

ULTRA

Positions and Polarities Beyond Crisis

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Image: Michaelmore, Roeger & Russell, *Chester House*, Belair 1966, State Library of South Australia BRG 346/28/6/2.

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The Sandstone Squarehouses of Macarthur: The Ultra Vires Blockhouses of Sydney Basin's Dispossession

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Abstract

South of Campbelltown, wedged between Sydney's two great rivers, where the Georges and the Nepean almost meet is Macarthur. In the early 1810s, to go beyond Campbelltown was to leave the authority of colonial Sydney - a colonial ultra vires frontier. Here are *squarehouses* that date from the mid-1810s, some were built during the height of Sydney's frontier wars, before the 1816 Appin Massacre, which secured colonial control over all of Macarthur.

These *squarehouses* are archaeologically intriguing as they are almost square, not large, have thick sandstone walls, some have 'slot openings' and others small openings. Were these *squarehouses* built with a defensive premise in mind, the openings for use as 'gunloops' as much as ventilation? If so they would be architectural evidence of the frontier wars.

The suggestion is that these small *squarehouses*, often overlooked as just an outbuilding in the homestead aggregation, were among the first buildings built on a property. If built on contested land, its presence would have acted as notification of a land claim, while its physical structure provided a bolthole from which one could defend life and property - a private blockhouse.

Blockhouses existed right across the British settler empire, with common standards constructed for defence in frontier areas from South Africa to New Zealand, Canada and the United States. So it should be no surprise to find them at the beginning of colonial NSW and yet it is, and this raises questions as to why this distinctive colonial structure is missing in Australia.

The placement of these *squarehouses* and the prospect of their loops - their surveillance isovists over creeks and valleys, would provide historical insight into the colonial consolidation of these landscapes.

Introduction

1. Byrne, William (1903) *Old Memories: General Reminiscences of Early Colonists -II* Old Times May p105

*One day a fine young aboriginal named Moudonigi, who had been partly brought up by Mr. Kennedy, came rushing up to our place, saying that a tribe of blacks were close at hand, determined to exterminate all of us. After a hasty consultation my step-father sent my mother and sisters to Mr. Kennedy's homestead, and then determined to defend the house as best he could. Luckily the soldiers had left some of their old uniforms when they were removed to Sydney. My father put on one, my brother another, and Moudonigi dressed himself in the third. He got on the roof with an old musket, and he was a capital shot. I can tell you. But there was no need to do anything in the way of shooting. No sooner did the blacks see the king's red uniform than that was enough for them. We saw no more of them, and were never afterwards troubled with them.*¹

William Byrne above is recalling his childhood, around Appin circa 1816. This quote we use not to illustrate the Frontier conflict at the edge of the colony, though it does, but the role the built form plays. The Kennedy Homestead is obviously a place of greater protection: is it because of greater firepower or is the homestead a better defensible structure or both? The three men left behind are defending the house and using it as a defensive structure.

2. Roxburgh, Richard & Baglin, Douglas (1978) *Colonial farm buildings of New South Wales* Adelaide: Rigby

3. Reynolds, Henry (1981) *The Other Side of the Frontier* James Cook University

4. Gapps, Stephen (2018) *The Sydney Wars: Conflict in the Early Colony, 1788–1817* Sydney: NewSouth

5. Gapps, Stephen. 2019. *Rifle slits and gun loops: Early colonial domestic defensive architecture in the Sydney region* retrieved 25th July 2021

When looking over the old district of Appin, in Macarthur, we keep on coming across these isolated strong-holds often with vertical slots dotting the rural landscape. They look defensive, but we are told they are just ventilation slits for old granaries or barns. This is an established narrative for these types of outbuildings (barns if big, or granaries if small) not just here but across NSW², Australia perhaps. This built expression fits the peaceful settler narrative, which is now well challenged by Reynolds³ et al in the historical record. Stephen Gapps, in his recently published *The Sydney Wars*⁴ chronicles the early colonial military campaigns in this area, and on later reflection on the function of these outhouse structures⁵ he comes to the conclusion that they likely doubled as defensive structures too. Indeed they must have, if they were built during the frontier conflicts, intentionally or not, and if built slightly later the experience of conflict would still reverberate in their built expression. This makes the Macarthur *squarehouses*, along with other outhouses structures along the Hawkesbury/Nepean river, architectural evidence of the Frontier Wars, likely the earliest evidence of such in Australia.

In this essay we situate the defensive structure strategy of the British Empire on settling new occupied lands, immediately before and after Australia; investigate the use of farming buildings when settling, focusing on their aperture details - vertical slits and gunloops; then how these granary/barns are placed within other frontier settings of Australia namely Tasmania. The focus then shifts back to Appin with similar barns and other buildings that are defensive but too small to be barns and argue that they fit the Blockhouse defensive structure type of the British Empire, and were likely placed to secure possession and expand the frontier.

Defensive Structures of British Colonialism

The majority of Australia's first contact experience occurred between 1788 and 1840. Within the British imperial settler project, this Australian colonial experience was bookended first by the North American War of Independence - lost in 1783, and the Treaty of Waitangi which saw the expansion of British settlement across New Zealand. Thus many British soldiers had seen duty in North America before arriving at Port Jackson, and after an Australian stint many would fight in the New Zealand wars. Defensive structures were a significant part of both the North American and New Zealand indigenous cultures, and the colonial battles that took place there. In the Australian context defensive structures are surprisingly rare.

Yet Governor Phillip in his preparations for Botany Bay, had fortifications at the forefront of his mind, and he executed them not at Botany Bay but at Sydney Cove as though he had foreseen the topography - using the Tank stream to contain the convict settlement within Dawes point.

6. Phillip, Arthur 1787 *Phillip's Views on the Conduct of the Expedition and the Treatment of Convicts* Bladen, F. M & Britton, Alexander & Cook, James. 1892, Historical records of New South Wales Government Printer, Sydney viewed 18 November 2021 http://nla.gov.au/nla.obj-343658027_p89

On landing in Botany Bay it will be necessary to throw up a slight work as a defence against the natives—who, tho' only seen in small numbers by Capt'n. Cook, may be very numerous on other parts of the coast—and against the convicts; for this my own little knowledge as a held engineer will be sufficient, and will be the work of a few days only; but some small cannon for a redoubt will be necessary. Within the lines the stores and provisions will be secured; and I should hope that the situation I should be able to take may admit of having the small rivers between the garrison and the convicts so situated that I may be able to prevent their having any intercourse with the natives.⁶

7. Walton A. 2003. *New Zealand redoubts, stockades and blockhouses, 1840–1848* New Zealand Department of Conservation

British defensive structures were grouped into three: redoubts, stockades and blockhouses. Briefly, these defensive structures are determined by their construction and scale: Redoubts are large earthwork emplacements, *Stockades* are mid-size timber palisade enclosures and *Blockhouses* are small house-sized masonry/timber structures.⁷ The British Military had a well developed culture and science of fortifications, *Simes' 1780 Treatise*⁸ explores this in some detail.

8. Simes, Thomas. 1780. *A Treatise on the Military Science: Which Comprehends the Grand Operations of War : and General Rules for Conducting an Army in the Field : Founded Upon Principles for the Improvement of the Same, with Occasional Notes : to which is Added, the Manner of Attacking and Defending Military Posts; Villages, Church-yards, Mills, Houses, &c. : Dedicated (by Permission) to His Majesty* Publisher John Millan

In New Zealand there are at least 322 British fortifications built between 1840 and 1881 and 183 Māori ones.⁹ Māoris traditionally fortified their villages - *pas* built before European arrival were near impregnable fortresses, with multiple palisades often atop small hills. The British colonial forces alternated and combined fortification types in their strategies to secure ground across New Zealand. In North America, many Native American tribes had similar palisade protections around their villages, and the lonely Fort is almost synonymous with the British and then the US military's push into what they saw as the 'wild frontier'. They also had a history of employing them against indigenous populations, yet in the Australian colonial context it is largely missing from the historical record.

9. Prickett, Nigel. 2016. *Fortifications of the New Zealand Wars* New Zealand Department of Conservation

10. White, John. c1590. *Village of Pomeiooc* Watercolour The British Museum.

11. Power, William. 1849. *Interior of a Pa on the Wanganui River* pen and pencil sketch Sketches in New Zealand, with pen and pencil British Library, p229

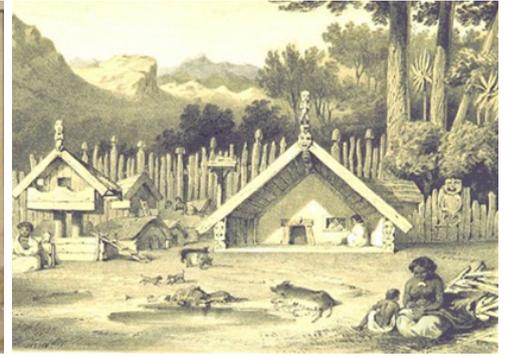


Figure 1: John White¹⁰ watercolour of the Village of Pomeiooc c1590 shows a palisade around the Indian village.

Figure 2: William Tyrone Power¹¹ sketch of a Maori Pa 1849 shows a palisade around the Maori village.

12. Kerkhove, Ray. 2015. *Barriers and Bastions: Fortified frontiers and white and black tactics* CQU Seminar Paper Noosa 11 June 2015 'Our shared history: resistance and reconciliation'

There is little evidence of Australian aboriginals building fortifications, and it is certainly not part of the historical narrative; this likely reveals a very different relationship to land and each other, than what we see even in other first nation cultures. The British colonial engagement in Australia mimics this absence, there are no large forts, stockades or redoubts in the interior, a few forts dot the coast to ward off other imperial powers, rather than the indigenous population. But the historical record does talk of colonists taking refuge in fortified positions from their houses, huts, homesteads and barns/granaries. Historian Ray Kerkhove¹² writes in some detail about this within Queensland. Have these smaller fortified positions been hiding in plain sight?

13. Lake, Jeremy. 2013. *National Farm Building Types*, Historic England p4.

The colonial frontier was outside the periphery of colonial land claims and control - an *Ultra Vires* landscape. Barns were one of the first buildings to go up on a new farm;¹³ if a barn was erected on a new land grant, it was the first built form to contest indigenous land ownership. Considering that lack of farming was a Lockean justification for the *Terra Nullius* declaration, an *Ultra Vires* barn was the physical embodied justification for a colonial land claim to turn land into a British '*Terra Tillius*'.

If a barn was first built on contested land and sometimes hostile territory, we would expect to find fortification details in its design, and we do, but they are often overlooked, in part because they step outside the peaceful settler narrative of earlier established Australian historiography, but also because the physical ambiguities of fortification details can hide their dual function. The most obvious of these details is the ventilation slit / loop-holes dichotomy.

Embrasure Loopholes or Ventilation Slits

14. Lake, Jeremy. 2013. *National Farm Building Types*, English Heritage.



Figure 3: 18th century combination barn and stable and cart shed in Sollers Hope, Herefordshire, England. Photo: Sam Hale¹⁴

15. Hall, Linda. 2009. *Vernacular Farm Buildings Thornbury*, Local History and Archaeology Society.

Above in Figure 3 is a typical 18th Century barn from England, The ventilation slits were necessary to prevent produce stored in them from rotting or self-combusting and if used for livestock to shed heat.¹⁵

In Australia embrasure-type windows feature in early convict architecture too, as they provide light, airflow and are relatively simple to construct in stone compared to conventional windows yet still provide rock solid security. We see examples of this at Cockatoo Island's Military Guard Room, Vaucluse house's former convict barracks, and the Cascades Women's Prison in Hobart, amongst others.

The similarity in configuration of ventilation slits and loopholes can be remarkable. Loopholes are an opening in a wall splayed out internally in plan profile around an aperture (such as an arrow slit) - to allow an archer or shooter a horizontal sweep and a slot vertically so they could adjust the elevation of their shot. The outside opening is reduced to minimize the return-fire target.

The *Canonier* was an evolution of this embrasure, shaped to accommodate a firearm, so it could be just a gun round or oval port built into a wall. However, they were often combined with a ventilation slit, thus its external face profile took on an inverted key-hole profile. The hole being just large enough to pass a musket through, while the vertical slot allowed better sighting and could still be used for ventilation. Vertical slits or apertures in a frontier granary/barn could do double duty as both ventilation and loophole.

Tasmanian Fortified Barns

16. Morrison, Jane *Frontier Conflicts Map – Tasmania* Blog: Australian Frontier Conflicts 1788-1940s

Tasmanian frontier barns provide clear evidence of this double duty, as indeed would frontier homesteads across Australia. Tasmania's frontier wars reached a climax of sorts with Governor Arthur's notorious *Black Line* sweep of 1830, after years of 'native' unrest and sheep killings. It was an eerily similar tactic to New South Wales's earlier sweeps across South West Sydney in 1816, they also used three lines in their sweeps. Though it failed to corral the aboriginal population into the Tasman Peninsula, it did signal the end of aboriginal resistance.¹⁶ By 1834 "*Aboriginal Protector*" Robinson had moved nearly all full blooded 'natives' to Flinders Island. Tasmania had barns rather than Macarthur's

granaries, as sheep rather than grain were the predominant agrarian occupation. Barns built during this unrest could do double duty as a fortified placement as well as a barn.

One of the earliest barns south of Launceston is Brickendon's Pillar Barn c1827, the barn was set on *staddle stones*, not only for greater ventilation but protection from rats. Its high shuttered windows, single elevated entrance and internal brick skin also made it eminently defensible.



Figure 4: Outside shot of the Barn at Brickendon c1829, Staddle Stones shown supporting timber framed brick infilled and timber clad. Photo: Author April 2021

17. Pers Comm Scott Wilson on site April 2021, also reported V jS (2021) *Scott Wilson Wesleydale Blog* Northern Architecture | Country Houses 09 Jul 2021

18. Robinson, George Augustus. 1834. *Friendly Mission: the Tasmanian Journal and papers of George Augustus Robinson, 1829–1834* (ed. Brian Plomley), 2nd edn., Queen Victoria Museum and Art Gallery, Launceston, 2008, 27 July 1834. For Robinson's two earlier visits to 'Native Hut Corner', see 8 April 1832, p.631 and 18 Jan. 1834, p.871

19. Haygarth, Nic. 2018. *Dan Pickett: Pioneer Cave Guide* Australasian Cave & Karst Management Association 2018 conference retrieved 16th July 2021

However as we move further away from the main Hobart to Launceston thoroughfare, and deeper into frontier territory, defensibility is more evident. In the Chudleigh Valley west of Deloraine a retired soldier Lieutenant Vaughan took up a 2500 acre land grant in 1829,¹⁷ that he called *Native Hut Corner*.¹⁸ With his considerable labour of about 30 convicts, he built a massive barn, 7m by 24m wide with walls 2ft thick, and over 6m in height. Considering the name of the property the Barn was almost certainly built near or on an indigenous camp probably of some significance. The area is surrounded by unique geological formations such as limestone caves through which creeks flow.¹⁹

This barn reflects its intrusion into indigenous land, for while it provides protection for produce, hay/grain above and sheep below, and their necessary ventilation slits, these slits are configured as defensive architectural features - elevated inverted keyhole loopholes. The fact that these gunloops are on all four sides even overlooking the measured acre compound, itself surrounded by 3m high walls, suggest this barn was the first building on site. He later sold the property in c1837 to Henry Reed, a shipper and whaler.



Figure 5 and Figure 6: Internal detail of the Gunloop and outside shot of the Barn at Old Wesleydale (Native Hut Corner) c1830 respectively. Gunloops/Ventilation slits are visible in the top half of the wall. Source: Photo Author April 2021

The New South Wales Macarthur Frontier Experience

The Sydney Basin, however, was the first region in Australia to be 'pacified'. Aboriginal unrest and crop destruction like Tasmania, was used as justification for Captain Wallis to sweep three militia lines across the Cowpastures and Macarthur regions, south west of Sydney. It culminated in the April 1816 Appin massacre and Macquarie's Proclamation that finally pacified the Basin. Any building built in or before 1816 in the Macarthur area was built in contested territory, and we would not be surprised, indeed would expect, to see evidence of fortification elements similar to those later seen in Tasmania. Early settler William Byrne continues to recall the conflict.

20. Byrne, William. 1903. *Old Memories: General Reminiscences of Early Colonists -II Old Times* May p105 State Library Of New South Wales

We left Parramatta in December, 1812, when I was four years old. My mother had in the meantime married a Mr. Sykes, who had received a grant of land at Appin. We were the first settlers there, and I remember having our Christmas dinner in the barn before our house was built. After we arrived, there was considerable trouble with the blacks. This was largely due to the fault of the settlers themselves, who often treated the blacks with a great deal of cruelty. Outrages by both blacks and whites extended over the years 1813, 1814, and 1815, up till 1816, when the settlers were granted military protection...²⁰



Figure 7 the 1810s colonial frontier landscape between the Georges and Nepean Rivers, just south of Rosemeadow (Campbelltown). The red text is the Colonial homesteads names, the text box's bottom right corner sits just above the homesteads location. Photo: Author (Google) 2021

The Gilead Fortified Barn

21. Morris, Colleen and Britton, Geoffrey (2000) *Colonial Landscapes of the Cumberland Plain*, and Camden National Trust of Australia (NSW) p69.

In the old district of Appin, the building most similar to the Northern Tasmanian barns in Macarthur is the Gilead Barn. In 1812, Reuben Uther was granted 400 acres near the junction of Menangle Creek and the Nepean River by Governor Macquarie,²¹ which he named Gilead, a biblical land of golden fields of wheat. In 1815, Uther had started supplying meat from his farm to government stores, and Governor Macquarie visited the farm and described it:

22. Macquarie, Lachlan. *Lachlan Macquarie, Governor of New South Wales : journals of his tours in New South Wales and Van Diemen's Land 1810-1822 : prospectus* Sydney: Trustees of the Public Library of New South Wales, 1956. Web. 22 July 2021

*"At 11 am entered the District of Appin at Mr Uther's farm, which is a very good and a very pretty well improved one on the slope of a high hill, on the summit of which he has erected his house. Mr Uther's crops look well and promise to be very good and plentiful."*²²

Within a year of that visit, Macquarie sent troops and militia through the area, with one of the lines of militia possibly assembling at Gilead. Two years later in 1818, Uther sold the land to Thomas Rose. *The Sydney Gazette* advertised it on 16 May as:

23. Bevan (1818, May 16) *Sales By Auction* Classified Advertising *The Sydney Gazette* and *New South Wales Advertiser* (NSW : 1803 - 1842), p. 2. Retrieved July 22, 2021

*"ONE of the most valuable ESTATES in the Colony ... - has a good House and Skelling, erected on a highly pleasant Hill, commanding a view of the Cow Pastures for many miles; a good Barn, &c..."*²³



Figure 8 and Figure 9: Internal detail of the ventilation slits and an outside shot of the Barn at Gilead c1817 respectively. These Ventilation slits are only on one half of one wall. Source: Photo Author June 2018

Figure 8 and Figure 9 above are shots of what is most likely the *'good barn'* mentioned in the 1818 advertisement as it is a standout barn and one of the oldest buildings on the farm. Though it also likely doubled as a convict gaol - the insets in the window jambs for the bars are still there - later to become a granary, after Rose, a baker, started using it with the mill he built on top of the hill.



Figure 10: Detail of the East and North face of the Gilead 'Granary' (from a Gilead collage, undated 1800s watercolour) it illustrates a double if not triple storey building, Figure 11: Photograph of the Gilead Granary with bars in the windows, it appears that the east door and half the height has been removed, date likely late 1800s/early 1900s.

24. Pers Comm Sue Gay 2019

If this was the *Good Barn* it would have most probably been built at the end of Wallis's sweeps or just after them as it was not mentioned by Macquarie in 1815. It is a massive barn even now, though the top half is missing (according to local folklore its higher sandstone blocks were used to help build St. Marys at Douglas Park²⁴), the walls are about 2 feet thick, 11m wide, 34m long, and it was over 2 storeys high. While this Barn mimics quite closely the combination barn/granary type seen around England, there is evidence of this Barn too, doing double duty as both shelter and defence. The prospect from these vertical slots, looks directly over where the wheat fields appear to have been first tilled at Gilead. It also looks past the fields to Woodhouse Creek where any surprise attack by the indigenous population was most likely to come from (anyone travelling the ridge lines could be seen for miles beforehand).

But what is most curious about this Gilead property, is that if this Barn was not actually built first in this hostile territory, what was? In 1815 Macquarie mentioned a house on the summit of a hill, besides fortified barns, the British, did indeed have a small house like fortification too - the *Blockhouse*.

The Blockhouse

Blockhouses existed right across the British settler empire, with common standards constructed for defence in frontier areas such as New Zealand, Canada and the United States to secure a strategic position, consolidate a military line, protect communications or for the defence of a local community within frontier areas.

25. 'Puketotara Nov. 18' [1864], Puketotara Blockhouse (9.22), near New Plymouth, is an example of a two-storey work. Colonel H.J. Warre, Sketchbook 1864-1865, p. 51, Ref: E-294-051, Alexander Turnbull Library, Wellington

26. Young, Richard. 1980. *Blockhouses in Canada, 1749-1841: A Comparative Report and Catalogue* Canadian Historic Sites: Occasional Papers in Archaeology and History No. 2, Minister of Supply and Services Canada

27. Lepper Brad. 2019. *Archaeology: Old Stone Fort built to protect Ohio settlers, but likely not by French explorer*, The Columbus Dispatch Mar 3 2019.



Figure 12: New Zealand Colonial Blockhouse - Puketotara Blockhouse²⁵ 1864 near New Plymouth.



Figure 13: Canada Kingston Mills blockhouse²⁶ 1754 near Rideau Canal.



Figure 14: US Ohio Colonial Blockhouse²⁷ c1655 near Newcomerstown, is a two-story building about 14-by-14 feet with 22-inch-thick walls made from sandstone blocks.

In the figures 12, 13 and 14 above we can see how small these isolated defensive structures were. The *Blockhouse* from New Zealand appears to be not much wider than 2m by 2m at the base, the Canadian one looks larger around 5m by 5m, as does the US blockhouse. They are all near square in plan.

28. Lepage, Jean-Denis. 2010. *French Fortifications, 1715-1815: An Illustrated History*, McFarland and Company p170.

The figures above help illustrate that Blockhouses were small isolated structures, with thick walls of either timber or stone, with one sturdy barred door, often square in plan with a single room, with a number of loopholes to fire from in relative safety, usually two storeys in height, yet according to French military historian Jean-Denis G.G. Lepage '*when the structure had only one storey, its loopholes were often placed close to the ceiling, with a bench lining the walls inside for defenders to stand on, so that attackers could not easily reach the loopholes*'²⁸. Greater detail about fortifying a house can be garnered from retired British soldier Thomas Simes's 1780 Treatise that explicitly describes how to fortify an existing house, this could also apply to a new structure if none existed such as in the New South Wales bush, one would presume. (emboldened text is the author's emphasis):

*Though the mill or house is surrounded with an abbatiss, he should not fail to **pierce the walls with loop-holes about a foot from the ground**, so as to discover the enemys' legs, that they may not get footing on the other side. **These loop-holes should be four inches wide, and three feet distant from one another**; and a little ditch should be made a foot and a half from the wall within the mill or house, in which the men should be placed. **Other loop-holes should likewise be pierced seven or eight feet from the ground, opposite to the interstices of the lower ones, and of the same width,** 'placing the soldiers that are to defend them upon tables, planks, bedsteads,*

29. Simes, Thomas. 1780. *A Treatise on the Military Science: Which Comprehends the Grand Operations of War : and General Rules for Conducting an Army in the Field : Founded Upon Principles for the Improvement of the Same, with Occasional Notes : to which is Added, the Manner of Attacking and Defending Military Posts, Villages, Church-yards, Mills, Houses, &c. : Dedicated (by Permission) to His Majesty* Publisher John Millan

*ladders, & c. and taking care to pierce a greater number opposite to the avenues before, and at the sides of the gate, and the angles of the house, because there are the places where the enemy usually make the greatest efforts. If the mill or house has an inner court, the walls should be pierced which inclose it, so as to fire upon the enemy after he has made himself master of it.*²⁹

Blockhouses are near invisible defensive structures, if they still exist as they are small buildings that can be absorbed into later buildings or homesteads or be completely overlooked as being insubstantial. Before we return to Gilead, we must visit Beulah, the closest existing homestead to Gilead about 1500 metres to its south.

The Beulah Blockhouse

30. Taylor, Richard. 2011. *Background On Beulah* retrieved at 26th July 2021

31. Sydney Living Museums: Caroline Simpson Library & Research Collection: Collection of 23 original land grants, indentures, quit rents and conveyances relating to the property called Beulah at Appin, 1817-1971 at 29th April 2022

32. NSW State Heritage Inventory: Heritage Item Beulah: History - Historical Notes or Provenance at 26th July 2021

The Beulah Homestead was not built until 1835-1836³⁰. Four Crown grants became the parish portions 71, 77, 78 and 79 that later aggregated as Beulah. The farmhouse was built on portion 78. Portion 78, was granted to an ex Irish convict named Connor, or Cornelius, Bryan, his assigned Irish convict Connor Boland who would later acquire 30 acres³¹. And a 50 acre land grant was promised to Patrick Pendergast in January 1816. While the deed titles were not finalized until 1823, they were almost certainly in occupation of the land sometime in 1816 as they supplied fresh meat to government stores according to the 25th May 1816 Sydney Gazette³².

I believe the first part of this Homestead could have been the blockhouse, and that it may have been constructed in 1816 in the middle of the Appin Campaign. The reason I feel confident stating this is that the *Blockhouse* component of the Homestead is almost a direct physical expression of the Simes's 1780 *Fortification Treatise* related to a house, and Lepage's description of the internal layout of a single storey *blockhouse*.

33. Taylor, Richard. 2011. *Background On Beulah* retrieved at 26th July 2021



Figure 15: The Beulah Homestead c1835-1836; north west perspective Photo: Stewart Watters 2011.³³ The blockhouse is to the far left, not covered by the main homesteads roof.

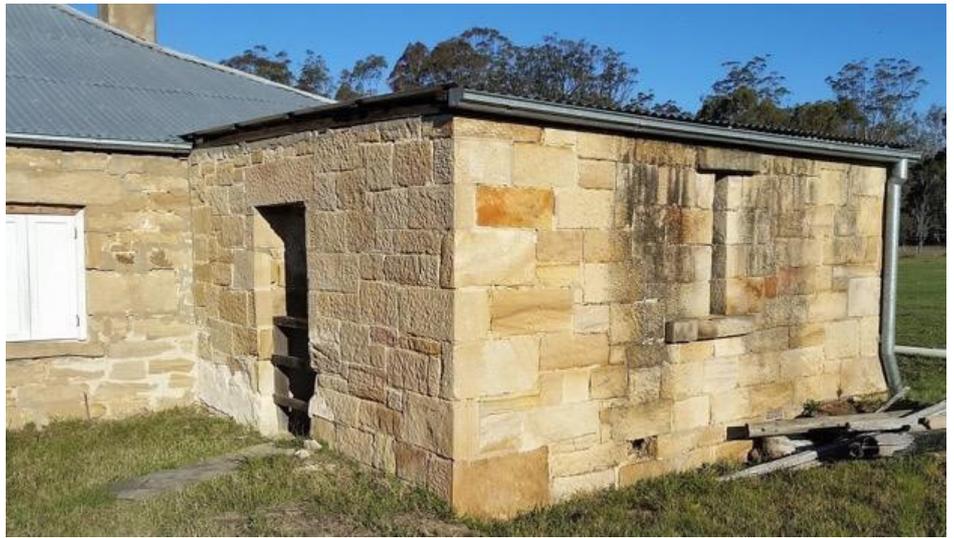


Figure 16: Blockhouse detail of the Beulah Homestead c1816 south east perspective
 Photo: Author 2018. You can see the North Facing door, and the west facing loophole (vertical slot).

This attached room of the Beulah homestead appears to have been built at a different time to the rest of the house, the sandstone blocks are more finely finished, squarer and have tighter mortar joints, than the rest of the homestead as seen in Figure 16. The cornerstones are larger and well strengthened using alternate horizontal quoining. As a small granary or barn the building is badly designed for it is small, and has holes just off the floor that would let in rats and insects, the built in shelf depths are relatively shallow, and the height is unnecessarily low.

As a smokehouse for meat preservation, however, these Macarthur squarehouses are a close fit as they are of similar dimensions with few openings. The low openings in the Beulah squarehouse could have been used as oven inlets, while there is little visual evidence of smoke internally, there are possible smoke stains on the outside. Smokehouses, however, rarely have windows or a narrow slit opening that this one does, and it is also over engineered, being built like strong room.

As an isolated *Blockhouse*, however Beulah would be a model example of one. It is square in plan - internal dimensions are 3.3m by 3.6m. The walls are 460mm (1 and half feet) thick and 2.1m high. This relatively tight space is an advantage if under attack, as you can communicate and reinforce easily. The door jamb is made of stone and inset so it can't open out. Defendable doors like those in a castle, bastle or house open in as a rule while barn doors and prison doors open out. Lepage's description also reads like he has seen the interior of Beulah.

34. Lepage, Jean-Denis. 2010. French Fortifications, 1715-1815: An Illustrated History McFarland and Company p170

Lepage says that if a *blockhouse* is only one storey, its loopholes were often placed close to the ceiling, "*with a bench lining the walls inside for defenders to stand on, so that attackers could not easily reach the loopholes.*"³⁴ While here we cannot see the loopholes close to the ceiling we can see the bench lining (or at least the sandstone lugs that would have supported a bench), this would have allowed occupants an ability to stand on it and shoot over the top from all four sides.

Simes backs up Lepage's design advice '*Other loop-holes should*

35. Simes, Thomas. 1780. *A Treatise on the Military Science: Which Comprehends the Grand Operations of War : and General Rules for Conducting an Army in the Field : Founded Upon Principles for the Improvement of the Same, with Occasional Notes : to which is Added, the Manner of Attacking and Defending Military Posts, Villages, Church-yards, Mills, Houses, &c. : Dedicated (by Permission) to His Majesty Publisher John Millan p280*

*likewise be pierced seven or eight feet from the ground... placing the soldiers that are to defend them upon tables, planks, bedsteads, ladders,*³⁵ we don't need tables and ladders to stand on if a bench has been built-in. The genius of this design is that if you step down from the bench you are completely protected from return-fire (spears).



Figure 17: Internal *Blockhouse* detail of Beulah c1816 north west perspective Photo: Author 2021. You can see the sandstone lugs about a foot and a half up the wall to carry the bench. There are two ground level openings about four inches wide, and the vertical slot loophole in the wall, and the door opening with internal inset jamb. The top loopholes are missing.

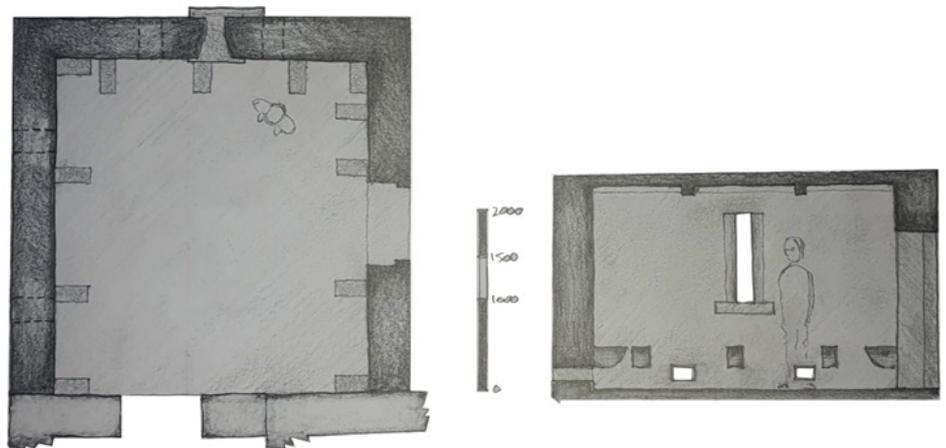


Figure 18: Plan and Section of the Beulah *Squarehouse*

Lapage's benches also provide another benefit in its use as a blockhouse. For Simes says that *'he should not fail to pierce the walls with loop-holes about a foot from the ground, so as to discover the enemys' legs, that they may not get footing on the other side. These loop-holes should be four inches wide, and three feet distant from one another...'* These ground level loopholes have been built into this Beulah square house almost to the inch. On the ground we can see two openings, granted they are less than a foot off the ground, but they are almost exactly four inches wide and just over three feet apart, they also continue around the south face of this squarehouse. The bench makes even more sense here, as an occupant could be firing through the ground level loopholes while lying down and the bench level allows another occupant to move above them without hindrance.

It almost appears as if British soldiers or Byrnes and his assigned convicts were building this *Blockhouse* with direct reference to Simes 1780 *Treatise* and Lepage's instructions. As there were no existing farmhouses on this Frontier to modify, unlike Europe or the Americas, they would have had to build the *blockhouse*. Could it have done double duty as a smokehouse like Old Wesleydale's Barn in Tasmania did? A Smokehouse like Barns protect the most important property a grazier has, and on this land claim it was meat/ A smokehouse also stores meat and thus it would have had to have been defended too. Now, if we return to Gilead, are their first buildings also likely *Blockhouses*?

The Gilead Blockhouse

The oldest buildings on Gilead are thought to be one of either two small buildings at the back of the homestead, one like Beulah is almost joined to the homestead. Are they the '*good house and skelling*' (isle or bay of a barn³⁶) mentioned in the 1818 advertisement for Gilead. Their external dimensions are roughly square, the possible good house is 6.6m by 7.4m and 3m high, while the possible *skelling* (or smaller squarehouse) is 4.6m by 4.4m and 2.7m high (above 2.1m it appears as a later addition). The good house may have meant one made of stone rather than the timber slab huts that used to be in the area. The original stone flooring is similar to Beulah's, as is the cornerstone strengthening quoining detail. If they had been used as *blockhouses* before or while being used as a house or skelling, we would expect to see benches and loopholes, they however are not immediately evident, but considering these buildings have faced over 200 years of alterations this is no surprise. A deeper investigation may uncover evidence of these details.

36. Bailey, Nathan. 1764. *An Universal Etymological English Dictionary* Publisher: Osbourne et al London.



Figure 19: External view of the squarehouse at the back of the Gilead homestead north east perspective circa 1813 perhaps.

The Glen Lorne Blockhouse

At Glen Lorne there is another *squarehouse* ruin, is this too the remnants of a *Blockhouse*? This building is square in plan but smaller, with internal dimensions of 2.4 m by 3.1 m, and only around 2.2m high, but again with very thick walls - 460mm. The sandstone door inset stops it from

opening out too. There are steel iron bars in the only 800 wide window-like aperture that sits directly opposite the door. On the other walls there are two small openings almost exactly a foot off the ground, they too sit immediately opposite each other. It is hard to tell if there has ever been a built-in bench of sorts, and we cannot see any overhead loopholes, yet if you just step up two feet you would have a 360 degree view all around, and if you step back down, protection. On balance this completely forlorn ruin fits the specifications of another *Blockhouse*.



Figure 20: Is an overall shot of the Glen Lorne square house looking North.



Figure 21: Shows a detail of its barred window on the northern face.

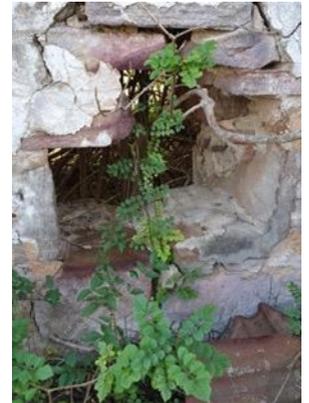


Figure 22: Is a detail of the ground level opening on the western face. Is this circa 1815 perhaps Photo: Author 2021.

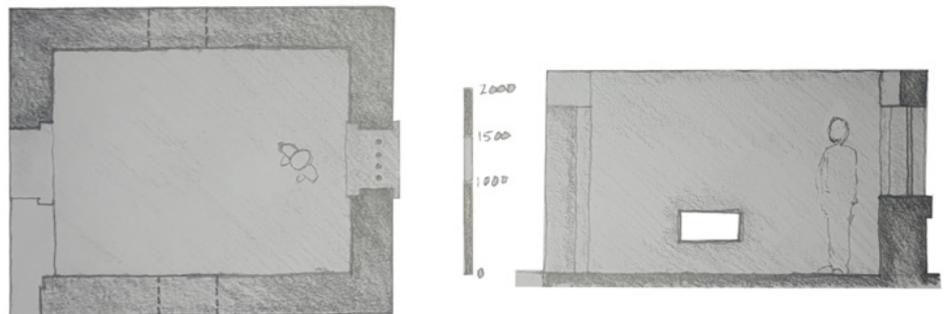


Figure 23: Is the Plan and Section of the Glen Lorne Squarehouse.

Meadowvale and Hillsborough

37. Morris, Colleen and Britton, Geoffrey (2000) *Colonial Landscapes of the Cumberland Plain and Camden* National Trust of Australia (NSW) Volume 2, p74

Hillsborough has no more standing structures. Meadowvale saw two sandstone outbuildings demolished in 2017, one of which was likely the c1814 Sandstone Cottage as according to³⁷ The forgetting and removal of this frontier colonial landscape appears to be fairly recent. In the 1950s when Meadowvale was being sold reference to the conflict was stated matter of factly, and gunloops like those at Beulah were acknowledged.

...Ohlson, has bought the historic 471-acre Meadow-vale property at Appin, near Picton, from Mr. W.Maskus. for about £25,000. The property has within its boundaries a 100-acre grant made to Andrew Hume, brother of the explorer, Hamilton

38. 1953 'Property Sold For £25,000', *The Sydney Morning Herald* (NSW : 1842 - 1954), 27 June, p. 3. , viewed 27 November 2021, <http://nla.gov.au/nla.news-article18365860> It is possible that this 100 acre lot included Beulah as they are adjacent property today, this has yet to be verified.

*Hume. The sandstone homestead, built more than 130 years ago, has a fortified cellar with gun-pits used to ward off attacks by aborigines...*³⁸

These gunpits foreshadow the trench type warfare that was to come to New Zealand and became synonymous with World War One. The forgetting of this colonial frontier landscape is a necessary precursor for these archaeological remnants of Australia's early colonial period to be removed.

Conclusion

As *blockhouses* these small *squarehouses* that dot the landscape of Macarthur, would attest to the violent nature of the frontier landscape on the edge of Sydney in the early 1810s. They would have played vital roles in protecting not only life and property of the early land claimants in the Macarthur area, but may have been used strategically by the Colonial Administration in the Wallis campaigns to subdue the Sydney Basin. Their existence would make Macarthur, one of the oldest intact colonial frontier landscapes in Australia and essential in understanding those first contact contestations, they are globally unique, as the Australian colonization experience amongst 'new world' colonizations is unusually sparse in the explicit use of fortifications. Their physical presence challenges the peaceful settler historiographical narrative. The urgency for these Blockhouses and their isovists to be catalogued and documented before they are knocked down and lost under NSW's new rezoning growth plans cannot be overstated.