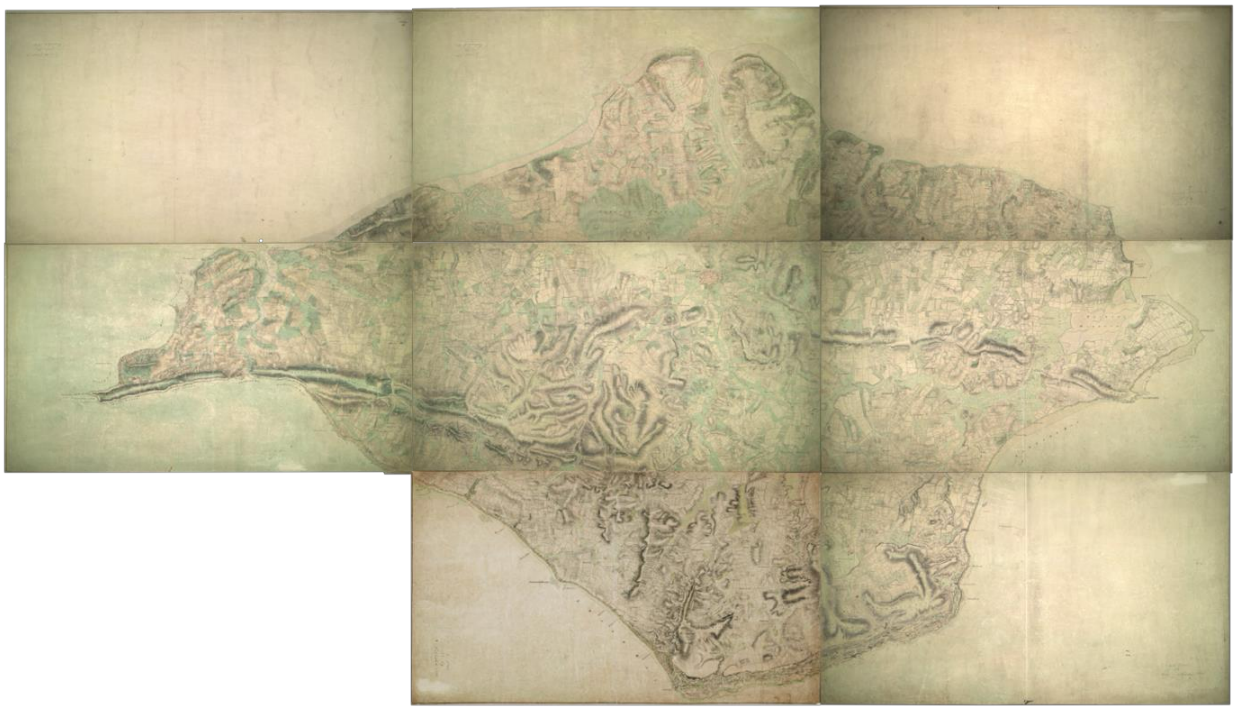

Figure 5. OSDs 67-74 Covering the Isle of Wight

Figures 6 and *7* illustrate the alignments between the surveyors' drawings and the printed sheet 10, showing that the OSD sheet lines were aligned to the Greenwich meridian and that sheet 10 is aligned to the meridian of 1 degree east.[22]

22 Blue = OSDs 67-74, Red = OSD 75 and Black = sheet 10. These assertions are made on the basis of carefully geo-referencing the sheet lines in the QGIS geographic information system (GIS) software application. Note that OSD 75 comprises six segments of paper (see *Figure 6*). Rob Wheeler has suggested that the segment including Portsmouth could have been drawn first. Note also that the western neatline (ink border) is not perpendicular to the northern or southern neatlines.

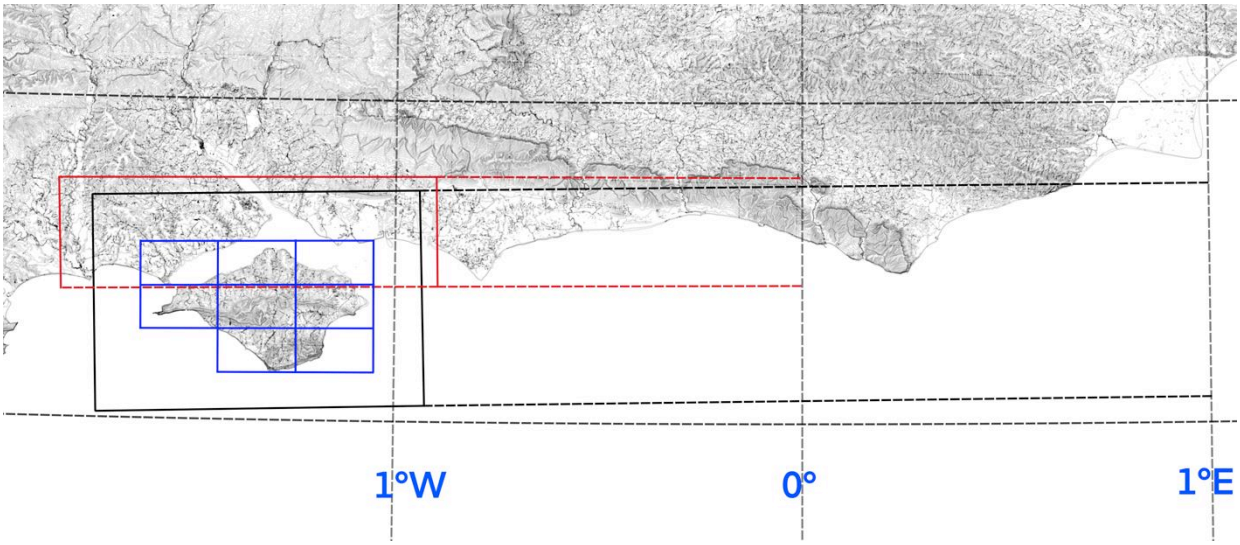

Figure 6. Sheet Line Alignments to Meridians (Cassini Projection)

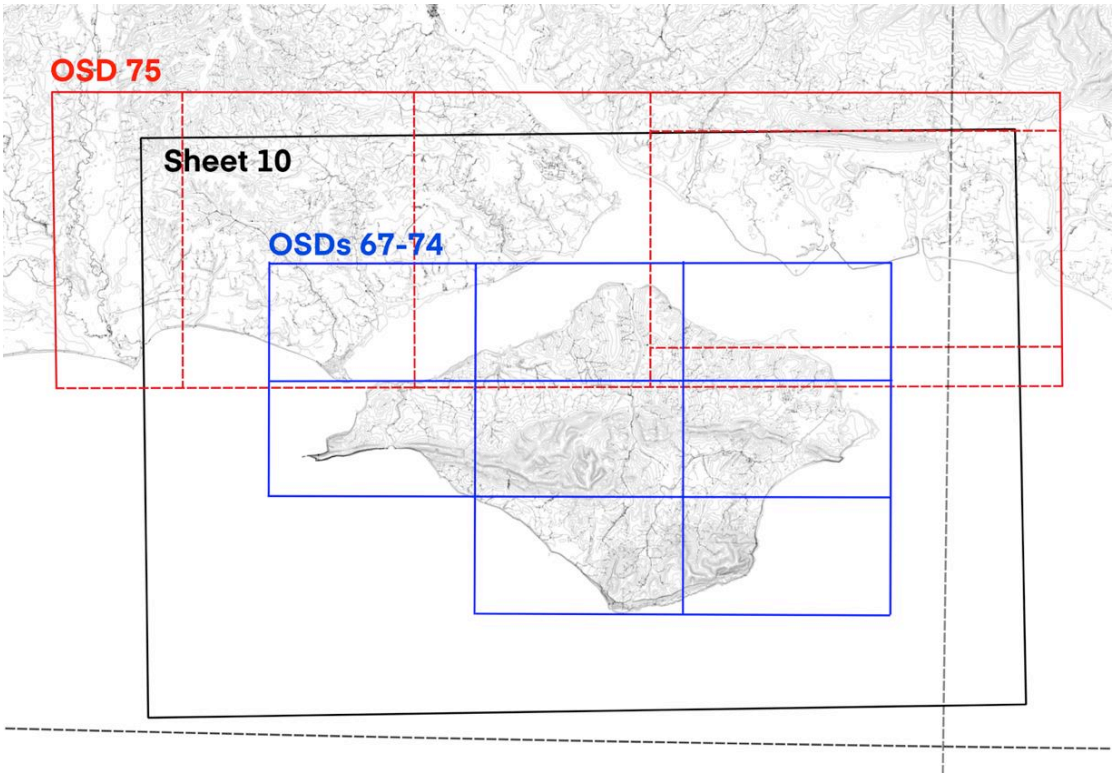

Figure 7. Alignments Between OSDs and Sheet 10 (Cassini Projection)

The 'finished' OSDs were used in two ways. Firstly they were manuscript maps in their own right and could therefore be circulated for use directly by the military, before the existence of more portable printed maps.[23] Secondly, as Hodson & Campbell[24] explain, they were "theoretically, the final document from which the reduction to one inch

23 In addition to OSD 75 held by the British Library, The National Archives hold a second copy ref. TNA MR 1/1406. The TNA copy is in excellent condition.

24 Yolande Hodson & Tony Campbell, *Ordnance Surveyors' Drawings, 1789-c.1840: The Original Manuscript Maps of the First Ordnance Survey of England and Wales from the British Library Map Library*, Research Publications, 1989.

scale was made for engraving. In practice, especially when long periods separated original survey and publication, they became only part of a large corpus of compilation material which built up as revisional surveys were made".

In July 1808 Mudge wrote to the Board of Ordnance seeking funding for the re-drawing and reduction in scale of Gardner's OSDs. Permission was granted for this activity covering over 770 square miles and including the Isle of Wight.[25] The task, apparently entrusted to Thomas Yeakell the younger [26], included the reduction of the contributing OSDs from their six-inch and three-inch scales down to the One-inch scale using a pantograph and the introduction of some generalisation (including the deletion of field boundaries) to create a monochrome 'model' that could be passed to the engraving section.[27]

The next task was to engrave the copper plate reflecting the 'model'. The engraving of sheet 10 could have begun in 1809 with the original intent of publishing the sheet in 1810. The engraving of the *outline* and *ornament* was undertaken by Benjamin Baker (1766-1841) and his assistants and the engraving of the *writing* was undertaken by Ebenezer Bourne (1763-c.1838).

When compared with OSDs 67-74, the engraved map includes a small number of additional features that post-date the original survey of 1793-4. Various place-names were added and other notable additions include: i) large barracks to the east of Parkhurst Forest completed in September 1798, including an improved road, ii) Norris [Castle] and its grounds, constructed in 1799, iii) barracks at Freshwater, known to be occupied in 1804, iv) infilling between Lower Ryde and Ryde, v) place-name New Village south west of Newport, vi) a new road north of Merston [Merstone], vii) Quarry Abbey re-named Quor Abbey, viii) barracks at Niton, ix) barracks at Grange Chine and x) barracks at Sandham [28] (Sandown). The additions encompass both civil and military features and seem to imply field surveys and the existence of 'compilation material' that is now lost.

The engraved publication date that appears on the map imprint is 1st June 1810.[29] However, as explained in Hellyer & Oliver, we know that

25 TNA WO 47/2603, 29-7-1808.

26 British Parliamentary Papers (HC) 1812 (5), IV, 137. *The Seventeenth Report of the Commissioners of Military Enquiry*.

27 This is likely to have included topographic features forming an 'outline' drawing to assure planimetric accuracy. It may not have included hachured hills or writing, as these could be observed on the OSDs and used as guidance for the engravers. Engraving generally proceeded in the following order: outline, writing, ornament.

28 Sandown barracks comprised 'rented barns' in 1805. Ref. Hansard, HC Deb 21 May 1806 vol 7 cc293-5 'Barrack Abuses'.

29 A precise date is used in order to gain copyright protection afforded by the Engravers' Copyright Act, 1735, (8 Geo.II, c.13). The Act states that the date of protection commenced 'from the Day of first publishing thereof, which shall be

the engraving task over-ran by a considerable period. A letter from Henry Phipps (1755–1831) to William Mudge [30] dated 2 September 1811 says "The Quarter Master General's Department having made application for a few of the early Impressions of the Ordnance Map of the Isle of Wight, I am directed to express the Master General's desire that they may be supplied accordingly as soon as it shall be printed. His Lordship wishes however that in this as well as in all other cases, it may be distinctly understood, that the Map is not to be made public". The letter implies that impressions couldn't be obtained and that printing had yet to commence in the autumn of 1811.

Even if the map was ready to be printed, public sales were now banned by Phipps, 1st Earl Mulgrave, in his role as Master-General of the Ordnance.[31] The ban wasn't lifted until April 1816, after the Napoleonic War had ended. As Hellyer & Oliver tentatively conclude, the engraved publication date could have been applied early on in the plate's life in order to protect the Ordnance's copyright as unfinished impressions were distributed outside the Tower.

Circulation of Early Impressions

At some point, perhaps in 1812, the engraving was completed and impressions could be circulated for government use. Oliver & Hellyer [32] note that "At least three copies are known of the Isle of Wight sheet in 'unnumbered' state". These are identified as states 1 and 2 within the cartobibliography. State 2 introduced some very minor changes to the marginalia, adding tick marks to indicate the limits of neighbouring 'finished' sheets 11, 15 and 16.

Whilst it is impossible to date the surviving maps from this period (there are no embossed printing dates and it is known that the paper stock had been sourced before 1810, rendering the watermarks of little use), it is tempting to speculate that these two initial states were 'unfinished' impressions printed during the Phipps ban.

Publication

The changes from state 2 to state 3 were also fairly minor but included the addition of the place-name Mill Bay (nr. Ventnor), the Roman sheet number 'X' and the notice regarding the 'skeleton' nature of the

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Truly engraved'. Whilst the Act did not define a date format, it's clear that the 'Day' should be stated. The Prints Copyright Act 1777 (17 Geo. 3. c. 57) brought 'map, chart or plan' within the scope of protection.

30 TNA OS 3/260 Copy of Phipps to Mudge, 2 Sept 1811 (formerly OSLB f 131).

31 Rob Wheeler has suggested that the ban may have caused the engraving of sheet 12, covering northern Hampshire, to be postponed. Topographical surveys of Hampshire were in hand by 1810 and so the original intention may have been to publish a county map of Hampshire [private email].

32 Richard Oliver & Roger Hellyer, *The one-inch Old Series: more discoveries – yet more questions*, *Sheetlines* 80 (December 2007).

Hampshire coast. So perhaps state 3 was prepared in anticipation of the lifting of the ban on public sales and could therefore date to *c.*1816.[33]

The following advertisement was placed in the Royal Cornwall Gazette, Falmouth Packet & Plymouth Journal published 18 May 1816 indicating that publication was imminent: [34]

> THE GENERAL SURVEY OF ENGLAND AND WALES
> Speedily will be published, with Authority, AN entirely new and accurate SURVEY of the ISLE of WIGHT, with the adjacent coast of HANTS, done by the Surveying Draftsmen of His Majesty's Ordnance, from the Trigonometrical Operations carried on by Lieutenant-Colonel MUDGE, F.R.S. under the Directions of the Honourable Board of Ordnance; the Map is elegantly engraved, and printed on one Sheet, price 16s. Published by W. FADEN, Geographer to His Majesty, to His Royal Highness the Prince Regent, and Agent to the Board of Ordnance for the Sale the above Work.

Faden's catalogue for 1822 [35] states that the maps "may be had by application to Mr. BAKER, Principal Engraver, at the Ordnance Map Office, in the Tower of London; and of W. FADEN, Agent to the Board, 5 Charing Cross". Flat sheets were originally sold in buff coloured paper wrappers and the maps were also sold in dissected format, mounted on fine linen. By this date, sheet 10 had been associated with sheets 4, 5, 9 and 11 to form Part V of the 'Ordnance Survey of Great Britain'.

Post-Publication Revisions

The reader is referred to the excellent cartobibliography section of Hellyer & Oliver *The First Ordnance Survey Map* for details of the known states. A total of 28 states are listed along with the concomitant changes made between *c.*1812 and *c.*1890.[36]

Early revisions reflect road improvements on the western and southern edges of Parkhurst Forest [37] and a turnpike road created between Newport and Ryde via Wooton Bridge.[38] State 5 incorporated Ryde Pier, depicted on an incorrect bearing. State 7 indicates that the

33 However, if this were the case then it seems strange that the very conspicuous Ryde Pier wasn't included, given that it was opened in July 1814.

34 Hellyer & Oliver, 2015 Appendix 6.

35 Catalogue of the Geographical Works, Maps, Plans, &c. Published by W. Faden, 5, Charing Cross, Geographer to His Majesty; 1822.

36 State 26 is conjectured with no copies found. A state 23+ is identified in the 'updates' pdf file available on the Books & Monographs page of the CCS website.

37 52 Geo. 3. c. clxxi Parkhurst Forest Disafforestation and Inclosure Act of June 1812. The deposited plans are likely to have informed this revision.

38 53 Geo. 3. c. xcii Isle of Wight Highway Act, May 1813.

printing had been entrusted to James Ramshaw [39] and state 13 included an Arabic sheet number (these were first introduced in 1846). The price had steadily dropped from the original 16s to just 2s by 1848.

More radical changes were incorporated in the 1850s, following the introduction of electrotyping at Southampton (first used in 1847). Electrotyping enabled the copper plate to be duplicated, avoiding further wear on the original plate, and allowed revisions to be undertaken more cost effectively. As well as the standard relief edition with hachures, the process was used to create two variants of the map [40]; i) an 'Index to Tithe Survey' and ii) a geological map depicting both 'solid' and 'drift' geology and making excellent use of hand colouring.

The 'Index to Tithe Survey' variants were published from *c.*1850 and provide a record of the island's parish boundaries, reflecting those on earlier Tithe maps of *c.*1838-48. Straight lines are used to link parishes with their detached parts. Parish boundaries are not shown on the 'mainland'. Hellyer & Oliver list five states encompassing minor revisions, most notably on the final state where security installations were deleted. The 'Index' variant was still listed in the 1894 catalogue,[41] obtainable "when specially demanded" at 2s 6d.

In September 1852 a 'revision' of the Isle of Wight was authorised,[42] perhaps to meet the needs of Sir Henry De la Beche, the Director of the Geological Survey, who had criticised the accuracy of the original map. The revision seems to have been a complete resurvey, mostly at the two-inch (1:31,680) scale. Concurrent with this work, and following the construction of Osborne House (1845-51), Prince Albert requested a plan of the Osborne estate. A survey at a scale of 1:2640 was duly made in 1853-4. The resulting estate plan [43] (along with the two-inch resurvey) informed a re-engraving of the East Cowes promontory on the One-inch map, present from state 16 (*c.*1854) onwards [44] – see *Figure 8*. Oliver & Hellyer: "This seems to be the only instance of post-1850 large-scale survey being used to revise an *Old Series* sheet."[45]

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39 Ramshaw acted as printer to the OS between *c.*1824 and 1840, apparently working at the Tower. The cartobibliography indicates that a 'Sold by Jas. Gardner …' note was never used.

40 No copies of sheet 10 in an outline-with-contours format have been recorded.

41 'Catalogue of the Maps and Plans and Other Publications of the Ordnance Survey of England and Wales, and the Isle of Man, To 1st January 1894', Her Majesty's Stationery Office, 1894.

42 Wood to Inspector-General, 30 July and 13 August 1852 in TNA WO 55/964; Ordnance minute, 1 September 1852, pp 9784-5 in WO 47/2304.

43 Historic England Archives, MP/OSH0027-33 and The British Library Maps 2720.(1.).

44 The revision also appears on the neighbouring sheet 11 from state 17 onwards *c.*1858 but intriguingly reverts to the original depiction on state 21.

45 Richard Oliver & Roger Hellyer, *The one-inch Old Series: more discoveries – yet more questions*, *Sheetlines* 80 (December 2007). The place-name (and parish of) 'Whippingham' was initially expunged and then hurriedly restored by state 20.

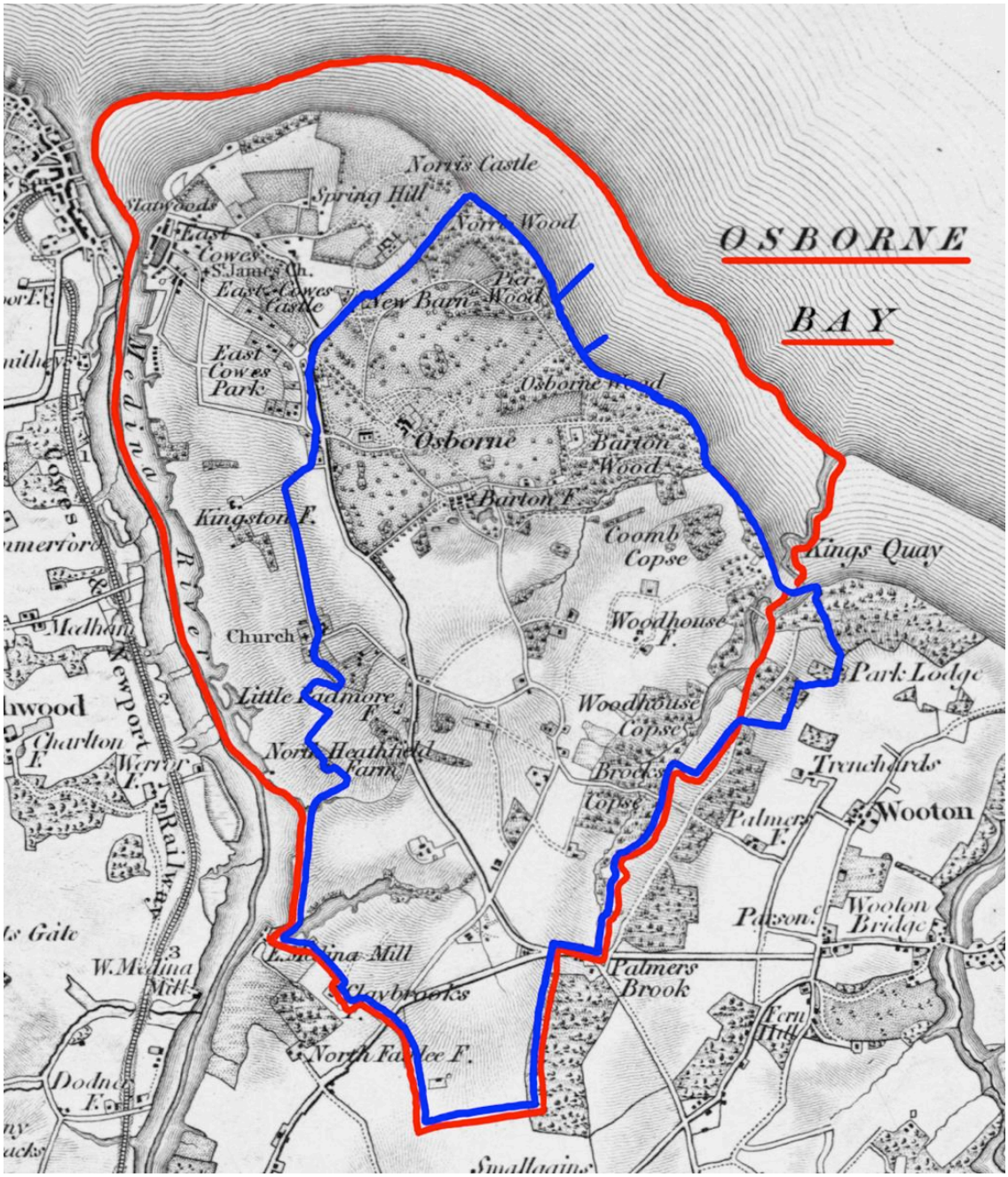

Figure 8. East Cowes Promontory Revision [46]

The resurvey, confined to the island, also resulted in an entirely new engraving made between *c.*1856 and 1859 at the One-inch scale. The resulting map,[47] on the *Old Series* sheet lines, lacks any representation of relief and appears to be unfinished – see *Figure 9*. This work was, however, suspended and never resumed. The geological sheet, first

46 Blue = coverage of the Osborne Estate plan. Red = extent of re-engraving on sheet 10.

47 Three impressions survive. One is in TNA PRO MR 1/1311 dated to 1859 or a little earlier and two later printings of 1909 are at Cambridge University Library, Maps.aa.G.014.1. One of the later impressions (CCSA 218A/25/1) can be viewed on our CCS website within the 'Rare Maps' section.

published *c.*1856, was ultimately based on the original plate rather than the re-engraving. The work was probably curtailed because a further resurvey of the island, at the large scale of 1:2500, had commenced in 1859 for fortification planning purposes and, in March 1863, authorisation was given for the general resurvey of southern Britain also at the 1:2500 scale. The latter had been justified, in part, on the basis that it would underpin accurate One-inch mapping to replace the *Old Series*. The re-engraving work was not completely wasted, as extracts were used as bases for index maps for some parish area books.[48]

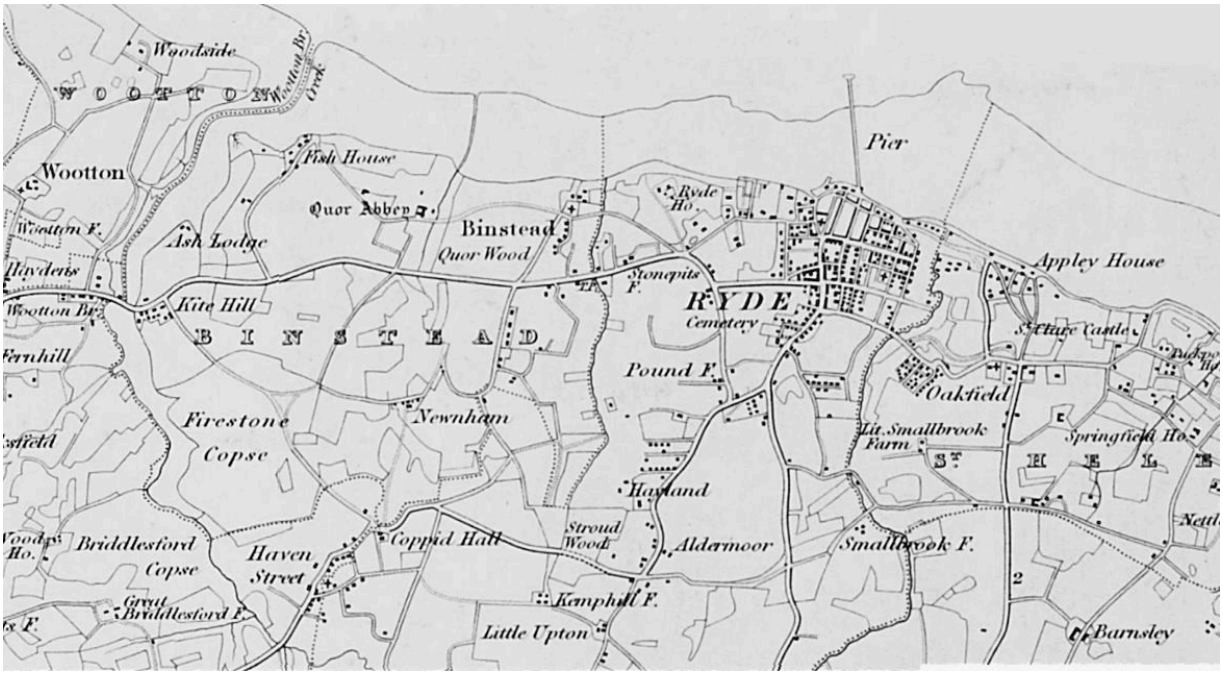

Figure 9. An Extract of the Unpublished Sheet 10

Returning to the original sheet 10, the Hampshire coast was largely 'bypassed' and even the final states essentially depict the topography of the 1790s. Nevertheless, some minor and rather random additions were made in the Portsmouth area, notably: i) some houses on the Fareham to Gosport road, ii) Hayling Bridge (opened 1824), iii) Portsea Island Union House (opened 1846), iv) Denvils Farm (Havant) v) Osier Farm (Warblington), vi) Stoke Common and windmill (Hayling Island), vii) North Green Villa (Portsea) and viii) Boundary Post (Portsea). These revisions only appear on later states following the introduction of electrotyping.[49]

Numerous railways and their stations were added between states 12 and 27 on both the island and the Hampshire coast. These cover the period 1841 (Gosport Junction Railway) to *c.*1890 (e.g. Freshwater, Yarmouth & Newport Railway). The extension of a line to Ryde Pier Head,

48 Richard Oliver & Roger Hellyer, *The one-inch Old Series: more discoveries – yet more questions*, *Sheetlines* 80 (December 2007).

49 They are not present on state 17 of *c.*1863 but are included by state 20 of *c.*1872.

completed in 1880, caused the re-engraving of the pier and its orientation to be corrected.

Impressions taken from later states generally appear 'lighter' than those taken from earlier states. The reason for this is that the hachures and ornament tended to be less deeply engraved than the linework and writing and so, as the plate became worn, the hachures and ornament became 'suppressed' (sometimes to the point of non-existence). The map border was updated *c.*1860 to include both longitude and latitude dicing and figures. These can be seen on state 17 of 1863 (NLS website). Numerous spot heights were added on state 18 and Dr JB Harley notes [50] "A distinctive feature of the late printings is a wholesale deletion of military installations following a security regulation of *c.*1870. The effect around Portsmouth and Gosport is especially noticeable with the core of both towns being flanked by blank spaces; even the smaller forts as at S. Sea Castle have been erased, although, in this case leaving discernible traces of the fortification".

In 1871 Sir Henry James proposed a new One-inch map series based on large-scale surveys that would be available in both outline and hills formats, be cast on uniform sheet lines and use a single projection and associated origin. His proposal was approved in 1872, resulting in the *New Series*. The smaller size of each map (*c.*17 x 21 inches) meant that the island would now be covered on four sheets; 330, 331, 344 & 345.[51] These were duly published in outline format in 1876, although the *Old Series* map remained available (to special order) and was even being revised, in a limited way, long after this date.

Concluding Remarks

I admit to having an emotional attachment to this map. I know the area reasonably well and the map content resonates with me. It transports me back to a pre-industrial landscape of dense woods, muddy lanes, busy shipyards and bawdy inns.[52] However, as CCS members, we look beyond the visible content and study the history of the map and the skilled surveyors and draughtsmen who created it.

In the case of sheet 10 this history is a long and interesting one, amplified by some of its unique characteristics. The history stretches back to the earliest period of topographical survey *c.*1791-4, sponsored by the Board of Ordnance and undertaken in response to the threat of invasion. This survey, and those of the Hampshire coast *c.*1797, formed the basis of the finished Ordnance Surveyors' Drawings used before the

50 Dr J B Harley, Cartographical Notes to Accompany the David & Charles Re-issue of Sheet 10, 1970.

51 A *New Series* geological sheet was published as a composite of the four sheets in 1893.

52 Alas, no gibbets are shown. Executions were apparently conducted at Gallows Hill, near Arreton Down, but this hill is not named on the map.

printed map existed. The detailed and colourful OSDs are superlative works of cartographic art and they, in turn, provided the primary source material for the engraved *Old Series* map.

The ban on sales between 1811 and 1816 disrupted the originally envisaged publication schedule but provided 'breathing space' to enable revisions to be incorporated and prepare the map for wider use by the public. Many revisions were made following its publication and the veteran sheet soldiered on to state 27 of *c.*1890, having ably served its users for well over 70 years.

I wish to extend my sincere thanks to Richard Oliver and Rob Wheeler for their hugely valuable insights and help whilst preparing this article. I would also like to acknowledge the National Library of Scotland and the British Library as sources of the map images used herein.

A kerb conundrum

Ian Prince

The executive committee of Rotherham & District Civic Society (of which I am historic architectural buildings and structures adviser), are intrigued by these kerb stone markings, of which there are over half a dozen known examples in tbe town.

When we, as CCS, recently visited OS Headquarters in Southampton I posed the question knowing they were not benchmarks as normally seen on buildings and structures, which OS staff confirmed

Other people (including a stone mason with forty years experience in that field) have suggested they are reused stone from buildings and are masons marks, whilst others cast doubt on such hypothesis. It seems that they are marked on some old town paper maps too.

So both the OS and Rotherham and District Civic Society have suggested I dig deeper and it has been hypothesised that the broad knowledge of the CCS membership may have more definitive answers. Are we missing something so very obvious and are they to be found elsewhere in other towns and cities?

I hope by broadening the search for answers I can advise my colleagues on Rotherham and District Civic Society the provenance and reasons for such markings appearing on the kerb stones as they are not of recent origin.