Attachment AH

Conservation Development Strategy

CANBERRA
BRICKWORKS

CONSERVATION DEVELOPMENT STRATEGY

February 2015

Prepared for

LAND DEVELOPMENT AGENCY

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1.0 HISTORIC CONTEXT

1.1 Overview

The Commonwealth Government established the Canberra Brickworks in order to support the development of Canberra as the new Federal Capital. The project was announced in 1910 and work began on the development of the complex in 1913. The complex supplied the bricks for the construction of buildings in Canberra in the early period of the establishment of the capital, including Canberra's major public buildings of the 1920s. Bricks and other specialty lines were produced at the site from this time until the closure of the complex in 1976. Production capacity at the site varied in response to fluctuations in demand for bricks and the Brickworks was expanded in a number of key phases, notably in the 1920s and the 1950s.
Originally steam traction engines were used to transport materials to and from the Brickworks, however these engines which pulled iron-wheeled trailers, were only able to make two round trips per day between the brickworks and Parliament House. In 1923 a narrow gauge railway was constructed to increase the speed of brick delivery, however this line was decommissioned in 1927 prior to the opening of Parliament House. Remnant embankments and cuttings are still evident on site.

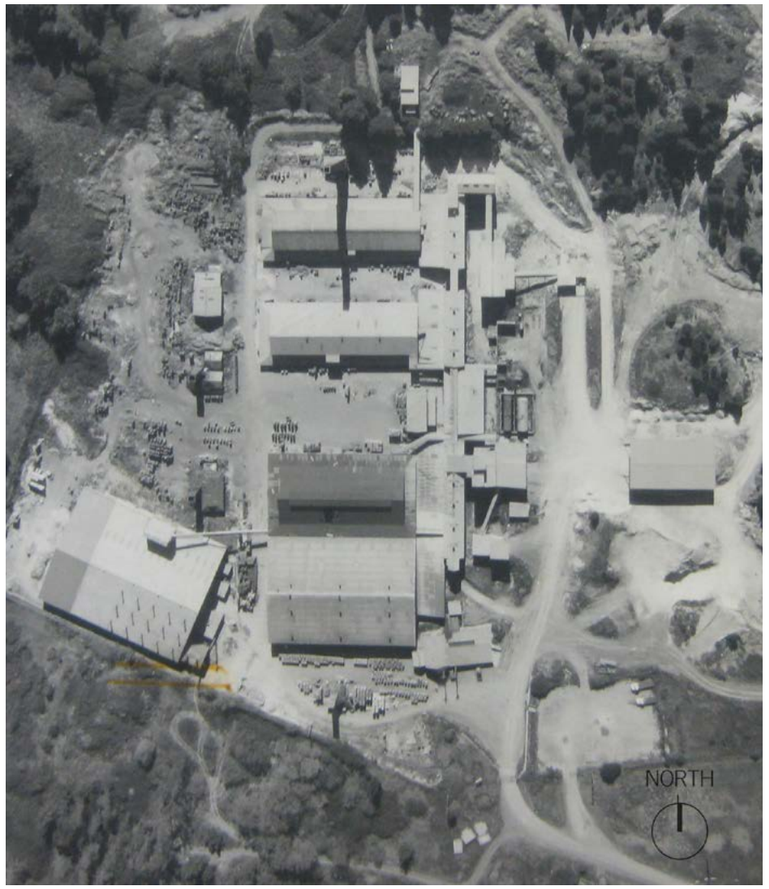
Following closure of the plant in the mid-1970s, the site was adapted for a range of uses (of varying duration) but other than for the subdivision of land and associated residential development on the perimeter of the site, relatively little physical change has occurred since this time. The surviving complex includes brick manufacturing infrastructure including kilns, stacks and ancillary buildings, with a quarry (brickpit) to the east. Currently, part of the complex is occupied by a timber recycling company.

1.2 Development Strategy

The Canberra Brickworks site and separately registered remnant railway embankment is to be included as part of the larger Canberra and Brickworks Environs development project. One of the primary heritage objectives for this site is the establishment of a future use that ensures its physical conservation and the retention of key heritage values in the long term. Within the context of the development strategy the intent is to maintain, conserve and develop the Brickworks for public use. The master plan envisages a link between the two separate registered sites through the establishment of a new integrated precinct that enables an appreciation of the heritage past, while creating a viable future.

The time frame for staging of works to the Brickworks site is related to the development of the surrounding areas and the gradual roll out of the residential estate infrastructure. Access to the site which is currently limited and of low grade will be improved in the first stage by the extension of Denman Drive and Brickworks Road, with further development including active conservation and adaptation of the core heritage elements occurring in the second stage followed by the new Quarry Park which will provide the impetus and access for new activities and uses on the site.

View from the north-east towards the brick processing buildings, c. 1927



Aerial view, at the time of the closure of the Canberra works. , c.1976

The first Hardy patent kiln (left) and the Staffordshire kiln in1928

1.3 Existing Condition

The history and significance of the wider site and the Canberra Brickworks Complex has been researched and assessed by Lovell Chen in the Canberra Brickworks Environs Assessment (2011) and Canberra Brickworks Conservation Management Plan (2010), prepared for the LDA.

Through this process conservation policy objectives were established that covered the potential for future management and uses, including for restoration and reconstruction, demolition, adaptation and site development. It was also recognised that any adaptive reuse proposal for the site which involves the substantial retention and conservation, repair and refurbishment and adaptation of significant fabric so as to maintain the heritage values of the place will involve substantial cost, both up-front and ongoing.

These costs ultimately will be required to be assessed against the positive heritage outcomes and the investment in the cultural capital embodied in the site, but also against an economic return that is generated by a new use or uses.

On this basis and having regard to the assessed significance of the place, the conservation policy for the site recognises that there are two broad approaches that reasonably could be contemplated: whole of site conservation; or partial site conservation. Clearly within these options there is scope for variations in the extent of adaptation of the retained buildings and the level of site development.

It is also acknowledged that the ultimate outcome for the site will be influenced by a number of factors, determined by those responsible for approving works. The scale of the site and nature of the fabric will inevitably require a level of intervention that will change the physical and visual nature of the place. The intention is to find a balanced outcome that meaningfully addresses the heritage while achieving a successful sustainable use.

The buildings on this site are generally in fair to poor condition and some are in a relatively advanced state of decay. Therefore there needs to be a tandem process of establishing a long term future use (which will evolve over time) with the need to make the site safe and halt the acceleration of decay.

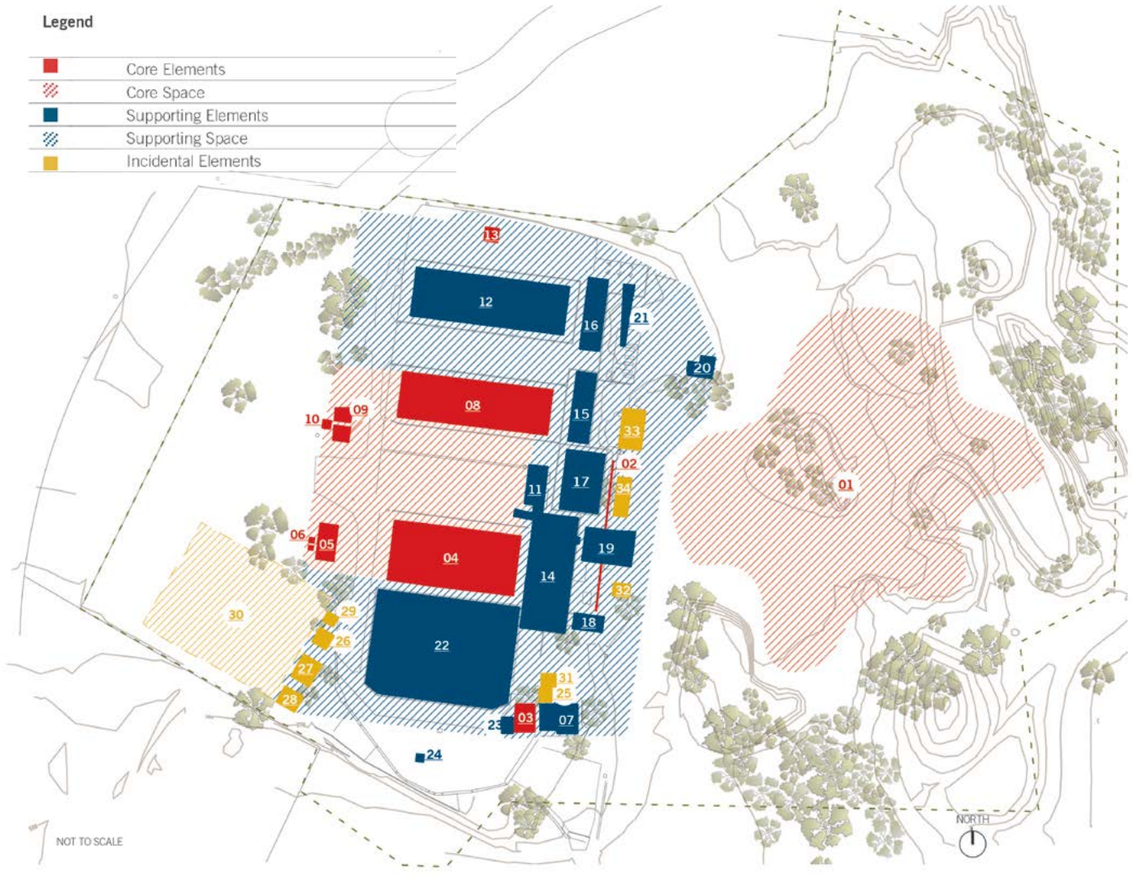
1.4 Conservation policy

The key conservation policies to be considered at this master plan stage are those that go to setting and curtilage; care of significant fabric; extent of fabric to be retained; use and public access; views and vistas; adaptation; site development and new works; site presentation; and access and circulation.

The current master plan strategy acknowledges and supports these policy objectives.

Setting and curtilage:

- sense of discovery upon approach will be retained, including the relationship with Quarry Park
- existing bold orthogonal spatial sequence and order will be retained with any new development beyond the alteration and adaptation of existing structures complementing the reading of the brickwork as a complex of buildings.



Care of significant fabric:

- conservation works to be carried out having regard for the principles of the Australia ICOMOS Burra Charter 1999
- a programme of immediate repair and maintenance works to be undertaken within Stage 1 to conserve significant existing fabric
- Extent of fabric to be retained:
- retention and conservation of 'core' elements
- retention of 'supporting' elements with alteration, adaptation or removal as appropriate to support new uses
- retention, alteration or removal of incidental elements as appropriate to support new uses

Building Number	Element
01	Quarry
02	Concrete retaining wall
03	Power House
04	Staffordshire Kiln (Kiln 1)
05	Fan house for Kiln 1
06	Chimney stack for Kiln1
07	Offices
08	Hardy patent Kiln (Kiln 2)
09	Fan house for Kiln 2
10	Chimney stack for Kiln 2
11	Amenities block
12	Hardy patent Kiln (Kiln 3)
13	Chimney stack for Kiln 3
14	Machine Bay I for Kiln 1
15	Machine Bay II for Kiln 2
16	Machine Bay III for Kiln 3
17	Workshop
18	Small Crusher House (Crusher House
19	Large Crusher House (White pan room / Crusher House II)
20	Primary Crusher House (Crusher Hous
21	Elevator / Conveyor
22	Downdraft Kilns (Kiln 4-6)
23	Downdraft kiln control room
24	Chimney stack for Kilns 4-6
25	Toilet block
26	Amenities block
27	Substation/control room
28	Boiler house
29	Ancillary storage building
30	Remnant of extrusion plant (concrete
31	Ancillary storage building
32	Storage shed
33	Model railway workshop
34	Model railway storage shed

Use and public access:

- enabling appropriate safe public access to Brickworks complex and particularly to Quarry Park
- enabling use of occupiable spaces which are compatible with retention of the significant fabric
- Views and vistas:
- retention of landmark elements (chimneys) that form markers in the local area
- retention of key internal complex views and vistas and linkages between individual building elements and the quarry beyond

Adaptation

- achieve appropriate balance between retention and conservation of fabric and delivery of a long term sustainable use
- maintain ability to understand the brickworks complex as an operating site within the context of redevelopment for different use(s)

Site development and new works:

- maintain legibility of the place as an industrial complex
- maintain strong industrial aesthetic
- maintain quarry area as an open landscape zone
- no new development in original brickyard space between Staffordshire and Hardy Patent Kilns
- new buildings of a scale and nature that relates to the existing building forms
- continue existing patterns of connectedness at all levels across the site

Site presentation:

- maintain the industrial aesthetic and character throughout

Access and circulation:

- maintain the traditional principal approach from Denman Road
- maintain legibility of rail access connection to site
- maintain roadway along west of the kilns and on east between process buildings and quarry

2.0 DEVELOPMENT STAGES

2.1 Stage 1 – Public and Pedestrian Access (years 3-5)

In the initial stage the focus is necessarily on removing hazardous materials, making the buildings weatherproof and addressing the inevitable decay that occurs to unoccupied buildings. It is desirable that the site remains in a safe condition so that continued access by the public is permissible and possible.
In approaching this initial phase of works the following principles apply to all buildings and structures on the site.

1. Preserving and managing fabric

- Ensure all rainwater goods are in operational state
- Ensure storm water system is in operational state
- Remove all invasive vegetation from buildings
- Remove all invasive vermin (rats, pigeons etc) from buildings and secure buildings from vermin incursion
- Secure openings, particularly on weather side of buildings
- Site enclosure to restrict access to the site other than by authorised personnel

2. Make safe from hazards

- Ensure there are no elements that will fall or detach themselves causing danger to personnel on the site or other building fabric
- Address any evident structural issues that will contribute to the deterioration of fabric or pose a safety hazard
- Restrict access to areas that put people at risk
- Remove hazardous materials particularly those which have been damaged or are in such a deteriorated state they prohibit access to the buildings (friable asbestos, flaking lead paint, pigeon excrement etc.)

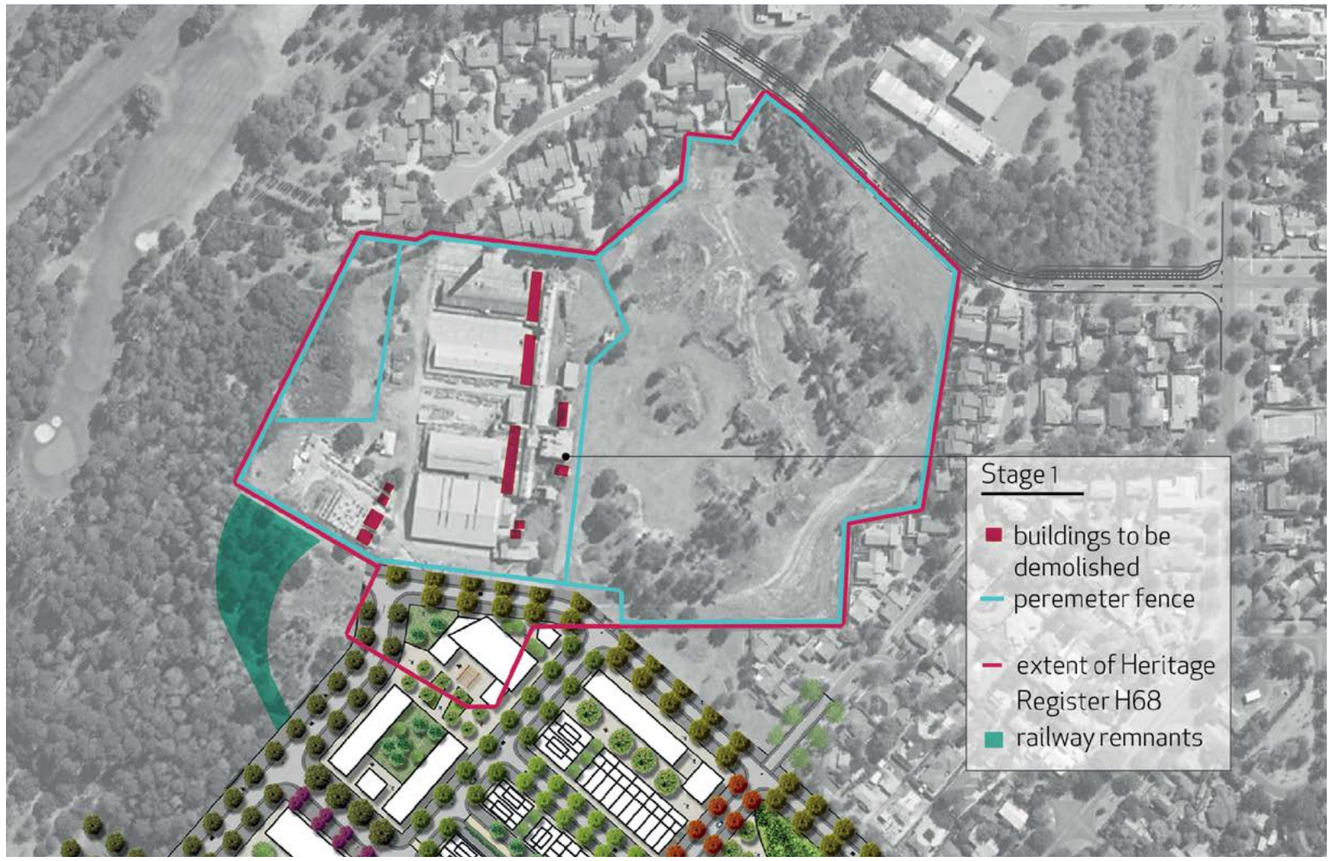
3. Maintain structural integrity

- Make buildings structurally safe addressing deterioration due to wind, rain, gravity or similar forces.

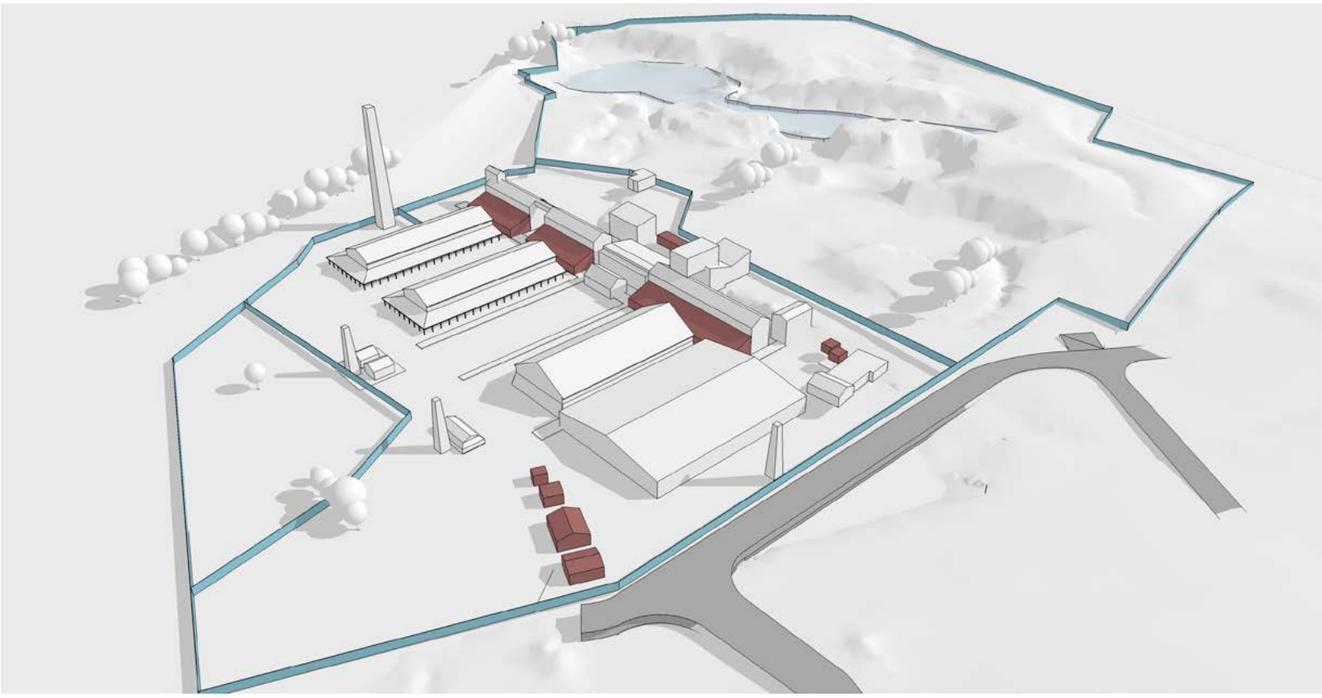
4. Demolition

- Immediate demolition of buildings/structures that are of little or no heritage significance and make little contribution to the understanding of the industrial complex operations.

LDA are committed to undertaking a scope of works across the site that aligns with the principles outlined above.



*Residential built forms in the CB+E master plan are illustrative only and do not correspond to CB+E Staged delivery timeline.



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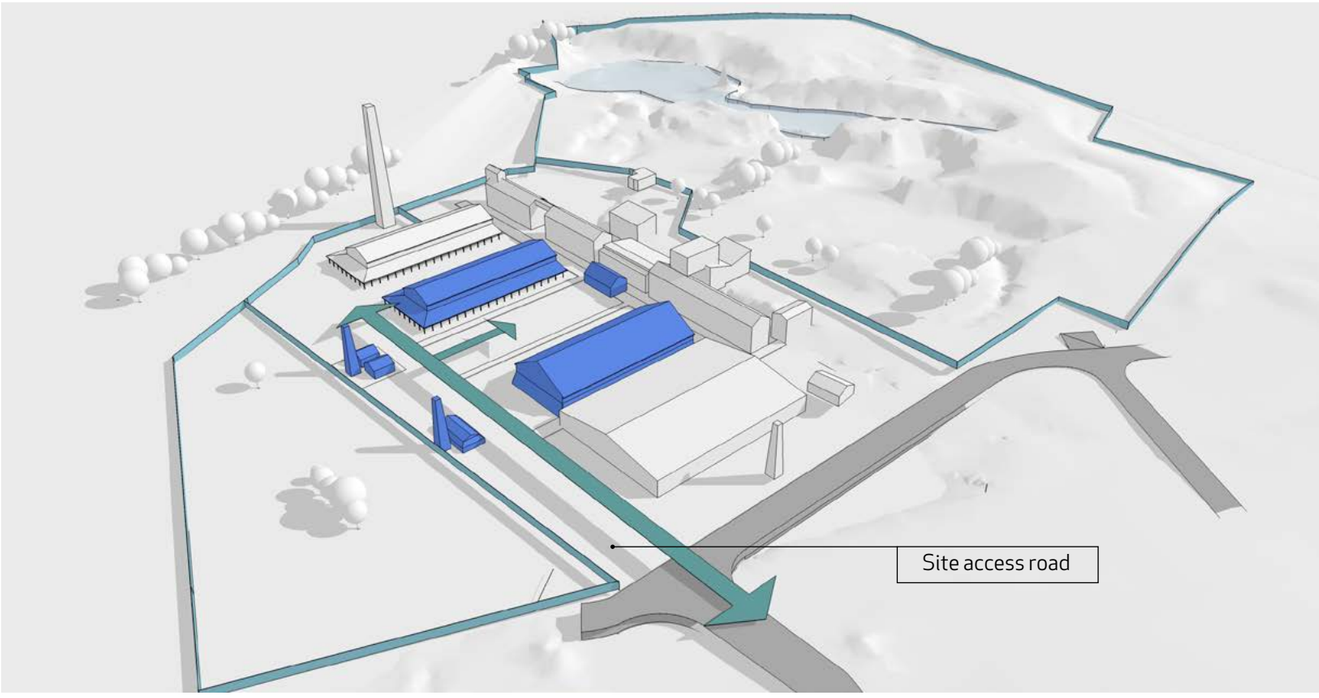


2.2 Stage 2 – Core elements conservation and development (years 6-8)

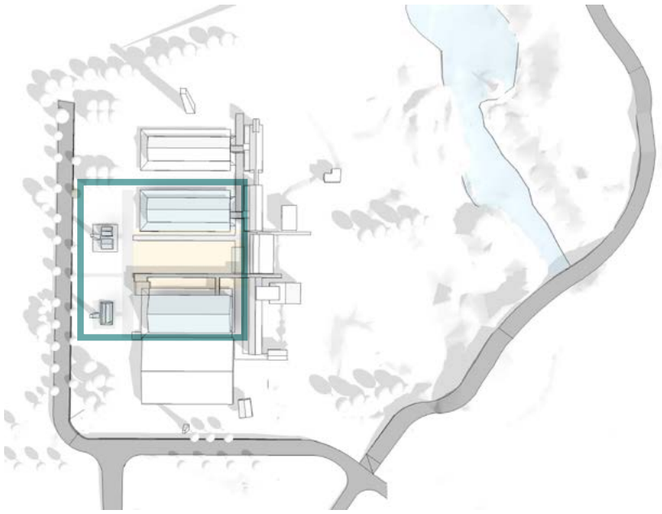
In this initial stage the new formed access roads that will connect the Brickworks site into the new subdivision (Denman Road and Brickworks Road) will be established. This will create a more formal access to the site from the south side and it is envisaged this will act as an impetus for more active use of the site which might include in this early phase pop-up events and safe community access.

As a next step it is proposed to undertake active conservation to the most significant structures on the site, the Staffordshire Kiln (Kiln 1), Fan House and Chimney (1914-15), Hardy Patent Kiln (Kiln 2), Fan House and Chimney (1926 and 1955) and central brickyard. This would enable occupation of the buildings for a range of potential uses including office, studio, and gallery or community space.

Works to the buildings will comprise conservation, reconstruction and adaptation works to bring these structures to a level of fit out and compliance that enables them to be occupied for a range of retail, commercial or public uses. The works will include conservation and reconstruction of the external fabric, provision of compliant access, conservation of existing or new floor, wall and ceiling linings and introduction of basic service infrastructure including power, lights, air conditioning and water.

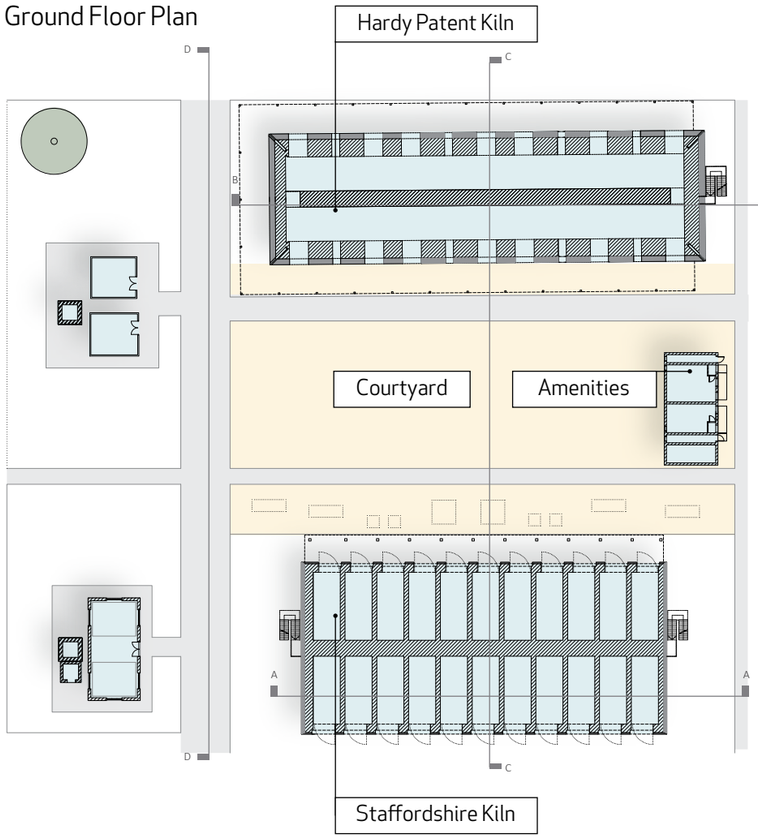
In addition the existing Amenities Block (c. 1955) will be retained and refurbished to provide public facilities and the brick courtyard between the two kilns upgraded as an accessible public space

Staffordshire kiln north elevation c. 1916

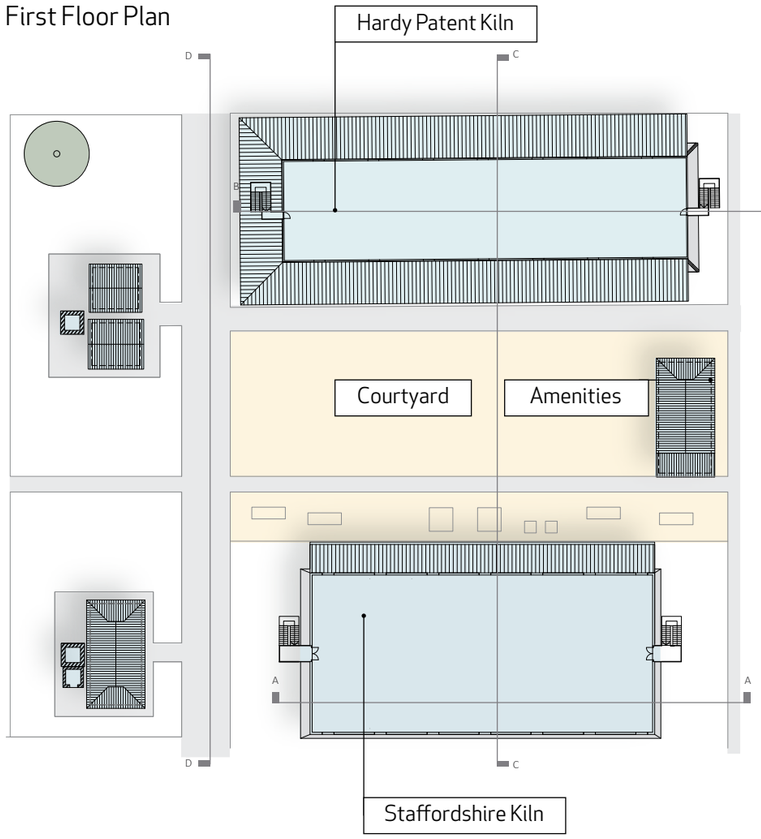


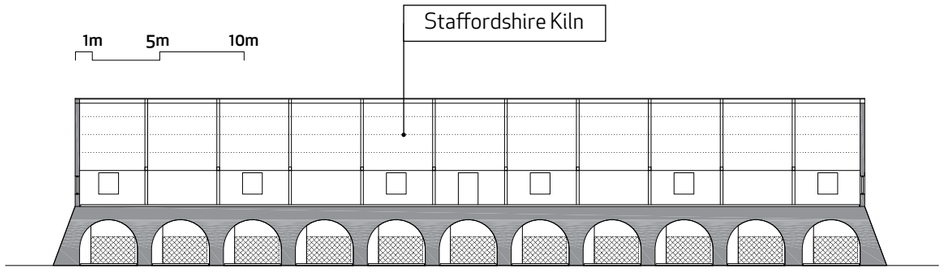
1m 5m 10m

Ground Floor Plan

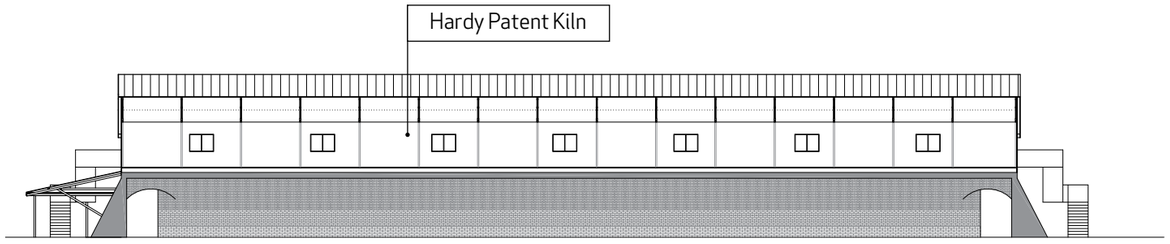


First Floor Plan

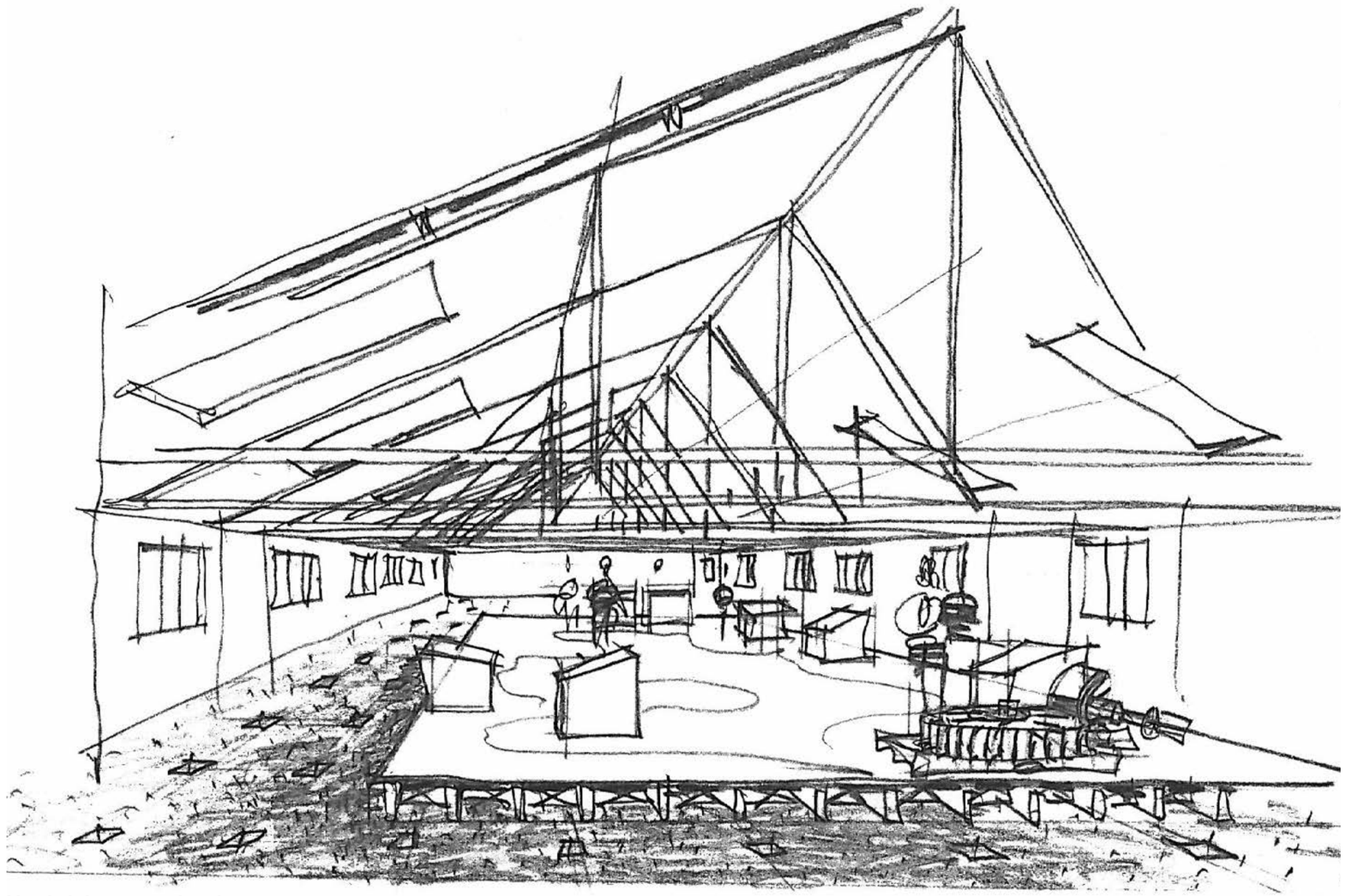




Section A-A



Section B-B



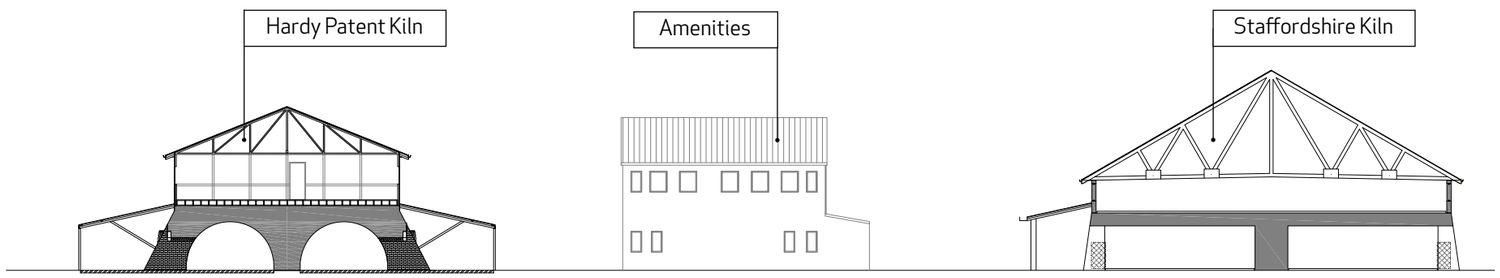
Hardy kiln - upper level interpretation

Accessed by a new pedestrianised roadway between the west end of the kilns and the east side of the fan houses, it is envisaged the central brickyard in a cleaned up and cleared state would provide a central open space which could accommodate pop-up events associated with the use of the Staffordshire and Hardy Patent Kilns and Fan Houses or the development more generally. Interpretation of the railway would be continued through in this location with the insertion of the narrow gauge tracks in their original location on the north and south sides of the Staffordshire Kiln within the paving to visually and physically demonstrate the manner in which the railway terminated at the site.

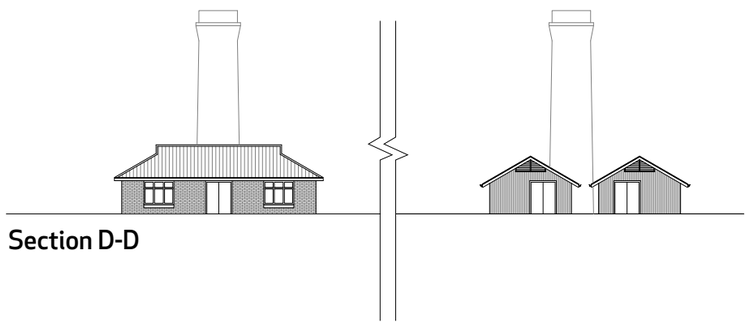
As the Quarry Park development evolves additional access points will occur along the east, west and south edges of the site, although it is proposed the formal "front door" will remain on the south-west end of the site.

Estimated commercial areas

Building	Ground (m2)	Upper (m2)
Staffordshire Kiln	620	850
Hardy Patent Kiln (Kiln 2)	470	620
Fan House (Staffordshire)	70	0
Fan House (Hardy Patent)	70	0
Amenities Block	95	0
	1,325	**1,470**



Section C-C



Section D-D

2.3 Stage 3 – Connecting Heritage Open Spaces (years 9-10)

In this stage the redevelopment of the Quarry as a public park will occur. The linkages with the brickworks site are an important element of this redevelopment as they will provide a further active edge to the Brickworks to the east enabling the public full access to the broader site, completing the reunification of the brick making industrial complex with the source of the essential material.

The Quarry is a core heritage element within the registered site and as such should generally be retained as an open landscape zone. When considering the introduction of new paths and landscape treatments it is important that the most distinctive aspect of the evolved setting which is the degree of concealment and 'removed-ness' from the character of the residential city is retained. The setting is still one of a degree of open unkempt landscape, wooded and plantation areas, and limited visible perimeter form.

New built form should be limited to incidental 'garden' structures other than along the north-south spine at the interface between the quarry and the Brickworks.

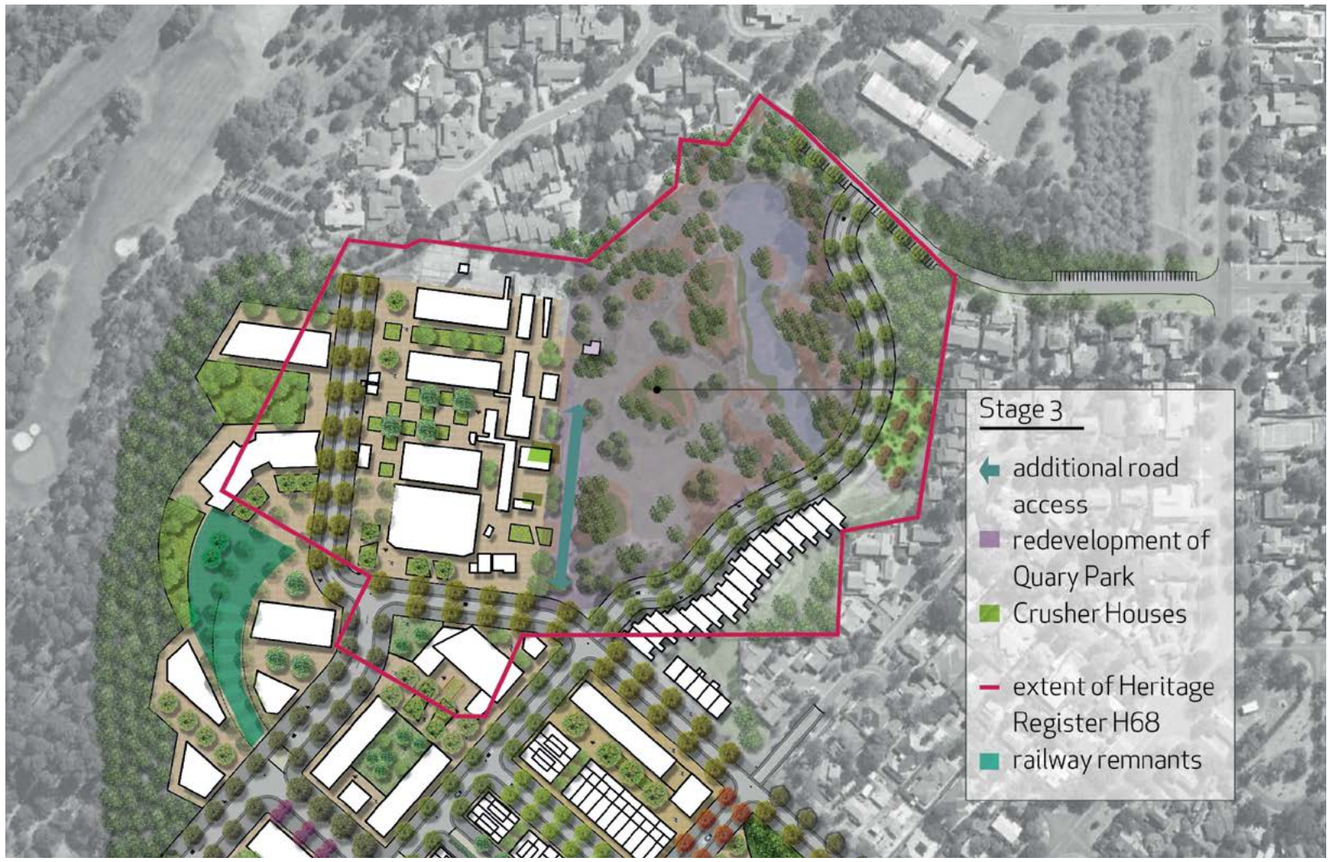
As part of this stage additional road access on the east side of the Brickworks with integrated public car parking will be constructed enabling linkages between the more elevated quarry site with the buildings through insertion of new stair access at the top of the retaining wall in structures such as the Large Crusher House (19) and Small Crusher House (18).

At this point the redevelopment of the north-south spine of buildings adjacent to the park would logically occur either as part of or independently of the Quarry Park development.

Further development opportunities at the Brickworks are related to the existing kilns to the north and south of the Hardy Patent and Staffordshire Kiln. These supporting elements may be adapted for use or demolished to make way for new development associated with the brickworks.

Legend

	Development opportunity
	Former railway tracks
	Crusher Houses
	Main external views
	Road and pedestrian connections to site
	Internal site connections



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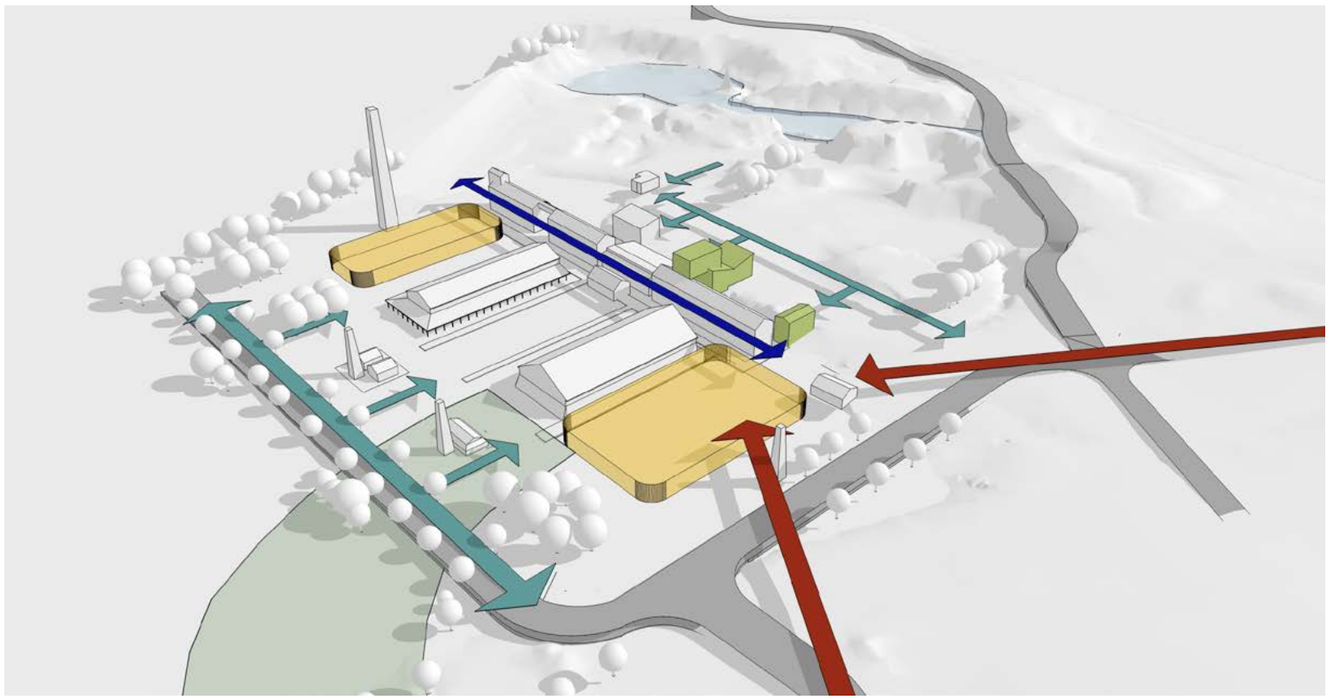

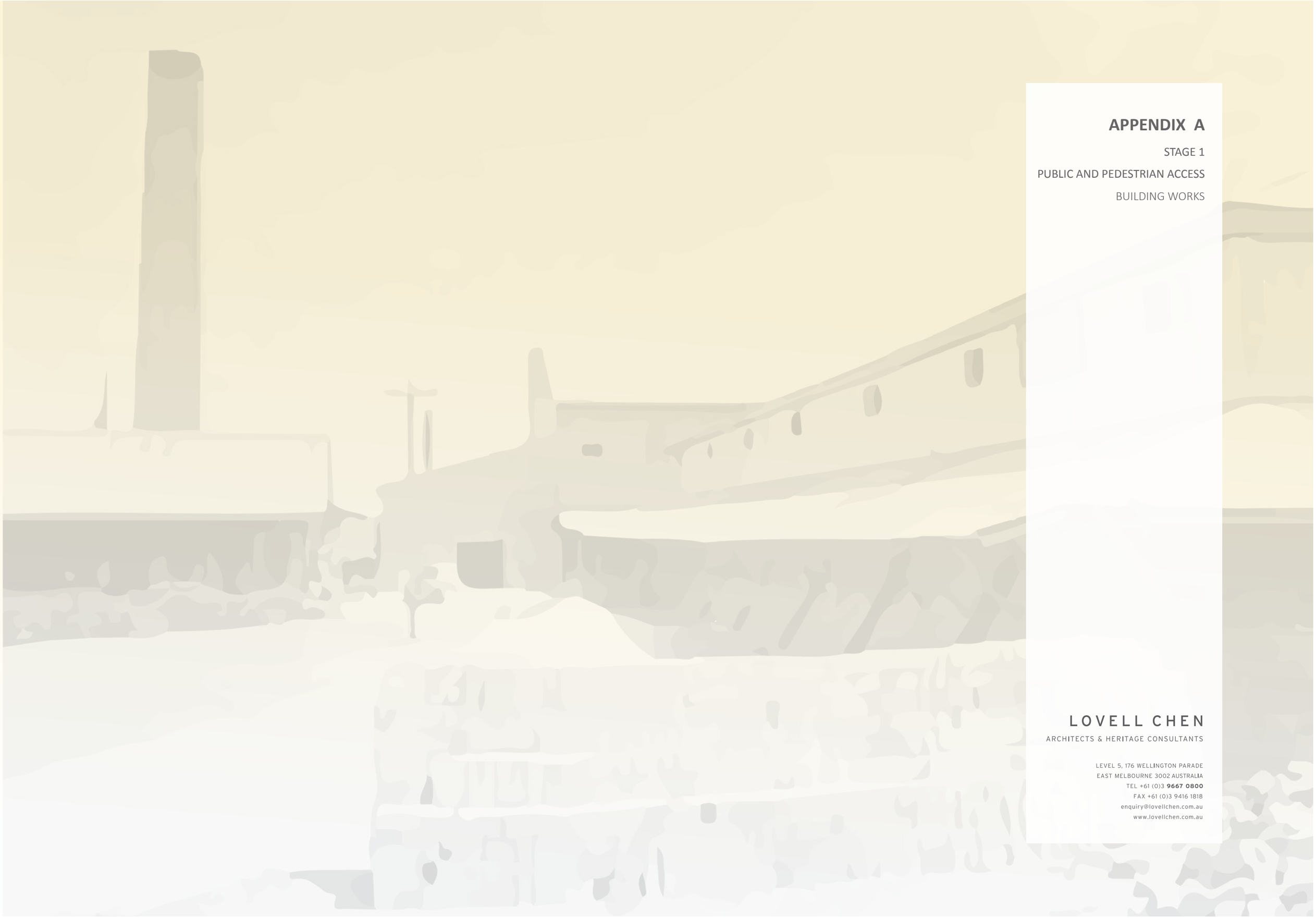

APPENDIX A

STAGE 1

PUBLIC AND PEDESTRIAN ACCESS

BUILDING WORKS

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Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
01	Quarry	Core space	Ensure fencing to perimeter is secure and all existing holes and missing wires made good.		
02	Concrete retaining wall	Core element	Remove all vegetation.	Collapsed brickwork on the upper section of the retaining wall and retained soil should be removed. The tree should also be removed before it becomes too large and collapsed. Earth should be battered at 45 degrees	
03	Power House	Core element	Investigate rainwater goods and make operational ensuring connection to storm water system. Secure openings.	Seal all windows to protect internal elements. Demolish retaining wall. This may also require underpinning of footings or demolition of adjacent small room. Further investigation required once wall has been demolished.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
04	Staffordshire Kiln (Kiln 1)	Core element	Remove non-original skillion roof at west end of building. Rebuild fascias and install new eaves gutter and downpipes to upper level roof on north side. Connect to surface storm water drain system. Large capacity eaves gutters on south side abutting Building 22 discharges into galvanised down pipes. These are bent and distorted at base. Rectify damage to ensure direct discharge into open storm water drain. Remove vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to and from pits. Secure all openings with CGI sheet or marine grade plywood to timber frame. Provide temporary covers to the vent pits located in the floors of the kilns to exclude vermin. Provide compliant stair access at west end.	Walls and roof should be waterproofed to prevent damage to the upper timber and steel structure by the elements. This includes completing brick veneer walls on upper floor and sealing west wall louvres. Masonry entry and archway should be reinforced to allow public access (20 off). All loose debris should be removed as necessary. All other members should be re-secured as required. Reinstate buckled steel angle brace. Seal holes from first floor. Ensure flat to remove trip hazard.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
05	Fan House for Kiln 1	Core element	Rebuild timber fascias, replace gutters and down pipes, connect to site storm water system. Secure all openings with CGI sheeting or marine grade plywood on timber frames. Retain existing window and door joinery. Remove invasive vegetation (blackberry) from roof. Implement pest control measures to remove pigeon infestation.	Remove and reinstate damaged ceilings if required. Seal all windows and doors from the elements. Provide secure handrails around internal pit. Fill sinkholes with suitable fill.	
06	Chimney stack for Kiln 1	Core element	CCap top of chimney to make chimney weather tight. Check lightning protection and rectify/replace if required. Remove invasive tree and vegetation growing in oven.	Provide steel straps around top of chimney stack. Fence off around 'oven' to restrict access.	

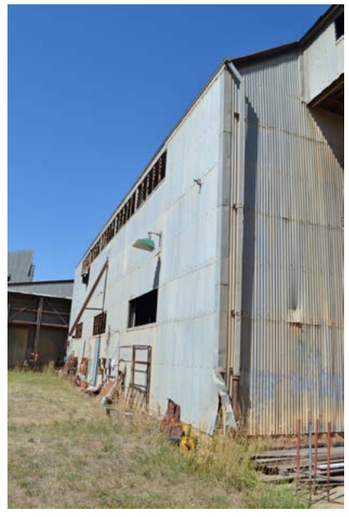
Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
07	Offices	Core element	Investigate rainwater goods and make operational ensuring connection to storm water system. Secure openings. Refix slipped tiles.		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
08	Hardy patent Kiln (Kiln 2)	Core element	Refix rusted and loose CGI roof sheeting. Reinstate fascias, eaves gutters and down pipes to both roof levels and connect to surface storm water drainage system. Remove vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to pits and from pits. Secure all openings both levels with CGI sheeting or marine grade plywood or similar. Secure entry point /ladder access on south side of building	Walls and roof should be waterproofed to prevent damage to the upper timber and steel structure by the elements. Masonry and entry archways should be reinforced to allow public access (16 off). Masonry archways to kilns at ground floor should be strengthened to allow public access (2 off). Steel roof to timber lean-to (north and south) should be reinstated where panels are missing and rotted timbers replaced. Ceiling battens on first floor should be resecured or removed in their entirety. Seal chimney holes from first floor. Ensure flat to remove trip hazard. All timber members to timber walkway between building 4 and 7 should be replaced with new treated timber. Provide new compliant stair access to first floor.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
09	Fan House for Kiln 2	Core element	Refix rusted and loose CGI sheeting to walls. Allow to replace sections of rotted timber framing. Install new eaves gutters and down pipes, connect to storm water system on site. Replace CGI roof sheeting to full extent. Allow to install new battens to full extent. Secure all openings with CGI or marine grade ply. Remove invasive vegetation.	Replace collar ties to each line of rafters. Seal all windows and doors from the elements. Provide secure handrails around the internal pit. Fill sinkholes with suitable fill.	
10	Chimney stack for Kiln 2	Core element	Cap to make weather tight Brick growth to top course, refer Structural Engineer recommendations. Check lightning protection and rectify/replace if required.	Provide steel straps around top of chimney stack.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
11	Amenities Block	Supporting element	Remove all damaged internal linings (assumed to be asbestos cement sheet). Remove all pigeon debris from interior (hazardous substance). Secure all openings with CGI sheeting or marine grade ply (note most window sashes glazing is broken or lost). Install new eaves gutters and fascias and downpipes and connect to storm water system.	Seal all windows and doors to prevent further damage from elements.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
12	Hardy Patent Kiln (Kiln 3)	Supporting element	Eaves gutters generally in poor condition, install new eaves gutters and downpipes. Allow new fascias throughout. Direct DPs into open storm water drain around perimeter. Rectify all loose CGI sheeting to roof and replace cover flashings to barge ends to gable roofs. Timber skillion at ground level largely dismantled, roof sheeting removed and eaves gutters removed. Record (photography/ measured drawings) and continue dismantling to make safe. Secure all openings both levels with CGI sheeting or marine grade plywood or similar to external face. Provide compliant stair on south side in existing location. Remove loose stone debris from roof. Remove vegetation from open storm water drain to perimeter and ensure operational including discharge to pits and from pits.	Walls and roof should be waterproofed to prevent damage to the upper timber and steel structure by the elements. Broken windows should be sealed as required. Masonry archways to kilns should be reinforced. Entry archways should be reinforced (16 off). Masonry archways should be strengthened to south west main entry (1 off). Sheet roof to timber lean-to should be reinstated where panels are missing and rotted rafters replaced. Replace roof truss where fire damaged (approx 20 m span) Seal holes from first floor. Fence and prevent access to timber walkway to north east. Provide new stair access to first floor.	
13	Chimney stack for Kiln 3	Core element	Cap to make weather tight. Check lightning protection and rectify/replace if required. Openings already secured with steel mesh, make secure.	Provide steel plate strap around top of structure to secure brickwork (5 off).	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
14	Machine bay I for Kiln 1	Supporting element	Eaves gutters generally in poor condition, install new eaves gutters and downpipes. Allow new fascias throughout. Direct DPs into open storm water drain around perimeter. Remove vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to pits and from pits.	Removed wall braces should be replaced where they have been removed (4 off). Handrails should be provided to first floor penetrations. Reinstate wall framing and lining to south elevation first floor. Restrict public access to raised walkway above first floor.	
15	Machine bay II for Kiln 2	Supporting element	Retain existing box and eaves gutters. Replace missing down pipes and direct into open storm water drain. Check the box gutters are fully lined and flashed – inspection was not possible from roof level. Secure all openings at ground level including rectification of semi-secured CGI lined gates/panels. Secure all window openings with CGI sheeting or marine grade plywood sheeting or similar. Note all louvre windows glazing smashed/removed. Cover openings in floor of upper levels. Remove vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to pits		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
16	Machine bay III for Kiln 3	Supporting element	Retain existing box and eaves gutters. Replace missing down pipes and direct into open storm water drain. Check the box gutters are fully lined and flashed. Secure all openings at ground level including rectification of semi-secured CGI lined gates/panels. Secure openings with CGI sheeting or marine grade plywood sheeting or similar. Note all louvre windows glazing smashed/removed. Cover and secure openings in floor of upper levels. Remove invasive vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to and from pits.	Repair trusses (2 off). Restrict access to public to timber deck above first floor. New stairway access should be provided to the first floor slab through the existing stairway voids (2 off). Handrails should be installed around the other first floor penetrations. Walls and roof should be waterproofed to prevent damage to the upper timber and steel structure by the elements. Broken windows should be sealed as required. Before waterproofing rotted timber purlins should be replaced with new where damaged. Reinstate wall framing to north elevation and lining to north elevations. Demolish timber deck and remove access to north upper deck. Replace missing wall braces as required (2 off). Treat spalled concrete and reinforcement to underside of floor slab.	
17	Workshop	Supporting element	Install new fascias, eaves gutters and down pipes. Connect to storm water system. Secure openings with CGI sheeting or marine grade plywood sheeting or similar. Note all louvre windows glazing smashed/removed to east side. Remove invasive vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to and from pits	Seal windows to prevent further damage. Restrict access to timber walkway.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
18	Small crusher house (Crusher House 1)	Supporting element	This building is unroofed to lower section. No change. Upper section that is roofed retain and ensure connection of existing eaves gutters via down pipes to storm water system Remove all invasive vegetation. Remove vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to and from pits. Remove all equipment and debris that is not associated with the brickworks.	Remove loose and damaged timber elements. Restrict access to public.	
19	Large Crusher House (White pan room/ Crusher House II)	Supporting element	Remove all equipment and debris that is not associated with the brickworks. Retain existing roof, allow refixing loose CGI sheeting and ensuring connection of existing eaves gutters via down pipes to storm water system. Remove invasive vegetation and debris from open storm water drain to perimeter and ensure operational including discharge to and from pits. Remove invasive vegetation. Fence off all levels of building to perimeter to restrict access/entry.	Wall braces should be replaced where they have been removed (3 off). Remove debris from floor and higher levels. Reinstate damaged and removed CGI wall and roof sheeting. Provide fencing around the base of the building to prevent public access.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
20	Primary Crusher house (Crusher House III)	Supporting element	Reinstate roofing (structure and CGI sheeting) to upper platform. Replace missing eaves gutters to central section. Fence off structure to prevent access/entry.		
21	Elevator/Conveyor	Supporting element	Fence base of conveyor to remove access.	Clear off any fallen debris and fence off from public access.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
22	Downdraft Kilns (Kiln 4-5)	Supporting element	Remove loose stone debris from roof. Rectify damaged galvanised down pipes at base where damaged by traffic to north and south. Remove invasive vegetation from open storm water drain to perimeter and ensure operational including discharge to pits.	Reinstate welds/connections where they have been damaged. Install mesh over brickwork where currently loose to prevent falling debris. Reinstate missing wall braces to match existing. Damaged portal columns should be straightened to original condition.	
23	Downdraft kiln control room	Supporting element	Remove/poison grub out all invasive vegetation (blackberry). Rebuild retaining wall to west side – Refer notes retaining wall in Building #03 Confirm existing storm water system is operational. Secure all openings with CGI steel sheet or marine grade plywood.		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
24	Chimney stack for Kilns 4-	Supporting element	Check lightning protection and rectify/re-place if required. Cap top of chimney to make weather tight. Cracked brickwork to top courses (outward leaning). Secure all openings in face of chimney with CGI Steel sheet or mesh gates. Remove invasive vegetation.		
25	Toilet block	Incidental element	Demolish and clear site.		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
26	Amenities block	Incidental element	Demolish and clear site.		
27	Substation/ control room	Incidental element	Demolish and clear site.		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
28	Boiler House	Incidental element	Demolish		
29	Ancillary storage building	Incidental element	Demolish and clear site		

Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
30	Remnant of Extrusion plant (concrete pad)	Incidental element	Demolish		
31	Ancillary storage building	Incidental element	Demolish		
32	Storage shed	Incidental element	Demolish		

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Building #	Building Name	Significance as identified in the 2010 CMP review	Make Safe - architectural	Make Safe - structural	Photo
33	Model railway workshop	Incidental element	Install new eaves gutters (allow replacement of fascias) and new downpipes. Connect into storm water system. Secure all openings with CGI sheet or marine grade plywood.	Possible underpinning may be required due to the demolition of the adjacent retaining wall. Collapsed brickwork on the upper section of the retaining wall and retained soil should be removed. The tree should also be removed before it collapses. Earth should be battered at 45 degrees away from the top of the wall. The adjacent buildings (33 and 34) should be monitored during the demolition. Building 33 should be underpinned during the wall removal.	
34	Model railway storage shed	Incidental element	Demolish		

APPENDIX B

STAGE 2

CORE ELEMENTS CONSERVATION

AND DEVELOPMENT

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Building #	Building Name	Significance as identified in the 2010 CMP review	Conservation and adaptation works	Photo
04	Staffordshire Kiln (Kiln 1)	Core element	• removal of the skillion roofed infill at the east end of the kiln; • conservation and reconstruction of the skillion roofed timber-framed verandah to the north side to match original detail (reinstatement to the south side requires the demolition of Building 22); • introduction of 2 new complaint access stairs at the east and west end; • reconstruction of original window openings to the north and south elevations at first floor with timber-framed windows (7 each side); • conservation of louvered windows at the west end and external galvanised sheet lining; • construction of new raised floor over original firing floor with sections left unfloored to enable viewing and interpretation; • construction of internal linings over the non original brick veneer to achieve high level of insulation leaving the roof trusses exposed; • lifting of the existing galvanised steel sheet roof to install insulation and services and reinstatement of the galvanised roof; • retention of kiln chambers for use associated with brickyard to the north (market or similar) leaving the openings exposed; • reticulation of new power, data, lighting; • reticulation of domestic cold and hot water; • new heating system. The adaptation will reintroduce the original window openings to the first floor with the internal space maintained as a clear span open space.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Conservation and adaptation works	Photo
05	Fan House for Kiln 1	Core element	Both the Fan Houses and Chimney associated with the kilns are to be similarly conserved and adapted for use as studio or cafe facility coupled with providing an interpretative understanding of the function of the Brickworks complex.	
06	Chimney stack for Kiln 1	Core element	• conservation of brick chimney • conservation and refurbishment of original timber-framed windows including new high performance glazing; • reconstruction of original paired timber entry doors; • construction of new raised timber floor to full extent with openings in floor for interpretation of fan plant and ducts retained below ; • conservation and refurbishment of original timber lined ceiling; • cleaning to existing internal brick walls; • reticulation of new power, data, lighting; • reticulation of domestic cold and hot water; • new heating system; • new external paving to perimeter of the building to provide access.	
08	Hardy patent Kiln (Kiln 2)		• removal of the skillion roofed infill at the east end of the kiln; • conservation of the steel and timber framed skillion verandah to the north, south and west side to match original detail; • introduction of 2 new complaint access stairs at the east and west end; • conservation of original steel-framed windows including new high performance glazing; • construction of new raised floor over original firing floor with sections left unfloored to enable viewing and interpretation; • raising of portal frame structure to achieve compliant height (2400mm) below bottom chord of truss; • construction of new internal linings and insulation to steel and stud-framed walls, retaining original corrugated galvanised sheet to exterior leaving the roof trusses exposed; • lifting of the existing galvanised steel sheet roof to install insulation and services and reinstatement of the galvanised roof; • retention of kiln chambers for use associated with brickyard to the north (market or similar) leaving the openings exposed; • reticulation of new power, data, lighting; • reticulation of domestic cold and hot water; • new heating system.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Conservation and adaptation works	Photo
09 10	Fan House for Kiln 2 Chumney stack for Kiln 2	Core element Core element	• conservation of brick chimney • conservation and refurbishment of original timber-framed windows including new high performance glazing; • new paired timber entry doors to both fan houses; • construction of new raised timber floor to both structures constructed around remnant plant; • new insulated wall and ceiling linings constructed to internal face of timber wall and roof framing; • conservation of retained plant including fan ducts; • reticulation of new power, data, lighting; • reticulation of domestic cold and hot water; • new heating system; • new external paving to perimeter of the building to provide access.	
11	Amenities Block	Supporting Element	The Amenities Block would include a complete refurbishment of the interior including new linings, fittings and fixtures and finishes over the original painted masonry internal walls. In addition all the windows would be refurbished, including reglazing with high performance glass and made operable.	

Building #	Building Name	Significance as identified in the 2010 CMP review	Conservation and adaptation works	Photo
	Courtyard		Accessed by a new pedestrianised roadway between the west end of the kilns and the east side of the fan houses, it is envisaged the central brickyard in a cleaned up and cleared state would provide a central open space which could accommodate pop-up events associated with the use of the Staffordshire and Hardy Patent Kilns and Fan Houses or the development more generally. Interpretation of the railway would be continued through in this location with the insertion of the narrow gauge tracks in their original location on the north and south sides of the Staffordshire Kiln within the paving to visually and physically demonstrate the manner in which the railway terminated at the site. As the Quarry Park development evolves additional access points will occur along the east, west and south edges of the site, although it is proposed the formal "front door" will remain on the south-west end of the site.