INTERPRETATION STRATEGY

YARRALUMLA BRICKWORKS PRECINCT

February 2022

Prepared for

DOMA

Prepared by

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Quality Assurance Register

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Cover: Detail of trace hole between chambers within the Staffordshire kiln

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1.0 INTRODUCTION

This Interpretation Strategy was commissioned by the Doma Group (Doma). It establishes recommendations for the interpretation of the Yarralumla Brickworks Precinct (Figure 1). The precinct, which is subject to controls under the ACT *Heritage Act* 2004 (see Section 1.3), comprises the brickworks itself (Block 1, Section 102) and the Brickworks Railway Remnants (Section 102, Block 7, part).

The long-disused brickworks complex is to be reactivated with a mix of residential, commercial, retail and food and beverage facilities. A health and wellness centre is also proposed, incorporating the Staffordshire kiln and two of the three downdraft kilns (building numbers 4 and 22 at Figure 2). The quarry and the railway remnants will become public open space with a range of amenities and landscape features. For the first time since the brickworks was established (in 1913) it will be an integrated component of Canberra as opposed to a concealed and peripheral industrial plant.

While buildings, elements and areas of significance will be retained and conserved, the process of adapting the precinct to a mixed-use destination consistent with contemporary amenity and code requirements will be unavoidably transformative (see further commentary about the development proposal at Section 2.0). Perceptions of the place and public engagement with it will also be fundamentally altered. A core objective of this Interpretation Strategy is to ensure that identity and cultural heritage values of the precinct remain central to its character once the works are complete.

As well as responding to the ACT Heritage Register entries for the brickworks and the railway remnants (see Section 1.3 'Summaries of Significance'), the recommendations of this report capture the outcomes of archaeological investigations (2021), including requirements for artefact management (Section 1.6). The approach adopted is consistent with best practice methodologies (Section 1.7).

1.1 Conservation Management Plan (2021)

This document satisfies Condition 4 of the ACT Heritage Council's approval for the Conservation Management Plan (CMP) prepared for the 'Canberra Brickworks Precinct' by GML Heritage (August 2021). The condition requires that an 'Interpretation Strategy' is submitted to the Council for approval within six months.

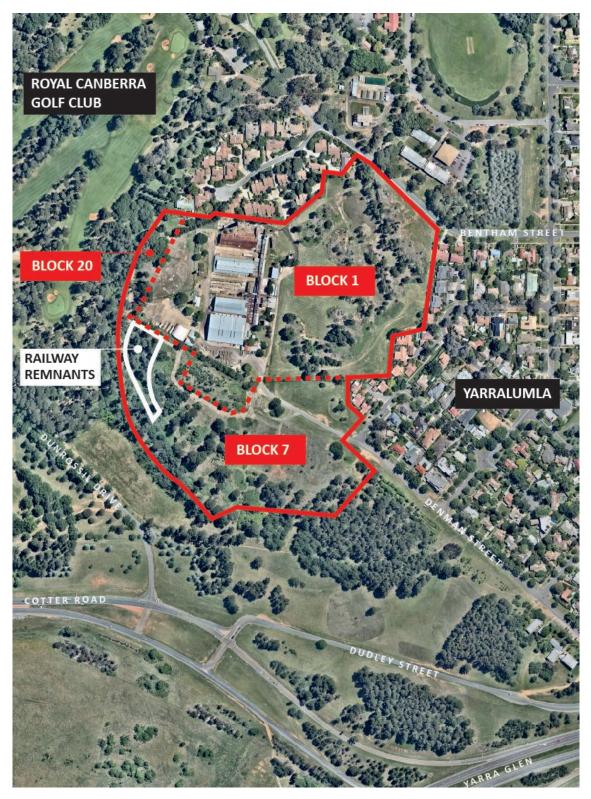
Policy no. 36 in the CMP addresses interpretation:

- 36.1 Prepare an Interpretation Strategy [...], as a means of integrating, showcasing and celebrating the heritage significance of the Brickworks for future users of the site.
- 36.2 Identify key themes and messages, potential audiences, and options for interpretive media [...] to guide future development of interpretive content.
- 36.3 Ensure interpretation is considered as part of a whole-of-site approach to revitalising the Brickworks, including conservation and new development.
- 36.4 Explore opportunities to integrate interpretation initiatives early in any future development proposal.²

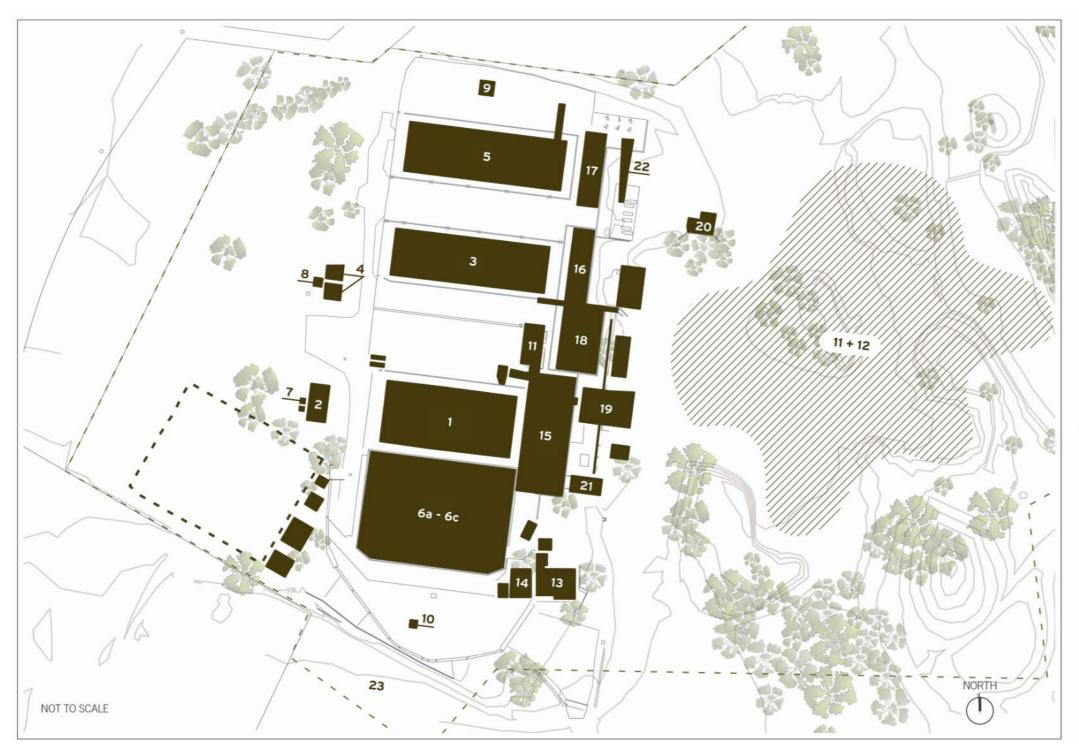
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Approval under Section 61K of the *Heritage Act* 2004 for 'Canberra Brickworks Precinct – Conservation Management Plan. Volumes One and Two' (GML Heritage, August 2021), 30 August 2021.

² 'Canberra Brickworks Precinct – Conservation Management Plan, Volume One', GMP Heritage, p. 105.



Aerial view of the Yarralumla Brickworks Precinct Figure 1 Source: www.nearmap.com



| Number | Element |
|--------|---|
| 01 | Staffordshire Kiln |
| 02 | Fan House for Staffordshire Kiln |
| 03 | Hardy-Patent Kiln |
| 04 | Fan House for Hardy-Patent Kiln |
| 05 | Hardy-Patent Kiln |
| 06 a-c | Downdraft Kilns |
| 07 | Chimney Stack for Staffordshire Kiln |
| 08 | Chimney Stack for Hardy-Patent Kiln |
| 09 | Chimney Stack for Hardy-Patent Kiln |
| 10 | Chimney Stack for Downdraft Kilns |
| 11 | Quarry |
| 12 | Geological features |
| 13 | Office |
| 14 | Power House |
| 15 | Machine Bay for Staffordshire and Downdraft Kilns |
| 16 | Machine Bay for Hardy-Patent |
| 17 | Machine Bay for Hardy-Patent |
| 18 | Workshop |
| 19 | Large Crusher House |
| 20 | Primary Crusher House |
| 21 | Small Crusher House |
| 22 | Elevator Conveyor |
| 23 | Brickworks Accommodation Village |

Figure 2 Yarralumla Brickworks site plan: built form and site infrastructure: the numbers correspond with the ACT Heritage Register entry for the brickworks

Consistent with the recommendations of the CMP this Interpretation Strategy includes:

- a thematically based interpretive structure;
- recommended locations for interpretive elements/features; and
- options for interpretive content and forms.

Subsequent steps will include concept development, design development, contract administration and implementation. It is anticipated that concept development for on and off-site deliverables will include, but may not be limited to:

- co-ordination with other disciplines, including architecture, landscaping, wayfinding and lighting
- graphic design;
- further research as required;
- drafting of written content; and
- picture research and approvals.

1.2 Previous research and reports

The precinct has been the subject of extensive research and analysis over a long period (since at least the mid-1980s). The documents produced variously provide extensive coverage of the history and development of the brickworks complex, and its cultural heritage values. As relevant, these sources have been referenced, and their content relied upon, in the preparation of this Interpretation Strategy.

Documents of particular relevance to this Interpretation Strategy include:

- GML Heritage, Canberra Brickworks Precinct, Archaeological Excavation Report and Statement of Heritage Effects, December 2021 (draft)
- GML, Canberra Brickworks Precinct, Conservation Management Plan, September 2021
- GML, Canberra Brickworks Quarry, Statement of Heritage Effects, September 2021
- Navin Officer Heritage Consultants, Archaeological Assessment Canberra Brickworks and Environs, September 2016
- Navin Officer, Canberra Brickworks, Aboriginal Cultural Heritage Assessment, August 2014
- Geological Society of Australia (ACT Division), 'Site 28 Yarralumla Brickpits', 2013
- Lovell Chen, Canberra Brickworks Conservation Management Plan, April 2010 (updated April 2016)
- Susan Conroy and Munns Sly Architects, Yarralumla Brickworks and Environs Planning Review, 2005
- Connell Wagner Pty Ltd, The Old Canberra Brickworks and Environs Development Control Plan, February 2001
- National Capital Development Commission, Canberra Brickworks, South Canberra, Policy Plan, October 1988
- Lester Firth Associates, Old Canberra Brickworks, Conservation Plan, June 1986

1.3 Statutory heritage controls

The Yarralumla Brickworks (Section 102, Block 1) and the Brickworks Railway Remnants (Section 102, Block 7, part) are included in the ACT Heritage Register and are subject to controls under the *Heritage Act* 2004. The Act provides for the protection, management and conservation of heritage places and objects in the ACT. Under the Act, the ACT Heritage Council is responsible for the Heritage Register and heritage registration processes.

Under the provisions of the Act, heritage places and objects include 'Aboriginal Place[s]' and 'Aboriginal Object[s]'. These are defined as '[object/place] associated with Aboriginal people because of Aboriginal tradition'. 'Aboriginal tradition' is defined as, 'the customs, rituals, institutions, beliefs or general way of life of Aboriginal people'.³

Summaries of significance

The following summaries of significance are based on the ACT Heritage Register citations for the brickworks and the railway remnants. Reference has also been made to the endorsed CMP (GML, 2021).

Yarralumla Brickworks

The brickworks complex is of historical significance (ACT Heritage Act Criterion A) as the first industrial manufacturing facility within the ACT, and for its role in providing materials for the construction of early buildings in Canberra. It is one of a small group of industrial and engineering heritage places that were built to facilitate the early development of Canberra. (Others are the Cotter Dam and Pumping Station and the Kingston Power House.)

The brickworks complex is of local historical significance for its role in the early development of Yarralumla, and as a source of employment.

The quarry also satisfies Criterion A ('importance to the course or pattern of the ACT's cultural or natural history') as the type locality for the Yarralumla Formation, a major sedimentary sequence dating from the Silurian Period, 424-423 million years ago.⁴ The rock units at the site provide the reference section for comparison of other outcrops within the Yarralumla Formation and in this context are of both research and educative value.

Yarralumla Brickworks demonstrates the *principal characteristics* (ACT *Heritage Act* Criterion D) of historic brickworks in Australia, including the proximity of processing plant to the resource (quarry); associated infrastructure (including chimney stacks and fan houses); and processing plant, equipment and facilities. As compared with other surviving brickworks, the Yarralumla Brickworks retains a relatively wide range of production and ancillary buildings, including crusher houses, power houses and the like. The removal of most of the brickmaking plant and machinery from the site has diminished its ability to demonstrate key aspects of the brickmaking process and associated technologies.

Yarralumla Brickworks is of *aesthetic significance* (ACT *Heritage Act* Criterion E) for its combination of distinctive and robust industrial building forms and the open landscape quality and striking rock outcrops of the quarry. The 1953 stack at the north end of the site is of aesthetic significance as a landmark in the local area.

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Heritage Act, 2004, Section 9.

A type locality is the location of deposits that are considered to define the characteristics/qualities of a particular geological formation or period.

The kilns and their associated flues are of varying levels of technological interest and significance (ACT Heritage Act Criterion F) as examples of kiln design. The Staffordshire kiln (completed 1915) is the only known example in Australia of this type. It is distinguished by a complex system of dampers and flues which provided more control and flexibility than earlier kiln types. The Hardy-Patent kilns are of a lower order of technological significance, though they are of interest as an example of a patented variation on the Hoffman kiln design originating from the late nineteenth century. Several examples exist in Australia of Hoffman and patent kilns dating from the first half of the twentieth century. The three downdraft kilns are of limited technological interest. They are late examples of this type of intermittent kiln design and there are numerous other and earlier examples surviving elsewhere.

The precinct derives significance from the co-location of kiln technologies. The range of kiln types at the site has been augmented by the 2021 discovery of remnants of the 'experimental plant' (1913-16), to the south-east of the heritage core. The experimental plant enabled experimentation with the available raw materials, and generated bricks for the construction of the Staffordshire Kiln and the Kingston Power House. The archaeological deposits include evidence of a clamp kiln, two Scotch kilns and two downdraft kilns, intermittent kiln typologies distributed widely through the Australian colonies from at least the beginning of the nineteenth century. The endorsed CMP also found that the Brickworks holds strong associations with the local Yarralumla and broader Canberra community. There is also affection for 'Canberra Reds' as a building material.

Brickworks Railway Remnants

The Railway Remnants are of historical significant (ACT *Heritage Act* Criterion A) for their association with the construction of the national capital between 1923 and 1927. The railway facilitated transport of bricks to a number of construction sites around the city in the lead-up to the Commonwealth Parliament moving to Canberra. The remnants provide an insight into one of the many challenges of building a city within a short time frame in an isolated and undeveloped area.

1.4 Aboriginal cultural heritage

The land occupied by the brickworks precinct forms part of the broad Molonglo River valley. This landscape is likely to have been well utilised by Aboriginal communities prior to European settlement, with a nearby water source and a diverse range of food on the riverbanks and surrounding hinterland The brickworks (specifically) and its setting (generally) have, however, been extensively disturbed over many decades, and almost all of the brickworks precinct has been cleared of its original native vegetation (localised exceptions may exist on outcrops within the quarry).

The 2014 Cultural Heritage Assessment (Stage 1), undertaken by Navin Officer identified no Aboriginal sites within the study area (a 47-hectare area including the brickworks precinct), and no areas of Aboriginal archaeological potential were identified during fieldwork.⁵ As an outcome of the Cultural Heritage Assessment, no statutory implications regarding cultural heritage apply to the study area. The Cultural Heritage Assessment was approved by the ACT Heritage Council on 11 September 2014.⁶

Navin Officer, Canberra Brickworks, Aboriginal Cultural Heritage Assessment, August 2014, Section 6.1.

⁶ ACT Heritage Council, Heritage Advice to Navin Officer Heritage Consultants, 10 September 2014.

1.5 Archaeological investigations

The Yarralumla Brickworks Precinct has long been identified as a place of (non-Aboriginal) archaeological potential (see for instance Policy 15 of the Canberra Brickworks CMP by Lovell Chen, dated April 2010). The Archaeological Assessment prepared by Navin Officer in 2016 identified 12 areas of archaeological sensitivity and recommended that areas of moderate and high archaeological potential be subjected to an archaeological testing programme prior to any works or development in these areas (see Figure 3).

Archaeological investigations undertaken in 2021 were informed by an Archaeological Research Design, (GML, September 2020). The objective was to determine the nature and extent of archaeological deposits at the site and develop recommendations for management requirements for archaeological deposits. Based on a review of the Archaeological Assessment (2016) and an inspection of the site it was determined that eight of the 12 areas of archaeological sensitivity identified in the Archaeological Assessment should be subjected to further archaeological testing (BRW1, BRW2, BRW3, BRW7, BRW8, BRW10, BRW11 and BRW12). The outcomes of the investigations are summarised in the Canberra Brickworks Precinct, Archaeological Excavation Report (GML, December 2021).

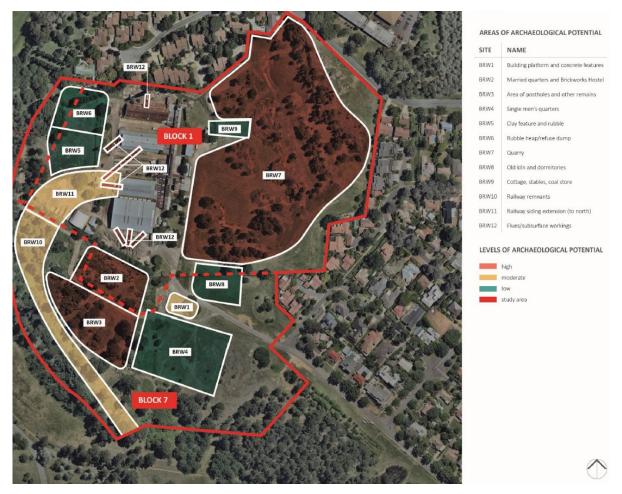


Figure 3 Areas of archaeological potential identified in 2016: BRW8, BRW10 and BRW 12 were assessed as significant following investigations carried out in 2021 Source: Navin Officer, Archaeological Assessment, September 2016

The Statement of Significance from the Archaeological Excavation Report is as follows:

The Canberra Brickworks Precinct is significant as the first industrial manufacturing facility commissioned for and constructed in the ACT, developed specifically to facilitate the construction of the new capital city. On the surface, the Precinct is an unusually complete example of a complex demonstrating aspects of the operation of a twentieth century large scale urban brickworks. It has a diverse range of heritage values, such as the role it has played in the course of the ACT's history, its aesthetic qualities, and the connection it holds with both the local Yarralumla community and the wider Canberran population. These values are manifested in the intact industrial landscape and the key role it played in the course of the ACT's history.

The archaeological remnants identified in this investigation are only partially reflective of these values. The site has undergone several distinct phases of operation, the later ones often obscuring the earlier activities. However, where archaeological remains that demonstrate the early and complex nature of the site are present, these have the ability to contribute to understanding both of the site and brick making processes more widely.

The Precinct underwent several distinct phases of operations, each reflective of the broader political contexts that have determined the fluctuation of construction in the capital city.

The archaeological remains of the Establishment Phase are a significant aspect of this development, as the 1913–1916 experimental plant played an integral role in the course of the Brickworks' and the ACT's histories (BRW8). The plant provided the means [by] which to build the capital city, producing the materials used to construct the Staffordshire Kiln and the Kingston Powerhouse, both of which, in turn, assisted in the further development of Canberra. The surviving kiln structures yield important information that contribute to the understanding of the establishment of the Brickworks and early twentieth century brick making technologies, and embody the principal characteristics of a brickmaking plant. Although previously considered to be a temporary part of the Brickworks, the modification of two kilns to continue operations show an active investment in the longevity of the experimental plant – this demonstrates the value the experimental kilns held, and the efforts expended to continue their operation.

When the Brickworks reopened in 1921, the Expansion Phase saw a suite of changes. The archaeological remnants of these are predominantly restricted to the railway remnants (BRW10). Although no evidence of the railway infrastructure was identified, the cuttings and central embankment are evidence of the process and the surviving elements of the once extensive railway network. They demonstrate the importance of the railway network to the early twentieth construction efforts in Canberra, particularly as a rare surviving element of this network.

The presence and generally highly intact nature of the subsurface flues (BRW12) are representative of technological developments across the entire life of the precinct. The six extant kilns contributed to the course of the ACT's history as the first industrial manufacturing facility commissioned for and constructed in the Territory, with the specific purpose to construct the new capital city. The subsurface flues are extensions of this significance, as they are integral to their effective functioning and contribute to the industrial character of the site.

Alterations made during the Post World War II and Post Closure Phases resulted in the removal of a large quantity of archaeological material. The archaeological resource of the quarry (BRW7) was particularly reflective of this, with any earlier features associated with the mining technologies obscured by accumulations of general waste and extensive brick rubble deposits. The construction of the extrusion plant in 1971 likely removed any remaining features associated with the 1920s railway sidings (BRW11), and the demolition of the Brickworks Hostel resulted in the loss of domestic deposits left by its inhabitants (BRW2 and 3).

In summary:

- The archaeological remains of the experimental plant (BRW8) have been assessed as meeting criteria a), b), c), and d). They are highly significant.
- The archaeological remains of the railway remnants (BRW10) have been assessed as meeting criteria a) and b). They are moderately significant.
- The subsurface flues (BRW12) have been assessed as meeting criteria a), b), c), d), e), and f). They are highly significant.

Of relevance to this Interpretation Strategy is the following recommendation at Section 8 of the Archaeological Excavation Report:

[...] The significant archaeological remains identified in this report should be interpreted and presented to the public as a means of mitigating any loss of the original fabric. The findings of this report should be incorporated into the Interpretation Plan for the Precinct, allowing dissemination of the results to the current residents of Yarralumla and the future residents of the Brickworks development. This Interpretation Strategy should identify opportunities for the interpretation of the highly significant experimental plant, subsurface flues, and public display of select artefacts recovered during the excavations.

1.6 Inventory of moveable relics

The ACT Heritage Register entry for the Yarralumla Brickworks includes 'specific requirements' for Industrial Equipment, as follows:

- a. Major equipment and machinery associated with the historical industrial use of the place shall be retained and conserved in situ. Minor equipment should be retained and conserved but may be relocated to a new location within the site for interpretive purposes and/or its own protection.
- b. The Primary Crusher House (20), including the integral equipment and machinery, and the Elevator Conveyor (22) shall be conserved for their ability to demonstrate and interpret industrial processes and secondary aesthetic values.

GML has prepared an Inventory of Moveable Relics (January 2021). The inventory defines moveable relics as 'historic industrial equipment and ephemera associated with the heritage significance and

historic function as the Brickworks (i.e. as a brick manufacturing plant)'. ⁷ The document also recognises that much of the industrial plant and equipment has been removed from the site.⁸

The Inventory of Moveable Relics does not identify 'major' and 'minor' items/equipment but does make recommendations for some objects/items including, in some cases, for interpretation. (More explicit direction is anticipated to be included in the Artefact Management Strategy, forthcoming.)

For the purposes of this Interpretation Strategy, equipment and machinery associated with the manufacture of bricks has been prioritised (i.e. 'major' items), consistent with the ACT Heritage Council's Specific Requirement (see Table 1).

Items/relics that supported the broader operation of the site, but do not contribute directly to an understanding of brick production, have been assessed as being of secondary significance (minor items).

Other items may need to be recorded prior to removal (i.e, the ammeter and wattmeter in the Power House, the oxygen analyser and the temperature control panel), subject to further research/analysis, the outcomes of the Artefact Management Strategy and the expectations of the ACT Heritage Council.

Table 1 Equipment and machinery associated with the manufacture of bricks

Item (including GML ID)

Plant in Staffordshire kiln fan house (ID 2-01)

This plant/infrastructure is incomplete (largely removed). Plant within the Hardy Patent kiln fan house is far more complete.

On the proviso that plant within the Hardy Patent kiln fan house is retained, conserved and presented as an interpretive exhibit, consideration may be given to removal of the remnant plant in the Staffordshire kiln fan house (further to recording).

Photograph(s)





GML, Inventory of Moveable Relics, January 2021, Section H.2.2, presented as Appendix H in Volume 2 of the GML CMP, August 2021.

⁸ GML, Inventory of Moveable Relics, January 2021, Section H.1.

Plant in Hardy patent kiln fan houses (ID 3-01)

This plant should be retained, conserved and presented as an interpretive exhibit.

Photograph(s)







Doors to downdraft kilns (6.02)

The doors are to be retained in situ (fixed open).



Photograph(s)

Brick press (Item 37.01)

This is the only complete brick press at the brickworks. It is recommended for retention in situ in preference to the brick press machine base (item 5A-01).



Crusher and puddler machines (17.02)

For the purposes of this Interpretation Strategy the degree to which the 'crusher and puddler machines' are complete has not been established.



Pugmill (17.03)

For the purposes of this Interpretation Strategy the degree to which the 'pugmill' is complete has not been established.



Crush machinery in the primary crusher house (the primary crusher house is identified as building number 20 in the AC $\ensuremath{\mathsf{T}}$ Register entry for the brickworks)

Recognising that the primary crusher house is a registered element the remnants of the crush machinery will be retained and conserved.

Photograph(s)



Kiln fixings, furnace doors, grates etc (6.01, 6.03)





Chutes (including 15.02, 15.05 and 32.02)

Multiple chutes are extant at the site, some integrated within machine bays (as per the image on the right) and some freestanding.

Consideration will be given to the retention of representative examples of chutes within the site. For reasons of authenticity opportunities to retain chutes in their existing (original) locations will be prioritised.

Photograph(s)



Gantry cranes (including 15.01, 16A.03, 16.01, 17.01 and 18.01)

A number of cranes are extant at the site. The gantry crane between machine bays 1 and 2 (buildings 16 and 18 at Figure 2) will be retained in situ, sitting externally.



Conveyors (15.03)

Representative examples of conveyors will be retained, including within the primary crusher house (Building 20, as noted above)



Wheelbarrows (28.01)

Wheelbarrows are utilitarian items with limited capacity to reveal aspects of 'process'. Consideration may be given to the retention f representative examples at the site, either in storage or on display.

Photograph(s)



1.7 Methodology

The development of this Interpretation Strategy was guided by the Article 25 of the Australia ICOMOS Burra Charter (2013) and the associated practice note 'Interpretation'. Article 25 states that:

The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and engagement, and be culturally appropriate.

Principles which have guided the plan include the following, transcribed from the Australia ICOMOS Practice Note 'Interpretation' (November 2013), pp.2-3:

- 1. Facilitate understanding and appreciation of cultural heritage sites and foster public awareness and engagement in the need for their protection and conservation
- Communicate the meaning of cultural heritage sites to a range of audiences through careful, documented recognition of significance, through accepted scientific and scholarly methods as well as from living cultural traditions
- 3. Safeguard the tangible and intangible values of cultural heritage sites in their natural and cultural settings and social contexts
- 4. Respect the authenticity of cultural heritage sites, by communicating the significance of their historic fabric and cultural values and protecting them from the adverse impact of intrusive interpretive infrastructure, visitor pressure, inaccurate or inappropriate interpretation
- Contribute to the sustainable conservation of cultural heritage sites, through promoting public understanding of, and participation in, ongoing conservation efforts, ensuring long term maintenance of the interpretive infrastructure and regular review of its interpretive contents
- Encourage inclusiveness in the interpretation of cultural heritage sites, by facilitating the involvement of stakeholders and associated communities in the development and implementation of interpretive programs
- 7. Develop technical and professional guidelines for heritage interpretation and presentation, including technologies, research, and training. Such guidelines must be appropriate and sustainable in their social contexts.

2.0 SITE DEVELOPMENT

The study area includes Blocks 1, 7 (part) and 20 Section 102. The total area is approximately 16 hectares. There is an elevated ridge to the south and east of the study area, and lower ground to the north and west. A water course originally ran to the north-west of the site. The study site is located approximately 5km west of the Parliamentary Triangle. It is bounded to the north and east by low density residential development (Woolls, Banks and Bentham streets, and Lane-Poole Place). To the west, the site is bordered by the Royal Canberra Golf Course and Westbourne Woods, and to the south by Dunrossil Drive and Dudley Street.

Between 1913 and 1976 the site was used to produce bricks and clay-ware products. Production was not consistent – peaks corresponded with major phases in the development of Canberra. The site retains kilns, plant and machinery dating from c. 1915, the 1920s/30s and the 1950s. This infrastructure is generally located within a rectangular area (referred to below as the 'heritage core') in the centre of the registered site within which the kilns are aligned east-west (exceptions being the downdraft kilns). Corrugated sheet metal-clad machine bays are to the east, with fan houses and stacks to the west. The quarry is directly to the east of the heritage core and the railway remnants are to the south-west.

Since 1976 the site has been largely (but not entirely) dis-used. A late-1970s proposal to adapt it as a tourist destination – initiated by A R Marr Pty Ltd – foundered by the early 1980. Subsequent ideas for site-wide reactivation, typically proposed to be funded by residential development to the periphery, also failed to gain traction. Legacies of these aborted redevelopment initiatives include the removal of much of the original brick making plant and machinery, and the introduction of some new buildings.

2.1 Development overview

As noted in the introduction, the brickworks complex is to be reactivated with a mix of residential, commercial, retail and food and beverage facilities. A health and wellness centre is also proposed, incorporating the Staffordshire kiln and two of the three downdraft kilns. The quarry and the railway remnants will become public open space with a range of amenities and landscape features (see Figure 4). The broader setting is to be developed with residential dwellings comprised of a range of mixed density residential accommodation including houses, townhouses and apartment blocks.

The proposal for the brickworks is framed around the central 'heritage core' which includes a range of extant buildings and features, and will form the focus of publicly accessible spaces. With the objective of managing the site holistically a number of design principles have been adopted, including:

- Adaptive reuse: Buildings to be adapted to new uses includes the powerhouse and office, downdraft kilns, Staffordshire Kiln, Hardy Patent kilns (I and II) machine bays (I, II and III), Staffordshire Kiln fan house and the workshop and White Pan Room (Large Crusher House II);
- New works to support adaptive reuse: Limited new built form is proposed to support the reuse of retained buildings. Interventions include elevated 'walkways' to provide access to
 the upper levels of the major kiln structures; and lightweight additions to the kiln
 structures, to facilitate repurposing;
- Conservation works: Stabilisation and retention of buildings/elements as 'features' within the landscape, including crusher houses and brick stacks; and
- Landscaping: The introduction of a landscaping treatment across the site to assist with 'softening' the industrial environment and providing an appropriate level of amenity.

Given the varying condition, intactness and levels of significance of the extant elements a building-specific approach will be adopted for the conservation works. Over-arching objectives are for the retention of original fabric, plant/infrastructure and the powerful forms of the primary built elements (kilns, stacks and machine bays).

Of particular relevance to this Interpretation Strategy are opportunities presented by the buildings themselves, as well as the site planning. The buildings, both individually and in composite, are powerful and expressive forms which are revelatory of process. The brickyard in particular – the hard-paved open area to the north of the Staffordshire kiln – is a fully immersive environment, surrounded on all sides by overtly 'industrial' forms. Materiality is another consideration, with the linear machine bays being generally clad in corrugated sheet metal (and oriented north-south), and the kilns being constructed of brick (and generally oriented east-west).

2.1.1 Access and circulation

The principal vehicular point of arrival to the brickworks will be 'Quarry Drive', a new roadway at the south of the site. Quarry Drive leads to a roadway extending east-west across the south of the heritage core. At the west end of this roadway is a parking structure, located opposite a linear north-south spine to the west of the kilns.

The principal circulation sequence within the site is indicated at Figure 5. The primary east-west connections are between the brickyards (the open area to the north of the Staffordshire kiln and south of Hardy Patent kiln no. 1) and the quarry; and the roadway at the south of the heritage core, which links the railway remnants to the quarry. The primary north-south connection is the linear open space between the kilns and fan houses (sometimes referred to as the 'village green').

The area between the two Hardy-patent kilns (sometimes referred to as Brickyard 2) will be a controlled access – it will be accessed only by the people attending the restaurants and offices. The pool area to the north of the heritage core (north of Hardy Patent kiln no. 2) will not be publicly accessible.

2.1.2 Landscape and urban design

A landscape and urban design masterplan has been prepared for the brickworks precinct by MacGregor Coxall. As conceived a 'key design principle for [the] public domain is to celebrate the site's industrial past and improve access and legibility to its history'. 9

A key interpretive concept integrated into the plan is the 'Water Story' (or 'Water Spine'), which uses water as a metaphor for an aspect of the brick production process (extraction from the quarry), and transport of the raw product between the quarry and the 'heritage core'. The following is an extract from MacGregor Coxall's *Landscape and Urban Design Package*:

The main access path through [Quarry Park] forms the first part of the Interpretive Walk [...] a narrow garden bed frames a steel trough that, similar to a conveyor belt, carries water from the quarry lake towards the Brick Yards and ends with a vertical water spill [...]

At the transition point from quarry to [the] manufacturing facilities, the water quality changes from natural lake water to treated water. This second water course flows through and under the catwalk to a vertical spiller falling down into the Brick Yards water pond [...]

-

⁹ MacGregor Coxall, Landscape and Urban Design Package, 2017.

[...] The brick stacks finally represent the produced outcome awaiting carriage to the construction sites within the city. These terraces offer informal seating and play, and connect to the last station of the Interpretive walk which is the Rail Play Zone [Railway Remnants], where train-like play structures between the reestablished track hills terminate the interpretive journey.

Another interpretive concept is an at-grade forecourt proposed to the south of the downdraft kilns and the powerhouse (see 'Arrivals Forecourt' at Figure 7). This area includes the downdraft kiln stack and the powerhouse/office (proposed for adaptation as a concierge). MacGregor Coxall's proposal is for the ground plane treatment to be composed of crushed red brick and rubble.

The forecourt area at the south of the heritage core presents as a major opportunity for interpretation (see further commentary below, including Section 6.1).



Figure 4 Yarralumla Brickworks, landscape masterplan Source: MacGregor Coxall

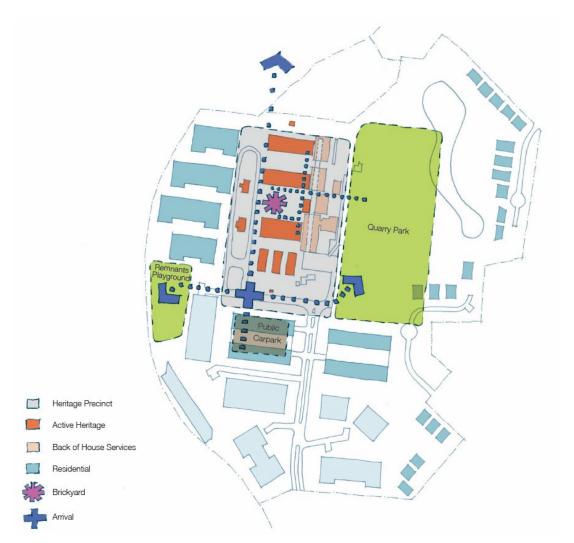


Figure 5 Arrival and circulation sequence Source: SJB and Six Degrees

3.0 AUDIENCE

In order for interpretation at the brickworks to be effective and sustainable it is important that the deliverables respond to the needs and expectations of those who will experience it. In considering possible audiences, the following observations are made.

Following the redevelopment of the brickworks the audiences for interpretation will include, but are unlikely to be limited to:

- residents of the redeveloped site and its environs;
- existing residents of the surrounding area;
- employees of businesses active at the site; and
- patrons of the wellness centre, bars and restaurants, some of whom will be repeat visitors.

Given that the large and well-known site has historically been inaccessible there is also likely to be a level of interest in the place from special interest groups including enthusiasts for industrial and/or engineering history, and those with an interest in the history of Canberra and the ACT.

The above represents a broad demographic with diverse ages, ethnic/cultural backgrounds and levels of interest in the site. The likelihood is that a high percentage of visitors will speak English, although there is a need for a graphic dimension to the interpretive deliverables for non-English speakers. The provision of some written content in different languages may also be required.

Table 2 Potential audiences

| Туре | Who | Needs and interests from the perspective of interpretation |
|--|--|---|
| New residents | May include: • downsizers; • young families; • first home buyers; • owner occupiers | A sense of identity and pride in place Potentially a playful engagement with place through/with children |
| Business owners/employees | Businesses will include: • hospitality; • health and wellness | Alignment with brand values and aesthetics Sense of identity and pride in place |
| Patrons of businesses | May include: local residents of varied ages, many of whom will be repeat visitors; and occasional visitors – i.e. people for whom the brickworks is a 'destination' (perhaps to be experienced at night) | Enjoyment of experiential qualities and aesthetics Potential to 'dip into' interpretive content if desired Initial customers may be curious about a new environment which has been closed off in the past Repeat visitors may seek new opportunities to engage with place |
| Families and children | May include: Canberra residents Visitors and tourists | Enjoyment of multiple experiences of consumption, relaxation and play A playful engagement with place through/with children Potential to dip into content if desired |
| Individuals or groups with a special interests | Will include those with an interest in: • history generally (a place from which Canberra evolved); and • industrial and engineering history | Desire for direct experiences with historical content Deep curiosity, valuing original sources and rigour Expectation for a detailed understanding of industrial processes and plant |

3.1.1 Implications and opportunities

Implications of the above for the approach to interpretation include:

- The need for interpretation that engages people at different levels (a layered approach), from the superficial (i.e. play equipment referencing trains) to detailed (i.e. technical information about the operation of the kilns)
- A graphic/visual emphasis, to appeal to the potentially broad demographic and age-range of visitors, some/many of whom may be non-English speakers
- The integration of interpretation with way finding (site navigation), given the diverse range
 of on-site experiences (the quarry, heritage core and railway remnants) and the diversity of
 visitor expectations
- The delivery of interpretation through lighting treatments, consistent with visitors' expectations of the brickworks as a 'destination' to be used and experienced after hours

4.0 RESOURCES AND OPPORTUNITIES

There are multiple tools and resources available to communicate/reveal aspects about the cultural heritage significance and meanings of the brickworks and its setting. These tools/resources include the place itself (a powerful and distinctive environment), archaeological deposits of high significance; and the extensive documentary records associated with the brickworks.

A high-level, and non-exhaustive, summary of tools and resources that are available for interpretation – and should be seen and understood as having interpretive potential – is at Table 3.

Table 3 Tools and resources for interpretation

| Tools/resources for interpretation | Opportunities (indicative) |
|--|---|
| The place, core built elements and the setting | The quarry and heritage core are places with strong and distinctive characters. To a degree, they can 'speak' for themselves. That is not the case for the railway remnants, which will require a more explicit approach to interpretation. |
| | Given the technical nature of brick production processes, and the large-scale removal of plant and infrastructure, assistance will be required to support an understanding of aspects of the site, including: |
| | the relationships between kilns, fan houses and stacks; |
| | the relationship between the heritage core and the quarry; |
| | the function of the kilns – progressive technologies that can be understood as large-scale 'machines'; |
| | the planning of the site – the site layout can be presented as revelatory of process |
| | Within the heritage core it is also noted that materials perform a role in define zones – i.e. brick (kilns) and corrugated sheet metal (processing plant and machine bays). |

| Tools/resources for interpretation | Opportunities (indicative) |
|---|---|
| | There are also opportunities for retention and celebration of internal spaces that allow for moments of connection with historic fabric and stories. For example, retention of a portion of the firing floor in the Staffordshire Kiln, combined with a careful approach to the retention of kiln chambers, will provide an opportunity to provide insights into kiln operations, as well as to appreciate the patina of use. |
| The quarry (geomorphology) | As noted, the quarry is a location with a strong character in its own right. The delivery of an interpretive response can/should be correspondingly light touch, to allow the environment to 'speak' for itself. |
| | Opportunities that would desirably be explored include but are not limited to: a thematic celebration on the quarry as an ancient marine environment, to assist visitors to understand the 'deep time' meanings and origins of the environment; and the use of materials from the quarry for ground plane treatments within the heritage core. |
| Archaeological deposits | The majority of archaeological deposits /features at and in proximity to the brickworks have been assessed (GML) as having limited capacity to enhance an understanding of the site's cultural heritage significance. Features assessed as being of high significance are: |
| | The footings of experimental plant: Once the footings have been removed, the location of the temporary plant should be acknowledged, as well as its formative role in the site establishment. This may take the form of signage; naming (i.e. Experimental Drive); or a marker at the entry to the Quarry Park. Salvaged bricks may be contemplated for re-use within the public realm. |
| | Flues: The flues that connect the major kilns to the fan houses should be revealed/identified through a ground plane treatment. This treatment may be augmented by signage, for those with a deeper interest in the function/operation of the kilns. |
| Artefacts, moveable objects, plant and infrastructure | Extant plant, objects and machinery can (and should) be used as authentic 'props' (or triggers) to articulate aspects of process. Emphasis should be placed on objects/plant that relates expressly to aspects of the brick production process. Further, the retention of these objects/plant in situ should be prioritised. A degree of support (interpretive intervention) |

| Tools/resources for interpretation | Opportunities (indicative) |
|------------------------------------|--|
| | will be required to reveal the function of extant elements within the site. |
| Documentary record | As is the case with almost all heritage sites in Canberra and the ACT, there exists a voluminous documentary record for the brickworks, in the form of photographs and drawings held at the National Library of Australia, the National Archives of Australia and the ACT Heritage Library (among other repositories) – see limited selection below. |
| | This record provides considerable opportunities for interpretation, both on-site and off-site (i.e. website). The documentary record can provide a degree of completeness that is unachievable in the place as it exists. It also provides evidence of the brickworks as a working environment. |
| | |

Tools/resources for interpretation Opportunities (indicative)

Tools/resources for interpretation Opportunities (indicative)

5.0 THEMATIC STRUCTURE

In terms of the recommended thematic structure, approach adopted has been to establish three overarching (or primary) themes that capture the intent of the interpretive messages for the whole site. Aspects of the history and operation of the brickworks from 1913 to 1976 are addressed as secondary (or sub) themes, see Table 4. A graphic representation of the key themes and stories is at Figure 6.

Table 4 Overarching thematic structure

| Theme | Sub-theme(s)/stories |
|---|---|
| Geomorphology – raw | Ancient marine environment |
| materials (i.e. the reason for the | Yarralumla Formation, sedimentary sequence from the Silurian Period, 424-423 million years ago |
| establishment of the brickworks in this | Deposits of clays and shales (layered), including marine fossils |
| location) | Quarrying |
| | Processes of extraction and processing/manipulating raw materials |
| | The brickworks and quarry as a dynamic (much altered) landscape –explain the reason for the outcrops |
| | Country |
| | Connection to place/country – acknowledging the traditional custodians of this land, and their connection to Country and the wider Molonglo River corridor |
| Building Canberra | Raw materials |
| | Human settlers manipulating raw materials to create habitation |
| | Establishing the National Capital |
| | The brickworks was foundational to the establishment of Canberra, and shares an historical relationship with the Kingston Power House (a source of power built using Yarralumla bricks) and the Cotter Dam (water) |
| | Episodic improvements to the brickworks aligned with political and economic cycles |
| | Leading edge technologies |
| | The political imperative for Canberra to succeed meant that little expense was spared. The brickworks was the beneficiary of leading edge technologies in continuous kilns: |
| | - the Staffordshire kiln is the only example of its type in Australia; and |
| | - the site is unusual for the colocation of multiple kiln types |
| | Canberra's earliest buildings |
| | Canberra's earliest buildings were constructed with bricks and building materials from the Yarralumla Brickworks, including: the Provisional Parliament House, East and West Blocks, Hotel Action and Hotel Kurrajong |
| | The first building constructed in Canberra was the powerhouse at the brickworks; the Staffordshire kiln soon followed. |

| Theme : | Sub-theme(s)/stories |
|--|--|
| Process – technical, industry, working environment, the brickworks railway | Processing raw materials A productive place, where raw materials were transformed through heat and labour A place where technologies of construction are visible Firing The operation of the kilns and experiential elements such as light, sound, heat, and dust Transporting Opportunities to reveal interconnections within the site (i.e. use of light gauge rail within the quarry) and with Canberra itself A place of work and community The brickworks as a place of work and community (dormitory buildings, bathhouse, relationship with the nearby worker's camp) |

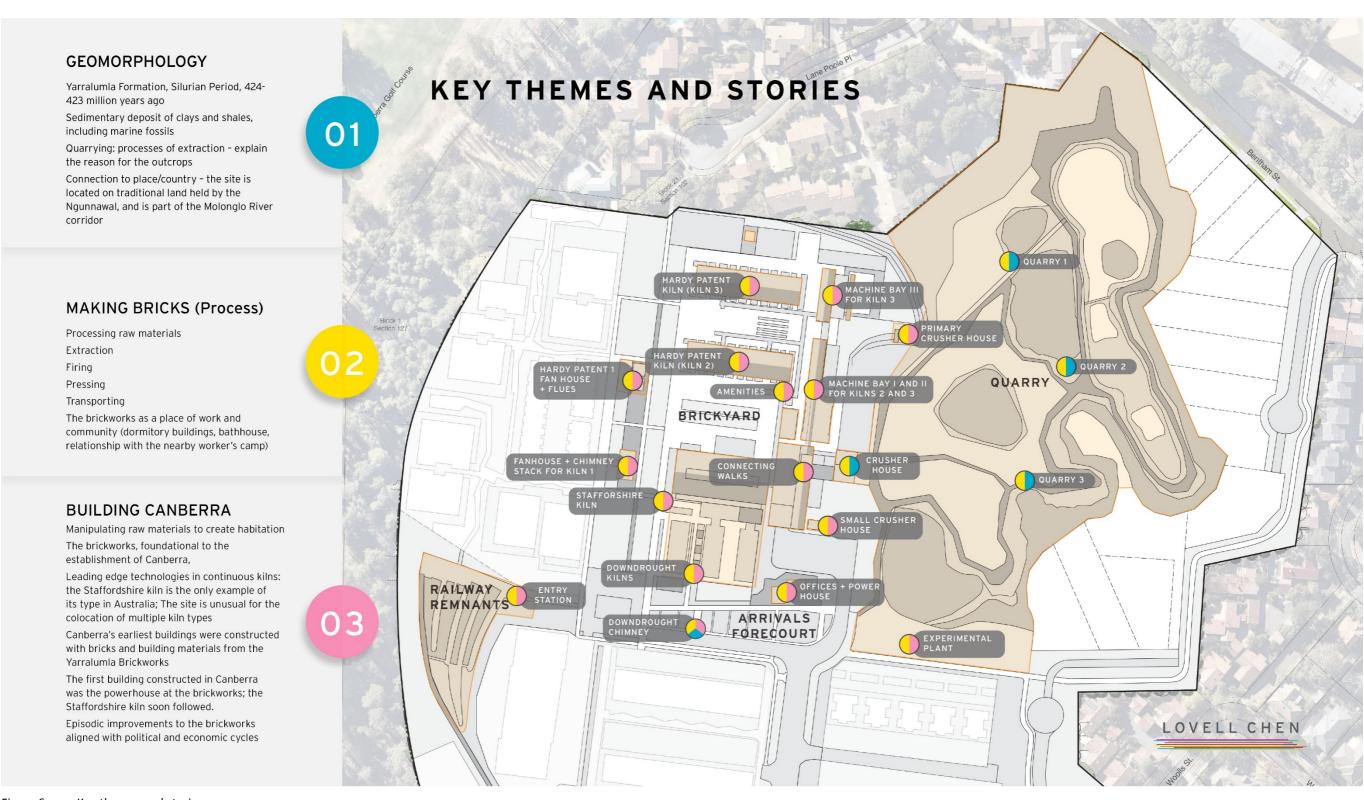
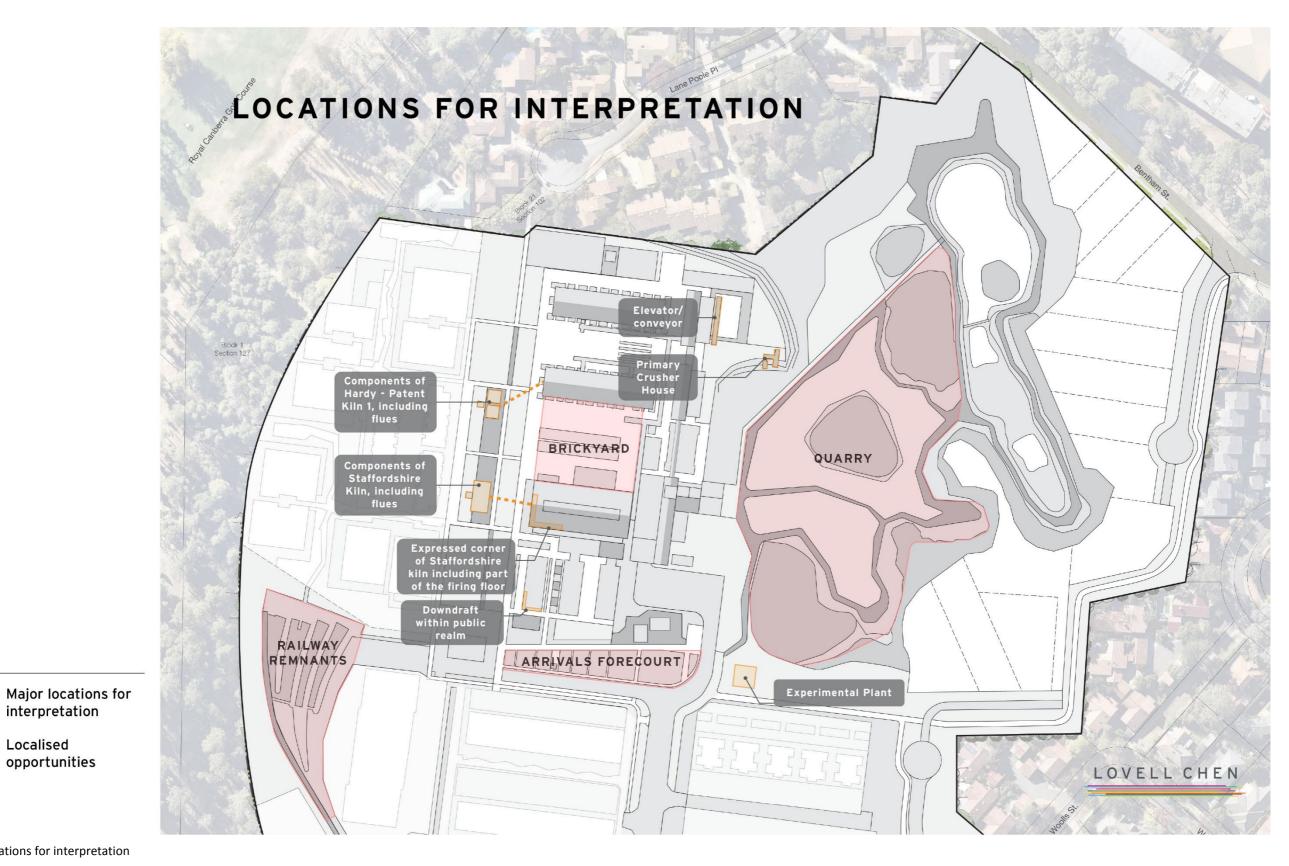


Figure 6 Key themes and stories

6.0 RECOMMENDATIONS

Four primary locations for the delivery of interpretation have been identified, the Arrivals Forecourt, Brickyard, Quarry and Railway Remnants (indicated at Figure 7). Each of the zones has a distinct character, and will perform a particular function within the overall interpretive experience (discussed below). A supplementary sequence of interpretive deliverables is recommended at discrete locations between the four core zones (see Section 6.5).



Locations for interpretation Figure 7

interpretation

Localised opportunities

KEY

6.1 Arrivals forecourt

Character and core objectives

- The Arrivals Forecourt will be the principal point of arrival to the brickyards site, consolidating an historic condition.
- The east-west roadway at the south of the heritage core (adjacent to the Arrivals Forecourt) is a key pedestrian link connecting the railway remnants, the heritage core and the quarry.
- Interpretation in this location should introduce visitors to both the place (orientation/wayfinding) and the core experiences/opportunities within the site (key themes).
- Delivery of the interpretive 'layer' should be integrated with the landscape treatment and wayfinding. The proposed lighting treatment may also be contemplated as a vehicle to communicate stories / interpretive content.
- Existing heritage buildings –the power house and office, downdraft kilns and downdraft kilns stack will be retained and contribute to the character of the Arrivals Forecourt.

Interpretive media

Table 5 Recommendations for interpretive media in the Arrivals Forecourt

Interpretive media Ground plane treatments expressive of core themes: crushed red brick and a stone (or toppings) of a lighter hue, evocative of shale from the quarry An interpretive 'timeline' might also be considered, from 'deep time' (the quarry) to the present

Interpretive media Precedent(s) / benchmarking

Didactic signage installation, possibly including a tactile 3D site model to facilitate orientation

Signage and a model might be integrated within a small-scale enclosure, a dedicated point of orientation to core themes





Interpretive media Lighting projections – the image on the right shows an historic image projected onto the side of the downdraft kiln stack, with crushed red brick at the base

Options

The media included in the table above should be understood as core deliverables. Subject to design resolution, and to the interpretive deliverables through the balance of the site, consideration may also be given to the following:

- Artefacts displayed as interpretive pieces and/or public art
- Furnishings as expressive elements

6.2 Brickyard

Character and core objectives

- The brickyard will be a major public experience and destination, activated throughout the day and evenings with a range of tenancies and activities
- The brickyard is a framed to the north, south and east by retained buildings, creating a powerful and distinctive environment
- The 'visibility' and role of interpretation should recognise the brickyard's capacity to 'speak for itself' and with aspirations for the reactivation of the space

Table 6 Recommendations for interpretive media in the Brickyard

'Walkway gallery': the elevated walkways – also proposed between the Hardy Patent kilns – provide opportunities for the presentation of historic photographs and architectural drawings

Precedent(s) / benchmarking





Signage/markers are recommended attached, or in proximity to, the retained heritage buildings / elements. The content of the signs/markers should be sufficient to address the key questions – such as 'What am I looking at? When was it built? How did it work?'

For kiln structures, consideration may be given to the introduction of QR codes (or equivalent) so that those with a deeper interest can access the information.

Precedent(s) / benchmarking



Use lighting to highlight/reveal details of kiln structures (and firing holes), and celebrate architectural details and materiality



| Interpretive media | Precedent(s) / benchmarking |
|---|-----------------------------|
| | COCKATOO ISLAND |
| Retention, in situ, of plant, infrastructure etc for interpretive purposes (see also Section 6.5.2) | |
| 'Water Story', major interpretive deliverable through the landscape treatment; using water as a metaphor for connectivity between the quarry and brickyard (see Section 2.1.2). There may be a requirement for the Water Story to be supplemented by light-touch signage, to support an understanding of its meaning. | |



Figure 8 Visualisation of the brickyard looking east: note the integration of water features at the rear (east) of the space

Source: MacGregor Coxall SJB

6.3 Railway remnants

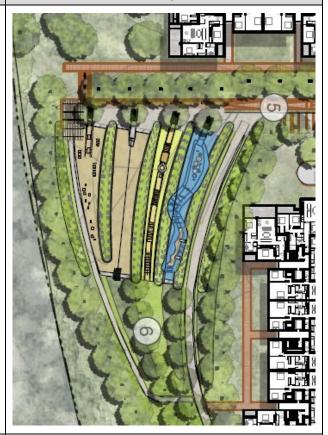
Character and core objectives

- Interpretation in the railway remnants should be overt, to support an understanding of the remnants as a 'heritage' place
- The landscape treatment presents as a major opportunity to reveal the form of the cutting
- Interpretive deliverables will otherwise be almost entirely introduced
- This location has been identified as a preferred location to tell the final part of the process story –transportation of bricks off-site, to facilitate the construction of Canberra.

Table 7 Recommendations for interpretive media in the railway remnants

The landscape treatment will reveal and reinforce the cutting alignment (see graphic at right, indicative only).

Precedent(s) / benchmarking



Signage to explain the history/significance of the remnants, as well as its role in the process story – i.e. point of departure for the major construction sites

Consideration may also be given to a playscape with 'platforms' dedicated to major built landmarks (the Provisional Parliament House, Kingston Power House etc, see Figure 8)



Interpretive media Precedent(s) / benchmarking Opportunities for fitness and/or play equipment expressing the theme of transportation / railways

Options

The media included in the table above may be understood as core deliverables for interpretation of the railways remnants. Consideration may also be given to the following:

- Public art and/or play equipment composed of salvaged brickwork
- Moveable objects/plant presented as public art and/or play

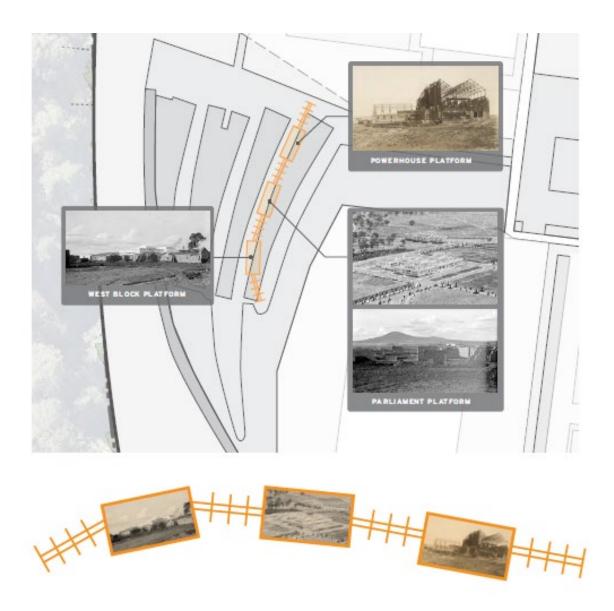


Figure 8 Concept for play equipment with 'platform' dedicated to major construction sites

6.4 Quarry

Character and core objectives

- Large scale public park with a strong/distinctive character
- Interpretation media should be 'light touch', and delivered through landscape treatment, at least in part
- Opportunities that would desirably be explored include but are not limited to: a thematic
 celebration on the quarry as an ancient marine environment, to assist visitors to understand
 the 'deep time' meanings and origins of the environment; and the use of materials from the
 quarry for ground plane treatments within the heritage core.

Table 8 Recommendations for interpretive media in the quarry

Signage: Thematically, signage should include:

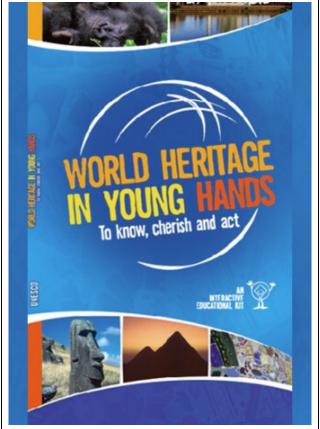
- the quarry as an ancient marine environment; and
- the attributes of the Yarralumla clay and shale for brick production, and processes of brick production (may be appropriate as the subject for an educational brochure, or similar).

Programmes of ecological reconciliation and/or indigenous cultural awareness may also be contemplated.

Locations for signage should correspond with the major nodes of congregation within the park, as conceived in the landscape masterplan (see, for instance, the viewing deck, amphitheatre and picnic areas denoted by figures '17, '18' and '23' in the image below right).

Precedent(s) / benchmarking





Water feature concourse extending from the stormwater pool at the north-east of the park to the brickyard (item '1' in image to right, see also Section 2.1.2). The concourse will need to be supplemented by explanatory signage

Precedent(s) / benchmarking



Experimental plant:

The location of the temporary plant should be acknowledged, as well as its formative role in the site establishment.

Interpretation could take many forms including signage; naming (i.e.

Experimental Drive); or a marker at the entry to the Quarry Park, possibly constructed of salvaged bricks.

6.5 Interpretive deliverables between the core zones

While emphasis has been placed on the four zones described above, there also exist opportunities for the delivery in interpretation at locations in between and around them. Two of the principal opportunities are described below.

6.5.1 Linking the brickyard to the railway remnants

The application of integrated landscape features to communicate aspects of the process of brick production, as well as to reveal the inter-relationships between the quarry, heritage core and railway

remnants, is a major commitment for the public realm. Commentary regarding the water features within the brickyard and the quarry park is provided above.

As a means of 'completing' the journey, and linking the brickyard to the railway remnants, options being considered include the use of brick (ideally salvaged on site) as a 'detail' treatment within the ground plane, and the integration of brick stacks/palettes that would form points of landscape interest/relief and seating opportunities. Resolution of the detail will be managed as part of the landscape plan for the site. Subject to the designed outcome, there may be a requirement for supporting signage.

6.5.2 In situ plant

There are opportunities throughout the site for extant plant to be held in situ and treated as interpretive exhibits. This relates, as discussed above, to the retention of chutes and travelling cranes as locations both within the public realm and within adapted spaces. The Hardy Patent kiln fan house presents as another iteration of this idea.

As compared to the fan house for the Staffordshire kiln (very largely stripped), much of the plant within the Hardy Patent kiln fan house is extant (Figure 9). Through the replacement of sections of the fan house enclosure with glass, there is an opportunity for the plant to revealed and celebrated, supported by explanatory signage (see, for example, Figure 10).





Figure 9 Left: Hardy Patent kiln 1, exterior; Right: Hardy Patent kiln 1, interior



Figure 10 Proposal for partial removal of timber wall to a signal box to 'reveal' the intact gears and mechanisms within

7.0 CONCLUSION

This Interpretation Strategy responds to the requirements of Policy 36 in the endorsed CMP for the Canberra Brickworks (GML, August 2021).

It makes recommendations for integrating, showcasing and celebrating the heritage significance of the brickworks through the identification of core themes and stories. Options for expressing these themes and stories are calibrated to the needs and interests of the anticipated audiences for interpretation. Further, a site-wide approach has been adopted with the overarching objective of ensuring that identity and cultural heritage values of the precinct remain central to its character once works for the reactivation of the precinct are complete.

To achieve a fully integrated outcome it anticipated that the interpretive devices will be delivered – in large part – through the work of Doma's lead architecture and landscape design consultants.