REPORT ON THE ARCHAEOLOGICAL EXCAVATION OF TYNAN'S SLAUGHTERHOUSE, OLD CADIA ROAD, CADIA, N.S.W.

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EDWARD HIGGINBOTHAM & ASSOCIATES PTY LTD.

Archaeology, History & Heritage.

A.B.N. 79 072 316 968.

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For
Cadia Holdings Pty Limited.

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Heritage Office: Ms. Caitlin Allen.

ABBREVIATIONS.

Bk	Book
C T	Certificate of Title
DP	Deposited Plan (LTO)
LTO	Land Titles Office
LTOD	Land Titles Office, Deed
ML	Mitchell Library
No	Number
SMH	*Sydney Morning Herald*
SRNSW	State Records, New South Wales

EXECUTIVE SUMMARY.

The archaeological excavation of the remains of Tynan's Slaughterhouse prior to mining has revealed a house site associated with the pioneer settlement of the land under Crown Land Alienation Act provisions of Conditional Purchase. The hut or house site dates from 1879 to 1929. From 1879 to 1902 it was occupied by settlers under Conditional Purchase. The archaeological remains indicate the presence of two buildings and associated fencing. The construction of the timber building (Building 1) allowed the survival of an extensive underfloor deposit, rich in artifacts, which has provided a detailed insight into the way of life of the settlers and their frugal lifestyle. The bone evidence indicates a diet based on rabbit, supplemented by the least nutritious cuts of sheep and cattle, together with the remains of native species, which were hunted in the locality. The artifacts indicates a domestic assemblage, representing family life in the bush, with few belongings and limited access to goods and services. The assemblage will provide a benchmark for the analysis of the artifact remains from other rural sites, including Cadia Village, and can be used as a predictive tool to identify the occupants of households, whether families, groups of men or other individuals.

From 1902 to 1929 the site functioned as a slaughterhouse. Ownership changed from the original settlers to persons in the Cadia Village, namely the butcher and then the hotelkeeper, namely Mary Tynan, after whom the site is named. A building (Building 3) was adapted or constructed for a slaughterhouse and stockyard, though there is little evidence of its use, other than historical documentation. Such a building is difficult to identify archaeologically, since butchery practice here meant that the site was disinfected and kept clear of slaughterhouse debris. The high number of pharmaceutical bottles may be associated with this practice.

The site provides little evidence of the types of meat available in Cadia Village, but the historical documentation does reveal the close interrelationships between the Village, the mine and the surrounding settlement.

1. INTRODUCTION.

1.1. Background.

This report was commissioned by Cadia Holdings Pty Limited in February 2001. The archaeological investigation of this heritage site was required prior to the extension of the mine at Cadia Hill.

The site was located during site survey and included in the historical and archaeological assessment of the Ridgeway Project.[1]

The archaeological remains of historical mining at Cadia were the subject of a conservation plan in 1995, in advance of the existing Cadia Hill Gold Mine.[2]

The archaeological excavation was carried out in accordance with an excavation permit approved by the Heritage Office of NSW on 11 April 2001.

1.2. Brief.

The purpose of this report is to recover the archaeological significance of the site prior to final development of the Cadia Hill Mine.

1.3. Location of site.

The subject site is located beside the former alignment of Old Cadia Road at Cadia, to the south of the former Cadia Quarry and to the south of the crossing of Cadiangullong Creek, where the Old Cadia Road crosses to the west side of the creek. The site is located on Portion 84, Parish of Clarendon and County of Bathurst (Figure 1.1).

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[1] Edward Higginbotham & Associates Pty Ltd. Historical and archaeological assessment of the Cadia Ridgeway Project on 'Tunbridge Wells', Four Mile Creek Road, Near Orange, N.S.W. Resource Strategies Pty Ltd. 1998.
[2] Godden Mackay, Cadia Mining Project, Final Conservation Plan. Newcrest Mining Limited. 1995. Volumes 1-6.

1.4. Study methodology and limitations.

This report has been prepared in accordance with the Heritage Office and Department of Urban Affairs and Planning guidelines.

The site of the hut, next to the slaughterhouse, was only located after disturbance by mining equipment and partial stripping of topsoil. The interpretation of the site is limited by this factor.

1.5. Author identification.

This report was prepared by Dr. Edward Higginbotham.

Site plans were completed by Edward Higginbotham, Kevin Hickson and Tim Adams. The draft or trench report on the excavation was prepared by Kevin Hickson.

Archaeological excavation was completed by Dr. Edward Higginbotham, Kevin Hickson, Tim Adams and Martin Lawler between 1 and 11 May 2001.

Computer plans were completed by Kevin Hickson and edited by Edward Higginbotham.

Artifact analysis was completed by Rowan Ward (Ceramics), Jean Smith (Glass), Dominic Steele (Bone) and Kevin Hickson (Metals and other categories).

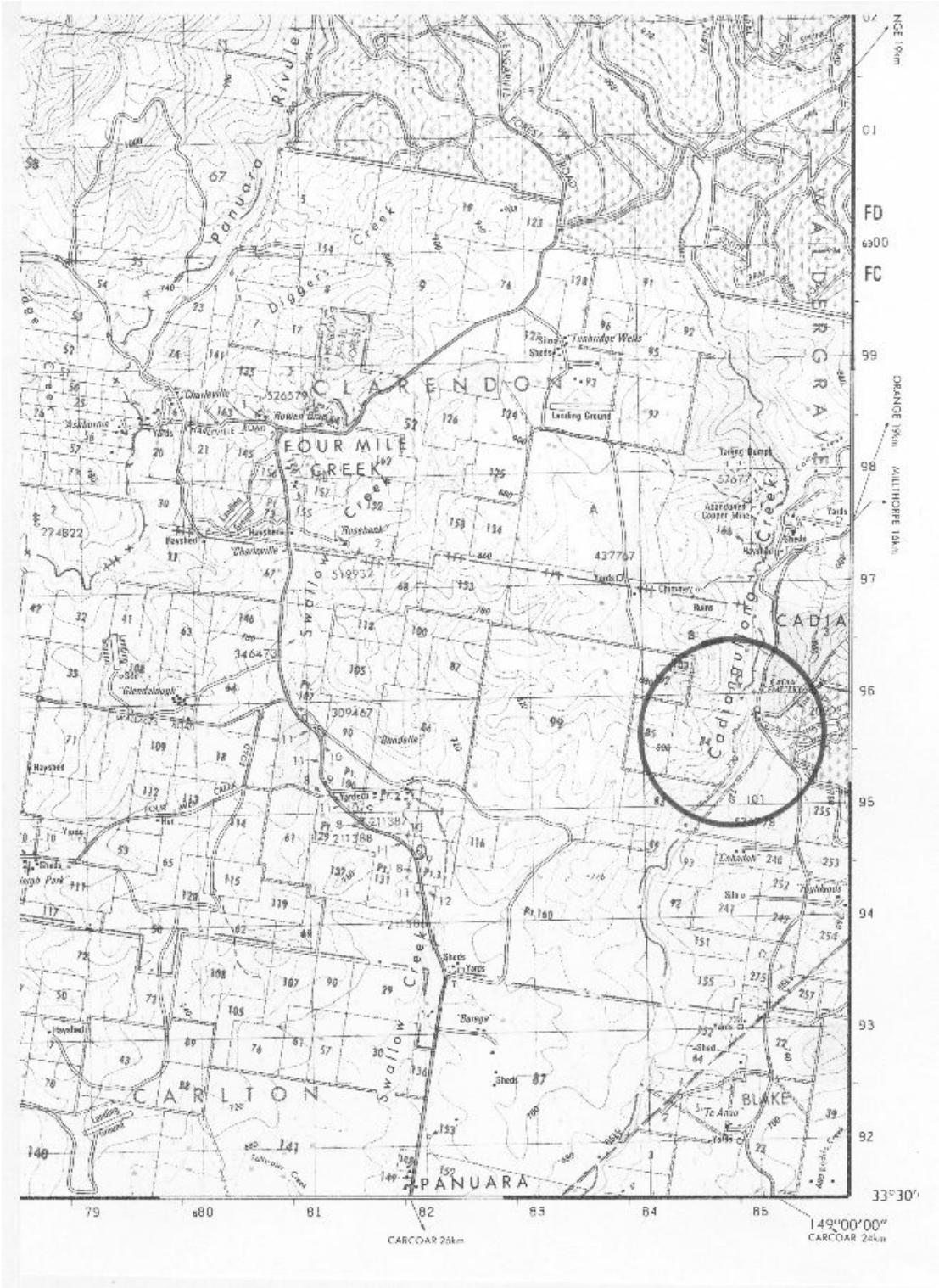

Figure 1.1 Location plan of the historical mine at Cadia, NSW, showing the site of Tynan's Slaughterhouse.

2. SEQUENCE OF DEVELOPMENT.

2.1. Introduction.

The following historical background report was prepared by Terry Kass, historian (Sections 2.2.1 to 2.2.6). The summary of owners, occupiers, landuse and improvements was prepared by Edward Higginbotham.

2.2. History of Portion 84 to c. 1930.

2.2.1. George Robert Glasson, lessee, 1866.

Prior to 1864, although it was near the Cadia Mines, this land was not occupied. When squatter George Robert Glasson became aware of this, he asked that the land be put up for lease by auction, and he successfully bid for the lease. By 1866, he had stocked the land with sheep.

2.2.2. Part of the Cadia Common, 1866 - 1879.

The miners at Cadia successfully petitioned to have the land around the mine declared a common, but with the downturn in mining by 1879, the common was no longer necessary. The mining owners, the Scottish-Australian Mining Company, agreed that the land common could be revoked. This was duly done on the 10 March 1879.[3]

2.2.3. Henry Hunt, 1879 - c. 1889.

On 24 April 1879, Henry Hunt of Cadia made an application for a Conditional purchase at the Carcoar Lands Office for 100 acres, beginning at the south-east corner of Portion 11 of 60 acres and bounded on the north by that portion , and on the west by a line, on the south by another line and on the east by Cadiangullong Creek. The minuting on his application noted that the land had been reserved as part of the common. This reserve had been cancelled on 10 March 1879, so Hunt was able to

[3] At Ms.79/884, Lands, Miscellaneous Branch, Correspondence, SRNSW 2/1174

take up his Conditional purchase. This land became Portion 84, County Bathurst, Parish Clarendon.[4]

Surveyor A J Pechey surveyed Hunt's land on 19 May 1879. Hunt was not residing on the land at that time, but had commenced to erect a hut worth £2. Hunt took up occupation soon afterwards.

Henry Hunt had been born at Harrington Hall, Morpeth on the Hunter River in 1847. According to later sources, he arrived in Orange in 1858. He was a friend of William Tom who had found gold locally. Hunt lived at both Cadia and Lucknow for long periods.[5]

Hunt was in Cadia by 1866. He married Jane Coppock at Springfield near Cadia on 8 January 1866. Jane was the daughter of Joseph Coppock, one of the earliest settlers at Flyers Creek, near Cadia. Joseph Coppock died of bronchitis and asthma on 11 January 1866, three days after their wedding. He was buried at Cadia Cemetery. One of the witnesses at his burial was "N Hunt". In May 1866, Henry Hunt signed the petition calling for a common around the mine, which led to the land he later took up being declared as part of the common.[6] There were many children born to the couple, the birth of the first was registered at Orange in 1866. Thereafter children were born to the couple every two years. In 1872 and 1873, Hunt was listed as the father of children at Cadia Public School.[7] His son, Henry, was born at Cadia on 26 July 1878. Henry Hunt, junior, was drowned accidentally on 10 December 1879, possibly on Portion 84, which his father had taken up shortly before. Henry Hunt, senior, was listed as a farmer of Cadia on the death certificate of Henry junior, who was buried in Cadia Cemetery, possibly close to his grandfather, Joseph Coppock. Henry Hunt's wife, Jane (nee Coppock) appears to have acted as the local midwife. She was listed as a witness to many births at Cadia in this period.

A later account noted that Hunt spent long periods at Lucknow as well as Cadia. No mention is made of Hunt in the published history of Lucknow. Hunt appears to have been at Cadia until about 1884.

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[4] At CS 03/6146, Lands, Conditional Sales, Correspondence, SRNSW 10/19249. All other references in the following report are to this file unless otherwise stated.
[5] *Orange Leader,* 19 April 1916, p 1
[6] At Ms.79/884, Lands, Miscellaneous Branch, Correspondence, SRNSW 2/1174
[7] Board of National Education, Correspondence, 12/2/1872, SRNSW, 1/900; At 4/6/1873;, SRNSW 1/940

In November 1879, about six months after Hunt took up Portion 84, he signed a petition regarding the road into Cadia. It is notable that at this time, he gave his occupation as storekeeper.[8]

By January 1881, Hunt was indebted to Nelson Brothers of Orange for about £200. To give them security for the debt, they asked Hunt to gave them a mortgage over his selection. Ignorant of the proper procedure, they took a transfer of the Conditional purchase by way of mortgage, instead of taking out a mortgage. Nelson Brothers was a prominent firm of merchants and millers with large premises in Orange as well as similar interests elsewhere. If Hunt was operating as a storekeeper late in 1879, it is possible that the debt due to Nelson Brothers represented payment for goods which Hunt may have been selling at Cadia.

On 10 January 1881, Henry Hunt formally declared that had resided on his selection for at least 12 months and that he had alienated the Conditional Purchase to Benjamin Nelson, Joseph Nelson and Adolph Maerker, trading as Nelson Brothers at Orange, for £191. As further proof of their claim to the Conditional Purchase, on 18 May 1881, Henry Hunt of Cadia declared that Nelson Brothers were the lawful owners of the Conditional Purchase, and that improvements consisted of fencing, two houses, a stockyard and cultivation to the value of £150. Hunt had occupied the Conditional Purchase continuously since it was taken up.

Inquiry by the Lands Department into the non-compliance with the regulations regarding occupation of the Conditional Purchase by the owner caused further difficulty for Hunt and Nelson Brothers. On 13 June 1882, Nelson Brothers informed the Lands Department of what had happened with the land. They did not meet the requirements of the Act since they did not reside on the land, but Hunt had been in continuous occupation since he took up the land in 1879. They wanted to alienate the land back to Hunt, to regularise the matter.

Soon afterwards, the business arrangements of the firm of Nelson Brothers underwent a major change. On 8 October 1882, Morris Nelson, a partner in the firm of Nelson Brothers, merchants, storekeepers and millers of Orange, Sydney and elsewhere sold his share in the business to the other partners. Benjamin Nelson was appointed to take possession of any land transferred to them.

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[8] Lands, Roads Branch, Correspondence, SRNSW 10/15112 At 81/777, (Cadia Rd, R.339 c.1603)

Lands Inspector Whittingdale Johnson held an inquiry on 28 November 1882 into the manner in which this Conditional Purchase had been occupied. After deliberating on the evidence provided by Hunt and Nelson Brothers, he recommended that since Hunt had occupied the land continuously with his wife and family and since Nelson Brothers had not been aware of the requirements of the Act, that the Conditional purchase be allowed to stand and not be revoked.

On 25 June 1883, the ownership of the Conditional Purchase was regularised when it was transferred from Benjamin Nelson of Orange to Henry Hunt of Cadia. However, Hunt does not appear to have shaken off his indebtedness to Nelson Brothers. On 31 December 1883, Henry Hunt of Cadia transferred the Conditional Purchase back to Benjamin Nelson of Orange.

Hunt may have continued to reside on the land for the next few years, but others held the actual title. In October 1884, Benjamin Nelson was declared bankrupt. On his bankruptcy schedule of 22 October 1884, he listed a 100 acre farm at Cadia worth £150 amongst his landed property. No further details were provided. There was no mention of Hunt either in the schedules or the list of debts, or in the verbal evidence.[9] On 23 October 1884, the following day, Benjamin Nelson's assignee was given power to deal with Nelson's lands.

It is notable that a few months later, on 31 December 1884, when the annual stock return was compiled, that "M Hunt" of Cadia was listed as the owner of 100 acres at Cadia. He also held livestock of three horses and three pigs.[10] When did he leave the selection? He appears to have left the land at some time in the next three of four years, although there is the claim that he lived for a long time at Lucknow.

Henry Hunt was renowned for his knowledge of gold mining and many sought his advice regarding prospecting. He worked at the Lucknow mines for many years during their heyday. Although he lived at Cadia and Lucknow for long periods, Henry Hunt lived at Orange from 1888 onwards. About 1899 he went to Western Australia with his two sons, but was injured by a fall of rock, which severely affected his health until his death. At his death he was living in McLachlan Street, East Orange. He had six sons and four daughters, according to an obituary.[11]

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[9] Bankruptcy no 19192, SRNSW 2/10100

[10] 'Dept of Mines (Stock and Brands Branch), Report 31 Dec 1884', *V & P L A N S W,* 1885 (2), III, p 75 (of report)

[11] *Orange Leader,* 19 April 1916, p 1

On 9 March 1886, the assignee of Benjamin Nelson's estate transferred Portion 84 to Michael Casey, merchant of Orange, for £115. Although Casey was a merchant at Orange, he was heavily involved in land in the Cadia area. From 1882 onwards, he took up numerous Conditional Purchases in the Parishes of Clarendon and Waldegrave.[12] At his death in February 1895, he held many parcels of rural land across the district as well as town land in Orange.[13]

Casey only held Portion 84 briefly. It appears to have been too far from his other Conditional Purchases in the area, which were situated in the northern part of the Parish of Clarendon. On 15 August 1889 Michael Casey, merchant of Orange, transferred Portion 84 to Adolphus Judd, of Cadia, carrier, for £250.

Henry Hunt did not give up all interest in the land he had selected. On 27 September 1888, along with James Walsh of Long Swamp, he applied for and was later granted a gold lease on part of the road, which ran along the southern boundary of Portion 84, an area totalling 2 acres 3 roods and 37 perches. The partners appear to have worked the land. The lease was cancelled on 16 August 1892.[14]

2.2.4. Adolphus Judd, 1889 - 1902.

Adolphus Judd had been born in Braidwood in February 1859 and had married Mary Louisa Jenkins at Trinity Church, Orange on 26 January 1878. Their first child was born at Cadia in September 1879. Judd took up a Conditional Purchase (CP 79/141 Carcoar) over a 40 acres portion in the Parish of Waldegrave on 27 November 1879. He added to thus with further Conditional Purchases over 80 acres on 27 October 1881 (CP 81/165). 40 acres, on 15 December 1881 (CP 81/201) and 100 acres 2 roods on 3 January 1889 (CP 89/3).[15] These were Portions 23, 250, 256 and 258 of the Parish of Waldegrave. He also obtained a Conditional Lease over Portion 21 adjacent on 15 February 1889. The births of other children, all born at Cadia, were registered until 1887. These portions were clustered together to the south-east of Cadia village. They were directly across the valley of Cadiangullong Creek from Portion 84.

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[12] Orange Conditional Purchase Register, SRNSW 7/4721
[13] Deceased Estate File, Michael Casey, duty paid 15/5/95, SRNSW 20/77
[14] Lease No 605, Mines, Register of Leases, Auriferous Land, 1888-90, Bathurst, SRNSW Reel 1530
[15] LTOD, No 201 Bk 421

On 31 December 1884, Adolphus Judd was listed in the annual stock return as living at Cadia but he was shown, erroneously, as holding no land. He possessed livestock consisting of 4 horses, 5 cattle and one pig.[16] On 30 June 1888, he had agreed with the Tom Brothers to let then prospect for gold and other minerals on the 160 acres he then held as Conditional Purchases, with an option to transfer the Conditional purchases to them for £200 if desired.[17] This transfer was completed on 22 July 1889 , also including the 100 acres and 2 roods he had recently taken up. The consideration for the transfer totalled £250.[18]

It was only a short time later, namely on 15 August 1889, that Judd obtained a transfer of Portion 84, Parish of Clarendon, which is the subject of this study, from Casey, to give him a new property to live upon. To cover his purchase of the Conditional Purchase, on the same day as he bought it from Casey, he mortgaged it back to Michael Casey merchant and Charles Cooper, postmaster both of Orange for £225.

Judd was not often on his farm. In December 1892, he was in arrears with the school fees of his children. He was away for long periods with his team. It was expected that he would make up the arrears when he returned soon once the wool carrying season was over.[19] In September 1897, he had four children at the school.[20]

Casey and Cooper were acting as lenders in their capacity as trustees for the Orange Permanent Building and Investment Society. Judd held the Conditional Purchase for many years. Michael Casey, merchant of Orange, died on 7 February 1895, aged 58 from pneumonia. This left Charles Cooper as the surviving trustee of the Orange Permanent Building and Investment Society.

On 31 October 1902, the mortgage was transferred by Charles Cooper, as surviving trustee of the Orange Permanent Building and Investment Society to Andrew Edye, hotelkeeper and Patrick Joseph Flanagan, storekeeper, both of Orange for £1. Judd was released from this mortgage, on 28 October 1902, by Andrew Edye, hotelkeeper and Patrick Joseph Flanagan, storekeeper, both of Orange for £192. At that time Adolphus Judd was described as being a carrier and farmer of Cadia.

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16 'Dept of Mines (Stock and Brands Branch), Report 31 Dec 1884', *V & P L A N S W,* 1885 (2), III, p 76 (of report)
17 LTOD, No 508 Bk 405
18 LTOD, No 881 Bk 426
19 93/295798, Cadia School file, SRNSW 5/15228.3
20 97/57699, Cadia School file, SRNSW 5/15228.3

On 1 November 1902, Adolphus Judd of Cadia, carrier transferred the Conditional Purchase to Luke James Tompkin, of Cadia, storekeeper, for £220.

Judd left the district and purchased land at Browns Creek, in the Parish of Beaufort, some miles to the east.[21] He was shown as a farmer living at Browns Creek in later electoral rolls.

2.2.5. Luke James Tompkin and his wife, Sarah Jane Tompkin, 1902 - 1915.

Luke James Tompkin paid off the remainder of the purchase money on the Conditional Purchase. The final payment on the Conditional Purchase was made by Luke James Tompkin on 16 February 1903 making a total purchase price of £100 on the Conditional Purchase. A Certificate of Title was issued to Luke James Tompkin of Cadia for this Portion on 23 May 1903.[22]

Tompkin was the local storekeeper and part of the community. Aged 22 years old, with his wife, Sarah Jane, aged 23, he arrived in NSW on the *Abergeldie* on 6 July 1884. The birth of their daughter, Edith, was registered at Orange in 1885 and that of their son, Sydney, in Orange in 1888. He was shown on the 1894 electoral rolls as the local storekeeper. In September 1897, he had two children at the Cadia Public School.[23] In 1901, he was one of the local men of substance who attested to the reason for the illness of the local school teacher, assuring the department that it was not due to any "abusive conduct".[24] The 1903 Electoral Roll showed Luke James Tompkin as a storekeeper at Cadia with his wife Sarah Jane.

The Sands Directory for 1901 was the first to include country commercial listings. At Cadia, Tompkin was listed as storekeeper and butcher.[25] This listing as both storekeeper and butcher continued until 1909. His acquisition of Portion 84 on 1 November 1902 by a transfer from Adolphus Judd is likely to have been associated with this activity. It is notable that Yewen's Directory listed Tompkin as growing wheat and oats at Cadia as well as being a "grazier".[26]

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[21] C T 30 f 72
[22] C T 1473 f 173
[23] 97/57699, Cadia School file, SRNSW 5/15228.3
[24] Cadia School file, SRNSW 5/15228.3
[25] Sands, Directory, 1901, p 695
[26] *Yewen's Directory of the Landholders of New South Wales, 1900,* Farm & Dairy Publishing Co, Sydney, 1900, p 97, 371

After the death of Luke James Tompkin in 1911, the title to the property was transmitted to his widow Sarah Jane Tompkin of Cadia on 28 January 1916.[27] Mrs L J Tompkin is listed as the storekeeper at Cadia until 1914 in the Sands Directories. A few weeks earlier, on 20 December 1915, she had the property transferred to Mary Tynan, of Cadia, widow.[28]

2.2.6. Mary Tynan, 1915 - 1929.

Mary Tynan was the widow of Patrick Tynan. As Mary O'Sullivan, her marriage to Patrick Tynan was registered at Hamilton near Newcastle in 1891. The births of a number of children were registered at Hamilton in 1891, 1894, 1895, 1897, and 1899, with the last birth registered at Wickham in 1901. About 1900, Patrick Tynan sold land he owned at Hamilton.[29] Mary and Patrick first appeared at Cadia in 1906, with Patrick as a storekeeper and Mary as being involved in domestic duties.[30] About this time, Patrick became the registered proprietor of a small parcel of land in Portion 83 Parish of Waldegrave , that is in Cadia Village. Mary later took over this land.[31]

The 1909 Sands Directory shows that P J Tynan was the publican of the Cadia Hotel. It is uncertain when Patrick died. The death of a Patrick Tynan was registered at Parramatta in 1912, and this may have been the same man. Mary was not listed as hotelkeeper until 1920 in the Sands Directory, but, the 1915 electoral roll showed her as the hotelkeeper. The 1916 electoral roll also showed her son, Thomas Michael Tynan, as hotel manager, for that one year. Sands listed her as the hotelkeeper in 1920-1, but thereafter, the publican was listed as being other people.

On 15 May 1908, Mrs Tynan, hotelkeeper, signed a petition requesting that the local school teacher be retained at Cadia, because of his medical training, which was invaluable in a community without ready access to a doctor. "P J Tynan" also signed the petition.[32]

The Tynans had various connections with Cadia. In 17 April 1916, J Tynan, baker of Orange, announced that he would take over the bakery in Summer Street West, lately

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[27] C T 1473 f 173
[28] C T 1473 f 173
[29] OS Indexes, LTO
[30] 1906 Electoral Roll, Division of Macquarie, Cadia Polling Place
[31] Torrens Indexes - C T 175 f 108
[32] 08/30595, Cadia School file, SRNSW 5/15228.3

occupied by G H Pritchard. He announced he was lately of Sydney and Cadia.[33] In September 1917, the witness to the burial of the child, Laurentine Heffernan, was listed as T Tynan, possibly Thomas Michael Tynan.

Mary Tynan moved away from Cadia about 1916. When she bought a property in Marrickville in 1916, she gave her address as Cadia. However, the Sands Directory for 1916, (compiled late in 1915) listed her as living at Park Road, Marrickville, where she was listed for some years to come.[34]

On 5 July 1926, Mary Tynan leased the land to James Joshua Oglethorpe of Cadia, hotelkeeper. The lease specified that it was let for three years at £97/10/- per annum, and there were specific conditions regarding the disinfection of the premises.[35] On the same day, 5 July 1926, Mary Tynan leased by Old System deed, "the Butcher's shop premises known as the Cadia Butcher Shop and appurtenances thereto" to Oglethorpe from 1 March 1926 at 2/6 per week. It is notable, that an identical clause regarding the cleaning and disinfection of the premises were also included in this deed of lease.[36]

James Joshua Oglethorpe was born near Dubbo in 1878 to James and Mary Oglethorpe.[37] In December 1924, when he inherited land at Portland, owned by his father, he was a coach builder living at Auburn.[38] He took over the land at Cadia owned and leased by Mary Tynan, probably the hotel.[39] He was only listed as hotelkeeper at Cadia in Sands for 1927.[40] The hotel closed down very soon afterwards. His lease of Portion 84 was cancelled on 14 June 1929 for non-payment of rent.[41] It likely that the same occurred to the other leases he held for Cadia property. He moved to Grafton to manage hotels there. His lease of what appears to have been a hotel at Pound and Turf Streets, Grafton was registered about 1928.[42] He soon took over the lease of the Royal Hotel in Ryan and Abbott Streets South Grafton.[43]

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33 *Orange Leader,* 17 April 1916, p 1
34 Sands, Directory, 1916, p 1793
35 C T 1473 f 173; Dealing B 390273
36 LTOD, No 301 Bk 1437
37 BDM indexes
38 C T 1421 f 45
39 Torrens Indexes LTO, Lease B 293344
40 Sands, Directory, 1927, p 67A
41 C T 1473 f 173
42 Torrens Indexes - Lease B.823133
43 LTOD, No 645 Bk 1564; No 646 Bk 1564

Portion 84 was transferred by Mary Tynan to William Ralston Brown of Orange grazier on 11 July 1929.[44] On 8 August 1929, he transferred the title to the property to William Ralston Brown, Cyril William Brown and Kenneth Ernest Brown as tenants in common.[45]

2.3. Summary of historical documentation.

The above historical background reveals details of life at Cadia and its environs, indicating the close knit community forged by intermarriage and other social and economic ties.

From the archaeological standpoint, the historical documentation also needs to be summarised for the information it provides on the owners, occupiers, land use and improvements of the subject land, namely Portion 84. The documentation is summarised in the table below:

Date	Owner	Occupier	Land Use	Improvements
1866		George Robert Glasson, squatter	Pasture of sheep	
1866 - 10 March 1879		Cadia Common, part		
19 May 1879	Conditional Purchase by Henry and Jane Hunt, with children.		Residence soon after May 1879	Commenced building a hut, but not in residence.
November 1879	Henry Hunt, storekeeper. (Jane Hunt, possibly midwife).			
10 January 1881	Conditional Purchase transferred to Nelson Brothers, Orange, for £191.	Henry and Jane Hunt, with children.	Residence of Henry and Jane Hunt, with children.	
18 May 1881	Nelson Brothers, Orange	Henry and Jane Hunt, with children.		"fencing, two houses, a stockyard and cultivation to the value of £150"
8 October 1882	Conditional Purchase transferred to Benjamin Nelson	Henry and Jane Hunt, with children.		
25 June 1883	Conditional Purchase transferred to Henry Hunt			

[44] C T 1473 f 173
[45] C T 1473 f 173

31 December 1883	Conditional Purchase transferred to Benjamin Nelson			
22 October 1884	Benjamin Nelson declared bankrupt.			100 acre farm at Cadia worth £150
31 December 1884	"M Hunt", Cadia.			Livestock of three horses and three pigs.
9 March 1886	The assignee of Benjamin Nelson's estate transferred the Conditional Purchase to Michael Casey, merchant of Orange, for £115			
15 August 1889	Transfer to Adolphus Judd, of Cadia, carrier, for £250			
15 August 1889	Mortgage to Michael Casey, merchant of Orange for £225	Adolphus Judd, of Cadia, carrier (Wife, Mary Louisa, nee Jenkins)		
December 1892		Adolphus Judd, of Cadia, carrier. In arrears with school fees at Cadia School.		
September 1897		Adolphus Judd. Four children at Cadia School.		
31 October 1902	Transfer of mortgage to Andrew Edye, hotelkeeper and Patrick Joseph Flanagan, storekeeper, both of Orange for £1.	Adolphus Judd		
28 October 1902	Reconveyance to Adolphus Judd, carrier and farmer, Cadia, for £192.			
1 November 1902	Transfer of Conditional Purchase to Luke James Tompkin, of Cadia, storekeeper, for £220			
16 February 1903	Final instalment payment of Conditional Purchase			
23 May 1903	Certificate of Title issued to Luke James Tompkin of Cadia			

1901 - 1909	Luke James Tompkin, storekeeper and butcher, Cadia.			
1900	Luke James Tompkin			Yewen's Directory listed Tompkin as growing wheat and oats at Cadia as well as being a "grazier"
28 January 1916	Transfer to Sarah Jane Tompkin, widow of Cadia			
to 1914	Mrs L J Tompkin, storekeeper at Cadia			
20 December 1915	Transfer to Mary Tynan, of Cadia, widow.			
1915	Mary Tynan, hotelkeeper, Cadia.			
1916	Mary Tynan, Park Road, Marrickville.	Thomas Michael Tynan, as hotel manager, Cadia.		
1920 - 1921	Mary Tynan, hotelkeeper, Cadia.			
5 July 1926	Mary Tynan	Lease to James Joshua Oglethorpe of Cadia, hotelkeeper, for three years at £97/10/- per annum with specific conditions regarding the disinfection of the premises. Lease of Cadia Butcher Shop to Oglethorpe on same day.		Slaughterhouse
14 June 1929		Lease to Oglethorpe cancelled for non-payment of rent.		
11 July 1929	Transfer to William Ralston Brown of Orange grazier.			

It is clear that by 5 July 1926 Portion 84 was used as the slaughterhouse to supply the Cadia Butcher Shop of Mary Tynan. The conditions placed on the lease to James Oglethorpe make it clear that both premises were to be cleansed and disinfected in the same way, surely indicating the like use of Portion 84 and the Butcher Shop. Mr. Graham Brown, the former owner of the land, referred to Portion 84 as the former

location of Tynan's Slaughterhouse.[46] For this reason it is deduced that Mary Tynan or her husband would have commenced or continued the use of Portion 84 as a slaughterhouse.

The question is - at what date did the slaughterhouse commence? It is unlikely that Adolphus Judd was involved in this activity, since he was well known as a carrier. The transfer of the property to Luke James Tompkin in 1902 is the third association with the storekeepers or hotelkeepers of Cadia, while Henry Hunt was the first as a storekeeper, although not so successful. Tompkin had the ready capital to make a final payment on the Conditional Purchase and could easily have had the money to set up the slaughterhouse. As a storekeeper and butcher in Cadia between 1901 and 1909,. he clearly had the need of a slaughterhouse. The most likely interpretation is that Mary Tynan purchased a ready functioning slaughterhouse in December 1915.

Once Portion 84 came into the ownership of people with businesses in Cadia, it is less likely that they resided on Portion 84. This change of residential status can be seen to commence in 1902 with the purchase by Luke James Tompkin. While persons may have resided on Portion 84, it is likely that the respective owners resided in Cadia Village itself, where they would be able to keep a closer eye on their business interests. The question of residence may be decided by the archaeological evidence.

Another issue that arises with regard to the conditional purchase is the means (social and economic standing) of the persons who took up the land in the first place. The Crown Land Alienation Acts of 1861 were meant to enable persons of lesser means to become property owners and farmers by providing a way of purchasing land by instalment, thus allowing applicants to gradually improve the land and pay off the instalments as they reaped the benefits of their land. The historical and archaeological question is - what living conditions did the applicants for conditional purchase experience in their attempts to improve and gain ownership of their land? From the viewpoint of the historical documentation this question is best answered by Henry Hunt and his wife, Jane. For Henry Hunt, like many others, the dream of land ownership was a strong incentive to take up property. The land itself could not support him and his growing family as is clearly evident from his associations with the mining of gold at Cadia and Lucknow. Hunt exemplified the saying - "once a miner, always a miner" - because he was one of the few exceptions, or possibly not. In order to support himself, Hunt continued with his mining interests, while his wife appears to have gained some income from midwifery. His stock comprised three

[46] Pers. Comm: Mr. Graham Brown, 1998.

horses and three pigs in 1884, which can hardly have provided for more than the family's needs. What caused Hunt's demise was his attempt at storekeeping, which by 1881 had resulted in a debt of £200 to the firm of Nelson Brothers in Orange. This forced Hunt to sell his land, even though he had made substantial improvements to it, including fencing, two houses, a stockyard and cultivation to the value of £150. He was able to continue living on his land for a number of years, but left it by 1889. Thus for Hunt, the dream of land ownership eluded him, as for many others.

Adolphus Judd appears to have been another person to embark on land ownership through conditional purchase. In all he had taken up 260 acres as 4 portions by 1889, with 4 horses, 5 cattle and one pig in December 1884. Judd had agreed with the Tom Brothers to allow them to prospect for gold on his land with an option to purchase. He sold the 260 acres to them in July 1889 for £250, but had already paid out considerable capital in the conditional purchase instalments. Judd bought Portion 84 a little later for £250 on 15 August 1889, but a mortgage over the land meant he had paid only £25, the rest being borrowed. Judd could not support himself and his growing family on the 100 acres alone and was away for long periods as a carrier, particularly involved in the carriage of wool. Nonetheless he reconveyed the loan for £192 in 1902, indicating that he had reduced the amount by £33 in 13 years.

From the above and comparable data for applicants of conditional purchases, the historical documentation would suggest that successful purchase of land by persons of lesser means was difficult. The later owners of the land, being storekeepers and hotelkeepers in Cadia, had their main economic interests elsewhere. Their situation differs from the other applicants for conditional purchase, who relied and resided on their land and the seasonal work available to them elsewhere.

2.4. Historical maps and plans.

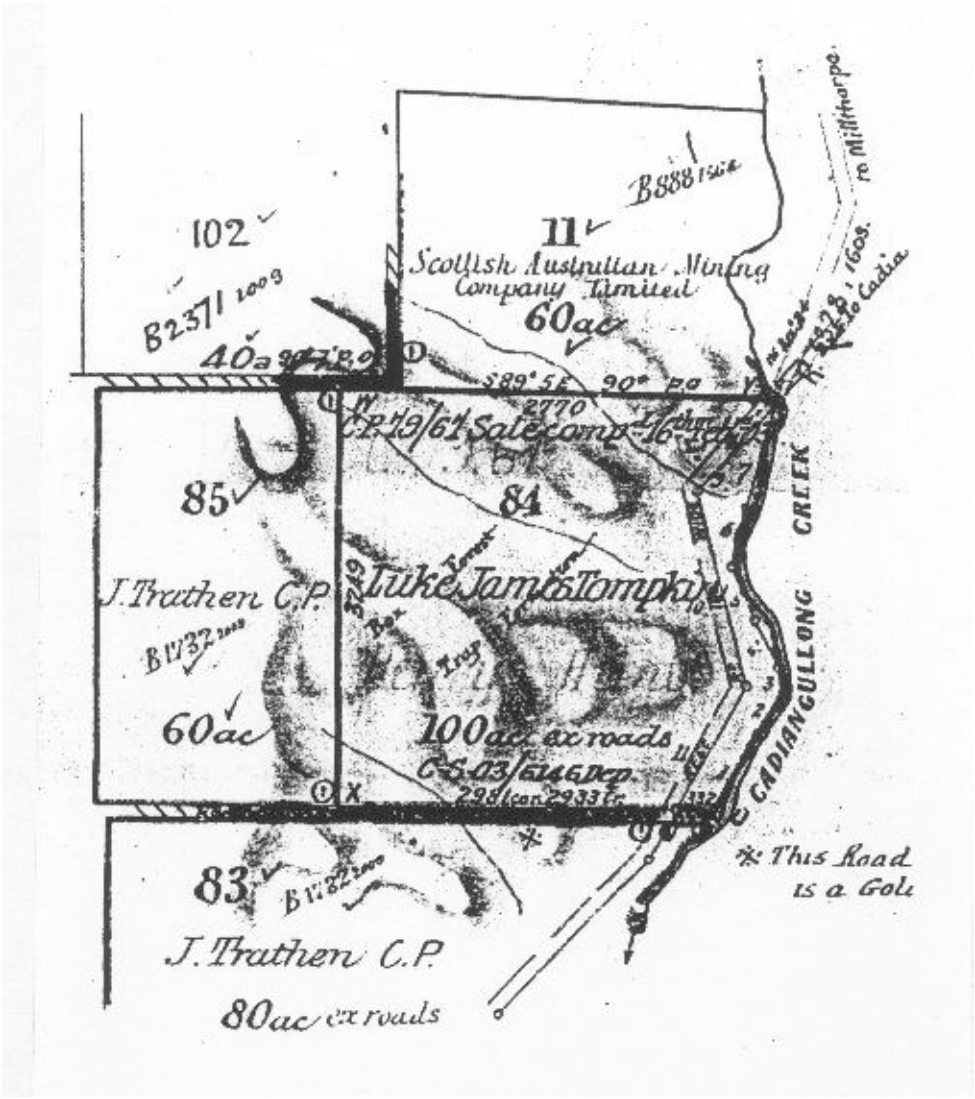


Figure 2.1. Plan of Portion 84, showing the location of the hut at the north-east corner of the portion, near the road (B.1736.2009. LTO).

3. THE RESULTS OF ARCHAEOLOGICAL EXCAVATION.

The site of Tynan's Slaughterhouse was originally located in 1998 during site survey.[47] Only the site of the presumed slaughterhouse was noted and it was not until stripping of topsoil for mining began in January 2001 that the remains of the additional hut were located by a scatter of artifacts and the brick rubble of a chimney. These sites were surveyed by Cadia Holdings Pty Limited (Figures 3.1 and 3.2). Even though the site was surveyed and clearly identified, the site was further damaged by mine clearance, so that the fireplace and a proportion of the archaeological deposits were destroyed before a permit for archaeological excavation could be obtained.

The archaeological excavation was completed over a period of 2 weeks in May 2001. The site was opened up by mechanical excavator, supervised by the archaeologists. The machine was provided with a 1.8 metre wide mud bucket with no teeth. The machine was used to strip topsoil, either to subsoil or to the first significant archaeological features. This process exposed the post-holes of what is believed to be the slaughterhouse, the four corner posts of which had survived until excavation, although two had collapsed. It also uncovered an extensive underfloor deposit in association with the house site. These sites were investigated by manual excavation in the second week of investigation. The underfloor deposit and underlying topsoil was divided into a metre grid and sieved with a 5 mm mesh to recover all artifactual materials. The limited time available for excavation meant that the house could not be completely excavated and the post-holes of the larger timber shed or building (slaughterhouse) could only be sampled.

3.1. Soil types

The archaeological site was characterised by a number of soil types, namely:

Soil Type	Horizon	Munsell Colour	Description
1	A1	10YR 4/3	Brown silty loam
2	A1	10YR 2/1	Black silty loam (occupation deposit)
3	A1	7.5YR 3/2	Dark brown silty loam with frequent angular gravel and stone
4	A2	10YR 6/3	Pale brown silt with iron panning
5	A2	7.5YR 4/6	Strong brown silty clay with frequent angular gravel and stone

[47] Edward Higginbotham & Associates Pty Ltd. Historical and archaeological assessment of the Cadia Ridgeway Project on 'Tunbridge Wells', Four Mile Creek Road, Near Orange, N.S.W. Resource Strategies Pty Ltd. 1998.

6	B	10YR 6/8	Brownish yellow clay with angular gravel and stone
7	B	2.5YR 4/8	Red silty clay with angular gravel and stone
8	in A2	5YR 5/8	Yellow red silty loam, burnt, with angular gravel

The south-western part of the site was characterised by dark brown silty loam (ST 3. A1 Horizon) over brown silty loam (ST 1. A1 Horizon) over strong brown silty clay (ST 5. A2 Horizon).

The northern part of the site consisted of brown silty loam (ST 1. A1 Horizon) over pale brown silt (ST 4. A2 Horizon) and/or strong brown silty clay (ST 5. A2 Horizon).

In the south-eastern area, brownish yellow clay (ST 6. B Horizon) or red silty clay (ST 7. B Horizon) were apparent below the strong brown silty clay (ST 5. A2 Horizon).

The yellow red silty loam (ST 8) occurred only occasionally and was invariably associated with charcoal in features identified as burnt out tree roots.

The black silty loam (ST 2. A1 Horizon) was confined to the northern area around Building 1 and is interpreted as an occupation or an underfloor deposit. It sat immediately below the grassed surface topsoil and above brown silty loam (ST 1. A1 Horizon) mottled with pale brown silt (ST 4. A2 Horizon). In this position the black silty loam (ST 2. A1 Horizon) is stratigraphically equivalent to the dark brown silty loam (ST 3. A1 Horizon) which was found in the south-western part of the site, although the two soil types need not be contemporary. Indeed it is likely that the dark brown silty loam (ST 3. A1 Horizon) is associated with erosion control works constructed in the 1950s and 1960s, adjacent to the site.[48]

With the removal of topsoil (A1 Horizons) by machine, the archaeological remains overlying the subsoils (A2 Horizons) were clearly defined. They consisted of a number of pits, post-holes and trenches, cut into the A2 or B Horizons and an extensive layer of black silty loam (ST 2. A1 Horizon), containing many artifacts in the vicinity of the brick fireplace (Building 1).

The archaeological remains could be divided up into a number of structures, namely:

1. Building 1,
2. Building 2, and

[48] Pers. Comm. Graham Brown via Russell Squire, 2001.

3. Building 3,

together with a number of other features, including fencelines and stockyard. Each structure will be described separately.

3.2. Building 1.

Building 1 was defined by the extent of the black silty loam (ST 2. A1 Horizon) and was located in the north-western part of the site. The surviving area of this occupation or underfloor deposit measured approximately 15.25 by 12.5 metres, although it may have spread beyond the walls of the original building.

The depth of the deposit ranged from 1 to 14 centimetres. The northern part of the deposit was truncated by disturbance prior to archaeological excavation. The occupation or underfloor deposit was divided up into grid squares (context numbers 14-67, 75-101), excavated by hand and sieved through a 5 mm mesh to recover as many artifacts as possible and also to provide spatial information, if present.

Once the black silty loam (ST 2. A1 Horizon) was removed, the underlying topsoil, brown silty loam (ST 1. A1 Horizon), was also excavated by hand and sieved on a metre grid (123-156), allowing for the recovery of additional artifacts.

The removal of the brown silty loam (ST 1. A1 Horizon) revealed a number of features, cut into the subsoil, the strong brown silty clay (ST 5. A2 Horizon). Time allowed for the excavation of only a few of these features, but they do indicate some details of the structure that had stood on the site.

It is likely that the fireplace, indicated by the mound of brick rubble, inadvertently removed prior to archaeological excavation, represent one side of the original structure, namely the alignment of its northern wall. A number of post-holes were located (160, 162, 164, 166), but the pattern is inconclusive and the layout of the house confused by the extensive tree root disturbance (157, 176). The most revealing feature was the grid of shallow trenches, filled with topsoil, cutting into subsoil (177). This grid represents the pattern of floor joists of a structure that must have been timber framed, with a raised timber floor. Although it is difficult to interpret, this timber structure may have only measured 6.75 metres long from the fireplace to the southern extent of the grid of flooring (177), by 6 metres wide from the eastern extent of the grid of flooring (177) to the back of the structure, possibly represented by pits (176). A structure of this size (6.75 by 6 metres, 22 feet by 19 feet 8 inches) would

equate to a 3 roomed structure with rooms measuring 13.68 square metres (144 square feet) or 3.65 by 3.65 metres (12 by 12 feet). During the survey of Cadia Village by far the greatest number of buildings were 2 and 3 roomed structures, with 18 and 16 possible examples respectively out of a total of 115 recognisable structures.[49]

The archaeological remains indicate a 3 roomed timber framed building, with raised timber floor, possibly partly supported on stumps or posts, with a fireplace at its northern end. Its size and construction features indicate that it was a common, indeed ubiquitous type of habitation, though the survival of an occupation or underfloor deposit was unexpected. The presence of this type of deposit is usually restricted to masonry built structures and is not usually found in association with the sites of timber buildings, possibly because of subsequent cultivation, which may not have occurred in this case.

3.3. Building 2.

Only Building 1 possessed any form of occupation deposit, the remainder of the structures on the site were simply exposed as patterns of post-holes, slots or pits, cut into subsoil. Few, if any artifacts were located in association with these other structures, which clearly indicates that they were not used for human habitation, but for some form of non-domestic use.

This interpretation is possibly hardest to accept for Building 2, which looks very much like a small three roomed hut or cottage of simple post-built construction (102, 105, 108, 115, 169), measuring 7 metres long, by 3 metres wide (23 by 9 feet 8 inches). Another room was attached to one side, measuring 2.5 by 3 metres (8 feet 3 inches by 9 feet 8 inches). In the main part of Building 2 there are two rooms, one measuring 3 by 3 metres (9 feet 8 inches by 9 feet 8 inches), the larger 4 by 3 metres (13 feet 2 inches by 9 feet 8 inches).

In overall area, namely 28.5 square metres, it equates with a 2 roomed structure, where the rooms are each 13.68 square metres (144 square feet). The room dimensions are therefore on the small size for human habitation, but not unknown. The absence of any occupation materials perhaps suggests that it was not used for

[49] Edward Higginbotham & Associates Pty Ltd. Historical and archaeological assessment of Cadia Village in advance of the proposed mining of Cadia Quarry, Cadia, NSW. Cadia Holdings Pty Limited. 2000: 60-61.

human habitation, but could have been a pig sty or other type of pen for animals. It is interesting to note that there is no evidence of the wall construction material other than the post or sill beam framing (111, 113, 117, 119). The infill material could have been timber, perhaps slabs, but was certainly not wattle and daub, because the clay would have left some archaeological trace.

3.4. Building 3.

Like Building 2, Building 3 was indicated by a number of features cut into the subsoil, including post-holes and trenches for sill beams or wall plates (171, 174). The most likely form of construction was timber framing using bush timbers, as survived, and slabs, supported on the sill beams or wall plates, indicated by the shallow trenches. The surviving lengths of the bush posts, namely 2.4 and 3.4 metres, indicate the height of the structure above the ground, where the posts had rotted off. The shorter posts are the corner posts, indicating a structure of 2.4 metres or approximately 8 feet in height, while the longer post represents the height of the ridge, namely 3.4 metres or 11 feet 2 inches. The structure measured 8.8 metres long by 4.3 metres long (29 feet by 14 feet) and was probably open on its east side, since there is no base plate along this side. A lean-to structure on the back of the building is indicated by posts and slots, measuring 2.3 metres (7 feet 6 inches) wide and possibly 5.2 metres (17 feet) in length.

Few artifacts were associated with this structure, which is initially surprising if it was indeed the slaughterhouse. Upon further consideration it is highly likely that the slaughterhouse would have been cleansed and disinfected, as prescribed in the lease of the building from Mary Tynan to Joshua Oglethorpe in 1929, leaving little or no animal remains in the vicinity. If portions of the animal carcases were not used or taken to the Village for sale in the butcher shop, then they could have been disposed in a manner that has left no trace on the site of the slaughterhouse. The small lean-to on the back of the building may have been a store, as it would have had a low roof line.

3.5. Stockyard.

Directly to the east of the slaughterhouse (Building 3), the pattern of post-holes is partly confused by tree root disturbance, but it is possible to define another post built structure from the remaining archaeological features. The rectangle formed by these

post-holes encloses an area measuring 6.86 (22 feet 6 inches) by 5.48 metres (18 feet) and was contiguous with the open side of the slaughterhouse (Building 3).

A stockyard or pen would have been an essential element of a slaughteryard.

3.6. Fencelines.

A number of linear features were noted on the site. The most obvious line of post-holes (068) was located directly to the north of Building 3 and ran obliquely across the site, appearing to divide the slaughteryard from the domestic residence. Another fenceline may be indicated in the south-east corner of the site by further post-holes and slots (071, 073). This fenceline would have run obliquely across the site as well, from the south-east to the north-west and behind the slaughterhouse (Building 3).

Another slot or linear trench runs in a north south direction between Buildings 1 and 2. Its function is not clear, but it may be a form of fenceline dividing the yards of the two buildings, but another similar parallel slot also is located within the remains of Building 1.

3.7. Plans.

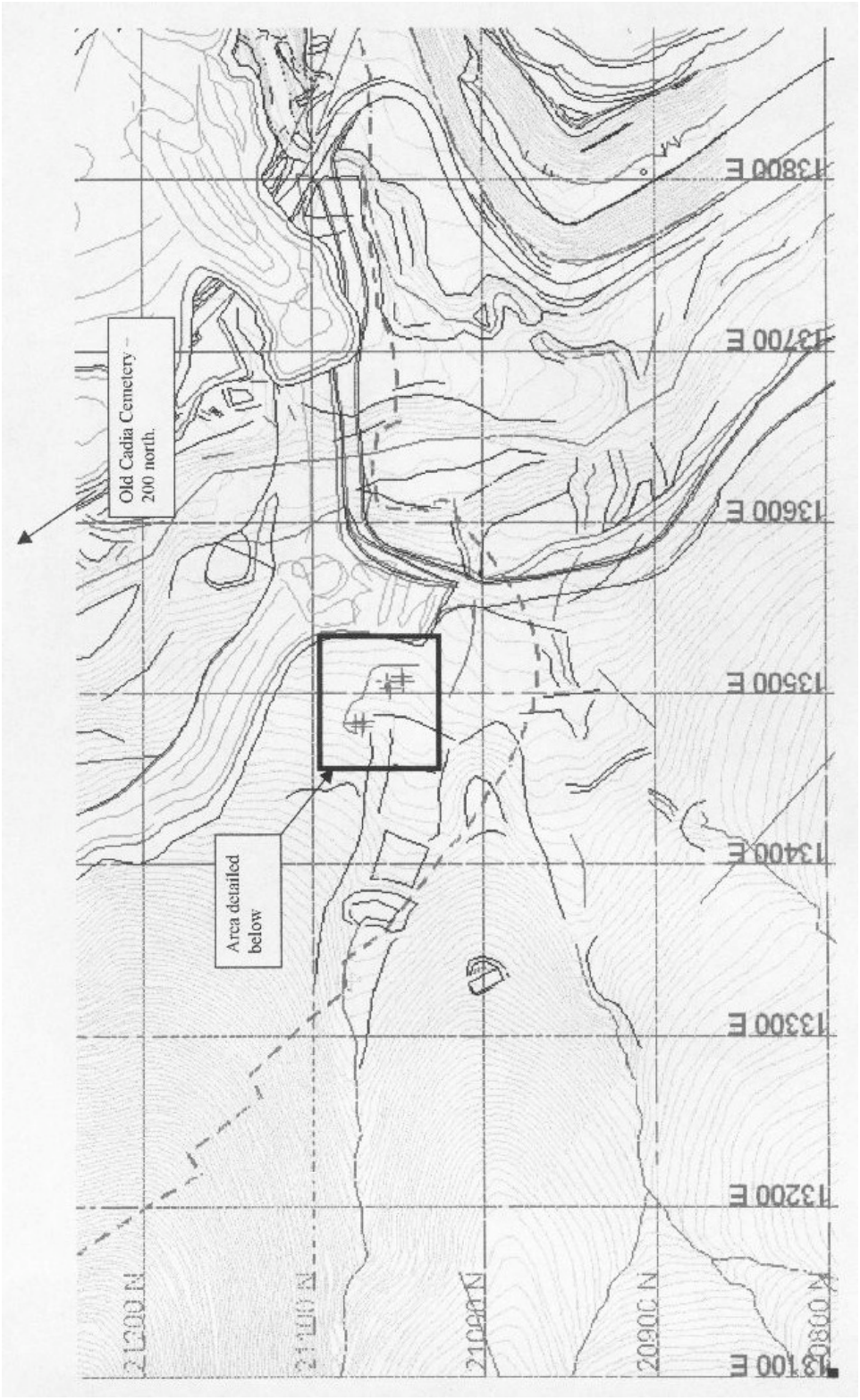


Figure 3.1. Tynan's Slaughterhouse, Cadia. Location plan using the Cadia Mine Survey Grid (Plan by Cadia Holdings Pty Limited).

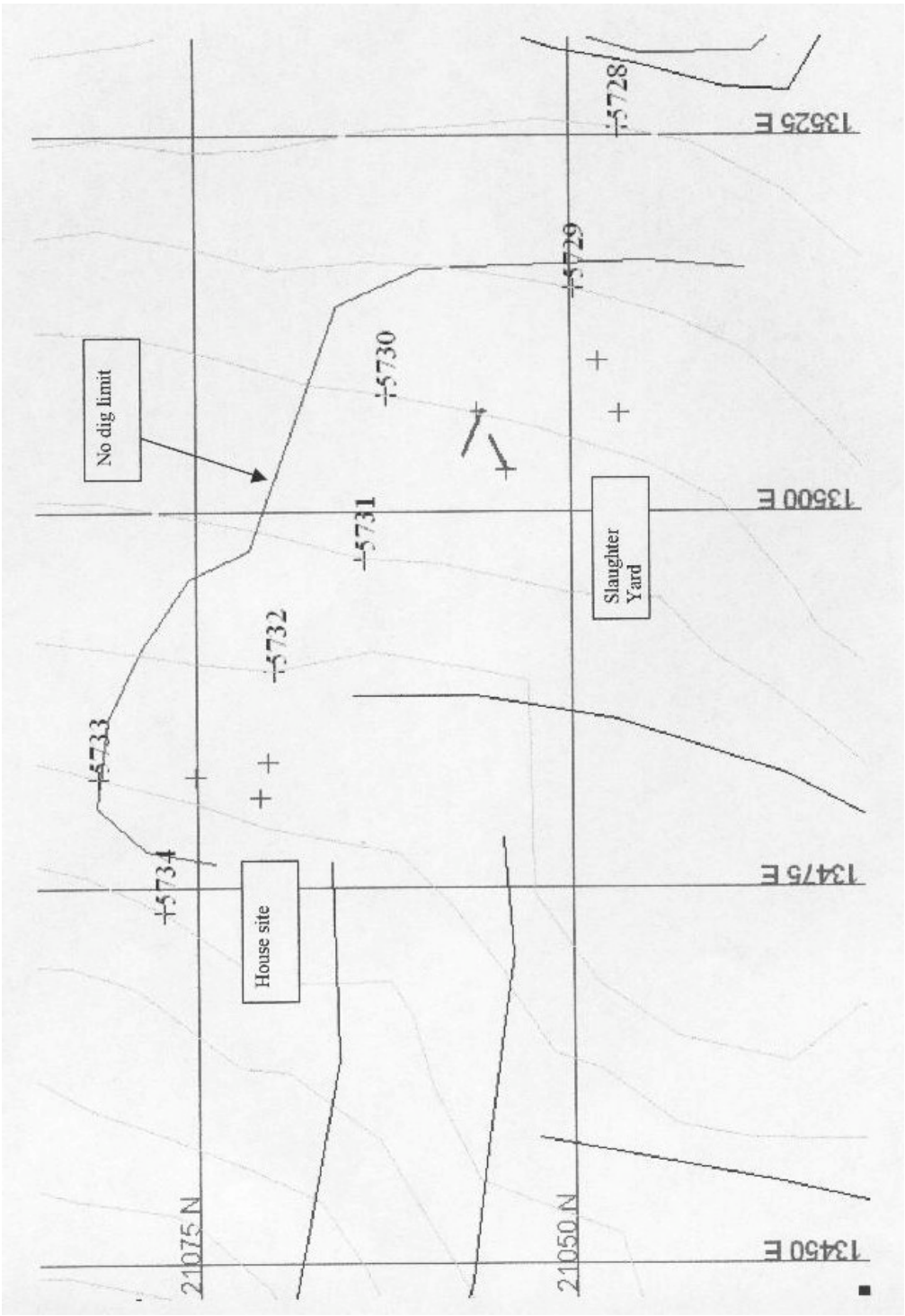


Figure 3.2. Tynan's Slaughterhouse, Cadia. Detail plan using Cadia Mine Survey Grid, showing the surviving posts of the Slaughterhouse (Building 3) and the outline of the house platform (Building 1). The northerly cross indicates the site of the fireplace (brick rubble), the other two crosses to the south indicate the extent of the levelled platform (Plan by Cadia Holdings Pty Limited).

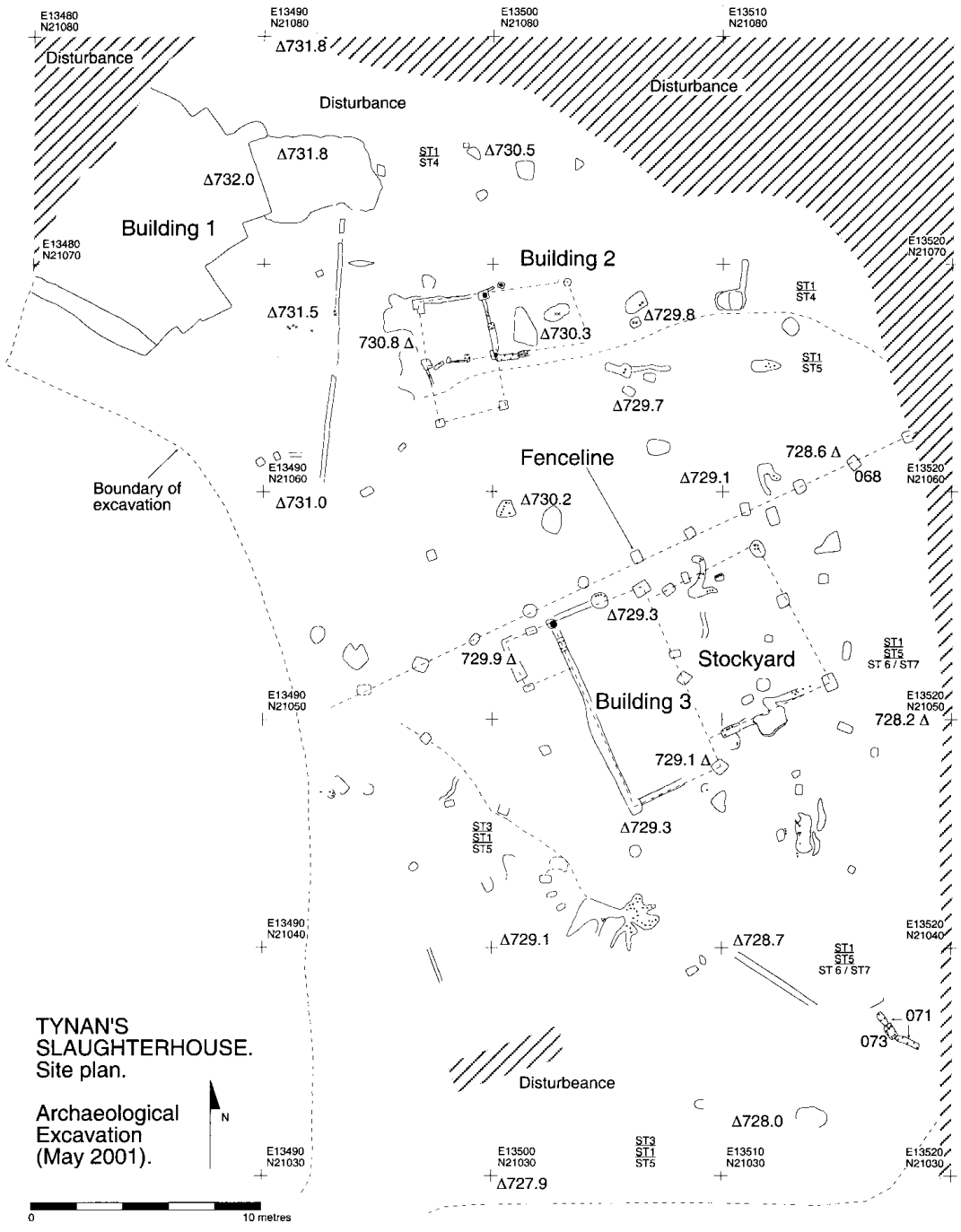


Figure 3.3. Tynan's Slaughterhouse, Cadia. Site plan of archaeological site, showing the location of all archaeological features and the positions of Buildings 1-3, fencelines and stockyards.

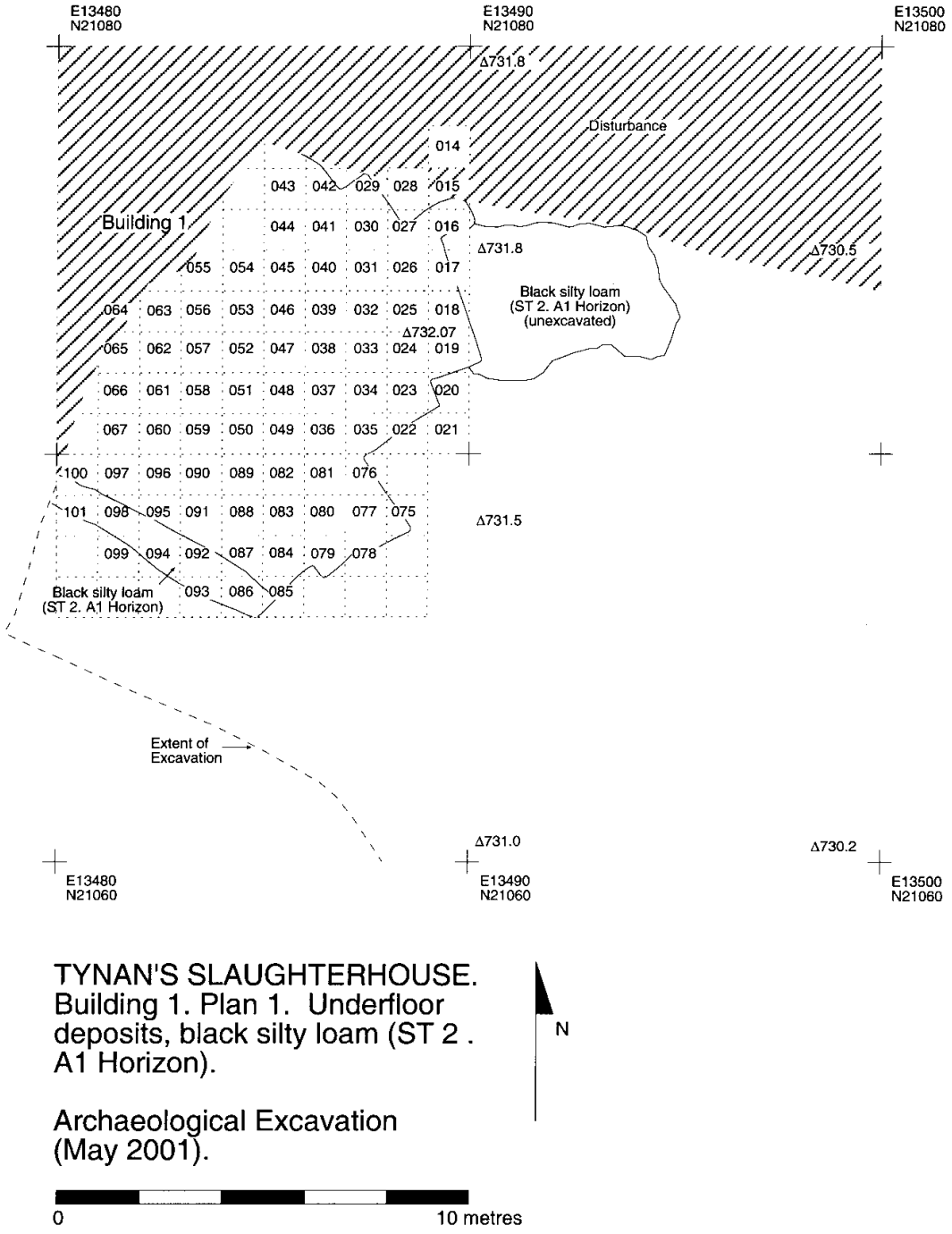


Figure 3.4. Tynan's Slaughterhouse, Cadia. Building 1, Plan 1, showing extent of underfloor deposits (black silty loam, A1 Horizon) covering the site of the house.

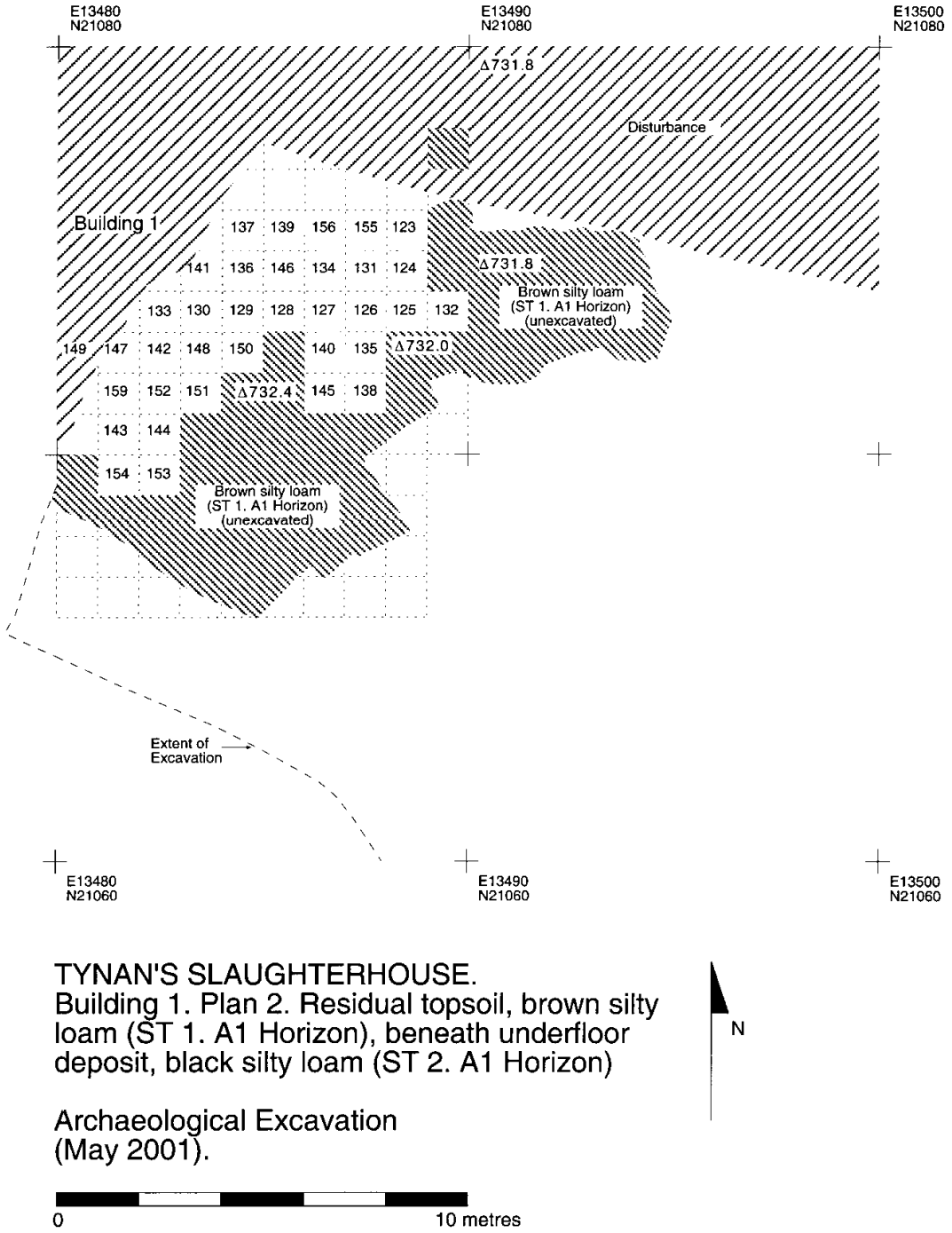
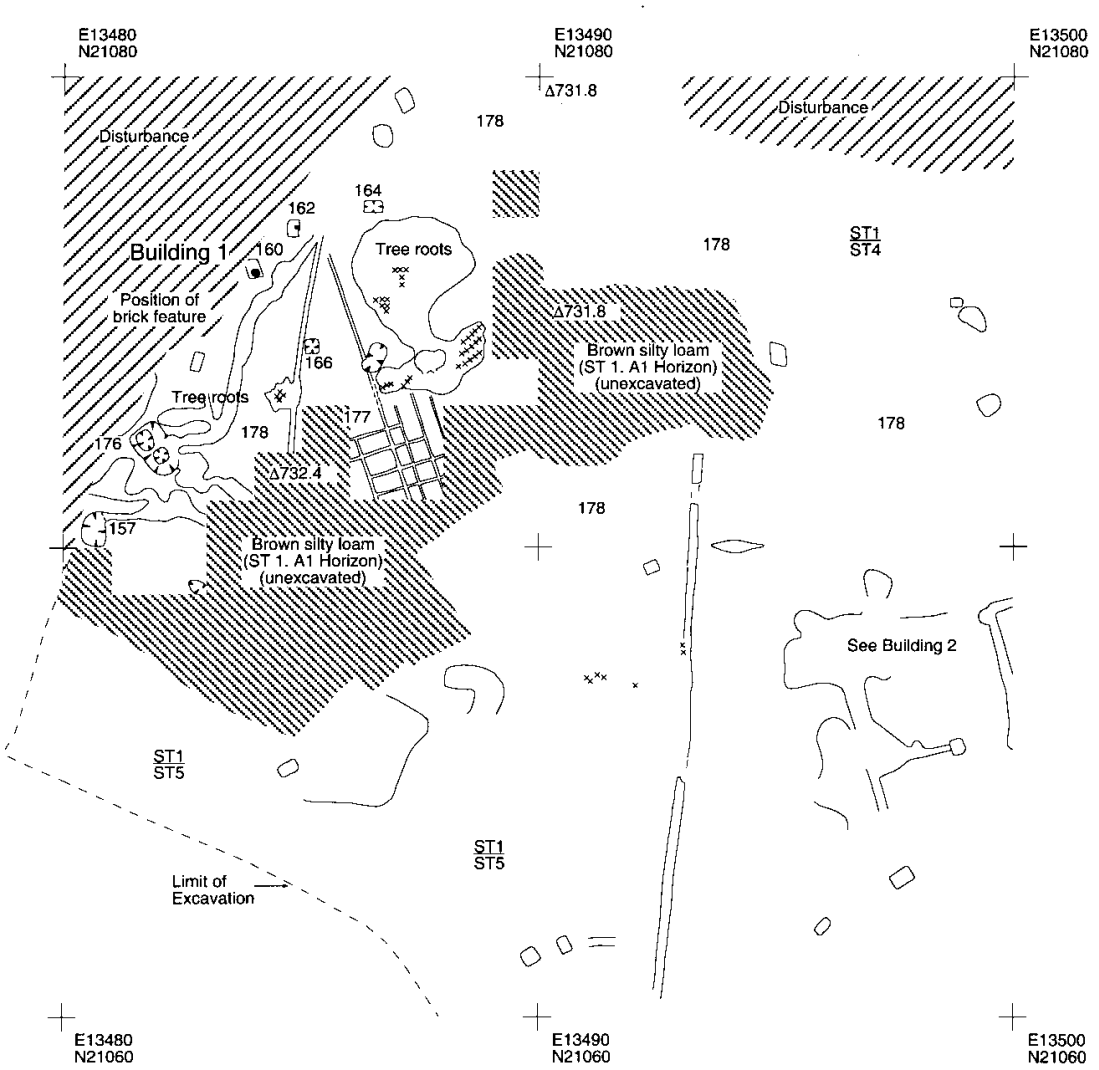


Figure 3.5. Tynan's Slaughterhouse, Cadia. Building 1, Plan 2, showing extent of remnant topsoil (brown silty loam, A1 Horizon) beneath the underfloor deposits on the site of the house.



TYNAN'S SLAUGHTERHOUSE.
Building 1. Plan 3. Features cut into subsoil (A2 Horizon).

Archaeological Excavation (May 2001).

N

0 10 metres

Figure 3.6. Tynan's Slaughterhouse, Cadia. Building 1, Plan 3, showing archaeological features cut into subsoil and remnants of the structure of the house.

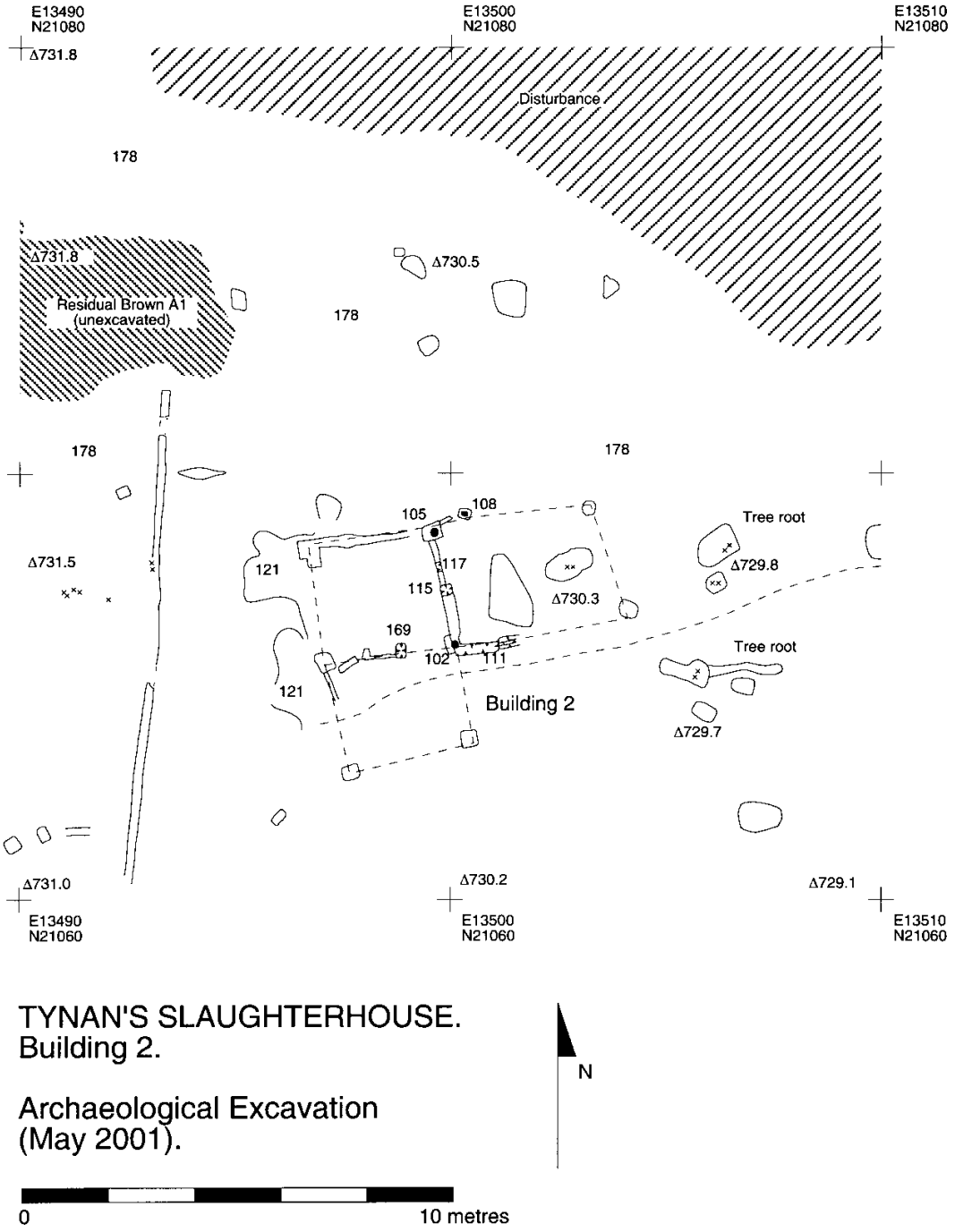


Figure 3.7. Tynan's Slaughterhouse, Cadia. Building 2, showing archaeological features cut into subsoil and remnants of the structure of the building.

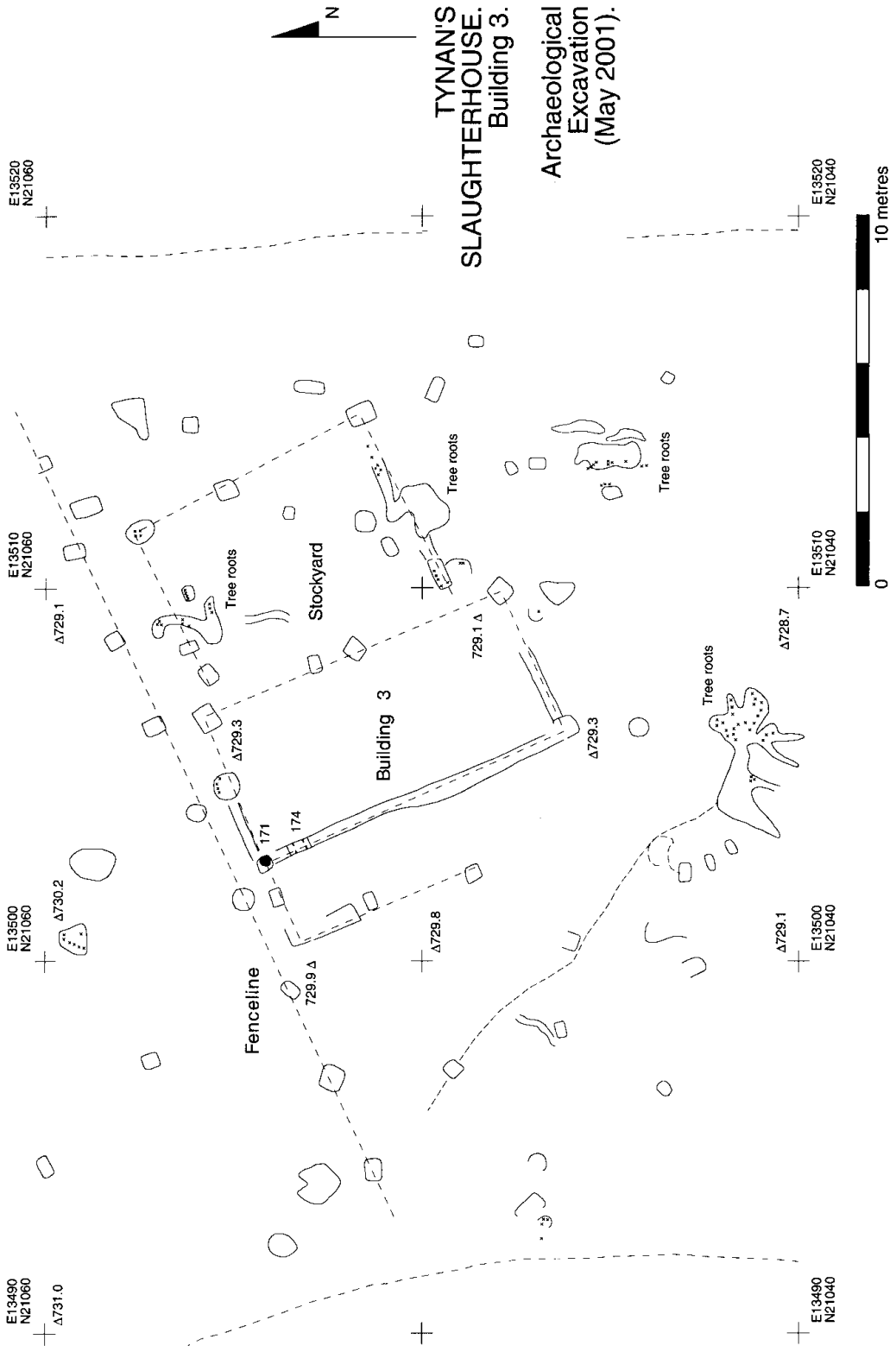


Figure 3.8. Tynan's Slaughterhouse, Cadia. Building 3, showing archaeological features cut into subsoil and remnants of the structure of the building.

3.8. Photographs.

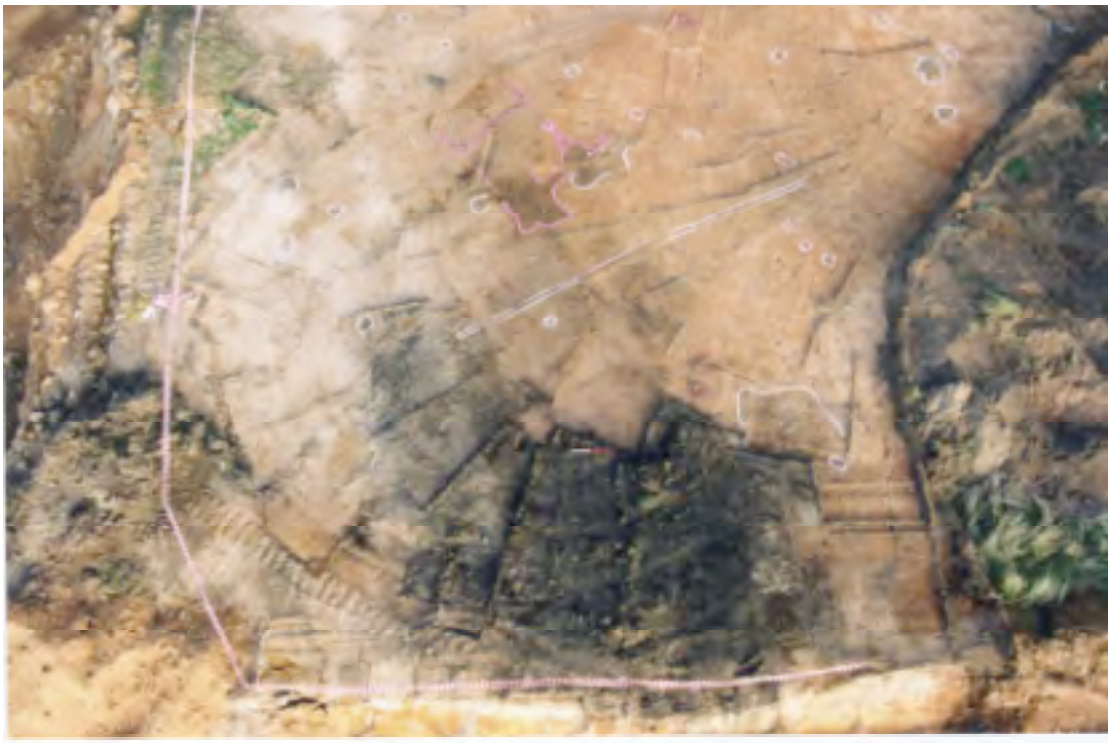


Plate 3.1. Tynan's Slaughterhouse, Cadia. Aerial view of whole site, looking south. Building 1 is in the foreground (black soil), Building 2 and Building 3 located progressively towards the background with archaeological features highlighted in pink survey marker paint and other features in white survey marker paint (scale 1 metre with 0.5 metre subdivisions).
Plate 3.2. Tynan's Slaughterhouse, Cadia. Aerial view of Building 1 (black soil) and part of Building 2. Archaeological features of buildings highlighted in pink survey marker paint and other features in white survey marker paint (scale 1 metre with 0.5 metre subdivisions).

Plate 3.3. Tynan's Slaughterhouse, Cadia. View showing extent and depth of underfloor deposits associated with Building 1 (black soil) (scale 1 metre with 0.5 metre subdivisions. View to west).
Plate 3.4. Tynan's Slaughterhouse, Cadia. View showing method of gridding and excavation of Building 1 (black soil) with all occupation soils sieved for artifacts.

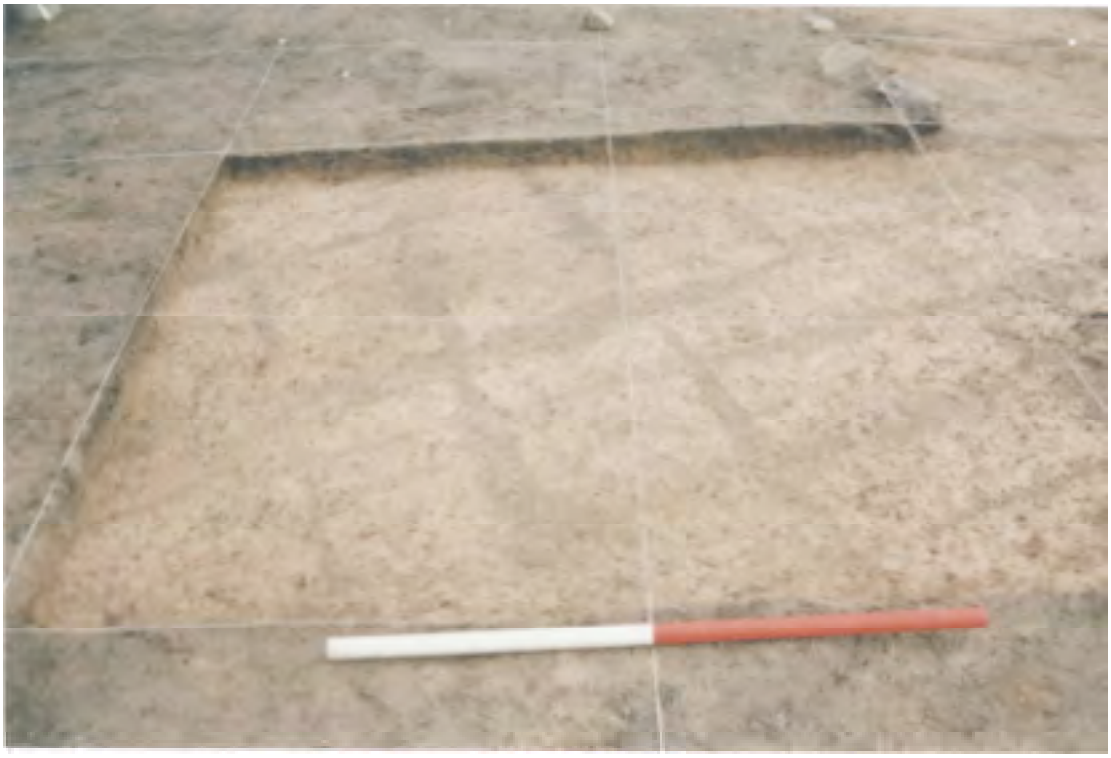


Plate 3.5. Tynan's Slaughterhouse, Cadia. View of soil discolouration associated with flooring and structure of Building 1 (scale 1 metre with 0.5 metre subdivisions. View to west).
Plate 3.6. Tynan's Slaughterhouse, Cadia. View of pits, post-holes and other features cut into subsoil and associated with Building 1 (scale 1 metre with 0.5 metre subdivisions. View to south).

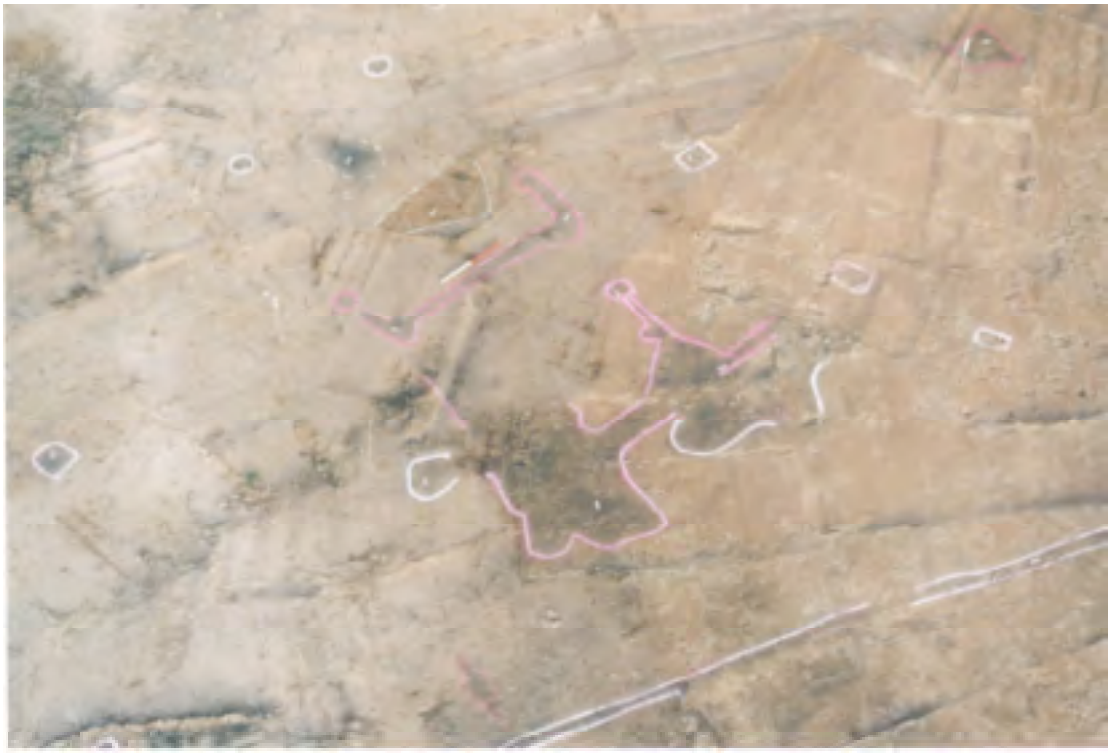


Plate 3.7. Tynan's Slaughterhouse, Cadia. Aerial view of Building 2. Archaeological features of buildings highlighted in pink survey marker paint and other features in white survey marker paint (scale 1 metre with 0.5 metre subdivisions).
Plate 3.8. Tynan's Slaughterhouse, Cadia. View of excavated post-holes and slots of Building 2 (scale 1 metre with 0.5 metre subdivisions. View to north).

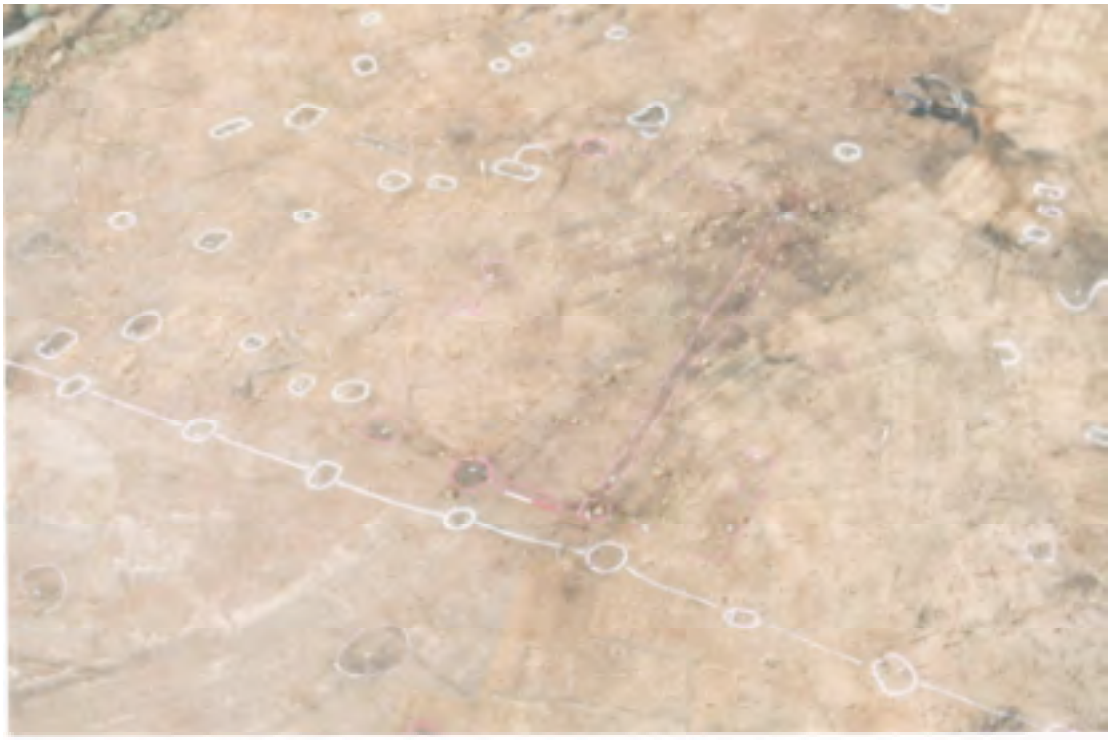


Plate 3.9. Tynan's Slaughterhouse, Cadia. Aerial view of Building 3 and associated fenceline and stockyard. Archaeological features of Building 3 highlighted in pink survey marker paint and other features in white survey marker paint (scale 1 metre with 0.5 metre subdivisions).

4. THE RESULTS OF ARTIFACT ANALYSIS.

4.1. Introduction.

In this report, the computer catalogue of artifacts has been used for two principal purposes, first the dating of the site, and second to elucidate the usage or function of the site. The dating of the artifacts is essential, so that the chronological sequence of the site may be determined in relation to the stratigraphic evidence. Nonconformity may occur in two distinct ways, first between the stratigraphic and dating evidence, but secondly between the historical and archaeological evidence for the dating of the site. This may indicate:

1. the contamination of the archaeological evidence, either by residual or introduced artifacts,
2. the need to reassess the historical documentation, or
3. the need to reassess the dating of artifact categories.

These processes are standard practice in the advance of archaeological knowledge for sites or artifact types. Once the dating analysis has been successfully completed, the functional analysis of a site can proceed.

4.2. Analysis of the site.

There are various procedures common to the dating and functional analysis of a site. The archaeological contexts are grouped into a number of phases in accordance with stratigraphic, chronological and other comparative evidence. The identification of phases is in fact a significant simplification of the function of the "Harris Matrix', but achieves the same result. Furthermore for the purposes of the functional analysis of the artifacts and for the description of the archaeological remains, it is more convenient to divide these phases into a number of historical periods:

Only three phases were identified at Tynan's Slaughterhouse. These were named after the buildings to which they belonged.

Period	Phase	Phase name	Date range	
1 (to 4)	1	Building 1	1860s	1920s
-	2	Building 2	-	-
-	3	Building 3	-	-

The historical periods relate to the following stages in the historical sequence of development on the site:

Period	Sequence of historical development.	Land use	historical date range
1	Henry Hunt and his family	Residential	1879-1889
2	Adolphus Judd and his family.	Residential	1889-1902
3	Luke James Tompkin	Residential and Slaughterhouse	1902-1916
4	Mary Tynan	Residential and Slaughterhouse	1916-1929
5	W R Brown	Pastoral	1929-present

The dating of the artifacts differs significantly from the historical periods because of the numerous factors which have influenced the deposition of objects on the site. The most important factors are identified in the following analysis.

4.3. Dating of the artifacts, and methodology.

All datable artifacts have been used for the purpose of dating each site. For every artifact category, it was possible to list the frequency of artifacts, together with the date range of production. These dates were listed as follows:

'**From**' records the date production of an object or artifact commenced.
'**To**' records the date production of an object or artifact ceased.

Artifact frequency was calculated on total number of pieces found, not on any calculation of the actual number of complete artifacts that might be represented by the total number of pieces.

A phase may be dated by the following methods and considerations:

1. Production from dates. It is assumed that there is a steady flow of newly produced artifacts, which have an equal chance of being deposited on site. A consistent flow of new artifacts on site will therefore indicate the occupation date range for a phase, except in the following circumstances:

1. where residual artifacts are introduced from earlier deposits.
2. where artifacts from later deposits have been introduced.
3. where deposition of artifacts ceased by whatever mechanism, but occupation can be demonstrated to have continued on the basis of other evidence. The cessation of

deposition may be caused by such mechanisms as municipal garbage collection, or by surfaces which seal the soil from further deposition.

The two basic assumption outlined above also need testing. They are:

a. there is a steady flow of newly produced artifacts.

b. datable artifacts have an equal chance of deposition on site.

Both assumptions have weaknesses, but have sufficient validity for use in the dating of phases.

Where an archaeological context or unit is sealed by another, then the artifacts with the latest production commencement date (from) will provide the date at which the layer was sealed, except in 2 or 3 above.

2. Production to dates. The earliest date of artifacts going out of production is usually taken to indicate the latest date for the commencement of occupation.

3. Consumables. Because most of the datable artifacts are consumable, it is expected that they will not appear in the archaeological record more than a decade after going out of production, except in exceptional circumstances.

Ceramics and glass, except where they become items of value, such as collectibles or antiques, will fall into this category.

Building materials, especially bricks, cannot be considered in the same manner as other consumables, since they can be reused so easily. Thus a sandstock brick, which goes out of production in the 1830s, may be found in much later contexts. Therefore they are not reliable indicators of the commencement of occupation in a phase, especially when considered in isolation.

Coins can usually be dated by their inscriptions. If not, then their date of first production is usually known. Dates when coins and tokens go out of circulation are also known, and can be useful in determining the date of a phase. However the uncertainties of their usage as gaming pieces, collectibles or antiques, often renders currency a very difficult medium to use in the dating of archaeological contexts, when in isolation from other datable artifacts.

4. Accuracy and reliability. The graphs showing the date range of production are in many cases shown to be accurate, since they can be tested against historical documentation. In this report, the closest dating is usually by decade, but in certain instances the exact year of production is known. The reliability of the dating is evaluated on the basis of sample size, the concentration of frequencies in consecutive decades, and the conformity of the graph towards a consistent or smooth curve.

4.2. Dating of the site.

The following pages are devoted to the analysis and interpretation of a number of graphs indicating the frequency of artifacts against their production date range, as defined above. In some cases the sample of datable artifacts was too small to give a reliable date range. The result is that historical documentation and the structural fabric of a site has to be relied upon for dating purposes.

The tables provide the following dates

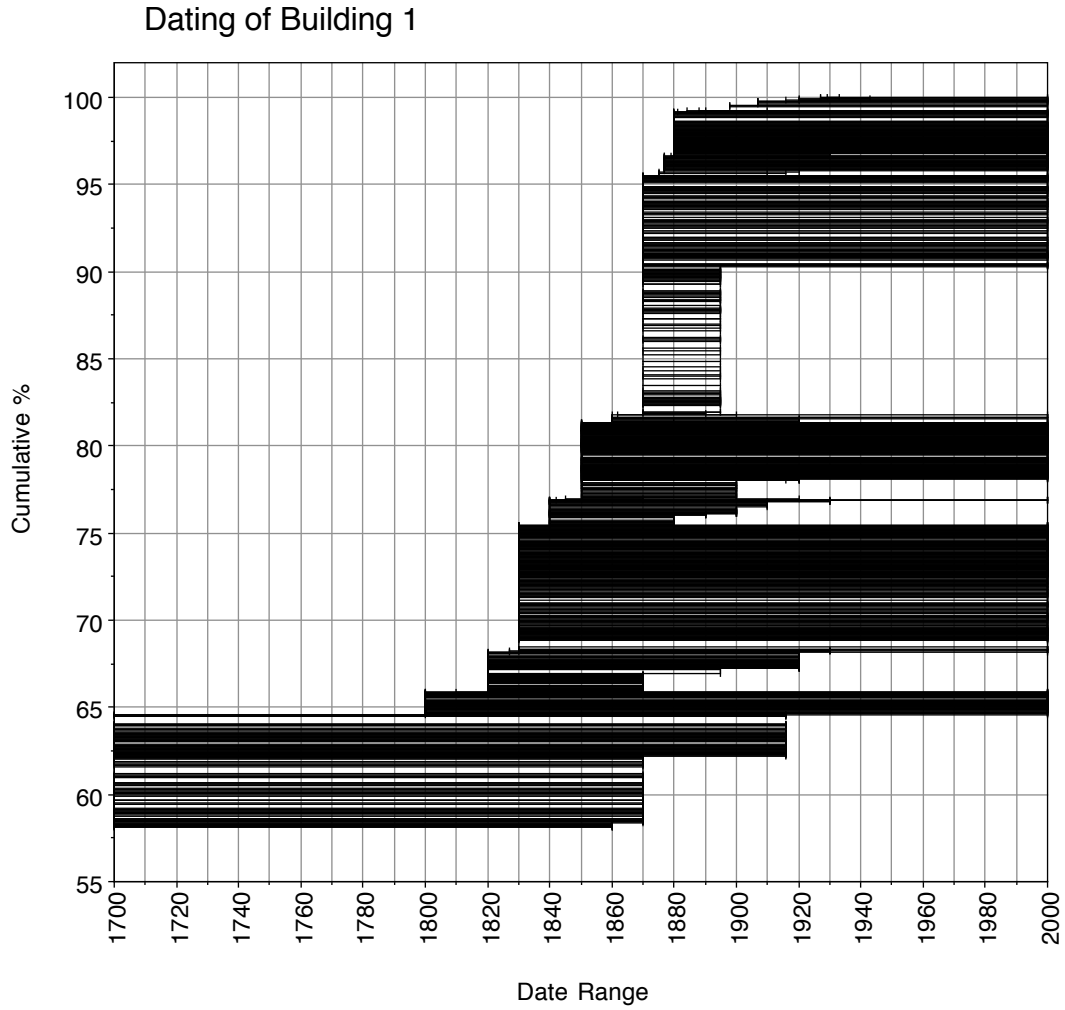
Date from:	The latest from date in the phase. (Where there is evidence of contamination, the latest date provided by introduced artifacts is given in brackets).
Date to:	The earliest to date in the phase. (Where there is evidence of contamination, the earliest date provided by residual artifacts is given in brackets).

The following date range is provided as an example:

Date from:	1880s
Date to:	1830s

The date range indicates occupation by at least the 1830s until the 1880s or soon thereafter.

4.3.1. Building 1.



Phase number:	1
Phase description:	Building 1
Total number of artifacts:	7672
Percentage undated	58%
Reliability of sample:	Large sample relatively consistent with historical documentation.
Date from:	1929
Date to:	1860s

Interpretation of sample: The artifacts indicate that Building 1 was constructed by the 1860s. This is inconsistent with the historical documentation, which indicates that a hut was commenced by 1879. The end date of 1929 for occupation of Building 1 is the same as the date when Portion 84 was amalgamated into the much larger holding

belonging to the Brown Family. It is clear that the building was abandoned or demolished at this time, since the Browns already had a residence on their property and would have had little or no need for an old house or hut.

The 1860s cut off date for manufacture is limited to a type of window glass. The comparison of the historical and archaeological dating suggests that this type of window glass continued in production or circulation until the 1870s. If this date adjustment is made, then the archaeological and historical dating is consistent.

Although the house (Building 1) continued in occupation until 1929, it is clear from the dating graph that the intensity of deposition of artifacts largely halted in the 1880s, with only 59 artifacts belonging to the time bracket 1890s to 1920s. This is 1% of the total number of artifacts in the phase, or just under 2% of all datable artifacts. In other words the largest proportion of the assemblage represents the occupation from 1879 to the end of the 1880s (99% of the total artifacts in the phase, 98% of the datable artifacts). This co-incides with the occupation of the house by Henry Hunt and his family (1879-1889) and perhaps the commencement of the occupation by Adolphus Judd (1889-1902). What is important to note is that the assemblage is confined almost totally to the initial occupants of the land, enabling the archaeological remains to reveal substantial evidence relating to the pioneer occupation of the land under Conditional Purchase in the 1870s and 1880s.

4.3.2. Building 2.

Phase number:	2
Phase description:	Building 2
Total number of artifacts:	13
Percentage undated	%
Reliability of sample:	Small sample - unreliable.
Date from:	-
Date to:	-

4.3.3. Building 3.

Phase number:	3
Phase description:	Building 3
Total number of artifacts:	6
Percentage undated	%
Reliability of sample:	Small sample - unreliable.
Date from:	-
Date to:	-

4.4. Inventory of functions.

The cataloguing of the each artifact includes a brief description, an object name, a function and key function, in accordance with general practice in archaeology. There is a very extensive range of possible uses for artifacts. The key function is therefore used to cut down on the number of functions recognised, allowing them to be grouped for analysis. The following table lists all the key functions that may be used in the artifact catalogue, together with the range of objects usually listed under each heading:

Key functions.	**Object names.**
Aboriginal	Aboriginal artifacts.
Building	Building materials, including: Bolts. Bricks. Mortar. Nails. Plaster. Sheet iron. Slate. Spikes. Spikes / pegs. Tiles. Washers
Building door	Door furniture
Building roofing	Roof coverings or fasteners
Building window	Window glass.
Construction	Items which could be part of a building, household furnishing or other item of furniture.

Container	Bottles, usage unidentified. Containers, usage unidentified. Fragments, usage unidentified. Handle, usage unidentified. Jar, usage unidentified. Lead foil bottle tops. Lid, usage unidentified. Rim, usage unidentified. Storage jars, usage unidentified. Unidentified ceramic and glass fragments.
Container barrel	Barrel hoops
Economic	Coinage, tokens used as currency by retailers.
Fastener	Eyelets, hooks studs, safety pins, studs, mostly used in clothing, packaging, etc. See also Hardware
Food aerated water	All aerated water containers, including soft drinks and ginger beer.
Food alcohol	All containers of alcohol, for example: Fragments. Stout Bottles.
Food baby goods	Items used in baby food preparation or feeding.
Food container	Containers, sardine type. Fragments of food containers. Ginger jars. Jars, for food. Storage jars or jugs, for food. All non-human skeletal material, unworked and butchered, but only species commonly used for food. Unworked shell, from edible species.
Food debris	Bone and shell debris from food species.
Food service cutlery	All cutlery.
Food service kitchenware	Basins. Bowls. Containers. Handles. Jars. Jugs. Lids, etc. Usually in cheaper or coarser ceramics, metal, etc.
Food service tableware	All parts of ceramic dinner sets, including food serving items. Glass bowls and other tablewares, principally clear glass, stemwares and tumblers.
Government	Items associated with government administration or regulation.
Hardware.	Principally metal items, the specific usage unidentified, including: Band. Bar. Piping. Plate. Ring. Rod. Sheet. Tubing. Wire.

Household accessory	Items used in the household, not as appliances, but as accessories, for example: A stand for an iron. Fire iron. Coat hangers.
Household appliance	Appliances.
Household cleaning	Blacking bottles. Polish. Laundry blue
Household collectible	Items collected for their intrinsic beauty, rather than usefulness, including: Shells, non-edible species.
Household cooking or heating	Items used to heat food or the household.
Household furnishing	Household furnishings, including fittings. Fixed toilet bowls, but not chamber pots. Mirror glass.
Household ornamental	Vases, ornaments and other household decorative items.
Household security	All items associated with the security of property, including latches, bolts, locks, keys, padlocks, window locks, escutcheon plates.
Household timekeeping	All component parts of clocks, but not watches.
Household toilet	Chamber pots. Wash basins and bowls. Wash jugs. Excluding fitted toilet bowls.
Human skeletal	Human bone or teeth.
Husbandry farming	Items associated with farming, including ceramic eggs to induce hens to lay eggs. Ploughshares, branding irons.
Husbandry fishing	Items used in fishing.
Husbandry horticulture	Items associated with horticulture including basins, bowls, plant pots in coarse earthenwares or terracotta.
Measurement	Weights and measures.
Mechanical	Items of machinery or other equipment.
Media	Newspaper, printing equipment, typesetting, TV aerials.
Merchandising	Labels, brand names and signs for the marketing or advertising of goods.
Military	Items of military uniform.
Natural	Items not altered by man, including: Roots. Branches.
Packaging	All packaging materials, including foil, plastic, foam.
Personal accessory	Personal accessories, including: Belt buckles.
Personal clothing	Items of clothing, including: Buttons. Studs. Cloth or fabric.
Personal cosmetics	All containers of perfume and other cosmetics
Personal dental	Dentures.
Personal footwear	All component parts of boots and shoes.
Personal jewellery	Items of jewellery. Note that glass beads may also be used in cloth covers for jugs and bowls.
Personal medicine	Pill boxes, medicine bottles, phials, tubes, syringes and other medicine containers.

Personal medicine or toilet	All containers of medicines or toiletries, excluding perfumes or cosmetics.
Personal optical	Spectacles and lenses.
Personal religion	All items associated with religious beliefs, including icons, rosaries, Chinese tear bottles.
Personal timekeeping	All component parts of watches and fob watches.
Personal toilet	Personal toiletries, excluding perfume. Including combs, toothbrushes
Pest	Rodent bones. Rat or mouse traps.
Pet	Bone from cats or dogs and other objects associated with pets, including bird cages.
Photography	All items associated with photography.
Recreation game	Counters, dice, balls, quoits and other gaming pieces, not already included under Toys.
Recreation music	All component parts of musical instruments, including pianos and mouth organs.
Recreation smoking	All tobacco pipes, of kaolin or other materials.
Recreation toy	Children's toys, including: Marbles. Children's tea-sets.
Scientific	Scientific instruments, telescopes, etc.
Services battery	Batteries for torches and other items.
Services drainage	Items associated with stormwater drainage.
Services drainage or sanitation	Principally ceramic drainage pipes, which may be used for stormwater and/or sewerage.
Services electricity	All items associated with the supply and use of electrical items, including brass and copper wiring, electrical cables, conduits and fittings.
Services energy	Gas piping, petrol containers.
Services energy or water	Principally iron piping which may be used for gas or water supply.
Services fuel	Coal. Coke. Charcoal. Burnt wood.
Services lighting	Items relating to the provision of light, including: Glass covers.
Services lighting electric	All items associated with the provision of electric lighting.
Services lighting gas	All items associated with the provision of gas lighting.
Services lighting oil	All items associated with the provision of oil lighting.
Services sanitation	Fitted toilet bowls, excluding chamber pots.
Stationery	All stationery items, excluding writing materials. Glue bottles, paper scissors, magnifying glasses.
Transport	Items associated with vehicular transport, including parts and accessories.
Transport automotive	Items associated with vehicular transport, specifically cars, trucks and buses.
Transport bicycle	Items associated with bicycles, including parts and accessories.
Transport equestrian	All items associated with horse transport, including: Horseshoes. Horseshoe nails. Harness.

Trophy	Plaques, cups and trophies awarded for excellence in sport or other endeavour.
Unidentified	Unidentified usage.
Weaponry	Items used in combat or hunting, including: Musket balls.
Work butcher	Butcher's hook.
Work glassblowing by-product	Rupert's drops, a by-product of glassblowing.
Work haberdashery	Items used in making or mending cloth or clothing, including: Pins. Thimbles. Bobbins.
Work leatherworking	Leather offcuts.
Work metalworking	Slags and other residues of metalworking. Note that slag like materials may be produced in ordinary fires.
Work tool	Tools or other items associated with trades or employment.
Writing	Writing materials, including: Penny ink bottles. Slate pencils. Slate tablets.

4.4.1. Depositional Theory or taphonomy.

The graphs summarising the functional analysis are simply a means of graphically describing the range of functions and the number of artifacts belonging to each function in a phase or group of phases.

The graphs do not indicate a direct relationship with the activities that have taken place on site. 'Depositional or Post-depositional Theory' (more recently termed 'taphonomy') has been developed by archaeologists to assist in the interpretation of the processes whereby artifacts find their way into the archaeological record.[50] Each stage in the 'life' of an artifact has to be considered in order to gain a better understanding of the archaeological record, including manufacturing, usage, depositional and post-depositional stages.

The dating of the artifacts has already revealed evidence concerning the taphonomy of the assemblages in depositional and post-depositional stages. Analysis can indicate the presence of residual artifacts. In other words artifacts deposited in one phase or period may have been disturbed by later occupation (post-depositional processes), so that they are incorporated into the later assemblage. Furthermore artifact dating can also indicate that artifacts were discarded off site, by means of various possible mechanisms, including municipal or other organised garbage disposal, the presence of

[50] Clarke, 1972: passim.

scavenging districts, or possibly by disposal in watercourses or other bodies of water (depositional processes). These examples illustrate the factors to be considered at particular stages in the 'life' of artifacts. The above examples of taphonomic processes reduce the reliability of any interpretation based upon an analysis of the functions of the artifact assemblage.

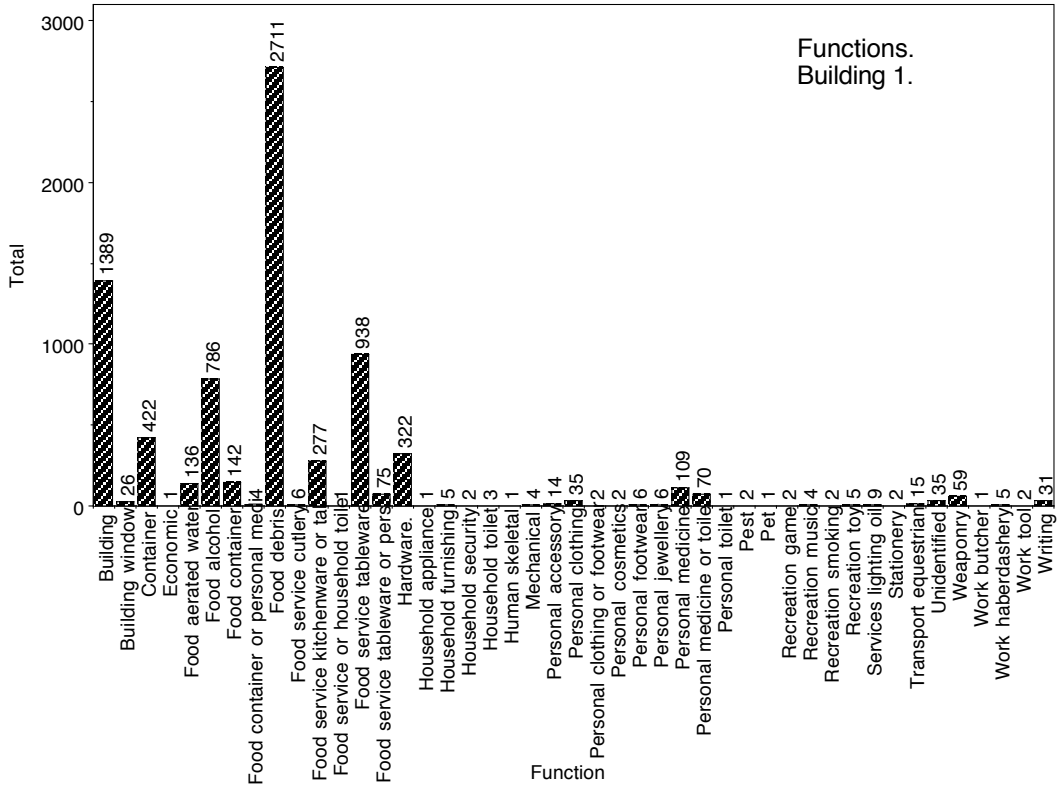
Nonetheless the archaeological excavation and analysis of a large number of assemblages from urban sites in Sydney reveal various common features. The broad range of artifacts is duplicated on most urban sites, which have formed domestic residences in the 18th or 19th centuries. In other words the typical assemblage may be described as characteristic of domestic occupation. The assemblages vary in accordance with date range or with socio-economic grouping, although the nature of variation between socio-economic groups has yet to be described, interpreted or explained in most cases.

The extent of variation between the various phases on a site is evident by the comparison of the graphs from various sites and / or phases. The assemblages vary both in the number of functions and the number of artifacts. Depositional or Post-Depositional Theory (Taphonomy) will be used to assist in the description, interpretation and explanation of the archaeological record.

4.5. Functional analysis of the site.

For the purpose of the functional analysis of the site, the archaeological contexts can normally be initially grouped into the phases already used for dating the site. Various phases can reveal similar date ranges, and can therefore be grouped together into periods. The following text is devoted to the analysis and interpretation of a number of graphs indicating the frequency of artifacts against the range of key functions in each phase.

4.5.1. Building 1.



Phase number:	1
Phase description:	Building 1
Total number of artifacts:	7672
Percentage undated	58%
Reliability of sample:	Large sample relatively consistent with historical documentation.
Date from:	1929
Date to:	1860s
Number of key functions.	45

Description of assemblage: Refer to Section 4.4 for list of functions and types of artifacts included in each function. Refer to artifact catalogue for description of each object in this assemblage (Appendix 4).

Interpretation of assemblage. Each function category is described separately.

Building.

Bricks and nails form the majority of this category, with some nuts, bolts, screws and a spike. Both the structural archaeological evidence and artifacts point to a timber building (timbers nailed together) with a brick fireplace (bricks).

Building window.

This category is limited to window glass, indicating that Building 1 had glazed windows.

Container.

This category includes all containers, brass, metal, ceramic, which could not be given a more precise function, like food container.

Economic.

A single half-penny was found, minted in 1881.

Food aerated water.

Codd, torpedo and other aerated water bottles, the soft drinks of the 19th century were present in reasonable numbers on the site.

Food alcohol.

Bottles which originally contained alcohol were present on the site in large numbers. It is highly likely that these bottles were recycled, so that their original contents may not reflect their contents when purchased for the last time. Nonetheless the consumption of alcohol by the occupants of Building 1 seems to have been in considerable quantities, as the table below illustrates:

Type	Total artifacts.
Alcohol - unspecified	16
Beer or wine	671
Champagne	67
Gin or Schnapps	31

It is highly likely that beer was the most common drink, often sold in recycled wine bottles, followed by much smaller quantities of champagne, gin or schnapps.

Food container.

This category is restricted to glass bottles, which originally contained foods, as indicated by the table below:

Type	Total artifacts.
Food unspecified	77
Oil and vinegar	53
Pickle or chutney	10
Sauces	1

The variety of bottled foods, oils, vinegars, pickles and chutneys would have been tasteful accompaniments to the very basic diet exhibited by this site. The presence of this type of food item also indicates the preparation of more than the basic meat and damper meal and possibly also the presence of a household including women.

Food container or personal medicine.

A small number of bottles cannot be distinguished between food containers or medicine bottles.

Food debris.

Food debris is confined to bone and bone fragments, which provide detailed evidence on diet. There was a total absence of other types of food debris on this site. There was no sign of shellfish, fish, fruit, nuts or seeds. The range of food resources appears to be conspicuously restricted in diversity and to lack (at least in an archaeologically visible form) a substantial fruit and vegetable component.

The report by Dominic Steele describes how this assemblage differs markedly from all other sites, so far excavated (Appendix 5). The findings of this report are summarised below.

The taxonomic composition of the excavated assemblage is relatively restricted in its dietary range and comprises at best less than ten different food types. The principal food variety (in terms of relative bone fragment count) consists of rabbit and possibly hare. Moderate quantities of sheep (or goat) bones, followed by lesser numbers of cattle remains are also represented. Pig bones are in contrast poorly represented, as are those of domestic fowl varieties. Just three pig bones are present within the collection, whilst only remains of chicken have been positively identified. Evidence for the consumption of other domestic fowl varieties commonly excavated from contemporary urban historic sites (such as turkey, goose or duck) is entirely absent. Likewise, no marine or freshwater fish bones are present amongst the excavated collection.

Other food components of the diet identified at this site may include a small number of native mammal species including kangaroo and/or wallaby, along with a single bone that is likely to be of a possum or glider species. Fragmentary bones belonging to other varieties of small native mammals may also be present amongst the sample. However, the highly fragmented nature of the assemblage has inhibited their recognition.

In general terms, it is clear that the range of animal food resources that were either available, exploited and/or preferred by the site occupant(s) was clearly restricted during the period in which the archaeological remains accumulated. It is also evident that this subsistence regime lacked either substantive variation or discernible dietary quality during the allotments historical occupancy.

Non-food remains are likely to be reflected by a small collection of reptile (lizard) and rodent (rat or mouse) bones, items associated with a number of very small bird varieties, along with an isolated (domestic) cat element. The assemblage also includes a single and fragmented horse tooth and one (mature) human molar.

The excavated rabbit bone collection comprises remains from well over 100 individual animals. These animals were likely to have been procured whole rather than purchased in a pre-dressed form (minus heads and paws etc).

In combination, the evidence would tend to suggest that this food resource was likely to have been hunted and/or trapped by the occupant(s) of the property during the operational life of the allotment rather than having been purposively purchased from a commercial vendor. Rabbit meat appears to have clearly constituted an important component of the daily diet to the site's inhabitants. Efforts to supplement a clearly meagre 'self sufficient' diet comprising traditional beef and mutton foods appear to be represented by this data.

The skeletal representation for both sheep and cattle are primarily characterised by either the predominance of bones generally associated with low-quality portions of limited meat yield or the complete absence (or a notable under representation) of significant portions of their respective carcasses that are associated with high(er) quality meat cuts. The 'extremity' portions found produce limited meat yields of low to moderate quality and are therefore often considered, at least in contemporary terms, to represent low-grade meat cuts and/or to reflect slaughtering 'waste'.

Trunk elements (ribs and vertebra etc) for example, from which the majority of most commercial-retail cuts of quality derive, are poorly represented for both sheep and cattle, whilst the majority of limb bones from which roasts and individual steak cuts are subdivided are again either few in number and/or conspicuous in their absence. This patterning again contrasts with many previously reported contemporary urban residential archaeological assemblages that have been excavated from contexts *perceived* to be either of low economic status or of households of greater means. Namely, even urban household contexts previously identified in Sydney, Parramatta and Newcastle through historical research to be surrounded by *slum* or economically poor circumstances have necessarily revealed through excavation dietary evidence of surprising quality; often consisting of *soup 'n stew* cuisine regularly punctuated by quality communal roasts and individual cuts of mutton, beef and pork.

In marked contrast however, the consumption of rabbit in such quantity that is evident at the current site, along with the exploitation of native land animals for food, is rarely in evidence at most mid to late Nineteenth urban residential archaeological sites.

The unidentified fraction of the assemblage consists primarily of broken long-bone fragments, as opposed to vertebral and rib remains. Again, the relative absence of rib and vertebral fragments (from which the majority of meat is derived from the sheep and cattle carcass) appears to be indicative of a dietary regime that was orientated around frugal measures rather than circumstances of abundance.

Whilst the kangaroo/wallaby bones identified consist principally of phalanges (toe bones), the nature and skeletal composition of the remainder of the excavated collection is largely unremarkable.

The collection is highly fragmented and contains few complete (or near complete) bones. This reflects the prevalence of a frugal and communal dietary subsistence rather than one orientated around the consumption of quality individual meat cuts.

Approximately 5% of the excavated bones display evidence for burning. The majority are either lightly or moderately charred (consistent with cooking), whilst a smaller fraction are more extensively calcined (consistent with prolonged exposure to heat). The collection also contains a number of discernibly eroded and weathered (cracked and pitted) specimens. Few bones are heavily weathered.

From the aging of the bone, the consumption of aged beef and mutton/hogget appears to be inferred, whilst the presence of lamb or veal is largely, if not entirely, absent. Even the youngest animals appear to be at least yearlings.

The assemblage currently under study contrasts markedly with the patterning on urban sites.. Rabbit bones occur in high numbers and this animal is traditionally considered to constitute a 'poor' food resource. Likewise, beef and mutton portions present clearly derive from the cheaper sections of the carcass and few quality cuts are evident. Finally, the restricted dietary fare (that lacks fish, large quantities of fowl or a fruit and vegetable component) appears to have been supplemented by the hunting/trapping of native mammals where these opportunities existed.

Procurement of relatively large quantities of meat at regular intervals appears unlikely to have occurred during the occupation of the property. It is very likely that much of the meat was obtained came directly from the slaughterhouse, as opposed to local retail butchers. There is little doubt that the dietary regime of the site was largely structured around the procurement, preparation and consumption of communal-based rabbit, mutton and beef stews, broths and other boiled portions which utilised sections from the poorer quality portions of the sheep and cattle carcasses in particular. Few of the excavated bones appear to be reflective of meat cuts which have arrived on-site in the form of pre-dressed retail portions. Small and individualised meat cuts are absent. Rather, the collection is dominated by portions of mutton and beef which appear to have been transported onto the site and have subsequently been subject to further processing prior to consumption.

Food service cutlery.

One small or butter knife, a number of fork or fork fragments and a teaspoon were located. The presence of cutlery other than knives indicates a basic level of refinement and table manners, associated with a domestic assemblage and family life.

Food service kitchenware or tableware.

Mostly this category includes miscellaneous body sherds of ceramic, which are indistinguishable between kitchenware or tableware.

Food service or household toilet.

A jug or ewer, either used in food serving or in ablutions, as in jug and hand basin.

Food service tableware.

Turquoise and clear glass dish or bowl fragments, but only two fragments of stemmed wine glasses comprise the glass tablewares. In ceramic, a number of cup, saucer, and plate types are present in various patterns and wares. There are the ubiquitous transfer printed tablewares, in black, blue, brown, green, purple and red prints, some gilded, clobbered or linear wares, but predominantly white glazed tablewares, in china, bone china and fine earthenware. The range of fabrics and wares is broad, but the number of patterns is limited when compared to sites in Sydney and elsewhere, which are also deemed to belong to the lower social and economic strands of society. This may reflect the marketing of good to country areas, as well as the social and economic standing of the occupants of Building 1.

The presence of tablewares, although of limited types, cups, saucers and plates, indicates a typical domestic assemblage, associated with family living.

The range of fabrics, wares and patterns at the site is given below:

Fabric	**Ware & Pattern**	**Totals**
China	Black Transfer Print	3
China	Blue Transfer Print	8
China	Blue Transfer Print "Willow III"	1
China	Brown Transfer Print	9
China	Brown Transfer Print "Hampden"	15
China	Clobbered	1
China	Gilded	18
China	Green Transfer Print	8
China	Green Transfer Print “Litchfield”	14
China	Linear ware	10
China	Moulded	1
China	Purple Transfer Print	1
China	White glazed	116
China, bone	Blue Transfer Print	4
China, bone	Gilded	30
China, bone	Hand Painted	6
China, bone	Moulded	2
China, bone	White glazed	91
Earthenware, fine	Black Transfer Print	27
Earthenware, fine	Blue Transfer Print "Asiatic Pheasants"	43
Earthenware, fine	Blue Transfer Print "Rhine"	2
Earthenware, fine	Brown Transfer Print	443
Earthenware, fine	Brown Transfer Print "Hampden"	5
Earthenware, fine	Brown Transfer Print "Poppy"	1
Earthenware, fine	Clobbered	1
Earthenware, fine	Green Transfer Print	8
Earthenware, fine	Green Transfer Print “Litchfield”	8
Earthenware, fine	Linear ware	53
Earthenware, fine	Moulded "Full Ribbed"	3
Earthenware, fine	Moulded whiteware	1

Earthenware, fine	Purple Transfer Print	2
Earthenware, fine	Red Transfer Print	21
Earthenware, fine	Spongeware`	5
Earthenware, fine	Whiteware	395
Ironstone china	Linear ware	1
Ironstone china	Moulded	3
Ironstone china	White glazed	10

Food service tableware or personal medicine.

A mixture of glass containers which are indistinguishable as tablewares or medicine bottes, because of their fragmentary survival.

Hardware.

The typical band, bar, plate, ring, rod, sheet, tubing and wire fragments of metalwork, predominantly iron, but brass and other metals included. Their uses included building, but in this context may also include fencing and agricultural usage.

Household appliance.

One clothing iron representing the task of ironing clothing. Again it is representative of a domestic assemblage and family life.

Household furnishing.

A number of wall hooks are the only remains of house furnishings, except for a small piece of false or synthetic marble, which may have graced a simple item of furniture. Again it is representative of a domestic assemblage and family life.

Household security.

A key and a small padlock, possibly for a chest, indicate the means whereby valuables were kept secure in the house.

Household toilet.

One chamber pot and two fragments of a water jug, part of a jug and basin washing set. The presence of these items indicate a typical domestic assemblage and family life.

Human skeletal.

One molar representing tooth loss or extraction.

Mechanical.
Two cog wheels and a frame, possibly from a clock or other mechanical item, again indicative of a domestic assemblage and family life.

Personal accessory.
Bobby pins, buckles for braces, other buckles and part of a penknife. Personal items associated with both male and female occupants of the household.

Personal clothing.
Buttons, both glass and metal, including iron and brass, hooks and eyes and studs, indicative of both male and female presence in the household.

Personal clothing or footwear.
A buckle and a stud, possibly from clothing or footwear.

Personal cosmetics.
Two fragments, possibly from one perfume bottle, comprise the only evidence for female cosmetics. Perfume bottle and cosmetics are usually more in evidence on urban sites, perhaps reflecting on the basic rural lifestyle of the occupants of this house.

Personal footwear.
Bronze or brass eyelets and part of the leather sole of a shoe or boot.

Personal jewellery.
A blue bead and a bronze or brass brooch again indicate a female presence in the household.

Personal medicine.
A large number of medicine or pharmaceutical bottle fragments are present, possibly too high a number to simply indicate medication, but perhaps also indicating the need to disinfect the premises of the slaughterhouse. It is interesting to note that all but one of the medicine or pharmaceutical bottles have a production date range continuing to 1916 or the 1920s, which may support the latter interpretation.

Personal medicine or toilet.
A similarly large selection of medicine or personal toilet containers and bottles. The same alterative interpretations are possible, namely personal medicines or disinfectants for the slaughterhouse.

Personal toilet.
A cut throat razor, typically an item of male toilet.

Pest.
Two rodent bones, indicating the presence of rats in the vicinity.

Pet.
One cat bone, sufficient to indicate that a cat was on the site and may have been used to keep vermin from infesting the locality.

Recreation game.
Two coarse earthenware marbles, indicating the presence of children.

Recreation music.
The frames of one or more harmonicas indicate a rudimentary appreciation of music, by adults or children.

Recreation smoking.
The presence of only one kaolin pipe fragment and the bone mouthpiece to another pipe are hardly indicators of frequent smoking by the inhabitants of the house, although only kaolin pipe fragments would appear frequently in the archaeological record.

Recreation toy.
Just one fragment of a toy teacup and three pieces of porcelain dolls indicate the presence of female children on the site.

Services lighting oil.
Glass covers for oil lamps indicate the type of lighting other than candles which was available during the hours of darkness.

Stationery.
Two thumb tacks or drawing pins indicate the securing of items to a board or wall, but not necessarily a clerical usage.

Transport equestrian.
A number of items associated with horses, namely horseshoes and horseshoe nails indicate that horses were present on site and used for transport or carriage. The

historical documentation reveals that Henry Hunt had a number of horses. Adolphus Judd would also have had horses or bullocks for his occupation as a carrier.

Unidentified.
Unidentified items, to which no function or use can be ascribed.

Weaponry.
The number of bullets and cartridges of various kinds is much larger than normally expected on an urban archaeological site and does appear to indicate the greater scope for hunting available in the rural situation. The use of guns provides a good explanation of how the large number of rabbits and other native wildlife was hunted for food.

Work butcher.
The presence of one butchers meat hook is insufficient to indicate the presence of a butcher, since meat hooks could have been used by a number of persons. Nonetheless, combined with the historical evidence for the slaughterhouse, it is perhaps the only one of a few strands of archaeological evidence that a slaughterhouse was located on site. In other words, the presence of the slaughterhouse is almost invisible in the archaeological record.

Work haberdashery.
Three safety pins, one sewing pin and a thimble are the only evidence of haberdashery or dressmaking on the site, an activity normally associated with women, but indicative of a domestic assemblage and family life.

Work tool.
A drill bit and a file indicate the need for a person with carpentry skills on the site. This role could easily have been taken by most male persons and would have been required for house maintenance and other general work on the property.

Writing.
Evidence of literacy may be found in a pen nib, but also the more common slate pencils and writing tablets. Often associated with the education of children, the slate pencils and tablets could also be used by adults for things like lists and tallies. The pen nib indicates that pen and paper writing was also used in the household.

4.5.2. Building 2.

Phase number:	2
Phase description:	Building 2
Total number of artifacts:	13
Percentage undated	%
Reliability of sample:	Small sample - unreliable.
Date from:	-
Date to:	-
Number of key functions.	6

Sample too small for further analysis.

4.5.3. Building 3.

Phase number:	3
Phase description:	Building 3
Total number of artifacts:	6
Percentage undated	%
Reliability of sample:	Small sample - unreliable.
Date from:	-
Date to:	-
Number of key functions.	5

Sample too small for further analysis.

5. RESPONSE TO RESEARCH THEMES AND CONCLUSIONS.

5.1. Research issues.

The permit application for the site of Tynan's Slaughterhouse proposed a number of reasons for the excavation of the archaeological remains.

It was considered that the site had the potential to reveal information relating to:

1. Butchery practices in rural slaughterhouses, predating the centralisation of the butchery industry at regional abattoirs.
2. Butchery practices and meat preferences for Cadia Village itself.
3. Standards of living and working conditions on rural landholdings. The hut belongs to the pioneering stage of the pastoral industry in this area. It would be highly significant to determine what the site has to reveal about the hardships or struggle of daily life, especially the level of access to goods and services revealed through the range of artifacts on the site.
4. The sequence of improvements to the hut and other buildings and structures.[51]

These research aims were further described in additional material supplied to the Heritage Office in order to justify the archaeological investigation:

1. The relationship of the mining project to the surrounding rural or farming community, in particular:
    - 1.1. Butchery practices in rural slaughterhouses, predating the centralisation of the butchery industry at regional abattoirs.
    - 1.2. Butchery practices and meat preferences for Cadia Village itself.
    - 1.3. Other social and economic relationships between the mining and farming communities.
2. The pioneering stages of rural settlement in the Western Region under the conditions of the Crown Lands Alienation Act of 1861.
    - 2.1. Standards of living and working conditions on rural landholdings. The hut belongs to the pioneering stage of the pastoral industry in this area. It would be highly significant to determine what the site has to reveal about the hardships or

[51] Edward Higginbotham & Associates Pty Ltd to Heritage Office, 2 February 2001.

struggle of daily life, especially the level of access to goods and services revealed through the range of artifacts on the site.
2.2. The sequence of improvements to the hut and other buildings and structures.
2.3. Strategies adopted by the landowners and occupants to maintain their economic viability and lifestyle.[52]

5.2. Contribution to research themes.

The following conclusions detail how the archaeological investigation has provided information relevant to these research themes and also the archaeological investigation of the Village Site.

1. The relationship of the mining project to the surrounding rural or farming community, in particular:
1.1. Butchery practices in rural slaughterhouses, predating the centralisation of the butchery industry at regional abattoirs.

The investigation has revealed how difficult it would be for archaeological evidence alone to pinpoint the use of a site as a slaughterhouse. The structure of the building itself (Building 3) is hardly indicative of this specialised use, but rather it is indicative only of generic agricultural or farming usage. The artifact assemblage is of limited use, since it is now clear that most butchery debris would have been cleared from the area, and the site disinfected according to good butchery practice. In this respect, it is interesting to note the number of pharmaceutical bottles which could have been used for disinfecting purposes. All the pharmaceutical bottles could have been used during the use of the site as a slaughterhouse from 1902 to 1929.

1.2. Butchery practices and meat preferences for Cadia Village itself.

Because of the absence of butchery debris from the slaughterhouse, little can be said of the butchery practices and meat preferences for Cadia Village, but what is revealed by the historical evidence is the way in which the butcher in Cadia used this allotment of land (see below).

[52] Edward Higginbotham & Associates Pty Ltd to Heritage Office, 19 March 2001.

1.3. Other social and economic relationships between the mining and farming communities.

The historical documentation reveals many aspects of the relationship of Cadia Village and the Mine to the surrounding landscape and its inhabitants. We see how the portion of 100 acres was unable to support its occupants without their seeking supplementary employment at the mine, in and around Cadia Village or elsewhere. Four examples of alternative incomes are provided by the historical documentation, namely mining, carrier, midwifery and storekeeping.

In addition we see how the ownership of the portion changed in 1902 to persons based in Cadia Village, namely the butcher and hotelkeeper. From this time onwards, the residential usage of the allotment appears to be supplementary to its use as a slaughterhouse to provide meat for the Village. For reasons of public health, the location of the slaughterhouse was kept away from the Village and both the butchers shop in Cadia and the slaughterhouse in the rural setting were subjected to similar regimes of disinfection.

2. The pioneering stages of rural settlement in the Western Region under the conditions of the Crown Lands Alienation Act of 1861.
2.1. Standards of living and working conditions on rural landholdings.

The archaeological investigation has revealed that the site is dated from the 1870s to 1929. The archaeological assemblage itself is largely restricted to the period 1879 to 1890, co-inciding with the period of pioneering of the landscape under the 1861 Crown Lands Alienation Act enabling Conditional Purchase.

The archaeological investigation revealed an artifact collection which may be recognised as a domestic assemblage, indicating family life and the presence of adult males and females, together with children. The assemblage is to a large degree an indication of a spartan existence, with a limited range of goods and services available to the occupants of the house. The most dramatic demonstration of the poverty of the occupants is found in the diet of rabbit, supplemented by the least nutritious portions of cattle and sheep, together with native fauna, no doubt hunted using the large number and variety of bullets and shotgun cartridges found on site.

For those people of limited means who ventured into property ownership through Conditional Purchase, both the historical and archaeological information from this site reveals the hardships and struggle associated with this dream of owning land.

2.2. The sequence of improvements to the hut and other buildings and structures.
The investigation has revealed how the original hut of 1879 gave way to 2 houses, fencing, stockyard and cultivation by 1881, although the archaeological investigation only definitely uncovered one of these buildings (Building 1). The second building (Building 2) may not have been a residence as few artifacts were located within it and the room sizes seemed to suggest an animal pen or stockyard.

The investigation has also shown how the site changed from being a residence associated with the pioneers of Conditional Purchase to a slaughterhouse associated with Cadia Village, necessitating the adaptation or construction of a shed and stockyard for the purpose.

2.3. Strategies adopted by the landowners and occupants to maintain their economic viability and lifestyle.

The historical and archaeological evidence demonstrates how the portion of 100 acres was unable to support its occupants without their seeking supplementary employment at the mine, in and around Cadia Village or elsewhere. Four examples of alternative incomes are provided by the historical documentation, namely mining, carrier, midwifery and storekeeping.

5.3. Conclusions.

The archaeological investigation of a site like Tynan's Slaughterhouse has a distinct advantage over the study of a similar site in Cadia Village in that the names and lifeways of the owners and occupiers of the site are able to be researched through property title and other sources. In Cadia Village this is mostly different. The names of many of those who lived in the Village are known, but few can be placed in a particular hut, residence, shop or other building. With Tynan's slaughterhouse there has been a much closer match between the historical and archaeological evidence than may be possible for Cadia Village, leading to greater detail in interpretation and contribution to research themes. In contrast, the investigation of a hut site in Cadia Village will supply archaeological evidence which in most part can only be interpreted generically, since the names of the occupiers will likely be unknown.

Nonetheless this investigation has provided a domestic assemblage which in all likelihood is typical of rural family life at the lower end of the social and economic

scale. The assemblage can now be tested and compared against those from Cadia Village and can be used as a benchmark for further comparative study. It has the potential to be a predictive tool to suggest the nature of building occupation in the Village, whether by families, groups of men or individuals.

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APPENDIX 1. CHRONOLOGY OF PORTION 84, PARISH OF CLARENDON

24 April 1879
CP application at Carcoar Lands office by Henry Hunt, Cadia for 100 acres

19 May 1879
Surveyor A J Pechey surveyed land. Hunt was not on the land but had commenced erection of a hut worth £2.

January 1881
Hunt was indebted to Nelson Brothers of Orange for about £200

10 January 1881
Henry Hunt declared that had resided on selection for at least 12 months and that had alienated CP to Benjamin Nelson, Joseph Nelson and Adolph Maerker trading as Nelson Brothers at Orange, for £191

18 May 1881
Henry Hunt of Cadia declared that Nelson Brothers were lawful owners of CP, and that it had fencing two houses, stockyard and cultivation on the CP to value of £150

8 October 1882
Partner Morris Nelson sold his share of Nelson Brothers, merchants, storekeepers and millers of Orange, Sydney and elsewhere to the other partners

28 November 1882
Inspector Johnson held inquiry into this CP

25 June 1883
Transfer from Benjamin Nelson of Orange to Henry Hunt of Cadia

31 December 1883
Henry Hunt of Cadia transferred CP to Benjamin Nelson of Orange

22 October 1884
Benjamin Nelson bankruptcy schedule lists 100 acres farm at Cadia worth £150 amongst assets

23 October 1884
Benjamin Nelson trading as Nelson Brothers was declared bankrupt

31 December 1884
"M Hunt" of Cadia listed as owner of 100 acres, and held livestock of three horses and three pigs

9 March 1886
Transfer by assignee of Benjamin Nelson's estate to Michael Casey, Orange merchant for £115

15 August 1889
Transfer Michael Casey, Orange merchant to Adolphus Judd, Cadia, carrier for £250

15 August 1889
Transfer of CP by Adolphus Judd Cadia carrier to Michael Casey merchant and Charles Cooper, postmaster both of Orange, for £225

28 October 1902
Release of mortgage Andrew Edye, hotelkeeper and Patrick Joseph Flanagan, storekeeper, both Orange to Adolphus Judd, Cadia, carrier and farmer. for £192

31 October 1902
Transfer of mortgage by Charles Cooper surviving trustee of Orange Permanent Building and Investment Society to Andrew Edye, hotelkeeper & Patrick Joseph Flanagan storekeeper, both of Orange for £1

1 November 1902
Transfer of CP by Adolphus Judd, Cadia, carrier to Luke James Tompkin, Cadia, storekeeper, for £220

16 February 1903
Final payment on CP made by Luke James Tompkin making £100 on CP

23 May 1903
CT issued to Luke James Tompkin of Cadia

1903
Electoral roll shows Luke James Tompkin as storekeeper at Cadia with wife Sarah Jane

1911
Death of Luke James Tompkin registered

28 January 1916
Transmission to Sarah Jane Tompkin, Cadia, widow

20 December 1915
Transfer to Mary Tynan, Cadia, widow

2 July 1926
Lease of Portion 84 to James Joshua Oglethorpe, Cadia, hotelkeeper

14 June 1929
Lease cancelled.

11 July 1929
Transfer to William Ralston Brown, Orange grazier

8 August 1929
Transfer to William Ralston Brown, Cyril William Brown and Kenneth Ernest Brown, tenants in common

APPENDIX 2. SITE RECORDS.

1. Archaeological site. Primary records.

1. Archaeological features and structures.	Subject to archaeological excavation. Now destroyed by redevelopment.
2. Artifact collection.	Catalogued.

1.1. Conservation treatment.

All artifacts have been cleaned, bagged, and packed into archive boxes, except where discarded as having no further research or other value. Oversize items have been stored without packaging. No laboratory conservation was required.

The artifacts were divided into the following categories:

Artifact categories.	**Status.**
1. Aboriginal artifacts.	no artifacts.
2. Bone unworked.	catalogued.
3. Building materials.	catalogued.
4. Ceramics.	catalogued.
5. Glass.	catalogued.
6. Kaolin	catalogued.
7. Metals.	catalogued.
8.1. Miscellaneous-coins.	catalogued.
8.2. Miscellaneous-other.	catalogued.
9. Organics.	catalogued.
10. Samples.	no artifacts.
11. Shell unworked.	no artifacts.
12. Stone.	no artifacts.
13. Synthetics.	no artifacts.

2. Secondary and tertiary records.

Secondary site records.	Documentary.	Context catalogue or index.
	Photographic.	Colour negatives and prints.
	Graphic.	Site plans.
Secondary artifact records.	Documentary.	Artifact catalogues.
Other secondary records.	None	
Tertiary site records.		Report as presented to client.

3. Permanent archive for all excavation records.

The artifact collection is held by Cadia Holdings Pty Limited.

APPENDIX 3. CONTEXT CATALOGUE.

Building	Context	Category	Description
1 and 2	011	Unstratified	From Buildings 1 and 2, including a dump of soil from Building 1 containing the bricks from the fireplace (sandstock, flat and rectangular frog)
3	012	Unstratified	From Building 3 and southwards
1	013	Layer	Finds on surface of ST 2 occupation layer, potentially disturbed
1	014 to 067	Layer	ST 2 occupation horizon, subdivided into one metre squares
Fenceline	068 069 070	Cut Packing Pipe	Post-hole
SE corner of site	071 072	Cut Fill	Pit, probable post-hole
SE corner of site	073 074	Cut Fill	Linear feature, possibly drain or wall slot
1	075 to 101	Layer	ST 2 occupation horizon, subdivided into one metre squares (all sieved)
2	102 103 104	Cut Packing Pipe	Post-hole
2	105 106 107	Cut Packing Pipe	Post-hole
2	108 109 110	Cut Packing Pipe	Post-hole
2	111 112	Cut Fill	Wall plate trench (same as 113-14, 117-20)
2	113 114	Cut Fill	Wall plate trench
2	115 116	Cut Fill	Pit, almost certainly a posthole between 102 and 105
2	117 118	Cut Fill	Wall plate trench
2	119 120	Cut Fill	Wall plate trench
2	121	Layer	Residual ST 1
1	122	Deposit	Very similar to ST 2, filling depression in ST 1, one small area indicative of a cut but uncertain if entire feature was man-made
1	123 to 156	Layer	ST 1 sub-divided into 1 metre squares (123-133 sieved)
1	157	Layer	Same square as 144, from major tree disturbance
1	158	Layer	Same square as 153, from animal burrow or tree disturbance
1	159	Fill	Pit disturbed by tree roots (cut 176)
1	160 161	Cut Packing	Post-hole (post-pipe 168 visible only in base)
1	162 163	Cut Fill	Pit, probably post-hole if depression on side marks pipe
1	164 165	Cut Fill	Pit, probably posthole but no visible pipe
1	166 167	Cut Fill	Pit, probably posthole with sandstock bricks in packing but no visible pipe
1	168	Post-pipe	See 160-61

1	169 170	Cut Fill	Pit, certainly a posthole though no visible pipe
3	171 172 173	Cut Packing Pipe	Posthole
3	174 175	Cut Fill	Wall plate trench
1	176	Cut	See 159
1	177	Rectilinear cuts	Linear cuts into 178 (ST 4)
	178	Layer	ST 4
1	179	Fill	ST 1 fill of linear cuts into 178

APPENDIX 4. ARTIFACT CATALOGUE.

All artifact catalogues were entered onto computer database, except for information (object description) of glass. These catalogues are held by Edward Higginbotham & Associates Pty Ltd and are available for research purposes on request.

APPENDIX 5. SUMMARY FAUNAL REPORT.

Report prepared by Dominic Steele.

Tynan's Slaughterhouse, Cadia, NSW

A Summary Faunal Report

October 2001

Introduction

This report presents in summary form the results of analysis and assessment that has been prepared for a collection of animal bones recovered through archaeological excavation from the Late Nineteenth Century Tynan's Slaughterhouse site located at Cadia, New South Wales. The remains derive from sub-floor deposits that accumulated during the occupation of a dwelling associated with a single short-term occupancy of a parcel of land investigated during the recent program of excavation undertaken at the site.

The faunal assemblage recovered represents an important component of the site evidence and has the potential to contribute to our understanding of the nature, composition and relative quality of the diet of the property's' occupant(s) during the period under study. It is intended that the discussion to follow will both contribute new insights into the past occupation of the place that are unlikely to be unavailable from other artefact or documentary sources, and that this information can also usefully feed into the broader analysis of the total body of site data that is currently being carried out.

Objectives

The vast majority of historic site faunal studies undertaken in NSW to date have examined assemblages excavated from mid to late Nineteenth Century urban-residential contexts. Most of the sites have been located within the principal eastern seaboard urban centres of Sydney, Parramatta and Newcastle. Excluding a small number of rural studies (such as those at the western Sydney site of Regentville, and at Bega & Orange Courthouses etc) few comparative contexts to Cadia have been

investigated that provide information directly pertinent to understanding to a similar extent the nature and development of dietary practices that occurred in places where issues of 'resourcefulness' and 'self-sufficiency' represent some of the principal research themes of interest.

It is intended therefore that the current study can go some way to redressing the imbalance in our understanding of Nineteenth Century dietary practices in rural contexts, as opposed to urban residential circumstances. It is further hoped that the current study can also provide a 'measure' of the level of adaptation to the land and success and/or failure through subsequent periods that may be in evidence in terms of the basic index of day to day subsistence.

Central to exploring how best the occupation and use of the property under study can be augmented through the analysis of archaeological dietary evidence are such issues of what food resources people may have eaten, how different food sources may have arrived on site, of what quality and range the foods consumed may have been, and in what ways kitchen refuse were ultimately disposed of.

The research questions outlined below are necessarily broad in their nature given that little faunal work in similar contexts to the current site have been reported at present and therefore no generally accepted zooarchaeological research designs for Australian rural sites are currently in place. It is nevertheless hoped that the broad themes examined here will provide a usable framework from which future comparative rural site analyses may develop. The following questions are addressed here:

- What is the nature of the distribution of animal bone across the excavated site?
- What types or range(s) of food and non-food animals are represented within the recovered archaeological collection?
- Are culturally familiar domestic animal varieties dominant, and/or are native species also present within the collection?
- What animal types represent the principal food sources, and what species reflect supplemental dietary components?
- What evidence is there for primary and/or secondary butchery and subsequent cooking or other processing methods?
- In what ways do the faunal remains reflect Nineteenth Century dietary, food procurement and processing practices (or other aspects) of the rural animal economy?

- Is there strong evidence for distinctive patterning in the relative quality of the diet reflected by the excavated animal bone collection?
- Does the patterning recorded at this site suggest that issues of food availability or restriction, preference and/or indications of socio-economic status structured the dietary regime revealed through excavation?
- What are the principal characteristic 'signatures' of Nineteenth Century rural dietary practice as reflected at this site?

The discussion to follow reviews each of these research questions according to the overall rationale underpinning the study as detailed below, and also presents a series of conclusions that draws comparison with some of the principal observations and patterns that have emerged from analysis of contemporary urban and rural animal bone collections completed over the last two decades.

Methodology

The catalogue of finds prepared for the excavated animal bone collection reported here has sought to identify and record where possible individual skeletal elements of the larger food species (such as sheep, cattle and pig etc) to as taxonomically specific level as possible. This procedure allows an assessment to be made of whether meat cuts may perhaps have arrived on-site in the form of specifically prepared (retail butchered) portions and/or as the product of 'home' slaughtering that may have been conducted on the property itself.

It may be expected that the various challenges experienced by the occupants of the subject property in first establishing, and subsequently developing the rural allotment, may have entailed both the reliance upon traditional retail food-provision structures that provided pre-prepared domestic animal foods, along with the exploitation of non-domestic food resources such as native mammals, birds and fish that were potentially available within the catchment immediately surrounding the site.

Smaller food species (such as rabbits and bird/fowl etc) are likely to have been purchased and/or procured through hunting as whole individuals, and bones of these species where they occur in large numbers within any given excavation context have therefore been grouped together for the purpose of expediency. An indication of the minimum number of individual animals likely to be represented amongst these categories has however also been calculated to provide an indication of their relative contribution to the overall dietary intake of the inhabitants of the site.

Those bone fragments that are either to small and/or retain insufficient diagnostic features to permit precise identification to a specific or family level have been divided into C-size (cattle/horse) and S-size (sheep/pig) unidentified categories. This procedure provides a control on whether the *identified* species list constitutes an accurate assessment of the true nature and composition of the full excavated assemblage, and whether fragmentation has served to substantively distort the relative proportions and range of animals that are reflected by the excavated sample.

Recording has also endeavoured to document the general size and condition of the bone fragments recovered (such as through evidence for burning and weathering etc), the aging characteristics of the principal food varieties present (through a consideration of bone fusion and the state of tooth eruption and wear) and the nature and extent of butchery. The former types of information have the potential to inform us about possible cooking methods, the nature of bone survivorship, and whether aged beef/mutton or veal/lamb for example was consumed. The latter category of information details the type of implement used, such as saws (evidenced by distinctive striae etc) or cleavers (evidenced by distinctive 'v' shaped indentations or shear-surfaces etc), along with the location and orientation of the butchery marks present on each individual skeletal element.

The rationale underpinning the recording of the butchery evidence is that *retail* meat portions will most likely display greater uniformity (standardisation) in terms of butchery type using meat-saws and location on any given skeletal element (of domestic animals) than potentially may be exhibited by 'home' slaughtering, perhaps employing an axe/cleaver that is likely to be more variable.

The above types of information provide a means by which we can discern specific meat cuts procured and ultimately left on-site, possible food processing methods employed, and the types and quality of animal foods procured, processed, consumed and discarded by the people whom occupied and used the property in the past.

Sample Size

The animal bone assemblage recovered is relatively modest in its size and comprises a total of 2,732 whole and fragmentary bones. These remains have provenance to a total of eighty-four [84] separate excavation contexts. It appears that that no other class of dietary evidence (such as shellfish fragments, or remains of fruit and vegetable seeds and pits etc) was located during the program of investigation. The range of food resources procured and consumed by the properties occupant(s) during the period under study appears therefore to be conspicuously restricted in diversity and to lack (at least in an archaeologically visible form) a substantial fruit and vegetable component.

Taxonomic Composition

The taxonomic composition of the excavated assemblage is also relatively restricted in its dietary range and comprises at best less than ten [10] different food types. The principal food variety (in terms of relative bone fragment count) consists of rabbit. It is possible that a small quantity of hare bones may also occur amongst the assemblage. Moderate quantities of sheep (or goat) bones, followed by lesser numbers of cattle remains are also represented. Pig bones are in contrast poorly represented, as are those of domestic fowl varieties. Just three pig bones are present within the collection, whilst only remains of chicken have been positively identified. Evidence for the consumption of other domestic fowl varieties commonly excavated from contemporary urban historic sites (such as turkey, goose or duck) is entirely absent. Likewise, no marine or freshwater fish bones are present amongst the excavated collection.

Other food components of the diet identified at this site may include a small number of native mammal species including kangaroo and/or wallaby, along with a single bone that is likely to be of a possum or glider species. Fragmentary bones belonging to other varieties of small native mammals may also be present amongst the sample. However, the highly fragmented nature of the assemblage has inhibited their recognition.

In general terms, it is clear that the range of animal food resources that were either available, exploited and/or preferred by the site occupant(s) was clearly restricted during the period in which the archaeological remains accumulated. It is also evident that this subsistence regime lacked either substantive variation or discernible dietary quality during the allotments historical occupancy (as detailed below).

Non-food remains are likely to be reflected by a small collection of reptile (lizard) and rodent (rat or mouse) bones, items associated with a number of very small bird varieties, along with an isolated (domestic) cat element. The assemblage also includes a single and fragmented horse tooth and one (mature) human molar.

A breakdown of the total excavated assemblage according to the quantification methodology previously outlined is detailed in the table presented below. This data indicates that rabbit, sheep/goat and beef dominated the diet of the past occupants of the allotment and that supplemental food sources including fowl and occasional native mammals largely made up the remainder of the subsistence during the period under study.

Animal Varieties Represented Within

the Excavated Assemblage

Animal Variety	**Number**
Mammals	
Rabbit	909
Sheep/Goat	298
Cattle	88
Kanagroo/Wallaby	7
Pig	3
Possum	1
Rodent	1
Cat	1
Horse	1
Human	1
Birds	
Chicken	24
Unidentified Bird	14
Reptile	
Unidentified Reptile	2
Unidentified	
Sheep/Pig Sized (S)	1308
Cattle/Horse Sized (C)	73
Total	**2732**

The excavated rabbit bone collection comprises remains from well over 100 individual animals. The precise number reflected is unclear as a consequence of the highly fragmented state of the sample. Bones from all parts of the rabbit carcass are represented and a considerable range in individual animal size is also evident. Animals appear to vary from small (and presumably immature) specimens to larger mature animals. In addition, the occurrence of extremity elements (cranial portions and bones from the feet) along with the full suite of trunk and limb bones suggests

that these animals were likely to have been procured whole rather than purchased in a pre-dressed form (minus heads and paws etc).

In combination, the evidence would tend to suggest that this food resource was likely to have been hunted and/or trapped by the occupant(s) of the property during the operational life of the allotment rather than having been purposively purchased from a commercial vendor. Rabbit meat appears to have clearly constituted an important component of the daily diet to the site's inhabitants. Efforts to supplement a clearly meagre 'self sufficient' diet comprising traditional beef and mutton foods appear to be represented by this data.

As discussed below, the sheep bone component of the collection is highly restricted in terms of the portions of the body that are represented by the excavated skeletal remains. Fragments of mandibles, maxillas and loose teeth are predominant, whilst metacarpals and metatarsals (lower-leg portions including the shin etc) are also present in considerable frequencies. Likewise, the cattle bones recovered comprise largely of metapodials and phalanges (toe bones).

Each of the 'extremity' portions of both animals produce limited meat yields of low to moderate quality and are therefore often considered, at least in contemporary terms, to represent low-grade meat cuts and/or to reflect slaughtering 'waste'.

The unidentified fraction of the assemblage consists primarily of broken long-bone fragments, as opposed to vertebral and rib remains. Again, the relative absence of rib and vertebral fragments (from which the majority of meat is derived from the sheep and cattle carcass) appears to be indicative of a dietary regime that was orientated around frugal measures rather than circumstances of abundance.

Whilst the kangaroo/wallaby bones identified consist principally of phalanges (toe bones), the nature and skeletal composition of the remainder of the excavated collection is largely unremarkable.

Bone Condition

The collection is highly fragmented and contains few complete (or near complete) bones of either the larger animal food varieties detailed above such as sheep, pig and cattle, or those from the smaller food and non-food species identified. Relatively few bone specimens exceed 5cm in maximum length, whilst only a handful of the cattle bones in particular are larger than 10 to 15cm.

Comprising approximately 48% of the total excavated sample, the majority of the sheep/goat or pig sized unidentified fragments occur within the 2cm-5cm size range. It is unclear however whether these remains reflect either the *original* purchase and

subsequent 'home' preparation (subdivision) and consumption of recognisable retail meat cuts that are often prevalent within contemporary rural-residential archaeological contexts, and/or 'soup and stew' portions *specifically* purchased and associated with extensively subdivided miscellaneous limb bone portions.

In the case of either scenario suggested above however, the likelihood is that the highly chopped and broken up remains recovered reflect the prevalence of a frugal and communal dietary subsistence rather than one orientated around the consumption of quality individual meat cuts.

Approximately 5% of the excavated bones display evidence for burning. The majority are either lightly or moderately charred (consistent with cooking), whilst a smaller fraction are more extensively calcined (consistent with prolonged exposure to heat). The collection also contains a number of discernibly eroded and weathered (cracked and pitted) specimens. Few bones are heavily weathered.

However, differential survival is unlikely to have consistently operated to remove certain components of the archaeological animal bone record either in the form of certain fragile boned animal types or specific skeletal elements susceptible to rapid decay. Therefore, the identified species and range of skeletal elements (see below) recorded is likely to reflect relatively accurately the dietary evidence deposited during the use and occupation of the dwelling subject to the current investigation.

Skeletal Element Representation

The skeletal element representation of the two principal domestic animal food types recovered (excluding rabbit) at this site is highly restricted. This is demonstrated by the breakdown that is presented in the table below. The skeletal representation for both sheep and cattle are primarily characterised by either the predominance of bones generally associated with low-quality portions of limited meat yield or the complete absence (or a notable under representation) of significant portions of their respective carcasses that are associated with high(er) quality meat cuts.

Trunk elements (ribs and vertebra etc) for example, from which the majority of most commercial-retail cuts of quality derive, are poorly represented for both animals, whilst the majority of limb bones from which roasts and individual steak cuts are subdivided are again either few in number and/or conspicuous in their absence. This patterning again contrasts with many previously reported contemporary urban residential archaeological assemblages that have been excavated from contexts *perceived* to be either of low economic status or of households of greater means.

Namely, even urban household contexts previously identified in Sydney, Parramatta and Newcastle through historical research to be surrounded by *slum* or economically

poor circumstances have necessarily revealed through excavation dietary evidence of surprising quality; often consisting of *soup 'n stew* cuisine regularly punctuated by quality communal roasts and individual cuts of mutton, beef and pork.

In marked contrast however, the consumption of rabbit in such quantity that is evident at the current site, along with the exploitation of native land animals for food, is rarely in evidence at most mid to late Nineteenth urban residential archaeological sites. Likewise, at the current site, cranial elements and trotter/hoof bones are predominant, whilst hindquarter portions comprising the better quality meat cuts of beef and mutton are largely absent. This issue is further outlined in the section to follow.

Sheep/Goat and Cattle Skeletal Elements Represented Within the Excavated Assemblage

Skeletal Element	**Sheep No**	**Cattle No**
Skull Fragment	3	1
Mandible/Maxilla	6	1
Teeth	158	33
Hyoid		1
Rib	13	19
Vertebra	57	12
Scapula	4	
Humerus	9	
Radius	3	1
Ulna	7	
Pelvis	2	2
Femur	1	2
Tibia	3	
Metatarsal	5	1
Metacarpal	4	1
Patella	2	
Carpal/Tarsal	1	8

Astragalus	1	
Calcaneus	3	1
Phalange	6	19

Body Part Representation

In an effort to summarise more succinctly the relative quality of the mutton and beef portions in evidence at this site, the table below has been created by grouping the following skeletal elements of cattle and sheep that are present within the collection. The Cranial category includes skull fragments, mandibles, maxillae, loose teeth and hyoids. The Trunk category combines rib and vertebral fragments. Forequarter elements include scapulae, humerus, radius and ulna fragments, whilst the Hindquarter portion comprises pelvis, femur and patella elements. Finally, the Extremity category encompasses metapodial bones, carpals/tarsals, astragalus, calcaneus and phalanges.

The rationale behind this exercise is that cranial and extremity portions are likely to reflect the consumption of poor quality meat cuts, the trunk is likely to produce the bulk of the meat cuts for both animal types and that these will vary in their relative quality, and that the hindquarter is more likely to be associated with quality food portions than sections from the forequarter.

Clearly, cranial and extremity portions are present in disproportionally high frequency for both sheep and cattle. Conversely, trunk elements appear to be relatively underrepresented for both animal types, whilst forequarter and hindquarter portions alike are present in low numbers. Furthermore, those limb elements that are commonly associated with meat cuts of more superior quality (such as pelvis, femur and tibia) are again poorly represented. In combination, the evidence suggests the occupant(s) of the property subsisted upon a restricted diet dominated by the occurrence of the cheaper and/or lesser quality portions from the sheep and cattle carcass.

Sheep and Cattle Body Portions Represented

Body Portion	**Sheep** *%*	**Cattle** *%*

Cranial	56.0	41.0
Trunk	23.5	35.2
Forequarter	7.7	<0.1
Hindquarter	5.4	4.5
Extremity	7.4	19.2

Butchery Evidence

Less than 5% of the bones within the collection display unequivocal evidence for butchery in the form of saw marks, knife cuts or cleaver blows. However, there is little doubt that the highly fragmented nature of the assemblage as a whole has operated to obscure the recognition of much of the butchery evidence. It is none the less evident that the majority of bones recovered have been heavily chopped or broken up during the course food preparation and/or have also been subject to fragmentation as a result of cooking methods associated with the provision of soups, stews and broths, from consumption, and from subsequent refuse disposal practices.

Aging Evidence

Few complete or near complete long bones are present amongst the excavated sample and the majority of these do not retain their proximal and distal portions. Aging evidence on the basis of fusion data is therefore inconclusive. The few unfused epiphyses recorded are largely undiagnostic with regards to establishing age profiles fro the animals represented. The cattle and sheep mandible and maxilla fragments that retain suitable dentition (along with the many loose teeth present) display eruption and wear patterns consistent with animals that attained maturity at the time of slaughter. The consumption of aged beef and mutton/hogget appears to be inferred, whilst the presence of lamb or veal is largely, if not entirely, absent.

Dietary Inference

Accurate assessment of the relative quality of the diet experienced by the occupant(s) of the property under study is made difficult by the lack of comparative rural studies completed to date. However, a number of general patterns have emerged from analysis of a wide variety of contemporary urban sites undertaken over the lass two decades that provide a basis for some basic inferences to be drawn for the assemblage under study.

In general terms, most urban historic site faunal collections are dominated by the presence of bones of domestic animal varieties, usually including between 50% and up to 80% sheep remains, followed by lesser numbers of elements of cattle and pig respectively. Domestic fowl are also often present in moderate numbers, dominated

by the occurrence of chicken bones, but also including at many sites smaller numbers of turkey, goose and duck remains. Depending on a given site's locality and context, bones of a number of estuarine fish species (and occasionally deep-water varieties) are also often present in large numbers, along with the remains of three to four principal shellfish varieties. Other food sources commonly present amongst the excavated remains include small to moderate numbers of rabbit bones, along with varying quantities and ranges of vegetable, nut and fruit seeds, pits and shells. Remains of native mammal species are rarely encountered in most mid to late urban sites. Finally, establishing an 'index' of relative dietary quality in urban contexts often revolves around the differential occurrence of different quality portions of the principal domestic animal food types. In most cases, trunk elements (ribs and vertebrae) and limb portions are present in large (but varying) quantities, whilst bone portions commonly considered to reflect 'primary slaughter waste' such as head and extremity elements are largely absent and/or are present in low frequencies.

The assemblage currently under study contrasts markedly with the patterning described above. Rabbit bones occur in high numbers and this animal is traditionally considered to constitute a 'poor' food resource. Likewise, beef and mutton portions present clearly derive from the cheaper sections of the carcass and few quality cuts are evident. Finally, the restricted dietary fare (that lacks fish, large quantities of fowl or a fruit and vegetable component) appears to have been supplemented by the hunting/trapping of native mammals where these opportunities existed.

Summary and Conclusions

On the basis of the information outlined above, the following conclusions can be drawn for the faunal evidence excavated from the subject property.

- The diet was heavily restricted in both composition and range during the period under study.

- The consumption of rabbit and mutton clearly represents the dominant characteristic of the dietary practices in evidence at this site. Beef, pork and native mammals appear to have constituted supplemental dietary components.

- The absence of fish, when combined with the complete absence of shellfish within the excavated assemblage, indicates that the procurement and consumption of freshwater food resources was not an issue of significance

that contributed to structure the dietary patterning during the period of occupation under study.

- Fowl are likewise poorly represented in terms of both variety and frequency.

- Even allowing for the vagaries of differential preservation, it appears that neither fruit nor vegetables figured prominently in the dietary regime of the site occupants.

The data and discussion provided in the sections above indicate that with regards to dietary reconstruction, the Tynan's Sl;aughterhouse faunal assemblage displays the following characteristics.

- Distinctive patterns of skeletal element representation are evident for the sheep and cattle bone samples excavated from the site.

- The patterning differs markedly in many respects from the type frequently observed at contemporary sites situated within urban-residential contexts.

- There is an overall dominance of sheep and cattle cranial and extremity bones present in the collection, along with an under representation of bones that derive from the trunk, forequarter and hindquarter.

- The consumption of mutton and beef is largely in evidence. There is a consistent overall emphasis upon the older age groups both species. Even the youngest animals appear to be at least yearlings.

- Procurement of relatively large quantities of meat at regular intervals appears unlikely to have occurred during the occupation of the property. It is very likely that much of the meat was obtained came directly from the slaughterhouse, as opposed to local retail butchers.

- There is little doubt that the dietary regime of the site was largely structured during the period around the procurement, preparation and consumption of communal-based rabbit, mutton and beef stews, broths and

other boiled portions which utilised sections from the poorer quality portions of the sheep and cattle carcasses in particular.

- Few of the excavated bones appear to be reflective of meat cuts which have arrived on-site in the form of pre-dressed retail portions. Small and individualised meat cuts are absent. Rather, the collection is dominated by portions of mutton and beef which appear to have been transported onto the site and have subsequently been subject to further processing prior to consumption.