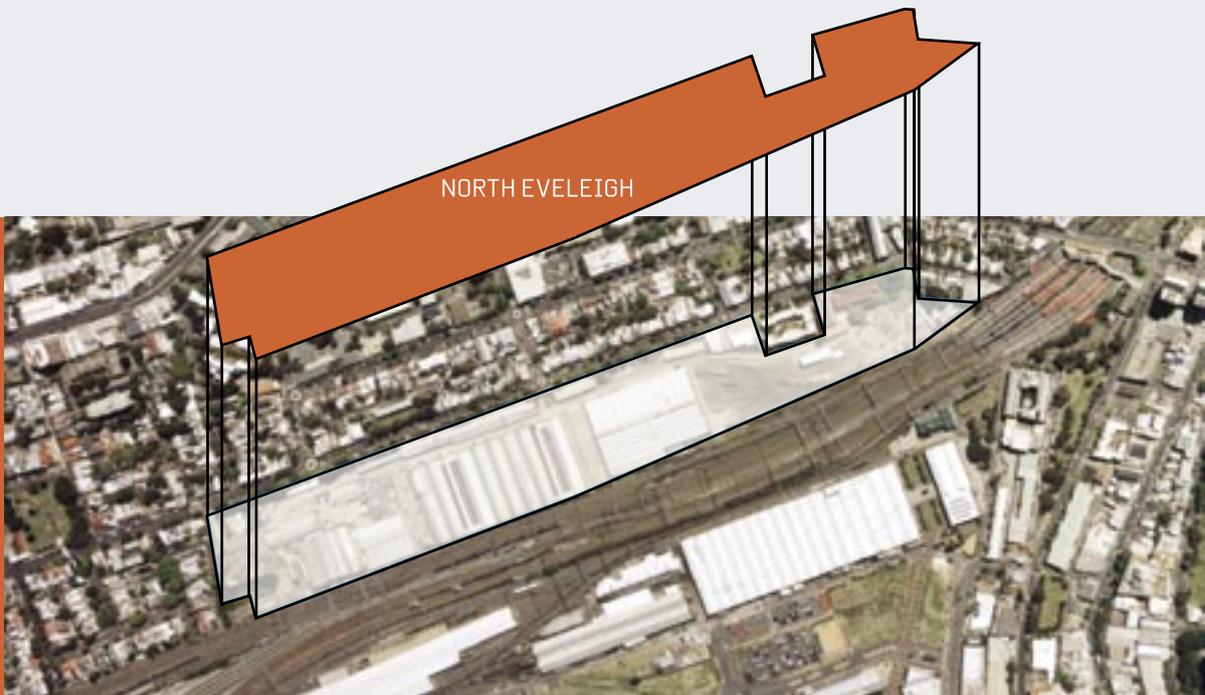


NORTH EVELEIGH CONCEPT PLAN

Part 3A Major Project Application
Preliminary Environmental Assessment



Submitted to the Department of Planning
Prepared by Redfern-Waterloo Authority

January 2008



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Executive Summary

The Redfern-Waterloo Authority is seeking approval from the Minister for Planning to lodge a Concept Plan for the redevelopment of North Eveleigh, formerly known as the Eveleigh Carriage Workshops. This Preliminary Environmental Assessment Report is a precursor to the Environmental Assessment Report which will be lodged with the Concept Plan Application. The Concept Plan will seek approval for: the achievement of a floor space equivalent to 185,221 sq metres for the whole site, maximum building heights, street and building layout, associated road works and building envelopes in accordance with a preferred design concept.

In 2005 the NSW Government established the Redfern-Waterloo Authority to facilitate the renewal and revitalisation of the Redfern –Waterloo Operational Area comprising the suburbs of Redfern, Waterloo, Darlington and Eveleigh. Eight strategic sites within the Operational Area were identified as state significant and a new planning framework was proposed under the Redfern –Waterloo Built Environment Plan (Stage 1) to guide redevelopment and investment to create jobs, housing, public infrastructure and community facilities. The BEP (Stage One) was the subject of extensive community consultation and was endorsed by Cabinet. Issues raised through consultation are reflected in its final form. *State Environmental Planning Policy (Major Projects)* gives statutory effect to the planning and urban design controls outlined in the BEP (Stage One).

Identified as one of the key strategic sites in the *SEPP (Major Projects)* North Eveleigh is listed as a State significant site in Schedule 3, Part 5 of *State Environmental Planning Policy (Major Projects) 2005*.

The North Eveleigh site comprises around 10 hectares of disused government land located within 3 kms of the Sydney CBD and in very close proximity to Redfern Railway Station- the 10th busiest station in the Sydney Metropolitan Network. Formerly known as the Eveleigh Carriage Workshops the North Eveleigh site functioned as a carriage workshop for almost 100 years and was integral to the development of the surrounding suburbs. In 1989 railway operations ceased and since that time the site has been used for the storage of railway carriages, machinery and a range of moveable items. North Eveleigh is owned by RailCorp and is surplus to their requirements. All RailCorp's significant moveable heritage is intended to be relocated to its proposed Rail Heritage Centre at Thirlmere.

The \$40 million investment by the NSW Government in 2006 on the redevelopment of the Carriageworks Building in North Eveleigh as a major Arts Facility heralded the renewal of the North Eveleigh site and marked a significant change from its traditional industrial base to a cultural/arts mixed use.

This Preliminary Environmental Assessment Report proposes a preferred design concept for the entire North Eveleigh site which will form the basis of a subsequent Concept Plan Application. The preferred concept builds on the ideas, planning and urban design framework outlined in the Built Environment Plan.

It seeks to provide an integrated design solution which responds to metropolitan planning objectives, supports and strengthens the Redfern Town Centre, is compatible with surrounding development, and creates a synergy with the

Australian Technology Park. For 100 years the Eveleigh Railway Yards provided a vital source of employment and was integral to the sustainability of the Redfern–Waterloo community. Redevelopment offers the opportunity to enliven the site after years of demise and reintegrate it back into the community.

The urban design logic upon which the Concept Plan is based aims to create a coherent and legible framework for the development of the site that consists of a pattern of streets and blocks. The alignment and visual continuity of the neighbourhood streets through the site has been maintained with the creation of a series of north-south streets. The existing heritage buildings have been used to establish the alignment of east west streets. The combination of the two street patterns establishes a framework of traditional streets and blocks in a configuration that responds to both the neighbourhood streets and heritage buildings on the site.

Key elements of the preferred concept design include:

- A high quality and vibrant residential, cultural, business precinct with a strong sense of place and distinct identity.
- Development which responds to the character of the surrounding residential, railway and high technology/business park uses.
- Provision for a network of public open space that responds to the character of the site, heritage buildings and spaces.
- Respect for the heritage character and values of the site and retention/adaptive reuse of heritage items identified in *State Environmental Planning Policy (Major Projects)* as well as certain items of historical interest.
- Building typologies which reinforce a precinct with a distinct character and typology.
- Provision for a range of dwelling types and flexible commercial/educational uses.
- Legible access to and through the site, an interconnected street network and a high reliance on public transport.
- The attainment of sustainable development principles through building design, maximum use of public transport, the introduction of a range of initiatives for the conservation of water and energy, provision for community facilities and affordable housing.

The redevelopment of North Eveleigh will be a major catalyst for the long term revitalisation of the Redfern –Waterloo Operational Area and complements other significant initiatives which have been undertaken by the Authority.

1. Introduction

This Preliminary Environmental Assessment has been prepared by the Redfern-Waterloo Authority (RWA) to enable the Director-General to prepare environmental assessment requirements to inform the preparation of the Environmental Assessment for the redevelopment of North Eveleigh.

Clause 5, Part 5 of Schedule 3 of the *State Environmental Planning Policy (Major Projects) 2005 (SEPP Major Projects)* provides that development with a capital investment value of more than \$5 million on land within the Redfern-Waterloo Authority Sites is a Part 3A Project under the *Environmental Planning and Assessment Act, 1979 (EP&A Act)*.

The development is considered to be a major project under Part 3A of the EP&A Act as the:

- North Eveleigh site is included within the Redfern-Waterloo Authority Sites identified in Map 3, Part 5 of Schedule 3 of the *SEPP Major Projects* (refer to [Figure 1](#)); and
- capital investment value of the proposal is estimated to be \$466 million.

The RWA is seeking confirmation from the Minister for Planning that the proposed development is a project under Part 3A of the EP&A Act.

Should the Minister confirm that the development is a Part 3A Project, the RWA requests that:

- the Minister authorise the submission of a Concept Plan Application for the North Eveleigh redevelopment; and
- the Director General issue environmental assessment requirements (EAR) for the preparation of the Environmental Assessment for submission with the Concept Plan Application.

This report provides an overview of the proposed concept for the site and identifies potential key issues to assist in the formulation of the Director General Requirements. These requirements will be addressed in the Concept Plan Application and accompanying Environmental Assessment Report.

The design concept for North Eveleigh submitted with this application proposes an integrated solution for the whole site and provides for a mix of residential, commercial, retail and cultural uses.

The design concept will enable the achievement of design excellence in accordance with Clause 22, Part 5, Schedule 3 of *State Environmental Planning Policy (Major Projects)*.

The proposal is consistent with the proposed land use and design concept outlined in the *Redfern-Waterloo Built Environment Plan (Stage One)*.

State Environmental Planning Policy (Major Projects) nominates maximum permitted floor space ratios and heights within the site. The proposal complies with the maximum floor space area permitted for the site under *State Environmental Planning Policy (Major Projects)*. In some instances it has been necessary to exceed the maximum permitted heights through redistribution across the site in order to achieve better urban design and planning outcomes, respond to constraints introduced by the newly proposed rail dive, preserve heritage items and items of historic interest and to deliver quality publicly accessible and private open space. Reasons for variations are provided in this Report and will be fully explained in the Environmental Assessment Report which will accompany the Concept Plan Application.

The RWA seeks the Ministers approval to exceed the height restriction imposed under the "Redfern-Waterloo Authority" height map in an approval for a concept plan for the proposed development in accordance with Clause 21 (3) of the *State Environmental Planning Policy (Major Projects)*.

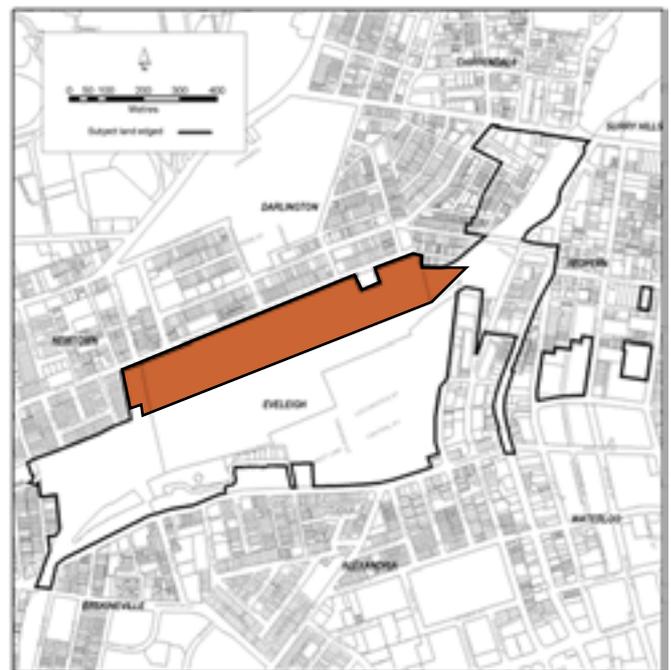


Figure 1: Redfern-Waterloo Authority State Significant Sites

The content of this report is outlined below:

- [Section 2](#) provides a description of the site;
- [Section 3](#) provides an analysis of the site and the surrounding context;
- [Section 4](#) details the relevant planning instruments and policies;
- [Section 5](#) identifies the key environmental issues associated with the development and which will require further resolution as the design is developed;
- [Section 6](#) details the preferred design context; and
- [Section 7](#) identifies the government authorities to be further consulted.

This report is supported by preliminary assessments undertaken by the specialist consultant team, which are included in the Appendices.

2. The Site and Locality

2.1 Metropolitan and Regional Context

The North Eveleigh site is strategically located to the south of the Sydney Central Business District (CBD), about 3 kilometres from the Sydney Town Hall and only 1 and half kilometres from the busiest station in the Sydney rail network, Central Station.

To the south-west of the site are Sydney's economic gateways, Port Botany and Sydney Airport. Under the *NSW Government's Metropolitan Strategy* released in 2005, the Redfern-Waterloo Area is designated as part of the Sydney CBD to Sydney Airport economic corridor and the broader global corridor of North Sydney to the Airport. The corridor contains commercial, educational, cultural and retail activities critical to the Sydney metropolitan economy.

This sites close proximity to the Sydney CBD reinforces the emergence of a major employment and residential centre in the Redfern area located in close proximity to Sydney's national and international businesses, and key health, education and cultural and educational faculties. In addition, the redevelopment of North Eveleigh will enhance the NSW Government's vision of facilitating a research and innovation zone on the western edge of the Sydney CBD stretching from the Australian Technology Park to the University of Sydney and the University of Technology. *Figure 2* illustrates the important strategic position of this site.

The redevelopment of this key site provides for increased jobs and housing in close proximity to existing transport infrastructure, as well as existing employment nodes and general services. The *Urban Transport Statement* released in November 2006 indicates the NSW Government's commitment to upgrading Redfern Railway Station to better meet the needs of future populations expected in the Redfern-Waterloo area.

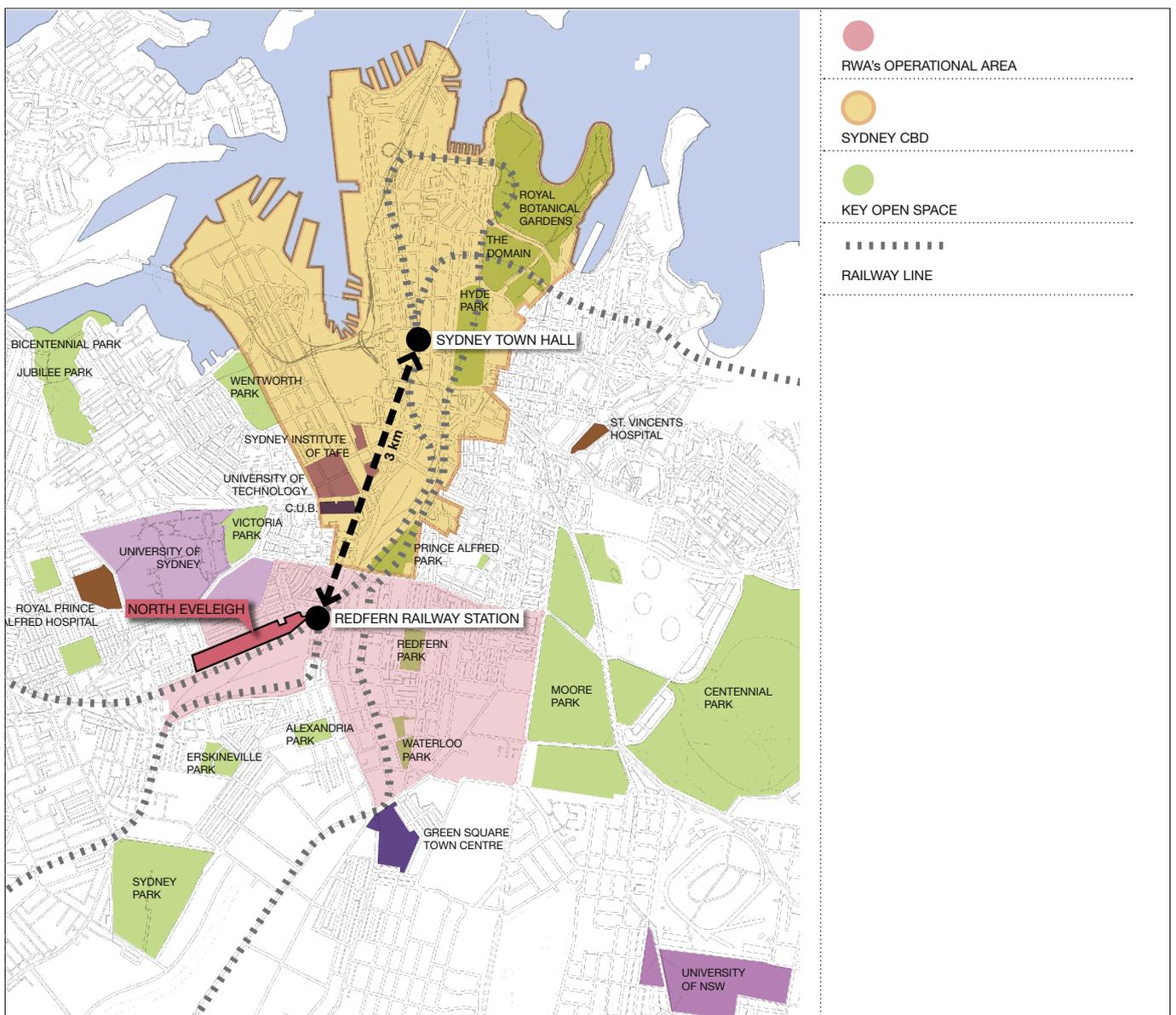


Figure 2: Strategic Location

2.2 Local Context

North Eveleigh is located adjacent to Redfern Railway Station at its eastern extremity and Macdonaldtown Station to the west. It is located adjacent to the suburbs of Darlington, Macdonaldtown, Redfern and Chippendale. The site is also in close proximity to the busy Newtown area and the proposed development of the former Carlton United Brewery site.

The site is less than a 100 metres from the University of Sydney, in close proximity to the Australian Technology Park (south of the railway corridor), and Redfern Town Centre. In addition, the site is in close proximity to public transport such as Redfern Station and significant bus routes which service the area. The key arterial roads of City Road, and Cleveland, Regent and Gibbons Streets are in close proximity to the site allowing for good road connections to/from the site to the wider metropolitan road network.

The site houses the CarriageWorks, a contemporary performance space which provides a significant cultural asset to the area. The adaptive reuse of the Blacksmiths' Shop for markets and arts space in 2008 will reinforce this cultural precinct.

Currently the North Eveleigh site is physically disconnected from surrounding residential development, employment activity at the ATP and public transport by a grade separation, the impact of the main western corridor and limited connections. The redevelopment of the North Eveleigh site and associated infrastructure such as bridges over the rail corridor will provide improved connections to the key existing and future assets in Redfern-Waterloo.

The existing urban form of the surrounding suburbs of Darlington, Macdonaldtown and Redfern is characterised by residential, railway, educational, cultural, retail and commercial development. Residential development directly opposite the site on Wilson Street is predominantly two-three storey terraces, with greater land use mix and building heights along Abercrombie Street towards City Road. *Figure 3* illustrates the local context.

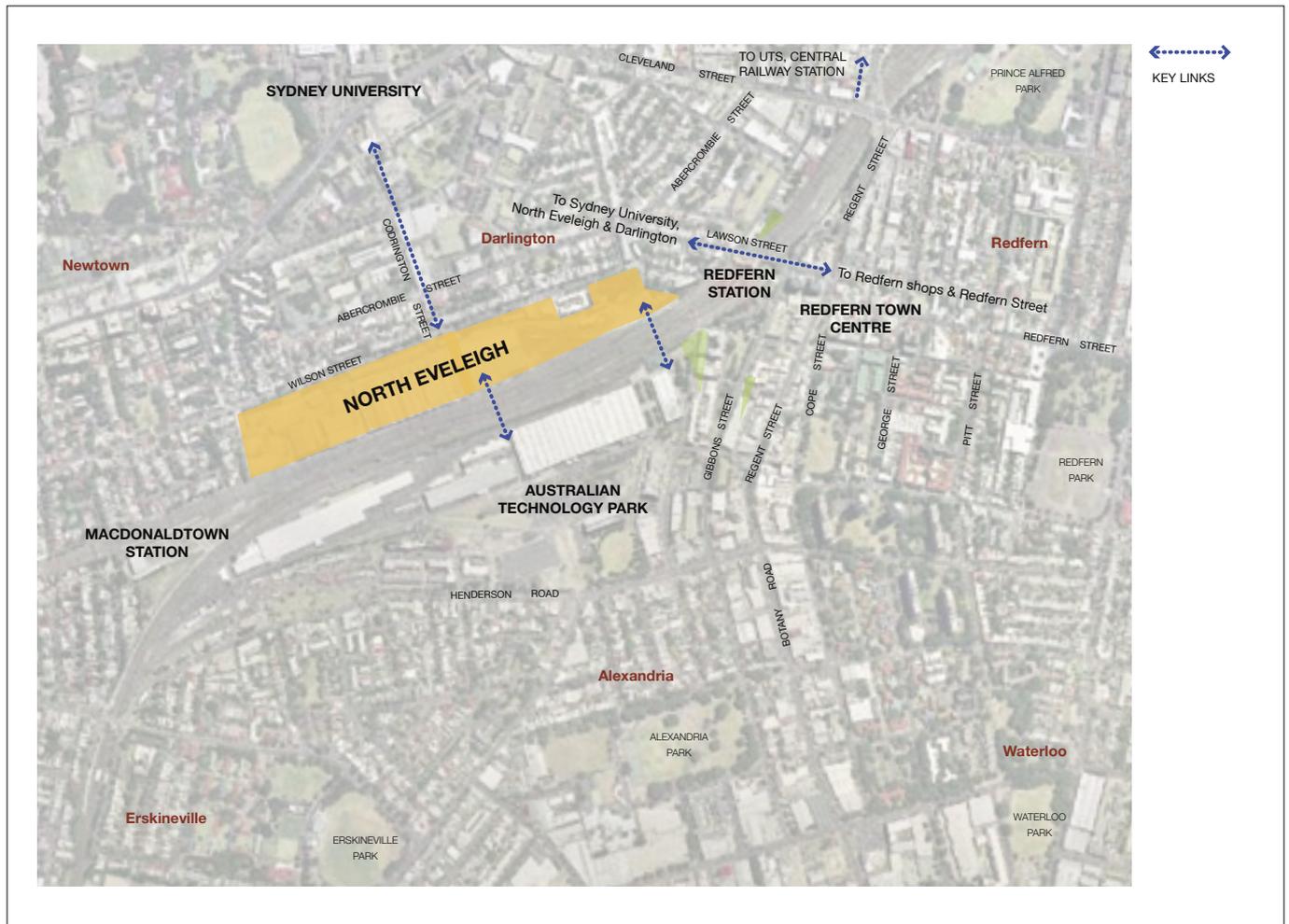


Figure 3: Local Context

2. The Site and Locality

2.3 North Eveleigh Site

The site stretches along the northern side of the railway lines from Redfern station to the east almost to Macdonaldtown station to the west. It is bounded by Wilson Street to the north and the rail corridor (the Main West line) to the south. The remaining perimeter of the site is defined by Iverys Lane to the west and Little Eveleigh Street to the east.

The site is legally described as part lot 4 and part lot 5 in DP 862514, is 107,991m² in area and is shown in *Figure 4*.

The North Eveleigh site contains numerous buildings and facilities including the following:

- Blacksmiths' Shop;
- Traversers No. 1 and No. 2, adjoining the CarriageWorks building to the east and west respectively;
- The RWA Training Centre in the former Carpenters, Plumbers and Food Distribution building;
- The General Store/Clothing Store;
- The Chief Mechanical Engineer's (CME) Building;
- Scientific Services Building;
- The Paint Shop; and
- The Fan of Tracks.

The North Eveleigh site is generally at grade with the rail corridor and as a consequence has a significantly lower relative level than that of Wilson Street which is located approximately 3-5m above the site. A retaining wall runs along much of the Wilson Street boundary to accommodate the change in level. The site itself is relatively flat with nominal changes in topography occurring to accommodate vehicular and pedestrian access.

The main vehicular access to the North Eveleigh site is via an entrance from Wilson Street at the far western end of the North Eveleigh site.

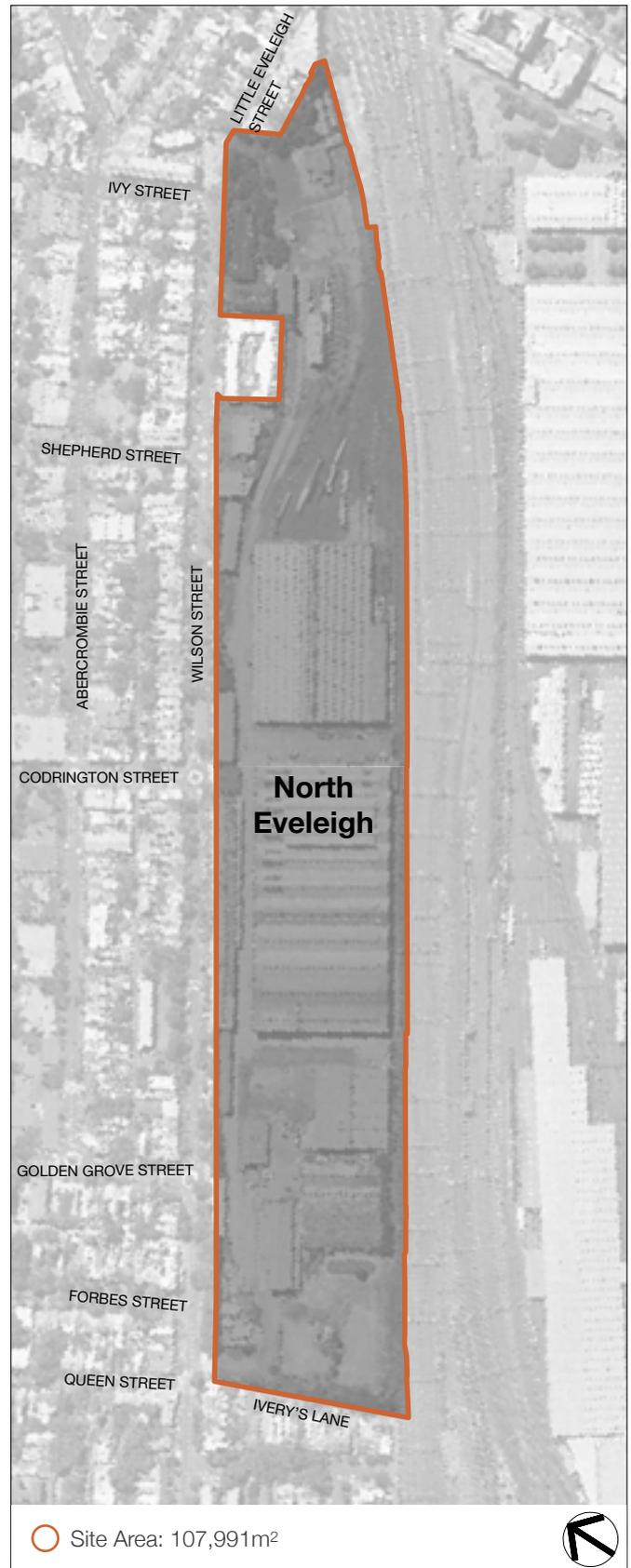


Figure 4: North Eveleigh Site Plan

Figure 4: North Eveleigh Site Plan

2.4 Site History

In 1855 the first railway line was constructed linking Sydney to Parramatta. The line divided an earlier land grant which was subsequently purchased for the construction of the Eveleigh Workshops in 1879.

In 1880 construction started on the south side of the rail corridor. On the northern side, the North Eveleigh Rail Yard, the first buildings (in 1883), were large stores at the Macdonaldtown end of the site.

Between 1884 and 1887 the fan of rails was laid and the Car and Wagon Workshops and the Paint Shop and Locomotive (later Mechanical) Engineers Office on Wilson Street were completed.

In 1886, the second Eveleigh Station was built. It was renamed Redfern Station in 1906 when Sydney Terminal was completed. Residential development of the area proceeded around the railway workshops, stimulated by the need for workers housing.

During the 1900s various modifications to the North Eveleigh Rail Yard were made including the removal of internal traversers and the construction of external ones, the erection of the Blacksmiths' Shop in 1907, construction of additional repair and painting shops and facilities for signalling, lighting, driver training, laboratories and staff amenities.

By the 1980s the northern component of the Eveleigh Railway Workshops had reached its full development. The site was closed in 1988 as the Chullora and Clyde railway workshops were able to take up the work previously performed at Eveleigh. In 2002 Railcorp submitted an application to redevelop the site to South Sydney Council. The application was subsequently withdrawn by the StateRail in 2003, due to lack of support from the Council.

Significant developments since the closure of the Railway Yards include:

- Establishment of Yaama Dhiyaan café and hospitality and construction training centres in the refurbished former Canteen and Carpenters building, North Eveleigh in late 2006.
- Development of CarriageWorks (Contemporary Performing Arts Centre) in the Carriage Workshops, North Eveleigh in January 2007.
- Viewing platform and pedestrian entrance structure off Wilson Street opposite the CarriageWorks opened in January 2007.
- Community markets proposed within the Blacksmiths' Workshop. A development application has recently been approved by RWA.
- Proposed pedestrian and cycle bridge being designed to connect North Eveleigh to Redfern Railway Station, the Redfern Town Centre and the Australian Technology Park.
- Design concepts for the upgrade of Redfern Station to improve pedestrian access.
- RailCorp's planning and preparation for the relocation of electrical infrastructure from within the North Eveleigh site, the installation of a new substation and work depot in the south-western corner of the site and a new access road directly adjacent the railway track on the southern periphery of the site.

- The North Eveleigh Dive Alignment. This is for a future underground rail connection planned by RailCorp from the Main West Line into the Sydney CBD. It extends along the southern boundary of the site.

2.5 Redfern-Waterloo Authority (RWA)

The Redfern-Waterloo Authority (RWA) was established by the NSW Government on 17 January 2005. It is responsible for revitalising Redfern, Waterloo, Eveleigh and Darlington through urban renewal, improved human services and job creation. North Eveleigh is within the operational area of RWA and is one of its 8 strategic sites. As such RWA is significantly involved in providing direction for the land's future development.

While the site is currently owned by RailCorp it has been declared surplus to its needs. RailCorp's Emergency Services Unit and moveable heritage located on the site will be relocated in the near future. The site will be vested to RWA for future sale and development.

2.6 Design Competition

In August 2007 RWA invited four leading architects to prepare urban design proposals for the site in a Design Competition. The purpose of the competition was to select the highest quality architectural and urban design solution to inform the preparation of a Concept Plan for the eastern and western portions of North Eveleigh.

While the Design Competition related only to the eastern and western portions of the site, entrants were requested to develop an integrated response to the entire site taking into account the CarriageWorks, the proposed markets at the Blacksmith's Workshop and the Yaama Dhiyaan café and hospitality and construction training centres. The Design Brief which informed the Competition required a concept which was consistent with the *Redfern-Waterloo Built Environment Plan (Stage One)*.

The RWA appointed an independent Urban Design Panel comprising industry specialists to judge the competition and select the preferred entry. Bates Smart won the competition. Its design has been refined to be the subject of this Preliminary Environmental Assessment, and which now includes the CarriageWorks and Blacksmiths' buildings.

3. Site Analysis

The site analysis considers the following characteristics of the site: location and access, environmental elements, built form and land use context and the existing site conditions.

3.1 Location and Access

The site is exceptionally well located in terms of access to transport and educational facilities providing an ideal location for significant commercial, residential and educational development. The locational benefits of the site are evidenced by the following:

- The site is situated within 3km of the Sydney CBD providing excellent access to employment and business services;
- Sydney University is 500m to the north, providing excellent access to educational facilities;
- Redfern Railway Station is located within 200m of the site, providing exceptional access to the Sydney rail network. Redfern Station is the tenth busiest station in the Metropolitan CityRail network in terms of passenger movements and second most accessible after Central in terms of the number of rail services that stop at Redfern. Redfern Station provides direct access to nine of Sydney's ten rail lines. The station can be accessed via Wilson Street and Little Eveleigh Street.
- City-bound commuters have a five to seven minute trip from Redfern Station to Town Hall Station, depending on the dwell time at Central Station.
- Throughout the day there is a city-bound train departing from Redfern on average every two minutes. During the morning peak hour city-bound trains depart on average once a minute, while the afternoon peak period averages one train every one and a half minutes.
- Macdonaldtown Railway Station is located within 200m of the site. The station is accessed via Wilson Street and Burren Street. The station is serviced by the Inner West and South lines on the CityRail network. It receives a much lower service frequency than Redfern Station.
- During most of the day there is a service to the city on average once every 14 minutes. Between 4:00pm and 7:00pm there is a service on average every 11 minutes.
- City Road trunk bus services are within the 400 m walking distance of the subject site. These services provide access to Newtown in the south and Railway Square in the north. During peak period, services run on average once every three minutes. Regent/Gibbons Street and Cleveland Street bus services provide services to/from destinations such as Circular Quay, Marrickville, Dee Why, Sydney Airport and Bondi Junction. During peak periods, average services are once every three minutes.
- RWA is facilitating a number of improvements to the area which will further improve accessibility of the site, including:
 - Working with Railcorp to achieve improvements to Redfern Station to provide:
 - > Enhanced station access, including access for families with prams, the elderly and people with disabilities;
 - > Increased capacity;
 - > Improved entry and better connection with the surrounding area; and
 - > More efficient interchange facilities for passengers.

- A new Town Centre adjacent the upgraded Redfern Station including a civic square, to serve as a hub for community and commercial activity;
- A new pedestrian and cycle bridge across the rail line which will improve access to Redfern Station and will bring the North Eveleigh site within easy walking distance of the offices and parking areas of the ATP and Redfern.

3.2 Land Use and Built Form

The area surrounding the site is a mix of residential, high technology, educational, retail, commercial and rail uses.

The areas immediately to the north, west and east of the site consist of predominantly residential Victorian terraces, reflecting the period in which the area was developed. The rail line provides a barrier between the site and the suburbs of Alexandria and Waterloo.

Abercrombie Street to the north of the site sustains a retail strip and is highly trafficked by University students moving to and from the station to the campus.

Sydney University and associated educational uses define the locality as an educational precinct. The Darlington campus lies within 500 metres of the North Eveleigh site and the built form of the campus is visible from a number of vantage points.

Redfern Railway Station and the railway tracks lie to the immediate south of the site. Railway uses and infrastructure are a predominant feature and give the site a distinctive character.

The roof forms of the Locomotive Workshops at the Australian Technology Park are visible from the site as is the new 6 storey NICTA building. The ATP formed part of the Eveleigh Railway Workshops and the industrial character of the railway yards is reflected in the high technology uses and building forms at the ATP which is less than 500 metres across the railway tracks.

To the south-east of the site the most prominent buildings are the twin towers which sit on the ridge and are 11 storeys in height. In the distance the 30 storey Department of Housing towers are also visible.

Along Wilson Street the Chief Mechanical Engineers Building and Scientific Services building frame the entry to the site from its north western boundary. The Blacksmiths Workshop, Yaama Dhiyaan Café and Fire Services Building on Wilson Street shield views of the site due largely to the grade separation between Wilson Street and the sites ground level.

The physical character of the site is established by the very large floor plates of the Carriage Workshop and the Paint Shop and by the rail infrastructure. The linear nature of the site is reinforced by the east west configuration and orientation of these buildings.

3.3 Environmental

Figure 5 highlights the environmental characteristics of the site and surrounds including solar access, prevailing winds and views which demonstrate the suitability of the site for mixed uses.

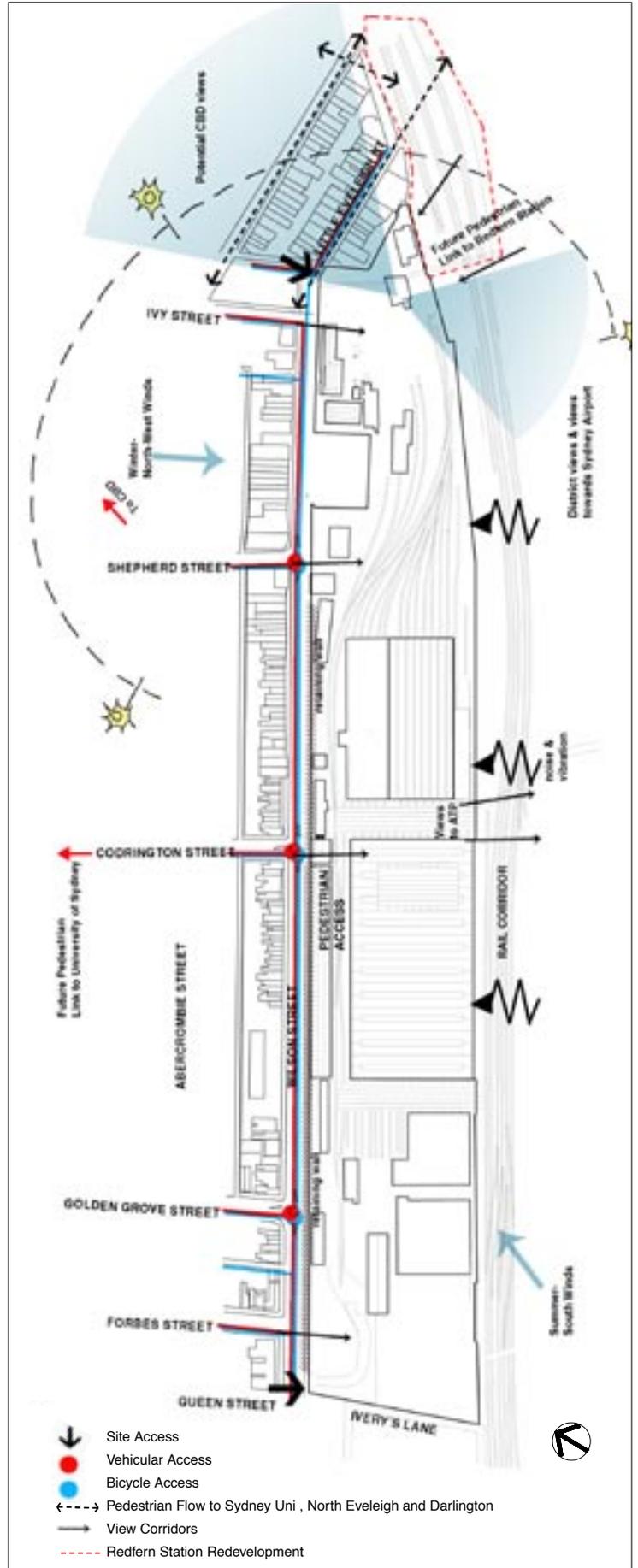


Figure 5: Site Analysis

3. Site Analysis

3.4 Existing Site Conditions – Opportunities and Constraints

The existing size, built form, locational aspects and physical characteristics of the site present a number of constraints and opportunities for future development:

Opportunities

- Enables the development of an integrated design solution of a sizeable portion of disused government land close to the Sydney CBD, major transport routes and educational establishments.
- Allows the introduction of an urban design framework which responds to the existing built form and typology, achieves high quality urban design, accommodates a mix of land uses and responds to the sites context and unique physical characteristics.
- Supports a sensitive response to the heritage attributes of the site through adaptive reuse of heritage items and items of historic interest and an urban design framework which relates to the heritage building forms and historic subdivision patterns.
- Facilitates respect for the industrial character of the site and railway/high technology uses to the immediate south while providing an appropriate interface to the residential and mixed use character of the surrounding area to the north, west and east.
- Potential integration of the site with the adjoining local street system by improved connections for pedestrians and cyclists into and through the site and Redfern station via a pedestrian bridge.
- Provides for a high standard of amenity as a result of solar access for both new residential and commercial development due to the site's northern orientation.
- Potential to maximise views due to the significant cross fall of the site which provides the opportunity to accommodate higher buildings at the southern edge of the site with limited impact on views and vistas at the northern edge of the site.
- Enables the creation of a safe and secure environment for pedestrian and bicycle movement through the site due to limited vehicular access points into and out of the site and consequent low vehicular movements through the site.
- Offers the opportunity to reduce car dependency by the greater use of public transport due to its proximity to both Redfern and Macdonaldtown stations.
- Provides for a synergy and extension of the innovation zone at the Australian Technology Park.

Constraints

- The main west rail line provides an east-west barrier between the subject site, the Redfern Town Centre and suburbs east of the Redfern Railway Station including the communities of Alexandria and Waterloo.
- The noise generated by the adjacent rail corridor renders the southern part of the site susceptible to high noise levels and vibration, requiring appropriately designed buildings for high ambient noise levels.
- There are a number of heritage items and items of historic interest on the site. The adaptive reuse of heritage items and items of historic interest will require significant investment.
- The change in level between Wilson Street and the site limits opportunities for vehicular access to and from the site and provides difficulties for truck movements.
- The need to maintain an understanding of the former use and function of the site while allowing necessary development will require careful consideration.
- The need to provide a sensitive response to the existing residential buildings adjacent to the site will require careful consideration.
- The requirement by Railcorp to protect a potential rail alignment option effectively limits development potential.

4. Relevant Planning Instruments & Policies

The following environmental planning instruments are relevant to the proposal:

- *State Environmental Planning Policy (Major Projects) 2006*,
- *State Environmental Planning Policy No. 55 – Remediation of Land*,
- *State Environmental Plan No. 65 – Design Quality of Residential Flat Development*
- *Draft State Environmental Planning Policy (Infrastructure) 2006*, and
- *Draft State Environmental Planning Policy 66 – Integration of Land Use and Transport*

It should be noted that Schedule 3, Part 5, Clause 3 of *State Environmental Planning Policy (Major Projects) 2006* states that all other environmental planning instruments do not apply to the Redfern-Waterloo Authority Sites, except for other State environmental planning policies.

The *Redfern-Waterloo Built Environment Plan (Stage One)*, August 2006 also applies to the site and proposal.

A brief discussion on each environmental planning instrument is provided in the following section.

4.1 SEPP (Major Projects)

Planning Consent and Part 3A Major Project Declaration

Clause 6 (1) of the *SEPP Major Projects* indicates that development that, in the opinion of the Minister for Planning is development of a kind described in Schedule 3 (State significant sites) as a project to which Part 3A of the Act applies. Clause 5 of Schedule 5, Part 5, of the *SEPP Major Projects* indicates that development with a capital value of more than \$5 million on land within the Redfern-Waterloo Authority is a Part 3A project. The North Eveleigh site is identified on Map 3 to Schedule 3 and will have a capital value of \$466 million. It is therefore requested that the Minister form the opinion that the North Eveleigh Redevelopment is a project subject to which Part 3A of the *Environmental Planning and Assessment Act* (EP&A Act) applies.

Part 5, Division 3 of Schedule 3 deals with the provisions relating to development of Redfern-Waterloo Authority Sites.

Permissibility

The site is identified as being zoned Business - Mixed Use as shown on the map marked "Redfern-Waterloo Authority Sites Zoning Map". The objectives of the Mixed Use zone are:

- (a) *to support the development of sustainable communities with a mix of employment, educational, cultural and residential opportunities,*
- (b) *to encourage employment generating activities by providing a range of office, business, educational, cultural and community activities in the Zone,*
- (c) *to permit residential development that is compatible with non-residential development,*
- (d) *to maximise public transport patronage and encourage walking and cycling,*

(e) *to ensure the vitality and safety of the community and public domain,*

(f) *to ensure buildings achieve design excellence,*

(g) *to promote landscaped areas with strong visual and aesthetic values to enhance the amenity of the area.*

The Project seeks to redevelop the site for a mix of uses. The proposed uses on the site are permissible and consistent with the objectives of the Zone. The Environmental Assessment will provide detail on how the proposed redevelopment meets the zone objectives.

Height and Floor Space

Part 5, Division 3, Clause 21 limits the height and floor space ratio of the site in accordance with the Redfern-Waterloo Authority Sites Height Map and Redfern-Waterloo Authority Sites Floor Space Ratio Map. The Maps indicate a maximum floor space ratio of 2:1 for the eastern and western portions of the site and 1:1 for the central section. Heights vary from the existing height of buildings in the case of some heritage buildings, to 16 storeys at the eastern end of the site.

It is noted that sub-clause Part 5, Division 3, Clause 21 (3) allows the Minister to vary the Height and Floor Space Ratio control in an approval for a concept plan for the development.

The proposed development will meet the permissible floor space area for the site.

In relation to permissible heights, the proposed scheme does not achieve maximum heights in some areas of the site. In other instances it has been necessary to exceed permissible heights and to redistribute heights across the site to achieve the best urban design, planning and commercial objectives. It is noted that the variations in proposed heights have emerged as a consequence of more detailed analysis of the site and its context and that despite these variations the proposed scheme is consistent with the intent, objectives and framework outlined in Built Environment Plan and *State Environmental Planning Policy (Major Projects)*.

The Environmental Assessment report will provide a detailed justification for any variations based on urban design and planning principles.

The RWA requests that the Minister consider any exceedences in permissible heights under Part 5, Division 3, and Clause 21 (3) of the *SEPP (Major Projects)*.

Design Excellence

Part 5, Division 3, Clause 22 requires the consent authority to consider whether the proposed development exhibits design excellence.

The urban design framework and logic provided in the proposed scheme will promote the achievement of design excellence in the built form.

Given the proposal is for a Concept Approval, the Environmental Assessment will include design excellence principles to be incorporated in the future detailed design of the building form including in relation to the treatment of heritage items and items of historic interest such as the former Paint Shop Building, Clothing Store, Chief Mechanical Engineers

4. Relevant Planning Instruments & Policies

Building, Scientific Services Building and Telecommunications Equipment Centre.

Heritage considerations

The Eveleigh Railway Yards is listed on the State Heritage Register. Under the Redfern – Waterloo Authority Act the Heritage Act does not apply to development under Part 4 of the EP&A Act and for which the Minister is the consent authority or development under Part 3A. Under Clause 29(2) of the Redfern-Waterloo Authority Act an item listed on the State Heritage Register cannot be altered or demolished unless the Minister has consulted with the Heritage Council and taken into consideration any advice received, and the Minister is satisfied that the alteration/demolition is necessary for the sustainable improvement of the operational area.

Clause 27 of the *State Environmental Planning Policy (Major Projects)* Amendment No. 7 only applies to development under Part 4 of the *Environmental Planning and Assessment Act* and as such does not apply to the subject development.

Numerous studies and reports have been prepared in relation to the heritage significance of the site over the years.

In 2002, a draft Conservation Management Plan for the site was prepared by Otto Cserhalmi + Partners. The draft Plan was prepared to support the development of the site as a predominantly residential/ railway museum use. The draft Plan does not reflect the proposed use of the site as a Mixed Use Precinct as described in the *Redfern-Waterloo Built Environment Plan (Stage One)* and reflected in the *State Environmental Planning Policy (Major Projects)*.

More recently the RWA has engaged Weir + Phillips Architects and Heritage Consultants to review the information relating to the heritage significance of the site including the draft Conservation Management Plan with the view to preparing an updated Conservation Management Plan which is relevant to the new zoning, its intended future character under the *Redfern-Waterloo Built Environment Plan (Stage One)* and the proposed design concept proposed by BatesSmart Architects.

Weir + Phillips Architects and Heritage Consultants has completed a Preliminary Heritage Assessment for the North Eveleigh site. Weir + Phillips concludes *“The impact of the Concept Plan on the heritage significance of the site is manageable as associative and cultural significance is maintained through interpretation and the aesthetic significance is maintained through the retention of significant buildings”*. The Preliminary Heritage Assessment is provided at [Attachment A](#). Additional discussion of heritage issues is provided in [Section 5.1](#) of this report.

It is noted that the urban design framework proposed for the development of this site takes into account the heritage values and significance of the site. It is also noted that the following heritage items which are identified in the *SEPP (Major Projects)* are to be retained and adaptively reused:

- Blacksmiths’ Shop
- Carriage Workshop
- Paint Shop
- Scientific Services Building No.1
- Chief Mechanical Engineer’s Office Building
- Telecommunications Equipment Centre Building

The Clothing Store which is identified as an item of historic interest in the Built Environment Plan is being retained and adaptively reused. [Figure 6](#) illustrates the heritage items identified by the *SEPP (Major Projects)* and the *Redfern-Waterloo Built Environment Plan (Stage One)*.

The proposal will incorporate the Fan of Tracks as a significant element in the overall design of the site. A portion of the fan of tracks will be retained and the remaining tracks be interpreted through landscaping.

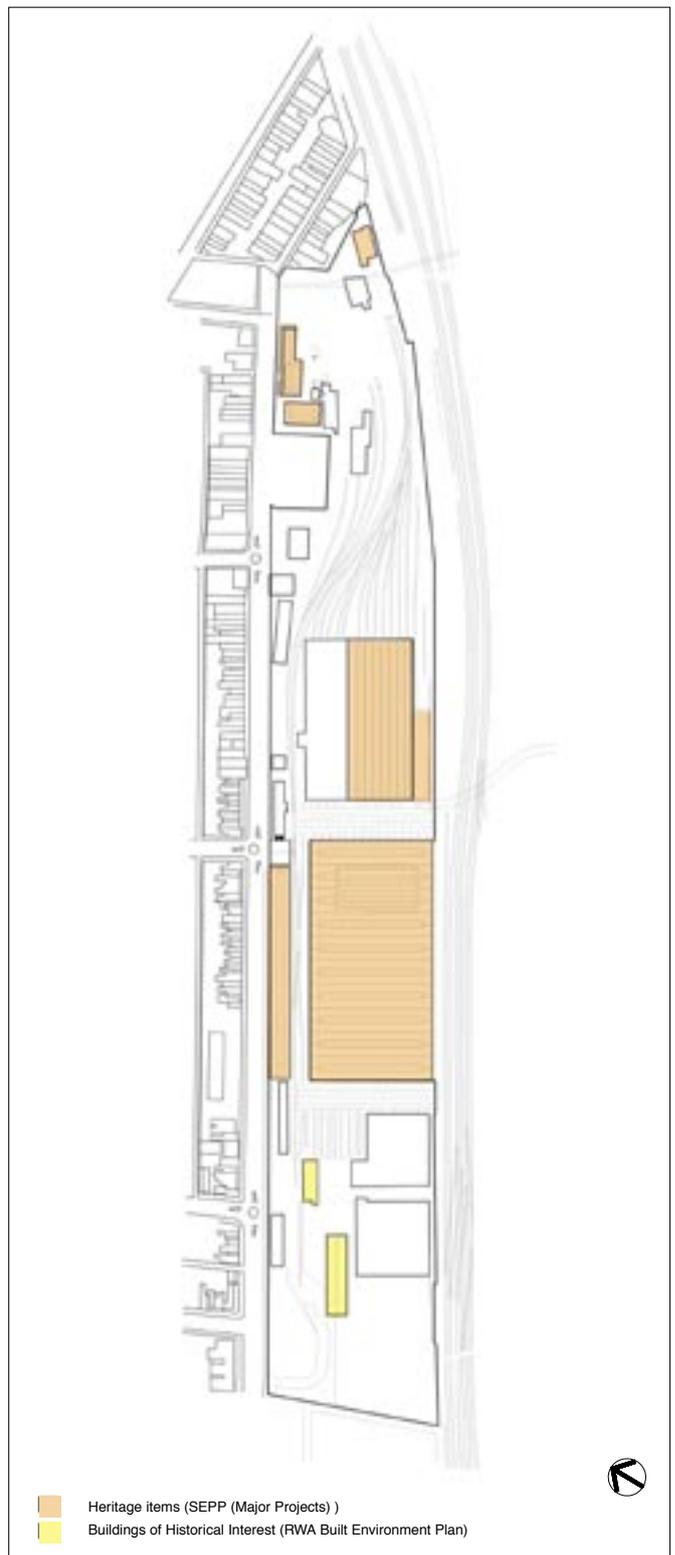


Figure 6: Heritage

4.2 SEPP No. 55 – Remediation of Land

SEPP 55 seeks to ensure the remediation of contaminated land in order to reduce the risk of harm to human health or any other aspects of the environment. Clause 7 of *SEPP 55* requires the consent authority to consider whether land is contaminated, and to be satisfied that the land is suitable for the proposed use, prior to granting consent to the carrying out of any development on that land. Essentially should the land be contaminated the consent authority must be satisfied that the land is suitable for the proposed use. If the land requires remediation to be undertaken to make the land suitable for the proposed use, the consent authority must be satisfied that the land will be remediated before the land is used for that purpose.

The site has been the subject of a number of contamination investigations since 1993. WSP Environmental Pty Limited has provided a preliminary assessment of the site's suitability for the proposed development, confirming that the site can be made suitable for the proposed mixed use development. This is provided at *Attachment B*.

4.3. SEPP 65 - Design Quality of Residential Flat Development

An assessment under *SEPP 65* will need to demonstrate that the Project will satisfactorily meet the design quality principles and provide an example of good quality design in respect to internal amenity, urban design and sustainability.

A preliminary analysis of the proposal indicates the Project will satisfy *SEPP 65*. Design statements will be included in the Environmental Assessment demonstrating achievement of the *SEPP 65* design quality principles.

4.4 SEPP Building Sustainability Index (BASIX)

As the proposal is for a concept approval for the site, the Environmental Assessment will not be accompanied by a BASIX Certificate. Rather the Environmental Assessment will set Ecological Sustainable Development principles to demonstrate that the development will meet the water and energy efficiency reduction targets for new multi-unit residential developments and commercial developments.

4.5 Draft SEPP (Infrastructure) 2006

Draft SEPP Infrastructure is intended to assist in the effective delivery of public infrastructure and outlines issues to be addressed when proposing development near and over the rail corridor. This includes any likely damage to rail infrastructure, use of cranes over the rail corridor, and electrolysis impacts.

The proposed design has been developed after considerable consultation with the relevant rail authorities. A separate rail access corridor will be provided by RailCorp directly adjacent to the rail corridor, and access to this will be provided at the western end of the site adjacent to Iverys Lane and at the eastern end of the site opposite Shepherd Street. The design takes into consideration a potential rail alignment option along the southern boundary of the site to ensure the development can be accommodated without restricting the proposed rail alignment. Vibration issues associated with the development are addressed in *Section 5.11*.

The Environmental Assessment will address issues relevant to development over and near rail infrastructure.

4.6 Draft SEPP 66 – Integration of Land Use and Transport

The planning objectives of *Draft State Environmental Planning Policy No.66—Integration of Land Use and Transport* relate to development that generally has a gross floor space of more than 1,000m² and includes (but is not limited to) development for the purposes of:

- (a) retailing, such as ... markets;
- (b) leisure and entertainment...;
- (c) offices and business parks; and...
- (h) residential flat buildings containing more than 300 units.

The Draft SEPP aims to ensure that urban structure, building forms, land use locations, development designs, subdivision and street layouts help achieve a number of objectives.

This draft SEPP is relevant as the proposal includes over 185,000m² of floor space for a combination of commercial and residential uses. The Environmental Assessment will address in detail the objectives of *Draft SEPP 66*.

4. Relevant Planning Instruments & Policies

4.7 Redfern-Waterloo Built Environment Plan (Stage One)

The RWA is responsible for revitalising Redfern, Waterloo, Eveleigh and Darlington through urban renewal, improved human services and job creation. It has developed three plans to achieve this. These are the *RWA Employment and Enterprise Plan*, the *RWA Human Services Plan*, and the *Redfern-Waterloo Built Environment Plan (Stage One)*.

The *Redfern-Waterloo Built Environment Plan (Stage One)* was adopted by Cabinet in August 2006. It is primarily designed to stimulate economic and social progress through urban renewal. For North Eveleigh the proposed land use concept is:

- To create a vibrant cultural, business and residential precinct that provides jobs, quality housing, services and facilities and opportunities for artistic and cultural expression that integrates with the surrounding established area;
- To encourage employment generating uses within proximity to Redfern Railway Station, to maximise the opportunities presented by public transport infrastructure and the Redfern Town Centre; and
- To encourage residential development on the western portion of the site in proximity to existing residential development, cultural and community uses in the middle of the site and a mix of residential and non-residential development at the eastern end.

The proposed heights and floor space ratio for the site are illustrated in Figure 4.4 of the Plan. The Plan indicates a maximum floor space of 2:1 on the eastern and western sections of the site and a 1:1 in the central section, with a range of heights from the existing height of buildings to 16 storeys.

Figure 3.5 of the Plan indicates publicly accessible open space. The BEP suggests approximately 15% of the total North Eveleigh site will comprise open space, including a substantial section of the Fan of Tracks and the curtilage around the Chief Mechanical Engineer's building.

Figure 3.6 identifies 6 buildings of heritage significance and 2 of historical interest on the North Eveleigh site. These include:

- Blacksmiths' Shop
- Carriage Workshop
- Paint Shop
- Scientific Services Building No.1
- Chief Mechanical Engineer's Office Building
- Telecommunications Equipment Centre Building
- Timber Shed Extension
- Clothing Store

4.8 RWA Contributions Plan

The RWA Contributions Plan identifies that the Minister may impose, as a condition of consent a requirement that the applicant pay a development levy of 2% of the proposed cost of carrying out the development in order to fund public facilities and amenities. The plan identifies public facilities and amenities in North Eveleigh that will be funded from contributions. It also allows a developer to offer an alternative to a monetary contribution.

4.9 RWA Affordable Housing Contributions Plan

This Plan requires a contribution equivalent to the estimated cost of the provision of affordable housing comprising 1.25% of the total gross floor area of development in the Operational Area.

5. Preliminary Environmental Issues

The potential key environmental issues are briefly discussed in this section. These issues will be considered in the design of the proposal will be addressed in detail in the Environmental Assessment.

5.1 Calculation of Floor Space

Site Area for the purposes of calculating floor space is defined in clause 23 of the Standard Instrument Local Environment Plans) Order 2006 as

(3) Site area

In determining the site area of proposed development for the purpose of applying a floor space ratio, the site area is taken to be:

- (a) if the proposed development is to be carried out on only one lot, the area of that lot, or
- (b) if the proposed development is to be carried out on 2 or more lots, the area of any lot on which the development is proposed to be carried out that has at least one common boundary with another lot on which the development is being carried out.

In addition, subclauses (4)–(7) apply to the calculation of site area for the purposes of applying a floor space ratio to proposed development.

(4) Exclusions from site area

The following land must be excluded from the site area:

- (a) land on which the proposed development is prohibited, whether under this Plan or any other law,
- (b) community land or a public place (except as provided by subclause (7)).

The North Eveleigh site is described as part lot 4 and part lot 5 in DP 862514. The site, for the purpose of calculating floor space area, has an area of 105,996m² after excluding areas zoned for Special Public Purpose - Infrastructure where residential and commercial development is prohibited and land which is not contiguous with the North Eveleigh Mixed Use zone. *Figure 7* indicates the site area based on the above.

The maximum floor space permitted for the site is 185,510m².

The floor space proposed for the site complies with the maximum permissible floor space based on the site area and maximum floor space ratios defined in the *SEPP (Major Projects)*.

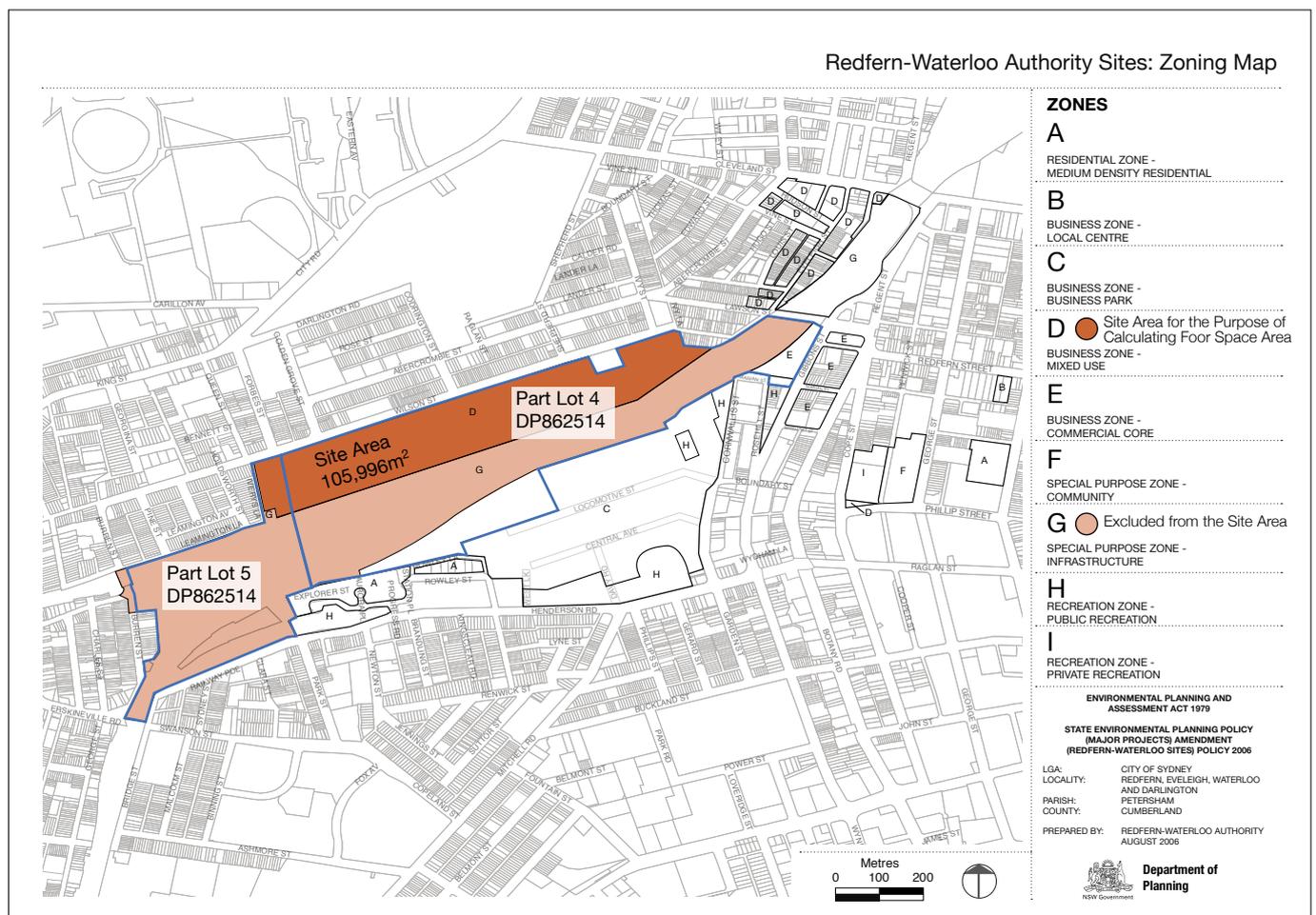


Figure 7: Site Area for the Purpose of Calculating Floor Space Area

5. Preliminary Environmental Issues

5.2 Height Limits

The SEPP (Major Projects) and the Redfern-Waterloo Built Environment Plan (Stage One) identifies maximum height limits defined in storeys. As a result of more detailed analysis of the site in the development of the preferred design concept height limits have not been maximised in some locations on the site while in some instances it has been necessary to exceed height limits to achieve constructability of buildings, better urban design, planning and commercial outcomes.

It can be demonstrated that in each case where exceedences in height limits have occurred, the result will lead to a more relevant scale, improve the buildability and functionality of the proposed uses with minimal impact on the surrounding development.

A detailed justification for exceedences in heights in each instance will be provided in the Environmental Assessment Report.

The RWA requests that the Minister consider any exceedences in permissible heights under Part 5, Division 3, and Clause 21 (3) of the SEPP (Major Projects).

5.3 Heritage

A preliminary heritage assessment has been undertaken by Weir + Phillips and is attached at [Attachment A](#).

Weir + Phillips identified the following opportunities and constraints for development on the site:

Opportunities

- The site is large, under-utilised and in one ownership. Its size offers the opportunity to achieve a cohesive design solution which integrates heritage items and builds on the sites heritage values.
- The existence of large, significant buildings that are compatible in form and scale provide the potential for flexibility in finding quality adaptive reuse.
- The conservation of core of buildings through adaptive reuse and a sensitive response to the site's historic layout and subdivision pattern can assist in the understanding and interpretation of the function of the site and related sites. Conservation of core buildings will also enable an appreciation of the site's historic and heritage importance in the future and arrest the decline of a number of significant items.
- The typology of the industrial buildings could be maintained and their relevance reactivated by allowing a range of new uses of varying scale that fit within the existing envelope of the industrial buildings.
- The Eveleigh Railway Yards provided a vital source of employment and was integral to the sustainability of the Redfern-Waterloo community. Redevelopment offers the opportunity to enliven the site after years of decline and reintegrate it into the community.

Constraints

- The challenge to maintain an understanding of the historic industrial function of the site through interpretation in the face of extensive changes to provide for residential and commercial use.
- The requirement to retain buildings and places of significance within acceptable curtilages.
- The need to maintain heritage significance while dealing with the restricted level of compatibility between past use and future use of buildings.
- The need for adequate interpretation of the Fan of Tracks based on the significance ascribed to it in the draft CMP.

These heritage opportunities and constraints formed the initial basis for the development of the proposal. Retention of the most significant buildings and ensuring an understanding of their relationship in the design has been a significant consideration.

The preliminary heritage assessment supports the preferred design concept as demonstrated by the following extract from the conclusion:

The impact of the Concept Plan on the heritage significance of the site is manageable as associative and cultural significance is maintained through interpretation and the aesthetic significance is maintained through the retention of significant buildings.

The Environmental Assessment will include an updated Conservation Management Plan based on a review of relevant sections of the draft Conservation Management Plan prepared by Otto Cserhalmi + Partners. A Heritage Impact Statement will also be provided.

5.4 Archaeology

The RWA has engaged a suitably qualified consultant to assess the issues relating to Aboriginal and European archaeology on the site. A full report will be submitted with the Environmental Assessment.

5.5 Traffic and Transport

A preliminary parking, transport and traffic assessment has been prepared. The report concludes that the proposed development can be accommodated by the existing street system providing some intersection improvements are undertaken. The Environmental Assessment will be accompanied by a parking, transport and traffic report. This will address the impact of the development on the local road network and associated road and intersection works. The report will investigate suitable vehicular entry points and appropriate gradients given the change in levels between the site and Wilson Street. General vehicular circulation and parking on the site will also be addressed.

5.6 Design Considerations

The design of the project will need to be of high standard to ensure an appropriate response to the context and heritage significance of the site, as well of the achievement of *SEPP 65* principles and design excellence. The Environmental Assessment will demonstrate how the proposed Concept Plan achieves broad design quality principles. Design excellence principles will be included in the Statement of Commitments to ensure future detailed design of the building form incorporates design excellence.

Section 6.2 provides a description of the design logic which forms the basis of the concept plan.

5.7 Visual Impacts

The proposed development will be viewed from various places in Redfern, Darlington, Eveleigh and further a field. The redevelopment will include consideration of views and vistas to and through the North Eveleigh site, and opportunity to enhance vistas to and through the site.

The Environmental Assessment will provide visual material such as perspectives or photomontages to demonstrate views to the site, including the site when viewed from the rail corridor.

5.8 Open Space and Landscaping

A preliminary landscape concept design will be provided with the Environmental Assessment which will:

- provide a range of suitably proportioned new open spaces which are integrated with new development and provide a high level of amenity.
- reflect the heritage of the site and assist in the interpretation of the industrial nature of North Eveleigh.
- provide public spaces to improve connectivity to and within the site, including contributing to pedestrian and cycle movements to the new pedestrian/cycle bridge.
- allow for the incorporation of water sensitive urban design.

5.9 Trees

The Environmental Assessment will include an assessment of all trees, including the species, height, canopy, spread, form, health and condition, and will identify any trees worthy of retention.

5.10 Contamination

The site has been subject to various Contamination Investigations since 1993. The reports detail the contamination status of the site. Both soil and groundwater contamination that requires remediation and/or management prior to redevelopment has been identified across the site.

WSP Environmental Pty Limited has provided a preliminary assessment of the site's suitability for the proposed development. It considers that the soils at the North Eveleigh Rail Yard site can be made suitable for the proposal.

The WSP Environmental Pty Ltd Statement is included at *Attachment B*.

The Environmental Assessment will provide an assessment of contamination issues by a qualified consultant. The Environmental Assessment will demonstrate compliance with the requirements of *SEPP 55*.

5.11 Hazardous Material

It is known that asbestos containing materials are in most older buildings on site. The principal asbestos material types included flat and corrugated asbestos cement (AC) sheeting, AC panels, gutters, flashing, zelemite electrical backing boards, asbestos based insulation materials and vinyl asbestos floor tiles.

SMF insulation materials have been identified in a number of the buildings at the site and some of the paint systems applied to the walls, ceilings and the exterior doors and frames have tested positive to lead. The Environmental Assessment will include a review of hazardous materials within the buildings.

5.12 Geotechnical

The North Eveleigh site has been the subject of a previous geotechnical investigation to examine the redevelopment potential of the site. Jeffery and Katauskas Pty Ltd Consulting Geotechnical Engineers has previously undertaken a *Geotechnical Investigation of Redevelopment Potential at Eveleigh Workshop*. No major constraints to development were revealed. The Environmental Assessment will include a review of geotechnical site investigations and assessment of the proposal undertaken by a qualified consultant.

5.13 Structural

The Environmental Assessment will include a preliminary structural assessment prepared by a qualified structural engineer. The assessment will provide a preliminary structural assessment of relevant heritage buildings on the site, their proposed alterations and adaptive reuse. The structural engineer will also consider protection of the proposed rail alignment option and electrolysis.

5.14 Services

Stormwater

The existing stormwater system drains to a Sydney Water culvert located in Alexander Street, and is located in the Munn Creek Catchment. Existing site drainage is directed to Traverser No. 1 and Traverser No. 2 which are immediately east and west respectively of CarriageWorks. Reinforced concrete pipes from each Traverser convey stormwater from the site to the Alexander Street culvert. Stormwater drainage from the western end of the site is also currently serviced by the culvert which crosses the rail corridor from Holdsworth Street.

The existing sewer system within the site drains to a 225 diameter pipe which crosses the rail corridor at Holdsworth Street.

The Environmental Assessment will include a report by a qualified engineer on stormwater issues.

5. Preliminary Environmental Issues

Water Supply

Water supply for the site will be provided by two connections to the existing Sydney Water 375mm main located in Wilson Street. Two separate ring mains within the site, to be owned by Sydney Water, will be provided; one to the east of CarriageWorks, and one to the west.

The proposed mains within the site will be appropriately sized to have adequate capability for domestic demand and fire fighting capacity.

The RWA is investigating the high level options for water infrastructure, utilising an approach of efficiency first to reduce overall demand of potable water, followed by the exploration of alternative supply sources for non-potable requirements.

Electricity Supply

Existing electrical supply to former rail structures and infrastructure within the site is provided by the RailCorp supply network. RailCorp intends to decommission the supply from the site.

A new Energy Australia substation chamber within the site was commissioned in 2007, housing a capacity of 2 x 1500kVA transformers with a maximum rating of 2900A. Electricity supply to the recently refurbished CarriageWorks is provided by the new substation. Additional substations may be required within the site, location and size shall be dependent on the proposed staging and supply requirements from the proposed development.

The RWA will investigate the high level options for electrical supply infrastructure, utilising an approach of efficiency first to reduce overall demand of electricity, followed by the exploration of alternative supply sources or increasing Authority supply infrastructure.

Gas Supply

Gas supply into the site shall be provided by connection to the existing main in Wilson Street. Reticulation of gas pipes shall be made available within service trenches in footpaths of the proposed development.

Telecommunications

Existing telecommunication services to former rail structures and infrastructure within the site is provided by the RailCorp supply network. This system will be decommissioned by RailCorp.

New telecommunications supply to the site shall be required. Reticulation of the telecommunications network will be made available within service trenches in footpaths of the proposed development.

The Environmental Assessment will include a preliminary services assessment addressing stormwater, sewer, electrical, gas and telecommunications prepared by a qualified engineer.

5.15 Noise and Vibration

For the purpose of the preliminary environmental assessment Acoustic Dynamics has provided a review of relevant documentation and a preliminary assessment of the potential noise and vibration impact at North Eveleigh.

The report concludes:

- Although high noise levels are present at the site resulting from rail traffic related activities within the adjacent rail corridor it is feasible that a development can be constructed that can adequately mitigate rail traffic related noise intrusion as well as other external noise, such as road traffic, aircraft, and nearby industrial noise;
- The magnitudes of noise reduction likely to be required from the facades (and glazing) of the development are feasible and are unlikely to require incorporation of mitigation measures that would be prohibitively expensive;...
- Measured vibration levels resulting from rail traffic related activities within the adjacent railway corridor and vibration dose values (VDVs) determined, indicate that it is feasible to construct a development that can adequately mitigate rail traffic related vibration intrusion;
- The magnitudes of vibration measured were significantly lower than the relevant criteria indicating proposed buildings at the North Eveleigh redevelopment site are unlikely to require incorporation of significant vibration mitigation measures, if at all;

The Environmental Assessment will include a preliminary assessment specifically addressing the proposed development.

5.16 Social Impacts

The Environmental Assessment will include a preliminary assessment. Affordable housing will be included as part of the proposal as well as safety and crime prevention, provision of community facilities, heritage protection and open space provision.

5.17 Economic Impacts

The Environmental Assessment will include a preliminary assessment prepared by a qualified consultant.

5.18 Ecological Sustainable Development

Environmental considerations are an important aspect of the development, including commitment to ESD principles in terms of design and construction. An Environmental Management Plan will be prepared. This will be included in the draft Statement of Commitments to be provided with the Environmental Assessment. The Plan may address:

- sustainability and climate change,
- conservation and management of resources,
- material selection,
- waste minimisation and management,
- maintenance of environmental safeguards,
- consultation and liaison with communities and authorities,
- environmental awareness and/or training for staff and sub-consultants, and
- environmental review, monitoring auditing and reporting systems.

5.19 Residential Amenity

The Environmental Assessment will include an analysis of the impacts of Project on the amenity of adjoining residential dwellings. The analysis will include an assessment of shadow, privacy and visual bulk and scale impacts on adjoining residential dwellings.

The analysis will include shadow diagrams in plans and elevations, including additional overshadowing.

5.20 BCA Compliance

The Environmental Assessment will include a preliminary assessment prepared by a qualified consultant.

5.21 Rail Infrastructure Considerations

The redevelopment will need to ensure the integrity of RailCorp's operations. In designing the development consideration will be given to:

- any RailCorp services such as pipes and cables and structures,
- stray current and electrolysis from rail operations,
- noise and vibration,
- any rail corridor fencing,
- drainage of the development,
- any other matters raised by RailCorp.

The Environmental Assessment will address these issues.

5.22 Wind

Wintech Consultants Pty Ltd have been engaged to provide a wind assessment on the proposed development and to make recommendations to ameliorate effects. The preliminary analysis indicates that the impact of winds on the site may be addressed through a range of measures including planting, provision of podiums, building orientation, canopy's and awning structures. A more detailed assessment will be submitted with the Concept Plan Application.

5.23 Access

An assessment of site accessibility for people with disabilities will be submitted with the Concept Plan Application. The report will make recommendations on design requirements to be integrated in the overall design.

6. Preferred Design Concept

The preferred design concept for the redevelopment of the North Eveleigh site for mixed use development is the product of extensive site planning and heritage analysis and will form the basis of the Concept Plan for the site. This section of the report describes the proposed development. This description is considered adequate to satisfy the submission requirements for the Preliminary Environmental Assessment and to enable the preparation of the Director General's Requirements.

The preferred design concept is illustrated in *Figures 8, 9* and *10*

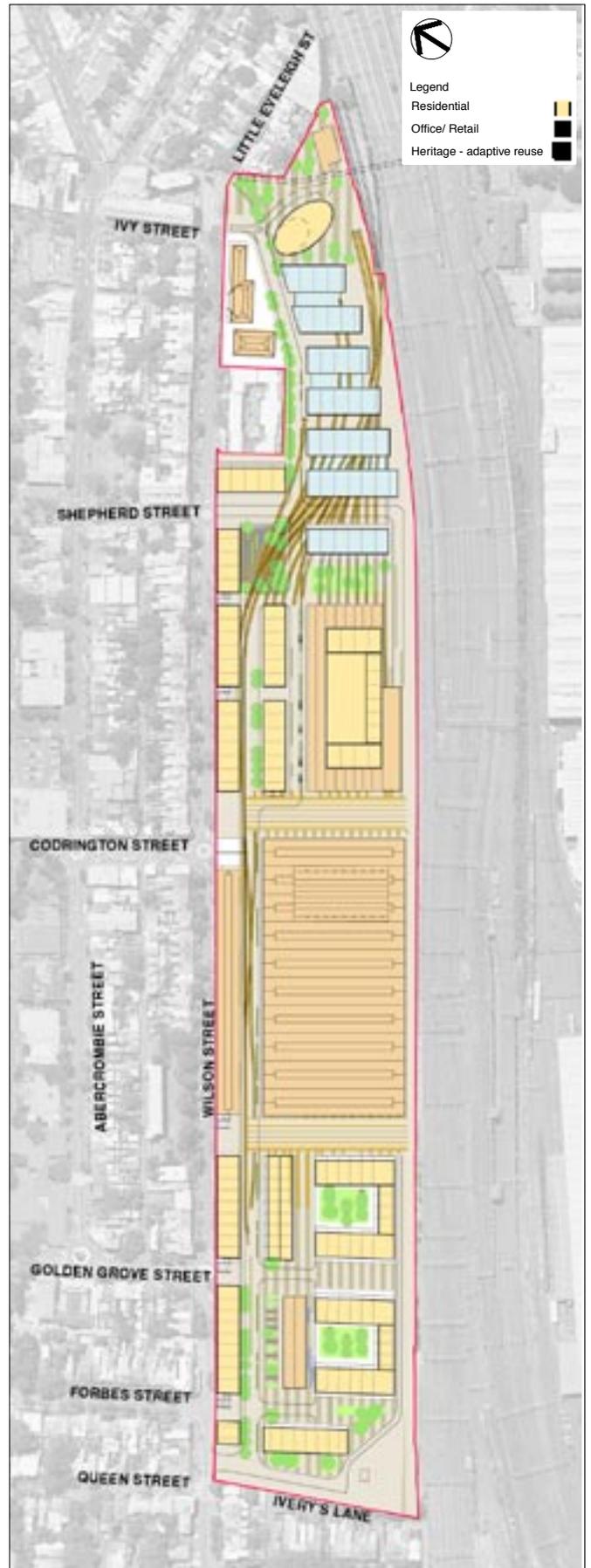


Figure 8: Proposed Development



Figure 9: Proposed Development - East



Figure 10: Proposed Development - West

6. Preferred Design Concept

6.1 Urban Design Framework

The key objective for the redevelopment of North Eveleigh is to create a vibrant mixed use community with its own distinct identity that celebrates the sites industrial heritage and reconnects with the neighbourhood.

A shared pedestrian spine links the precincts on the site creating a promenade activated by cultural facilities and public spaces.

Building typologies have been developed to create flexible commercial viable types that evolve from the heritage building typology and relate to the sites unique history and situation. A landmark building will create a marker for the Redfern Station and identity for the development.

The proposal creates a framework for the development of the site that consists of a pattern of streets and blocks. The alignment and visual continuity of neighbourhood streets has been maintained through the site, which creates a series of north-south streets. The existing heritage buildings have been used to establish the alignment of east west streets. The combination of the two street patterns establishes a framework of traditional streets and blocks in a configuration that responds to both the neighbourhood streets and heritage buildings on the site. This is demonstrated in *Figure 11*.

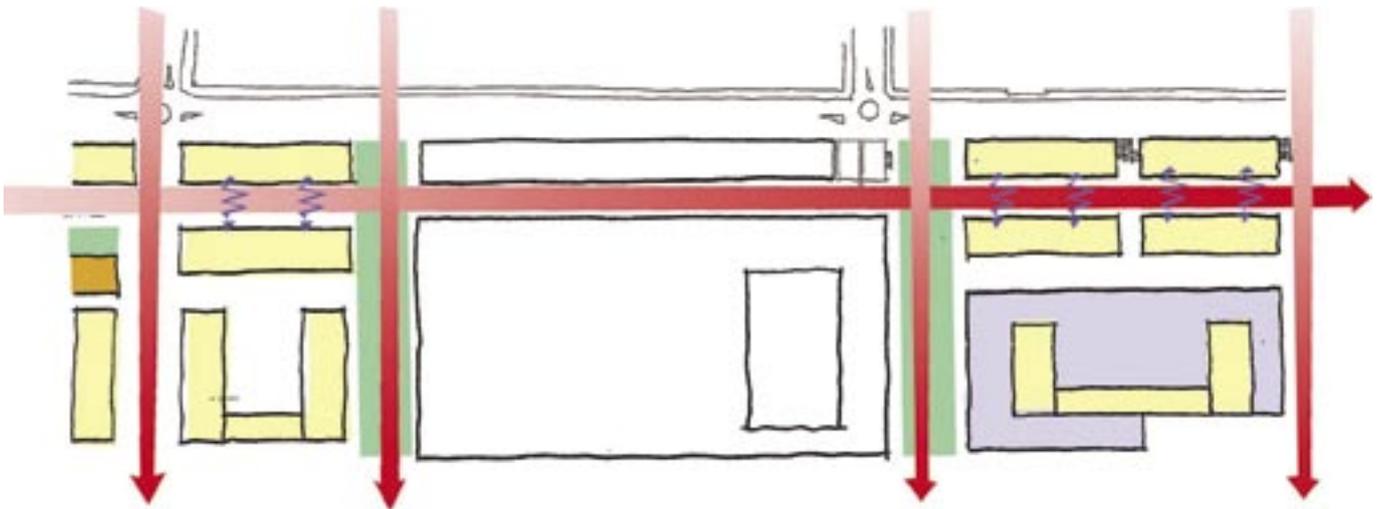


Figure 11: Urban Design Framework

6.2 Built Form and Building Heights/Urban Morphology

The built form and building heights have been conceived to maintain continuity of scale with the historic buildings. A series of low rise linear buildings, generally aligned east-west, frame the east-west access, providing a scale that is sympathetic to the heritage buildings and respects the scale of the adjoining neighbourhood. Taller buildings have been located on the southern portion of the site adjacent to the rail line, where they will have minimal overshadowing impact. These buildings have been aligned perpendicular to the rail lines to frame the neighbourhood streets, and imply an openness and connectivity across the rail lines; as opposed to walling off the precinct from the rail lines.

Finally a singular higher rise 'object' building is proposed as landmark at the eastern end of the site. This building acts as a landmark for the Redfern Railway station.

6.3 Adaptive Reuse of Heritage Buildings

It is proposed to adaptively reuse all buildings identified as Heritage Items by the *SEPP (Major Projects)*, specifically:

- Adaptive reuse of the Chief Mechanical Engineer's building (1,344m²);
- Adaptive reuse of the Scientific Services building (883m²);
- Adaptive reuse of the Telecommunications Centre building (336m²);
- Adaptive reuse of the Paint Shop for retail and residential purposes. The existing floor level is proposed to be used for retail purposes. A residential component will be constructed through the middle of the existing building, 4 storeys above the height of the existing Paint Shop, or 5 storeys in total (6,595m² retail and 6,346m² residential).
- As approved, the adaptive reuse of the Blacksmiths' Shop for markets allowing for future commercial expansion (2,120m² existing and 2,120m² future expansion);
- As approved, the adaptive reuse of the Carriage Workshop, allowing for future expansion (19,468m² existing and 12,000m² future expansion).
- In addition the Clothing Store, identified by the BEP as an item of historical interest, will be adaptively reused (1,795m²).

6.4 Demolition

It is proposed to demolish the remaining buildings on site including:

- At the western end of the site, demolition of a group of sheds and the timber store; and
- At the eastern end of the site, demolition of the side annex of the Paint Shop (also known as the Suburban Car Workshop) and a number of other buildings.

6.5 Gross Floor Area

The proposed project achieves a total GFA of 185,221m², including 96,540m² of floor space for residential development and 88,681m² of floor space for commercial, retail and community purposes. This includes 21,588m² of approved floor space in the Blacksmiths' and CarriageWorks buildings and 10,954m² of existing floor space area in the Paint Shop, Telecommunications Equipment Centre, CME Building, Scientific Services Building and the Clothing Store.

The maximum floor space area of the site is determined by its site area and floor space ratios identified in the *SEPP (Major Projects)*. The total permitted floor space area of the site is 185,510m², as demonstrated by Figure 12. The proposed development provides a Gross Floor Area of 185,221m².

The maximum permitted floor space area for residential development under the *SEPP (Major Projects)* is 110,271m². The proposed maximum residential floor space area is 96,540m².

	Floor Space Ratio	Area (m ²)	Permitted Floor Space (m ²)
Western precinct	2:1	30,757	61,514
Central precinct	1:1	26,482	26,482
Eastern precinct	2:1 1:1 maximum for residential	48,757	97,514
TOTAL Permitted GFA			185,510

Figure 12: Permitted Floor Space in accordance with SEPP (Major Projects)

The proposed floor space ratio for the Western Precinct has been calculated at 1.9:1. The proposed floor space ratio for the Eastern Precinct has also been calculated at 1.9:1, with the residential floor space ratio at 0.8:1.

It is noted that the provision has been made for an additional 12,000m² of additional floor space to be accommodated in the Carriageworks Building and 2,120m² additional floor space in the Blacksmiths Workshop.

The Carriageworks Building was recently completed by the NSW Government. The total area of the Carriageworks Building is 16,732m² and at this stage only half of the bays are occupied by Arts NSW.

Unless an increase of floor space area is provided for, the development potential and use of the building will be sterilised. Additional floor space within the building will not impact upon the urban form of the site or the surrounding area and offers a sustainable development outcome through the adaptive reuse of an existing heritage building.

Likewise, there is development potential for an additional storey within the Blacksmiths Workshop which could not be realised unless additional floor space is allocated to the building. Provision for additional floor space would result in increased sustainability by optimising development through the adaptive reuse of an existing heritage building. Increase in development potential will not impact on the urban form of the site or surrounding area.

The additional floor space within these two buildings will result in an overall floor space ratio for the Central Precinct of 1.3:1.

Importantly, it is noted that despite the increase in floor area within these two buildings, the total floor space area for the site is 185,221m², less than that permitted by the floor space controls.

6.6 Building Heights

The proposed buildings range in height from the existing height to 16 storeys. While generally consistent with the height map the building heights proposed vary from those outlined in the *SEPP (Major Projects)* as a result of detailed design, in particular:

- The alignment of the buildings in response to the proposed urban design framework, aligning the road system to reflect the existing heritage items. This will in effect reduce the visible elevation and impact from Wilson Street and the ATP.
- The retention of the clothing store, and the resultant configuration of buildings;
- The placement of 12, 8 and 5 storey buildings within the 10 storey zone to redistribute and provide greater variations in height of neighbouring buildings and improve visual continuity to the south;
- The framing of the main east-west axis with five storey buildings proposed on its southern side, and four storey buildings to the north;
- At the eastern end of the site the alignment of buildings perpendicular to the rail lines rather than parallel to retain connectivity across the rail lines as opposed to walling off the precinct from the rail lines and minimize visual impact from Wilson Street and the south.
- The location of the 16 storey marker building to best link with publicly accessible open space and a large publicly accessible plaza. The plaza will be the connecting arrival space for the new bridge connecting to the ATP and improving access to the Redfern Railway Station. The 16 storey building in this location hovers over the plaza and acts as a landmark for the Redfern Railway Station entrance.

6. Preferred Design Concept

6.7 Access and Parking

Site Access

The development will be accessed via Wilson Street at two access points. At the western end of the site the existing access will be modified to ensure appropriate grades. At the eastern end of the site a new access is proposed opposite Shepherd Street. An assessment of site access and circulation will be provided as part of the Environmental Assessment.

Car Parking

The proposal will provide car spaces for residential and commercial off street car parking. The proposed parking provision is outlined in *Figure 13* below. Car parking is generally in accordance with the City of Sydney Central Sydney LEP 1996, Part 6, and in accordance with the recommendations of Parsons Brinckerhoff.

Residential	Total	Car Space Maximum
	Studio	0.25
	1 bed	0.5
	2 bed	1.2
	3 bed	2
Other		
	Offices	1/125m ²
	Retail	1/125m ²
	Community	1/125m ²

Figure 13: Car Parking

Parsons Brinckerhoff has provided a preliminary review of traffic and parking for the proposed development and has determined that the site and local road system can operate with an adequate level of service providing some improvements are made. The Environmental Assessment will elaborate on these improvements, will review site access, car parking and on-site circulation.

6.8 Landscape Treatment

Approximately 15% of the site is proposed as publicly accessible open space, some of which will be dedicated to Council. Open space areas will:

- Provide a safe and accessible public domain, encouraging safe pedestrian and bicycle movements through the site;
- Reflect heritage forms and values; and
- Integrate with environmental solutions and provide water sensitive urban design.

7. Consultation

Appropriate consultation will occur with relevant local and state government agencies during the Environmental Assessment process. This section identifies these agencies.

7.1 City of Sydney

City of Sydney is the relevant local government authority. The proposed development will be referred to Council as part of the Environmental Assessment process.

7.2 RailCorp

RailCorp is the owner of the site and a stakeholder. The Redfern-Waterloo Authority has commenced discussions with RailCorp. RWA will continue discussions with the various RailCorp stakeholders prior to lodgement of the Environmental Assessment.

7.3 Heritage Council of NSW

As indicated in [Section 5.1](#) of this report, consultation with the Heritage Council will be required as part of the Environmental Assessment process, given the North Eveleigh site is listed on the State Heritage Register.

7.4 Roads and Traffic Authority

In accordance with the provisions of State Environmental Planning Policy No.11 – Traffic Generating Developments, the Environmental Assessment will be referred to the RTA for comment. Prior to lodgement of the Environmental Assessment preliminary discussions will be held with the RTA.

7.5 Utility Providers

RWA has commenced discussions with Energy Australia and Sydney Water regarding servicing the site. Further consultation will occur with Energy Australia, Sydney Water, Agility and Telstra to determine any issues which need to be addressed.

7.6 Other State Government Agencies

As the CarriageWorks facility is in close proximity CarriageWorks will be consulted during the preparation of the Environmental Assessment.

Police NSW will be consulted due to their interest in safer by design and crime prevention in public spaces. Police NSW will be consulted as part of the Environmental Assessment process.

8. Conclusion

The redevelopment of North Eveleigh is integral to the renewal and revitalisation of Redfern-Waterloo. It will generate investment and economic growth, create jobs, the provision of new housing –including affordable housing and facilitate cultural development. Redevelopment offers the opportunity to enliven the site after years of demise and reintegrate it back into the community.

The proposed scheme outlined in this Preliminary Environmental Assessment will deliver a high quality development which will contribute to the character of the site and local area. It is consistent with the intent for the site identified in the *Redfern-Waterloo Built Environment Plan (Stage One)*. It will provide 185,221m² of floor space area, within the limit of floor space area for the site permitted by the *SEPP (Major Projects)*.

The key issues identified in this report will be addressed in detail in the Concept Plan Application and have been prepared to assist the Minister and the Director-General of Planning to:

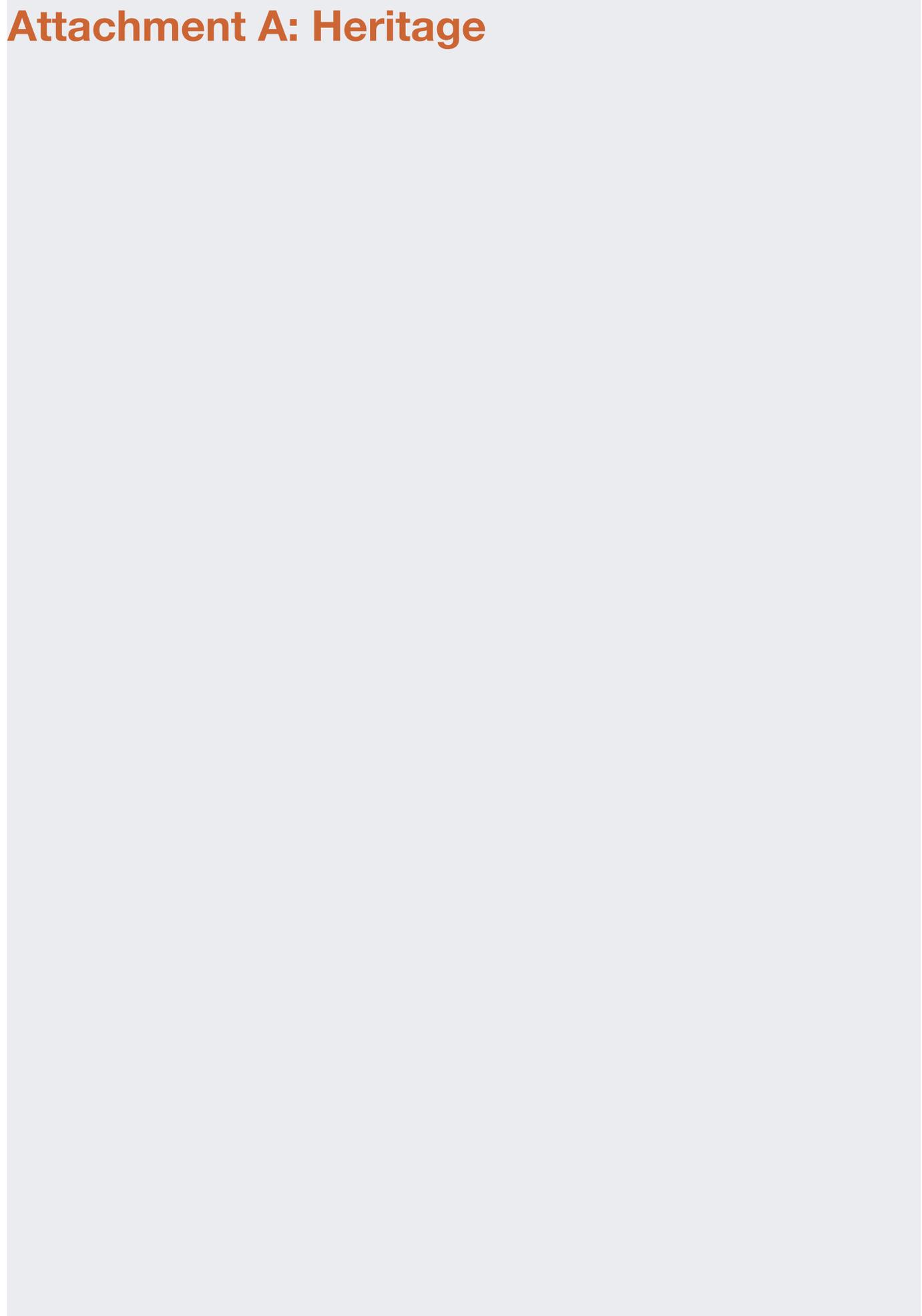
- Confirm that the proposed North Eveleigh redevelopment is a Major Project to which Part 3A of the *Environmental Planning and Assessment Act* applies,
- Authorise the submission of a Concept Plan Application for the proposed development, and
- Enable the Director-General to prepare and issue environmental assessment requirements under Section 75F(2) of the EP&A Act, in order to finalise the proposed design and to prepare the Environmental Assessment.

The RWA seeks the Ministers consideration of any variations in floor space and height in the proposal under Part 5, Division 3, and Clause 21(3) of the *SEPP (Major Projects)*.

The RWA looks forward to receiving the Minister opinion on this important project.



Attachment A: Heritage



Preliminary

HERITAGE ASSESSMENT

North Eveleigh Concept Plan

for

Redfern-Waterloo Authority

WEIR + PHILLIPS
Architects and Heritage Consultants

Studio 4, Level 2, 134 Broadway
Broadway, NSW, 2007
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December 2007

1.0 INTRODUCTION

1.1 Preamble

This preliminary heritage assessment report for North Eveleigh, also known as the Eveleigh Carriage Workshops, Redfern, has been prepared at the request of the Redfern-Waterloo Authority. It forms part of the Preliminary Environmental Assessment submitted with the Project Application for North Eveleigh to enable the Director-General to prepare and issue environmental assessment requirements under section 75F (2) of the *EP&A Act*, in order to assist in refining the design for the redevelopment and to prepare the Environmental Assessment.

A more detailed heritage assessment will be submitted with the Concept Plan application.

This statement assesses the Bates Smart Design Development documents of December 2007.

1.2 Authorship

This statement has been prepared by James Phillips, B.Sc.(Arch) B.Arch, M.Hert.Cons.(Hons), and Alice Fuller, B.Appl.Sc.(CCM), M.Hert.Cons.(Hons), of Weir + Phillips Architects and Heritage Consultants.

1.3 Methodology

1.3.1 Guiding Documents

Redfern –Waterloo Authority Act 2004: The Eveleigh Carriage Workshops are listed on the NSW State Heritage Register. Under Clause 29 (1) of the Redfern-Waterloo Authority Act 2004 the provisions of the Heritage Act do not apply to the carrying out of development under Part 4 of the Environmental Planning and Assessment Act (and for which the Minister is the consent authority) or that is a project under Part 3A of the EP&A Act. Under Clause 29(2) of the RWA Act an item or part of an item listed on the State Heritage Register is not to be altered or demolished unless:

- (a) the Minister has consulted the Heritage Council of New South Wales about the matter and has taken into consideration any advice duly provided by the Council, and
- (b) the Minister is satisfied that it is necessary for the sustainable improvement of the operational area.

Redfern-Waterloo Built Environment Plan (Stage 1): The Built Environment Plan (BEP) was endorsed by NSW Cabinet in 2006 and provides the planning framework for the revitalisation of Redfern-Waterloo. The BEP identifies heritage items and items of historical interest for RWA strategic sites and foreshadows the introduction of a heritage clause in the related State Environmental Planning Policy (Major Projects). Heritage items identified in the SEPP are listed below. The BEP identifies the Clothing Store and Timber Shed Extension as Buildings of Historical Interest.

State Environmental Planning Policy (Major Projects): Clause 27 of the State Environmental Planning Policy (Major Projects) Amendment No. 7 only applies to development under Part 4 of the Environmental Planning and Assessment Act and as such does not apply to the subject development. The following items within North Eveleigh are identified as heritage items for the purposes of Clause 27:

- Carriage Workshops;
- Blacksmiths' Workshop;
- Paint Shop;
- Scientific Services Building No.1;
- Chief Mechanical Engineers Office Building; and
- Telecommunications Equipment Centre.

Draft Conservation Management Plan (CMP): Otto Cserhalmi + Partners PL, Eveleigh Carriageworks Conservation Management Plan, 2002: The draft Conservation Management Plan is referred to in this statement as the draft CMP. The draft CMP is being updated to take into account the Redfern-Waterloo Built Environment Plan (Stage 1) and the associated State Environmental Planning Policy (Major Projects). It should be noted that the draft CMP was prepared for State Rail Authority on the basis of the development of a museum for rail heritage on the site. RailCorp no longer intends to retain ownership of the site or to develop a museum on the site. All RailCorp's significant moveable heritage will be relocated to its proposed Rail Heritage Centre at Thirlmere. As such the basis for the development of the CMP no longer exists, and its recommendations are no longer relevant. This assessment relies on a review of the draft CMP 2002 and an updated version of it which will be submitted in its final form with the Concept Plan Application.

The assessment procedure contained within this assessment has been prepared with an understanding of the guidelines provided by the NSW Heritage Manual, itself based on the principles of the ICOMOS Australia in The Burra Charter: the Australian ICOMOS Charter for Places of Cultural Significance, as revised and ratified in November 1999. Further interpretation of The Burra Charter has been made with reference to its predecessor companion document, The Illustrated Burra Charter: making good decisions about the care of important places, 1992.

This heritage impact assessment makes reference to the Heritage Office publication Statements of Heritage Impact, revised 2002.

1.3.2 Physical Evidence

Site visits were conducted throughout 2007.

1.3.3 Documentary Evidence

As indicated above the documentary evidence is derived from:

- State Environmental Planning Policy (Major Projects)
- RWA Built Environment Plan (Stage One)
- Otto Cserhalmi + Partners PL, *draft Eveleigh Carriageworks Conservation Management Plan*, 2002.
- Bates Smart, *Design Development Documents*, December 2007.

2.0 HERITAGE OPPORTUNITIES AND CONSTRAINTS

2.1 With Regard to the Concept Plan

The Former North Eveleigh Carriage Workshop Site has a history of evolution to meet the changing industrial requirements of the New South Wales Government Railways and its successors. With the exception of part of the CarriageWorks Building the site is currently unoccupied.

Best heritage practice seeks alternate uses that are related to the original use of the building/s (adaptive reuse). Related uses will often have a high level of compatibility with a site, thus minimising the requirement to change original fabric. As has occurred to a significant number of major heavy engineering sites, there are no viable related uses. Uses compatible with reasonable community expectation must be found. Given the surrounding commercial and residential character of the area, a mixture of these uses form the basis of a strategy for intensifying the use of the site and for finding adaptive reuse for suitable heritage significant buildings on the site.

Adaptive reuse for residential and commercial use, as foreseen by the RWA, requires that a high level of amenity be obtained in any changes, as it is likely that the new uses will continue long into the future.

The adaptive reuse of large industrial buildings poses a number of challenges in achieving a balance between good residential and commercial design and the need to recognise heritage significance. In the case of the North Eveleigh site the following opportunities and constraints have been identified.

2.1.1 Opportunities

- The site is large, under-utilised and in one ownership. Its size offers the opportunity to achieve a cohesive design solution which integrates heritage items and builds on the sites heritage values.
- The existence of large, significant buildings that are compatible in form and scale provide the potential for flexibility in finding quality adaptive reuse.
- The conservation of core buildings through adaptive reuse and a sensitive response to the site's historic layout and subdivision pattern can assist in the understanding and interpretation of the function of the site and related sites. Conservation of core buildings will also enable an appreciation of the site's historic and heritage importance in the future and arrest the decline of a number of significant items.
- The typology of the industrial buildings could be maintained and their relevance reactivated by allowing a range of new uses of varying scale that fit within the existing envelope of the industrial buildings.
- The Eveleigh Railway Yards provided a vital source of employment and was integral to the sustainability of the Redfern–Waterloo community. Redevelopment offers the opportunity to enliven the site after years of decline and reintegrate it into the community.

2.1.2 Constraints

- The challenge to maintain an understanding of the historic industrial function of the site through interpretation in the face of extensive changes to provide for residential and commercial use.

- The requirement to retain buildings and places of significance within acceptable curtilages.
- The need to maintain heritage significance while dealing with the restricted level of compatibility between past use and future use of buildings.
- The retention of a portion of the Fan of Tracks and for adequate interpretation of the Fan of Tracks based on the significance ascribed to it in the draft CMP.

3.0 STATEMENT OF SIGNIFICANCE

The Former Eveleigh Carriage Workshops, part of the Eveleigh Railway Workshops Complex, and originally known as the Eveleigh Carriage and Wagon Workshops has high historic, social, aesthetic and technological significance at a state level.

The Eveleigh Carriage Workshops was involved in the construction, conversion and maintenance of railway carriages from 1883 until 1989 and wagons from 1883 until 1913. Buildings, open spaces, circulation, rails, machinery, movable items and services within the site demonstrate the history and operation of the New South Wales Government Railways over the period 1883 to 1989. Late Victorian expansion, technological advance during the interwar period and later decline and closure are embodied in the fabric and memory of the place.

The Eveleigh Railway Workshops Complex, comprising the Carriage and Wagon Workshops and the Locomotive Workshop, was constructed during a period of growth and prosperity for New South Wales Railways and was designed to be the central workshops for the railway system. The original buildings of the Carriage and Wagon Workshops, (the Carriage Works, Paint Shop and Stores 1 & 2) constructed between 1882 and 1895 provide good examples of late Victorian industrial buildings and demonstrate not only the status enjoyed by the railways in the industrial age, but also the Government's confidence in the future of rail transport.

The main workshop buildings demonstrate innovative use of material and technology in, for example, the use of long runs of brickwork without construction joints and metal-framed windows. The layout of the complex and design of individual buildings reflects colonial exploration of essentially British railway technology and models. Important figures associated with New South Wales Railways during the late nineteenth century and involved in the design and layout of Eveleigh, such as Whitton, Cowdry, Elston and Thow, all had experience in British railways; Eveleigh

has significance for its association with these, and other, early colonial engineers. Unlike systems of this date in the United Kingdom and United States, Eveleigh was constructed by government, as opposed to private, enterprise.

The late nineteenth century buildings of the Eveleigh Carriage Works demonstrate a carefully considered aesthetic arising out of their scale, proportioning, materials choice and use and the rhythm created by the bays of the main carriage works. This aesthetic is closely tied to railway architecture of the late Victorian period and is reinforced with the ongoing use of brick and iron buildings, many with exposed structural elements. The fact that these buildings are very much tied to the Victorian era is demonstrated by the steady decline of the complex from the 1920s onwards. The buildings were built as timber workshops; increased use of steel gradually rendered them obsolete from the 1920s onwards. The simplicity and generally smaller scale of later buildings demonstrates the decline in the importance of Eveleigh as other rail yards, such as Chullora, gained in prominence.

The Eveleigh Carriage Works, as part of the Eveleigh Railway Yard, were integral to the development of the surrounding suburbs. The site has important physical, visual and social connections with these suburbs, home to many of the people who worked in, or were in some way, associated with the yard. The place has strong cultural, social and/or spiritual associations for substantial numbers of people in the community, including post World War II migrants and apprentices of the many trades represented on the site. The yard as a whole was a key site in many union activities, such as the strike of 1917. Many employees retain a strong sense of pride and identification with the place.

The Eveleigh Carriage Workshops, as part of the Eveleigh Railway Yard, has landmark qualities in the views and vistas to and from the site, but in particular as approached along the railway line. The size and spatial arrangement of the complex, its situation on both sides of the railway line and the scale and design of the late Victorian buildings distinguish it from other industrial sites along the line. The site defines the entrance or exit of a railway journey into the city.

4.0 STATEMENT OF HERITAGE IMPACT FOR THE CONCEPT PLAN

4.1 The Concept Plan

The Concept Plan prepared by Bates Smart proposes to adaptively reuse the North Eveleigh site for residential, commercial, and retail development. Within this development, provision would also be made for community facilities. The design principles on which the Concept Plan is based are outlined below:

The Urban Design Framework aims to maintain the alignment and visual continuity of neighbourhood streets through the site, creating a series of north-south streets. The existing heritage buildings are used to establish the alignment of east west streets. The combination of the two street patterns establishes a framework of traditional streets and blocks in a configuration that responds to both the neighbourhood streets and heritage buildings on the site. The simplicity of the framework allows flexibility in terms of staging, subdivision, etc, while maintaining a coherent legible overall form.

A network of public open spaces respond to the linear character of the site and relate to the historic buildings and spaces. The primary open space is a shared pedestrian and vehicle east-west street framed by the Carriage Works and Blacksmith's Shop building. This street links the east and west ends of the railyards through the cultural and retail heart of the site. To maximise its accessibility from Wilson Street a series of pedestrian connections are proposed, typically located at the ends of the neighbourhood streets.

Carriageworks Way links four open spaces along its length. Either side of the Carriage Works the siding yards will be maintained. These spaces will retain the rails to facilitate heritage interpretation, and be spaces to facilitate a range of outdoor cultural and community events.

At the eastern end of the site a large plaza is proposed as an extension of the existing open space adjacent to the Foundry. This plaza is the connecting arrival space for the new bridge to the Redfern Railway Station.

The built form and building heights have been conceived to maintain continuity of scale with the historic buildings. A series of low rise linear buildings, generally aligned east-west, frame Carriageworks Way, providing a scale that is sympathetic to the heritage buildings and respects the scale of the adjoining neighbourhood. Taller buildings have been located on the southern portion of the site adjacent to the rail line, where they will have minimal overshadowing impact. These buildings have been aligned perpendicular to the rail lines to frame the neighbourhood streets, and imply an openness and connectivity across the rail lines; as opposed to walling off the precinct from the rail lines.

A singular higher rise 'object' building is proposed as landmark at the eastern end of the site. This building hovers above the plaza and acts as a landmark for the Redfern Railway station entrance.

The building typologies have been developed to relate to the rail building types that occupied the site; and thus reinforce a precinct with a distinct character and typology. These buildings have a typology resulting from the addition of identical linear elements, giving them a repetitive linear rhythm. This quality has been reinterpreted to come up with contemporary commercial and residential building types. Paraphrasing Bates Smart 2007

The site is divided into distinct areas for the purpose of a more detailed explanation of the design. The Carriage Works and Blacksmiths' Shop buildings are located in the centre of the site and form the central precinct separating the eastern and western sites.

4.1.1. The Eastern Precinct

Proposed work to the Eastern Site consists of the following:

- The significant Chief Mechanical Engineer's Office and the Telecommunications Equipment Centre to the west of the site are to be adaptively reused.
- The Scientific Services Building No.1 will be adaptively reused.
- The Paint Shop will be retained and undergo extensive adaptation. This will include a residential component constructed through the middle of the existing building.
- Demolition of a number of buildings of low significance to the centre of the site and the demolition of the Paint Shop addition (also known as the Suburban Car Workshop).
- The construction of five residential buildings between Wilson Street and the Paint Shop to form Carriageworks Way.
- Construction of a residential building to the west of the Paint Shop.
- Construction of six Commercial/Office buildings bordering the rail corridor.
- Construction of a residential tower adjacent to Redfern Station.

4.1.2. The Western Precinct

Proposed work to the Western Site consists of the following:

- Retention of the Clothing Store to be adaptively reused as a residential building.
- Demolition of a group of early sheds and the Timber Shed Extension.
- Demolition of later sheds.
- Construction of eight residential blocks.

4.1.3. The Central Precinct

The existing buildings are proposed to remain and no additional building elements are proposed in the centre of the site. However, additional floor space is proposed in the CarriageWorks and Blacksmiths' buildings.

4.2 Discussion

The whole North Eveleigh site functioned as a carriage workshop for almost 100 years. Also on the site were offices related to it, and the locomotive works on the opposite side of the main running lines. Other functions such as telegraphy were also dealt with on the site.

Throughout this period, New South Wales Government Railways and its successors were major employers in the state and ran a sizeable portion of its industrial output.

4.2.1 Relative significance

The Eveleigh Carriage Workshops were unique to New South Wales as the only place where construction and maintenance of passenger carriages took place up to the 1920s when facilities were built at Chullora for the construction and maintenance of suburban trains. The Carriage Works has state significance for this historic role.

Carriage workshops also existed to serve each of the other state railway systems; Newport Workshops in Victoria, Ipswich in Queensland, Mile End in South Australia, Bassendean in Western Australia and Launceston in Tasmania. All manufactured a distinctive range of passenger carriages for their individual systems using construction and manufacturing techniques borrowed from then current practice in the United Kingdom and to a lesser extent, North America.

In terms of size, at their fullest extent, the railways of New South Wales and Queensland had roughly equivalent route mileages while the smaller Victorian system had a similar intensity of traffic to New South Wales. It is matter of debate as to which was the largest workshop, Eveleigh or Newport. The entire Eveleigh works are representative of workshops and manufactories owned by

each state's railway system. As such each complex has significance at a state level in each state. None produced an item or innovation that would justify significance at a national or international level.

Significance on an international level is confined to workshops such as Crewe Works in the United Kingdom and Altoona Workshops in the United States. These workshops served far larger railway systems than the New South Wales railways and produced locomotives and rolling stock that have become engineering icons of worldwide recognition.

4.2.2 Factors in determining a Conservation Strategy

Conservation of a whole railway workshop will never be attempted. The scale of machinery and production areas is too large to warrant complete conservation. Even where representative machines are concentrated in a single building or part of a building, the sense of scale of the operation is lost.

The buildings housing a railway workshop may be retained and adaptively reused, some as railway museums, but those railway workshops in inner-city locations are inevitably the subject of major use change. Where this occurs, interpretation becomes an important component in maintaining an understanding of the site's original function.

The range and disposition of buildings on the site also presents challenges. Where there is adaptive reuse of an individual building it fits in to the urban context in which it is found. In the case of the North Eveleigh site, there is a wide range of buildings and the process of adaptive reuse also includes extensive new construction. Where this occurs, it is important that heritage values are maintained, but it is also important that the new urban precinct being created is a viable design. Opportunities must be made to allow the design and location of new buildings to operate in an urban context that provides a high level of amenity to future users.

On a site that is so extensive, certain buildings, some of which are deemed as having heritage significance, will not be retained. The SEPP identifies six buildings as heritage listed. Buildings on the site have also been assessed for significance in the draft CMP. Their significance is derived from being part of a

large complex and from their representation of particular functions within that complex. Once the equipment for carrying out the particular function is removed, all understanding of the building's function is lost. Its architectural merit and location become important factors in deciding its future.

The review of the draft CMP undertaken by Weir & Phillips Architects and Heritage Consultants concurs with the draft CMP that the following buildings have low significance, being listed as either *Neutral* or *Intrusive*. These buildings (identification numbers are from the draft CMP, Levels of Significance Plan, p.270a) are:

- 6a Store No. 2 Extension
- 11b Timber Shed Extension
- 31a Electrical Workshop Extension
- 32b Electrical Workshop Outbuildings
- 48a Spring Store Extension
- 83 Scientific Services Building No. 2
- 84 Unidentified Building
- 86 Outward Parcels Depot
- 94 Boilermakers Shop
- 95 Toilets
- 103 Unidentified Shed
- 106 Unidentified Building
- 107 Fire Protection and Drug Analysis Building
- 108 Fire Protection Shed
- 109 Unidentified Building
- 110 Asbestos Shed

All of these buildings, assessed as being *Neutral* or *Intrusive* are proposed to be removed.

The review of the draft CMP revises the levels of significance for a number of buildings listed on the Levels of Significance Plan. They are listed as follows:

	Levels of Significance Plan	Review of draft CMP	
	The Fan of Tracks	International	State
10	Carriage & Wagon W'shop	International/National	State
11a	Timber Shed	State	Local
12	Paint Shop	International/National	State
12a	Paint Shop Addition	Local/State	Local
27	Traverser No. 1	International/National	State
28	Traverser No. 2	International/National	State
47	Carriage Shop Extension	State	Local
73	Store No. 3	Local	Neutral
81a	Air Raid Shelters	State	Local
82	Store No. 4	Local	Neutral

The following buildings, listed as significant are proposed to be removed:

(5) Store No. 1, (6) Store No. 2, (11a) Timber Shed, (12a) Paint Shop Addition, (47) Carriage Shop Extension, (48) Spring Store, (73) Store No. 3, (81a) Air Raid Shelters.

In each case the possibility of adaptive reuse has been carefully considered and discounted. The case for each building is given briefly as part of the Heritage Assessment in 4.3.2.

The Fan of Tracks will be removed for development and subject to a comprehensive interpretation strategy in landscaped areas to reflect their significance.

4.3 NSW Heritage Office: Matters for Consideration.

The impact of the proposal is assessed against three matters for consideration posed by the New South Wales Heritage Office update *Statements of Heritage Impact* (2002).

4.3.1 Consideration 1:

The following aspects of the proposal respect or enhance the significance of the item for the following reasons

The Former Carriage Works Site is a place of high historic, social, technical and associative significance. The significance lies in its ability to demonstrate a range of engineering techniques relating to the construction and maintenance of railway carriages for the New South Wales Government Railways and its successors. The cessation of this use has severely diminished the significance of the place in terms of technical, social and associative significance.

Understanding the criteria of significance on the site will largely depend on interpretation. The large buildings give an idea of the scale of the place and the scale of overall activity that took place there. The buildings themselves do not give an indication of the type and multitude of activities that took place within.

A number of the principal buildings and items on the site have been recognised and conserved. An interpretation strategy has been implemented for the Carriage Workshop. An interpretation strategy is being implemented for the Blacksmith's Shop.

In the proposal, recognition is given to the Paint Shop, the Clothing Store, the Scientific Services Building No.1, the Chief Mechanical Engineer's Office Building, the Telecommunications Equipment Centre and the Fan of Tracks.

- The Telecommunications Equipment Centre will be restored and adapted for an alternate use.
- The Chief Mechanical Engineer's Office Building will be restored and adapted for an alternate use.
- The Scientific Services Building No.1. will be restored and adaptively reused.
- The Clothing Store will be restored and adaptively reused as a residential building.
- The Paint Shop will be restored and extensively rebuilt as commercial and residential space.
- A portion of the Fan of Tracks will be retained and be extensively interpreted through landscaping its area of coverage in a manner that retains an understanding of its significance.

The careful retention of moveable equipment and its placement within the proposed development will greatly assist in interpreting and understanding the activities that once took place in the complex. An interpretation strategy should form part of the later Project Application process.

It is noted that all buildings identified in State Environmental Planning Policy (Major Projects) as heritage items will be retained and adaptively reused.

The Clothing Store is not identified in the SEPP as a heritage item but is an item of historic interest and is being retained. The Clothing Store is attributed as being of local significance in the draft CMP.

4.3.2 Consideration 2:

The following aspects of the proposal could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts

It is proposed to demolish a number of buildings not listed as significant in the draft CMP. These buildings include;

- The group of buildings to the east of the fan of tracks. This includes the buildings numbered 31a, 32, 32b, 59a 83, 84, 86, 105, 106, 107,

108, 109 and 110 in the CMP. The level of significance of these buildings is listed as neutral or intrusive in the draft CMP.

- The group of buildings at the western end of the site including the buildings numbered 6, 6a, 48a, 94 and 103 in the draft CMP. The level of significance of these buildings is listed as neutral or intrusive in the draft CMP.

These levels of significance are consistent with the reviewed assessment undertaken by Weir & Phillips Architects and Heritage Consultants.

The group of buildings listed above consist of later additions to the site to cater for new processes required in the latter part of the twentieth century. While they add to an understanding of the ongoing changes to the complex as a whole, they are poor candidates for adaptive reuse and are located such as to inhibit the overall redevelopment of the site.

There will be no adverse heritage impact arising from their demolition.

A number of buildings listed as significant are proposed for demolition. These are:

- (5) Store No. 1 & (6) Store No. 2.

Stores 1 and 2 date from the earliest years of the Carriage Workshop. They have been altered through recladding and are now supported by the structure of the adjoining buildings (Stores 3 and 4) due to the weakening of their structural timbers from white ant infestation. Given the condition and the difficulty of replacing large timbers, neither of these buildings are good candidates for adaptive reuse.

Any adverse heritage impact arising from the demolition Stores 1 and 2 is manageable as many other examples of this type of warehouse and shed construction are retained elsewhere in Sydney.

- (11a)The Timber Shed Extension.

The Timber Shed has a listing of state significance under the draft CMP. The review of the draft CMP concludes that the level of significance is not warranted. The building is indicative of many timber sheds built by the railways throughout New South Wales as goods and storage sheds. A number of good examples are

conserved including the similar goods shed listed on the State Heritage Register at Canowindra in western New South Wales.

Any adverse heritage impact arising from the demolition is manageable as other examples of this type of construction are retained elsewhere in New South Wales.

- (12a) The Paint Shop addition.

In the draft CMP, the Paint Shop addition is given local significance for its interior and state significance for its facade. This is an optimistic appraisal as the building presents poorly as industrial architecture when compared with the neighbouring Paint Shop of 1887. Demolition of this addition will allow the simultaneous interpretation of two elevations of the original (1887) Paint Shop and enhance the Paint Shop's relationship with the Carriage Works.

Any adverse heritage impact arising from the demolition is manageable and will benefit other aspects of the significance of the place and of the scheme.

- (47) Carriage Shop Extension.

The carriage shop extension has been partially demolished for the 1960s boilermakers shop. The southern wall of the building is of brick and it forms an important part of the view to the site from the rail corridor as it reinforces the wall of late nineteenth century industrial buildings along the southern boundary of the site. However the brick wall is located in an area required for vehicular access for maintenance of the rail corridor, in the location proposed for the new rail alignment and adjacent to a road for the subject development.

Retention of the southern wall would be preferable. However due to the operational requirements of RailCorp this is not possible.

- (48) Spring Store

This is a simple steel framed shed. Its external cladding has been removed leaving a series of simple steel frames. This building is not a good candidate for adaptive reuse.

There will be no adverse heritage impact arising from the demolition of the remains of this building.

- (73) Store No. 3

This building forms an infill between, and is of similar construction to, Stores 1 and 2. It has been altered through recladding. Given its condition and the difficulty of replacing large timbers affected by white ants, this building is not a good candidate for adaptive reuse.

Any adverse heritage impact arising from the demolition of this building is manageable.

- (81a) Air Raid Shelter

A rare building type that was never used for its intended purpose. It is constructed of reinforced concrete and has undergone alteration over time to give it some sort of use. This building is a poor candidate for adaptive reuse as since its initial construction no viable use has been found for the building within the industrial complex.

Any adverse heritage impact arising from the demolition of this building is manageable and will benefit the scheme overall.

- (82) Store No. 4

This building forms the western end of the group that includes Stores 1, 2 and 3. This is a later store than the other three and has been altered through recladding. Being of lighter construction adjacent to the rail corridor, this building is not a good candidate for adaptive reuse.

Any adverse heritage impact arising from the demolition of this building is manageable.

As empty buildings, the structures listed above tell us little of the functions carried out within. To maintain an understanding of the place, significant buildings such as the Carriage Workshop, the Paint Shop, the Blacksmiths' Shop, Traversers and the road way between the Carriage Workshop and Blacksmiths' Shop buildings are retained in a group from which a comprehensive interpretation strategy can be derived.

4.3.3 Consideration 3:

The following sympathetic solutions have been considered and discounted for the following reasons

There is a wide range of possible means of adaptively re-using the site.

- Creation of a Carriage Works Museum.

This would require conservation of the site *in toto*. The entire site as a museum dealing with the previous activities on the site would never be viable. Almost all of the machinery in the larger buildings has been removed or relocated. Interest in the myriad individual processes carried out would be limited. In addition, the Office of Rail Heritage is currently overseeing the development of the Rail Heritage Centre at Thirlmere, where significant moveable heritage will be located.

As the site now stands, the building that would have been critical in the creation of a museum has undergone adaptation into a cultural facility. The contents of this building have been dispersed. Any possibility of a meaningful museum has been lost.

- Retention of all buildings rated as having local heritage significance or higher.

With the CarriageWorks Theatre in the centre of the site, two separate areas are available for development. Within these areas, heritage issues must be balanced against the ability to plan for a high level of amenity for future users.

All of the buildings on the site were built for purposes that bear no relationship to the intended future uses of the site. A number of them are not viable candidates for adaptive reuse. This may arise out of the condition of the building (eg Stores 1 & 2 have been damaged by white ants), its location on the site (eg the Timber Shed Extension), its limited contribution to the understanding of the site (eg the Timber Shed Extension) and unsuitability for adaptive reuse (eg the Timber Shed Extension).

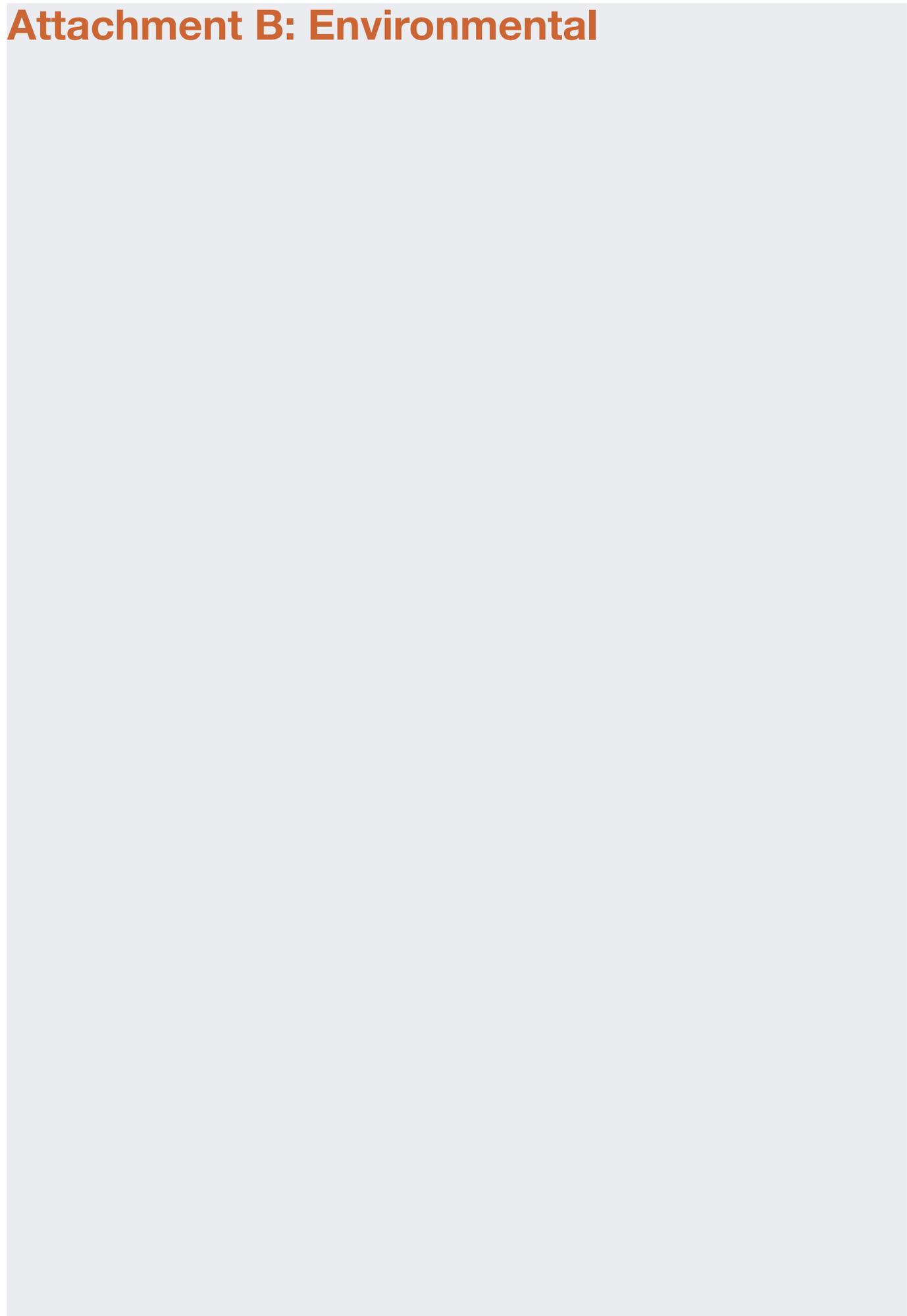
5.0 CONCLUSION

The Concept Plan takes into consideration the significance of the place while providing a scheme for urban renewal of the highest standard. In so doing, particular areas of significance are recognised. These are:

- The original street pattern of Darlington and Redfern is enhanced and reinforced by the introduction of that pattern onto the site.
- The design and orientation of the buildings and the development of building typologies that maintain the rhythm of bays in the existing industrial buildings.
- Retention and adaptive reuse of buildings identified as Heritage Items by the SEPP (Major Projects) these being the Chief Mechanical Engineer's Office building, Scientific Services Building No.1, the Telecommunications Equipment Centre and the Paint Shop.
- Retention and adaptive reuse of one building identified as a Building of Historical Interest by the BEP (Stage One), being the Clothing Store.
- Provision for the retention of a portion of the Fan of Tracks. Extensive interpretation of the fan of tracks by the creation of a major area of publicly accessible open space and by the separation of new buildings from the eastern elevation of the Paint Shop.

The impact of the Concept Plan on the heritage significance of the site is manageable as associative and cultural significance is maintained through interpretation and the aesthetic significance is maintained through the retention of significant buildings.

Attachment B: Environmental





Statement of Site Suitability

Based on the information available to date, WSP Environmental Pty Limited consider that the soils at the North Eveleigh Rail Yard site can be made suitable for the proposed mixed land use (i.e. residential apartments, cultural / artistic uses, commercial uses, landscaping and plazas) provided that the following are undertaken:

- Appointment of an Environmental Consultant to prepare a Sampling Analysis and Quality Plan (SAQP) which targets the data gaps present in the existing ground investigation information. Namely, deeper areas of fill; previous in-ground obstructions; and, soil impacts identified above the respective NEPM (1999) guidelines. The exact extent of these additional works will be governed by the zoning / phasing of the proposed development;
- Following completion of the additional investigation works, the Environmental Consultant will be required to prepare an updated Remedial Action Plan;
- Following completion of the remedial works, the Environmental Consultant will be required to prepare a Remediation Validation Report; and,
- If any immobile contamination remains in-situ following the remedial works, the Environmental Consultant will also be required to prepare an Environmental Management Plan.

Currently, insufficient information exists to confirm that the groundwater beneath the site is suitable for the proposed mixed use development. Consequently, the Environmental Consultant will need to outline the scope of additional investigation to demonstrate that the groundwater will not pose an unacceptable risk to human health and / or the environment.

Notwithstanding the above, given the site geology (i.e. shallow fill overlying shale) it is considered that many proven remediation technologies exist to be able to effectively address any groundwater contamination issues that may be identified by the proposed additional investigation works, thereby, making the groundwater beneath the site suitable for the proposed mixed use development.

In addition to the foregoing, a DECC accredited Environmental Auditor will review the foregoing elements of additional investigation in a staged manner throughout the works to ensure that the remediated site is suitable for the proposed mixed land use and does not pose an unacceptable risk to the environment.

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