

**MAJOR PROJECT ASSESSMENT
CONCEPT PLAN FOR NORTH EVELEIGH
Proposed by REDFERN WATERLOO
AUTHORITY
MP08_0015**

Director-General's Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

November 2008



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1 EXECUTIVE SUMMARY

This is a report on a Concept Plan application seeking approval for redevelopment of the former Eveleigh Carriageworks site on Wilson Street, North Eveleigh (part Lot 4 and part Lot 5 in DP 862514) (the site) for the purposes of land uses, building envelopes, building heights, FSR, access points, public open space network, preliminary landscape concept design and internal road layouts.

The site is currently owned by RailCorp and comprises a total area of approximately 10.7ha.

Proposal

The Concept Plan originally proposed a gross floor area of 179,927m² and car parking for 1943 spaces. Through the Preferred Project Report, the Concept Plan has been amended and seeks approval for:

- **Redevelopment** of the site for commercial, office, retail, cultural, community and residential uses
- **Retention and adaptive reuse** of heritage buildings
- **Demolition** of remaining non-heritage listed buildings
- **New building locations & new building heights** ranging from 4 – 16 storeys
- **Gross floor area** of 177,527m² (residential - 95,059m²; commercial - 55,672m²; retail - 4,000m²; and cultural uses - 22,796m²)
- **Car parking for approximately 1800 vehicles** within basements beneath proposed building footprints
- **75 parking** spaces at ground level on site (kerbside parking in new streets)
- **Public open space network** totalling 9,980m²
- Preliminary **landscape concept design**
- Removal of 80 trees
- Provision of **infrastructure** and **services**, including roadways and stormwater
- **Remediation** – to remediate the site to an acceptable level for redevelopment
- **Intersection upgrades** – to address increased traffic generation resulting from the redevelopment

The Capital Investment Value of the proposal is **\$550 million** and the proposal will create **3,270** full time equivalent construction jobs and **3,328** full time equivalent operational jobs.

Permissibility

State Environmental Planning Policy (Major Projects) 2005 (MP SEPP) is the principal planning instrument applicable to the site. The site is zoned Business – Mixed Use under the provisions of Schedule 3, Part 5 of the MP SEPP and is also identified in the Redfern-Waterloo Authority Built Environment Plan (BEP) as a strategic site for the purposes of a mix of employment, educational, cultural and residential uses. The proposed development meets the requirements of the MP SEPP and the proposed uses are permissible.

Public Exhibition

The proposal was exhibited for a 43 day period from 1 May to 12 June 2008. The Department received submissions from 10 public authorities and 161 public submissions, including community groups. Key issues included:

- Lack of open space
- Overdevelopment of site
- Traffic impacts
- Protection of heritage significance
- Parking provisions
- Promotion of ESD
- Promotion of public transport use

Preferred Project Report

On 16 September 2008, the proponent submitted a response to submissions and a Preferred Project Report to address issues raised by the Department and other public authorities. Revisions to the project included:

- Increased public open space by 2,650m², by creating 3-4 extra parks
- Amended building locations, by deleting 3 buildings and introducing 1 new building
- Redistribution of building heights
- Reduced on-site parking by 143 spaces to 1800 spaces
- Reduced floor space by 2,480m²
- Reconfigured vehicular access point
- Introduction of sustainability targets
- Affordable housing provisions

The PPR forms the basis of the assessment in this report.

The Department has assessed the merits of the Concept Plan Application and is satisfied that the impacts of the proposed development have been addressed via the PPR, the Draft Statement of Commitments and recommended modifications to the Concept Plan Application, and that the impacts can be suitably mitigated and/or managed to ensure a satisfactory level of environmental performance. On these grounds, the Department is satisfied that the site is suitable for the proposed development and that the proposal will provide cultural, social and economic benefits to the locality. All statutory requirements relating to the Concept Plan Application proposal have been met.

Public benefits

The public benefits resulting from the proposal include:

- The development benefits from its proximity to the city and transport hub, will revitalise a currently underutilised site and contribute to neighbourhood regeneration.
- Increased employment opportunities through the additional 3,328 operational jobs generated through the development.
- Commitment to Aboriginal employment in the locality.
- Improved connections from the surrounding neighbourhood into the site, which is currently physically separated.
- Provision and access to new public open space and public domain areas.
- Provision of new retail and commercial uses to service surrounding residential developments.

Key recommended conditions/modifications

Key recommendations made to the proposal and included as modifications to the Concept Plan are as follows:

- Further consideration of design options for works to Paintshop Building and Carriageworks
- Preparation of a TMAP to progress proposed intersection upgrades, identify measures to enhance public transport and pedestrian infrastructure, and support achievement of 40% mode share to car.
- Staging of development to ensure adequate access for vehicles and pedestrians and provision of services.
- Site management agreements for construction and ongoing operations between Carriageworks and owner(s) of residential and commercial buildings.
- Requirements to incorporate car share schemes and increased childcare provision in future project applications.

The Department recommends that the Concept Plan Application be approved, subject to modifications.

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2 BACKGROUND

2.1 THE SITE

2.1.1 Site context and location

The site, known as the former Eveleigh Carriage Workshops, is located in Wilson Street, Redfern (Lot 4 & Part Lot 5 in DP 862514), within the local government area of the City of Sydney Council (Council) and the Redfern-Waterloo Authority's (RWA) Operational Area. The site is currently owned by RailCorp and comprises a total area of approximately 10.7 hectares (107,230m²). It is located along the northern edge of the western rail line, between Redfern and Macdonaldtown stations, and bounded by Wilson Street to the north, the western rail line to the south, Iverys Lane to the west and Little Eveleigh Street to the east (see *Figure 1 – site location*).

The site is within walking distance to the University of Sydney's Darlington campus, Redfern Railway Station, and local shops and services located on Abercrombie Street. Redfern Town Centre and Australian Technology Park are within close proximity, located to the east and south of the site.

2.1.2 Existing site features

The site is currently occupied by numerous buildings and facilities as follows:

- Carriage Workshop (currently used as contemporary Performing Arts Centre)
- Blacksmiths' Shop
- Traversers No. 1 and No. 2, adjoining the Carriage Works building to the east and west respectively
- The Carpenters, Plumbers and Food Distribution building (Yaama Dhiyaan and Training School)
- The General Store/Clothing Store
- The Chief Mechanical Engineer's (CME) Building
- Scientific Services Building
- The Paint Shop building
- The Fan of Tracks

Historically, the site provided construction, conversion and maintenance services for railway carriages and this is evidenced in the buildings, open spaces, circulation paths, rails, machinery, moveable items and services within the site. In 1989 the Eveleigh Carriage Workshops ceased operation and a majority of the buildings are now unoccupied.

The main vehicular access to the site is via an entrance from Wilson Street, at the far western end of the site. Pedestrian access is via a ramp near the Blacksmiths' Shop building, and access is also available through the Yaama Dhiyaan building.

The site is generally level at the same grade with the rail corridor and has a significantly lower relative level than that of Wilson Street, which is located approximately 3 – 5 metres above the site. A retaining wall runs along much of the Wilson Street boundary to accommodate this change in level.

2.1.3 Surrounding development

The site is within proximity to the residential area of Darlington, University of Sydney, and the Redfern Town Centre and is surrounded by a mix of typical inner city land uses. Residential development to the north of the site is characterised by terrace housing, mixed with medium density residential development.

Abercrombie Street further north sustains a retail strip and is a main thoroughfare for university students moving between the campus and Redfern railway station, which is located to the south of the site. Railway uses and infrastructure is a predominant feature of the surrounding landscape.

Further south, across the rail corridor, is Australian Technology Park where various businesses are located.

2.1.4 Zoning / Statutory controls

The site is zoned Business – Mixed Use under the provisions of Schedule 3, Part 5 of State Environmental Planning Policy (Major Projects) 2005 (MP SEPP). A range of development is permissible with consent in this zone, including a mix of employment, educational, community, cultural, retail, business/office and residential uses.

Under the MP SEPP, the site is divided into 3 precincts and the development controls for each precinct are as follows:

- **Precinct A (Western):** maximum 4 storey height limit to Wilson St, a maximum 10 storey height limit to the rail line, and a maximum floor space ratio (FSR) of 2:1;
- **Precinct B (Central):** existing building height to remain (existing Carriage Workshop building and Blacksmiths' Shop building), and a maximum FSR of 1:1, including a maximum residential FSR of 0.5:1;
- **Precinct C (Eastern):** a range in height limits from existing height (2 storey Chief Mechanical Engineer's building) to 16 storeys, with the greater heights of 10 and 16 storeys at the eastern end of the site and adjacent to the rail corridor, a maximum FSR of 2:1, including a maximum residential FSR of 1:1.

The Carriage Works building, Blacksmiths' Shop building, Paint Shop building, Scientific Services Building No. 1, the Chief Mechanical Engineer's Office building, and the Telecommunications Equipment Centre are all identified as heritage items under the MP SEPP.

2.2 SITE HISTORY

The site, formerly known as the Eveleigh Carriage Workshops, has historic significance for its role in providing construction, conversion and maintenance services for railway carriages and wagons. The site evidences the rapid development of the NSW rail network, demonstrates the Government's confidence in the future of rail transport at the time, and also reflects international trends in rail industry during the period of its operation. The site has aesthetic and technological value for the original buildings of the Carriage and Wagon Workshops, being among Sydney and the state's finest examples of late Victorian industrial buildings, and is a major landmark in the landscape and defines views to and from the site.

The first buildings on the site, known as the North Eveleigh Rail Yard, were large stores at the Macdonaldtown end of the site. Between 1884 and 1887 the fan of tracks was laid and the Car and Wagon Workshops and the Paint Shop and Locomotive (later Mechanical) Engineer's Office were completed. Residential development of the area proceeded around the railway workshops, stimulated by the need for worker's housing.

During the 1900s various modifications were made on the site, 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 capacity. The site was closed in 1988 as the Chullora and Clyde railway workshops were able to take up the work previously performed at Eveleigh.

2.2.1 Previous applications

Since the closure of the site in 1988, significant developments include:

- Establishment of Yaama Dhiyaan café and hospitality and construction training centres in the refurbished former Canteen and Carpenters building, in late 2006;
- Development of CarriageWorks (Contemporary Performing Arts Centre) in the Carriage Workshops, in January 2007 (consent granted by Council in 2004);
- Viewing platform and pedestrian entrance structure off Wilson Street opposite the Carriage Workshops building, in January 2007 (consent granted by RWA as delegate of Minister, April 2006); and
- Approval for community markets within the Blacksmiths' Shop building (consent granted by RWA as delegate of Minister, November 2007).

- A masterplan lodged to City of Sydney by RailCorp was publicly exhibited in January 2001. A revised masterplan was lodged in June 2003 for a mixed use development and exhibited by South Sydney Council from 21 July to 5 September 2003. The application was withdrawn prior to a report to Council.

2.3 DESIGN COMPETITION

In August 2007, RWA invited 4 architects (Bates Smart, Cox, Hassell and Tzannes Associates) to participate in a design competition for the site, to prepare an urban design solution that would inform the preparation of a Concept Plan.

Whilst the design competition related to the eastern and western parts of the site, entrants were required to develop an integrated response to the entire site taking into account the CarriageWorks, the proposed markets at the Blacksmiths' Shop and the Yaama Dhiyaan training centres.

RWA appointed an independent Urban Design Panel (Julie Bindon, Brendan Crotty, Margaret Petrykowski, Lucy Turnbull and Prof. Peter Webber) which selected the Bates Smart proposal as the preferred entry. RWA have refined and incorporated the winning entry into the current Concept Plan application.



Figure 1 – Site location

3 PROPOSED DEVELOPMENT

3.1 The proposed development

Approval is sought for a Concept Plan Application for the redevelopment of the former Eveleigh Carriage Works site, known as North Eveleigh. The Preferred Project Report (PPR) has amended the proposal by reducing floor space and car parking spaces, deleting some buildings and increasing public open space. Specifically, the proposal, as encompassed by the PPR, consists of the following:

- Use of the site for residential, office/retail and open space purposes as well as the adaptive reuse of heritage buildings for cultural/community purposes;
- A total Gross Floor Area (GFA) of 177,527m², reduced from the original 180,007m², comprising:
 - 95,059m² of residential GFA (originally 92,139m²)
 - 55,672m² of commercial GFA (originally 61,072m²)
 - 4,000m² of retail GFA (remains unchanged)
 - 22,796m² of cultural purposes GFA (including existing Carriageworks, remains unchanged)
- Building location and indicative new building footprints and envelopes (*see Figure 3 - Site Plan*);
- Building heights, ranging from 4 storeys to 16 storeys (*see Figure 3 - Site Plan*);
- Retention and adaptive reuse of the following heritage listed buildings on site:
 - Carriage Workshop (approximately an additional 7,300m² floor area proposed)
 - Blacksmiths' Shop (approximately an additional 1,000m² floor area proposed)
 - Telecommunications Equipment Centre
 - Chief Mechanical Engineer's Office Building
 - Scientific Services Building No 1
 - Clothing Store
- The part restoration, rebuilding and extension of the Paint Shop Building, including ground floor retail, mezzanine parking, and 4 new levels of residential uses above.
- Demolition of remaining non-heritage buildings and structures;
- 2 - 3 levels of basement parking beneath the new building footprints, to accommodate approximately 1800 spaces, reduced from 1943 spaces;
- Vehicular and pedestrian access to the site from Wilson Street, internal roadways and on-street parking for 75 vehicles;
- Provision of private open space, including landscaping and tree planting, the removal of 80 trees, and public open space totalling 9,980m² (increased from approximately 6,500m²);
- Infrastructure and service provision; and
- Remediation of the site.

Land Use

The Concept Plan Application proposes various land uses across the site as follows:

- Western precinct: predominantly residential uses combined with private and public open space areas
- Central precinct: Carriage Workshop and Blacksmiths' Shop buildings proposed to accommodate cultural, commercial and retail uses
- Eastern precinct: a mix of residential, community, commercial, retail and office uses together with public open space areas.



Figure 2 – existing site plan



Figure 3 – Proposed Site Plan

Building Heights, Envelopes and Location

The Concept Plan seeks consent for the general siting, footprint, basement parking locations, height and envelope of buildings for the proposed development. The proposal retains the Carriage Workshop, Blacksmiths' Shop, Clothing Store, Science Lab, Chief Engineer's Office and Telecommunications buildings as well as part of the Paintshop building which incorporates new additions.

The location of new buildings has been aligned to maintain visual continuity of the surrounding neighbourhood streets through the site, with the creation of a series of north-south streets. The 7 heritage buildings to be retained have been used to establish the alignment of proposed east-west streets on the site.

A 16 storey residential building at the eastern end of the site is proposed to be a landmark building to create a marker for Redfern station.

Access and Car Parking

Vehicular access to the site is proposed at two points of entry, one at the western end of the site near the intersections of Queen and Forbes Streets, and one in the eastern half of the site at the intersection of Shepherd Street. The western end access point, between Forbes and Queen Street, is an existing access to the site and is proposed to be widened to ensure a safe line of sight for motorists and enable full movement for all vehicles using this intersection. The existing roundabout at the intersection of Shepherd and Wilson streets is also proposed to be modified to facilitate the access into the site at this point.

Vehicle circulation within the site is separated physically by the central Carriage Workshop Building and the pedestrian zone located between the Carriage Workshop and Blacksmiths' Shop, enabling vehicle manoeuvring to occur separately in the eastern and western parts of the site.

The new access points and road improvement works around the site will result in the loss of some on-street parking spaces and as such the Concept Plan proposes approximately 75 on street car spaces on the new roads within the subject site.

The Concept Plan proposes parking spaces for approximately 1800 vehicles, including visitor parking, to be located predominantly in the 2-3 levels of basement parking areas beneath the new building footprints. Included in this is 148 car parking spaces to be located at mezzanine levels in the Paint Shop Building.

The site currently does not present a frontage to Wilson Street and access into the site is limited to one vehicular and one pedestrian access point. The Chief Mechanical Engineer's Office building has direct off-street access from Wilson Street. To provide an extension of the site to the adjoining neighbourhood, pedestrian connections are proposed, to be located at the ends of the neighbourhood streets and will have public stairs and ramp access.

Roadworks and Intersection improvements

Two vehicular accesses are proposed, one at the existing western end access which is proposed to be widened to ensure adequate vehicular movement, and one at the intersection of Shepherd and Wilson Streets which will require modification to the existing roundabout to enable access in and out of the site.

To accommodate additional traffic generated from the development, the following intersections are identified as requiring improvements:

- Abercrombie and Lawson Streets: extend turning lanes for left and right turning traffic into and out of Abercrombie St and changes to signal phases and timings
- Cleveland and Shepherd Streets: possible extension to existing right turning bay from 30m to 70m and extending the cycle time for these turns
- Abercrombie and Shepherd Streets: replace scramble phase and adjust signal timings, or create additional turning lanes.

Open Space and Landscaping

The Concept Plan, through the PPR, provides for larger contiguous public parks, as well as various public domain spaces (see Figure 3 – Open Space Plan)

The proposed public parks to be dedicated total approximately 9,980m², and include:

- A park at the western end of the site, adjacent to Iverys Lane, with an approximate area of 3,350m²;
- A park in the location of the Fan of Tracks, with an approximate area of 3,215m²;
- A park at the eastern end of the site, adjacent to Little Eveleigh St, with an approximate area of 2,690m²;
- A park on Wilson St at the western end of the Blacksmiths' Shop, with an approximate area of 445m²;
- A park on Wilson St opposite Forbes St, with an approximate area of 280m².

Private open space is proposed primarily in the form of balconies, with opportunity for ground floor apartments to have courtyards and terraces. Areas of private open space in the form of common areas are proposed between residential apartment buildings and the details relating to these can be further resolved at the project application stage.

An amended Landscape Masterplan accompanies the concept plan, and provides landscaping principles to guide further detailed design of the proposed open space and general landscaping throughout the site. Generally the landscaping principles seek to understand and interpret the cultural values of the site, integrate environmental infrastructure, and provide a public domain that is safe, legible, accessible, amenable and meaningful.

An arboricultural assessment of 229 trees on or adjacent to the site identified trees that will require removal as a result of the proposed development and also identified trees that may be potentially affected by the proposed development, and makes recommendations with regard to other trees based on their species and condition. The report recommends the removal of 48 trees which are regarded as weed species and are recommended to be removed regardless of the proposed development. A total of 80 trees are proposed to be removed for the purpose of the development.

Development Data Table

Precinct	Precinct Area (m ²)	Proposed Gross Floor Area	Proposed FSR	Compliance with FSR controls in MP SEPP
A (Western precinct)	28,980m ²	50,698m ²	1.75:1	Yes
B (Central precinct)	31,110m ²	34,588m ²	1.1:1	No
C (Eastern precinct)	47,140m ²	92,241m ² 44,361m ² (residential floor space)	1.96:1 0.94:1	Yes Yes
Total	107,230m²	177,527m²	1.65:1	Yes

Table 1 – North Eveleigh redevelopment Concept Plan figures proposed across the whole site

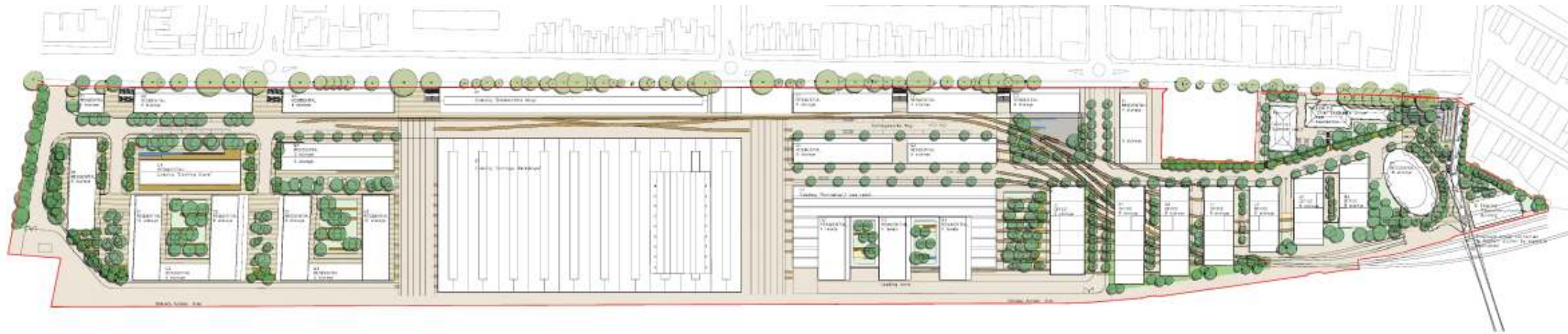


Figure 4 – original landscape/open space plan



Figure 5 – currently proposed Open Space Plan

3.2 Project Chronology

- August 2007 – RWA invites 4 architects to participate in design competition for the site.
- September 2007 – independent urban design panel selects Bates Smart proposal as preferred entry.
- 18 January 2008 – request for Clause 6 opinion lodged with the Department.
- 13 March 2008 – The Minister formed the opinion that the proposal is a Project to which Part 3A of the Act applies and authorised the submission of a Concept Plan.
- 17 March 2008 – Director-General's Environmental Assessment Requirements issued to proponent.
- 4 April 2008 – Environmental Assessment (EA) lodged with the Department (additional information submitted after this date).
- 22 April 2008 – EA deemed adequate for exhibition.
- 1 May - 12 June 2008 – EA placed on public exhibition.
- 20 August 2008 – site meeting with former Minister and community representatives.
- 16 September 2008 – response to submissions and preferred project report (PPR) submitted.
- 21 October 2008 – additional information to PPR received, including details of additional 580m² of public open space in the Fan of Tracks area.

3.3 Project Amendments

A PPR was submitted on 16 September 2008 incorporating the following amendments:

- Removal of new buildings A1 and B1 at the western end of the site and replacement with a public park;
- Removal of a new 5 storey commercial building at the eastern end of the site;
- A new 8 storey residential building adjacent to the railway line;
- Reconfiguration of open space areas including public parks on site totalling 9,980m², resulting in an additional 3,480m² of additional public open space;
- Reduced gross floor area by 2,480m², from 180,007m² to 177,527m², comprising a 5,400m² reduction in commercial and 2,920m² increase in residential;
- Reduced car parking, from 1943 to 1800 spaces;
- Reconfiguration of western vehicular access point to reduce potential vehicular conflicts;
- Redistribution of heights to achieve design improvements, including an additional storey to Buildings D4, G1 and G2;
- Introduction of sustainability targets;
- A target of 12% of new dwellings for affordable housing;
- Requirement to undertake a TMAP; and
- Amendments to Statement of Commitments, to require heritage interpretation strategies, increase in the provision of childcare facilities for proposed residential and working population, and to provide for car share schemes.

The proposal as amended by the PPR forms the basis of the Department's assessment of the statutory context and key issues.

4 STATUTORY CONTEXT

4.1 MAJOR PROJECT DECLARATION

The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* as it has a Capital Investment Value of more than \$5 million and is of a kind described in Schedule 3, Part 5 – Redfern Waterloo Authority Sites, (State Significant Site) as a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* (the Act) applies. The opinion was formed by the Minister on 13 March 2008 and authorisation was granted for the submission of a Concept Plan Application.

4.2 PERMISSIBILITY

Under the MP SEPP, the site is zoned Business – Mixed Use, which permits a mix of employment, educational, commercial/retail, cultural and residential uses. The proposal is consistent with the objectives of the Business – Mixed Use zone and is permissible subject to the Minister's approval.

4.3 DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (DGRS)

The DGRs issued on 17 March 2008 required the following key issues to be addressed:

- Land use
- Built Form & Urban Design
- Environmental and Residential Amenity
- Safety / Public Domain / Landscaping
- Car parking
- Traffic Impacts (Construction & Operational)
- Ecologically Sustainable Development
- Heritage
- Social and Economic Impacts
- Rail Impacts
- Staging & dedication
- Construction Impacts
- Contamination
- Drainage
- Services/infrastructure and utilities

The DGRs are in **Appendix A**

The amended EA lodged by the proponent on 22 April 2008 satisfactorily addressed the DGRs and was deemed adequate for exhibition.

4.4 OBJECTS OF THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979

The objects of any statute provide an overarching framework that informs the purpose and intent of the legislation and gives guidance to its operation. The Minister's consideration and determination of a concept plan application under Part 3A must be informed by the relevant provisions of the Act, consistent with the backdrops of the objects of the Act.

The objects of the Act in section 5 are as follows:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,

- (iii) the protection, provision and co-ordination of communication and utility services,
 - (iv) the provision of land for public purposes,
 - (v) the provision and co-ordination of community services and facilities, and
 - (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and
 - (vii) ecologically sustainable development, and
 - (viii) the provision and maintenance of affordable housing, and
- (b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and
- (c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The Concept Plan proposes to ensure that future development on the North Eveleigh site occurs appropriately, whilst protecting the environment including the existing significant flora and fauna on the site, coordinates the orderly use of the land, provides community facilities and ensures that the land is continued to be used for public purposes as well as being publicly accessible.

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act 1991* including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms.

The future development contemplated by the Concept Plan will be subject to further detailed planning applications to secure the outcomes envisaged, and this will involve state and local areas of government having a shared responsibility as landowner, tenants and managers of parts of the site. These future applications will provide further opportunities for public participation in the development, usage and management outcomes for the site.

The Department has considered the Objects of the Act, including the encouragement of ESD in the assessment of the concept plan application. The balancing of the application in relation to the Objects is provided in Section 5.

4.4.1 ESD Principles

There are 5 accepted ESD principles:

- (a) *decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);*
- (b) *if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);*
- (c) *the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);*
- (d) *the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and*
- (e) *improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).*

The Department has considered the development in relation to the ESD principles and has made the following conclusions:

- a) **Integration Principle** – The proposal will have environmental, economic and social benefits and provides a positive reuse of a now redundant site for employment, educational, commercial/retail, cultural and residential uses. The environmental impacts of the development are appropriately mitigated as discussed in this report. The Department's assessment has duly considered all issues raised by the community and public authorities, and the proposal as recommended for approval will not compromise a particular stakeholder or hinder the opportunities of others.
- b) **Precautionary Principle** – The proposed Concept Plan provides a framework for future development on the site. Subsequent applications will need to be supported by technical and environmental reports to ensure that the impacts of the proposal can be successfully mitigated. The site is not subject to any

- known effects of flooding and is not subject to bushfires. The proposal presents no threat of serious or irreversible environmental damage to the site or the wider locality.
- c) **Inter-Generational Principle** – The proposal represents a sustainable reuse of the site. The development includes the upgrade and reuse of significant heritage buildings, together with new buildings and land uses, to provide a new mix of uses and activation of a brownfield site for the benefit of both the current and future generations.
 - d) **Biodiversity Principle** – Following an assessment of the proponent's EA it is concluded with certainty that there is no threat of serious or irreversible environmental damage as a result of the proposal. There are no threatened or vulnerable species or significant vegetation on the site.
 - e) **Valuation Principle** – The approach taken for this project has been to assess the environmental impacts of the proposal and identify appropriate safeguards to mitigate adverse environmental effects. The mitigation measures include the cost of implementing these safeguards in the total project cost. The proposed framework for future development and uses on the site promotes a mix of uses (employment, educational, commercial/retail, cultural and residential) in the vicinity of an existing urban and commercial area, which will allow reliance on existing infrastructure to be maximised as well as provide community and leisure opportunities for the existing and broader community.

The proponent is committed to ESD principles and has reinforced this through the Draft Statement of Commitments and Environmental Assessment which explores key ESD opportunities, including but not limited to, benchmarking buildings against BASIX, the Australian Greenhouse Rating Tool and the National Australian Built Environment Rating System, solar shading devices, maximising cross ventilation through cross-over apartments, apartment layout to maximise solar access, roof forms to capture natural light and ventilation, and use of high thermal mass materials.

The amended EA, through the PPR document, introduces sustainability targets for commercial development equivalent to 4 Star Green Star for Commercial Buildings and 4.5 Star NABERS Office Energy. A modification to the Concept Plan recommends a minimum 4.5 star ABGR and equivalent Greenstar rating.

ESD is considered in the wider context of the public benefits of the proposal, and these are documented throughout the report.

4.5 Section 75I(2) of the Act

Section 75I(2) of the Act and Clause 8B of the Environmental Planning and Assessment Regulation 2000 provides that the Director-General's report is to address a number of requirements in the Director General Report. These matters and the Department's response are set out as follows:

Section 75I(2) criteria	Response
Copy of the proponent's environmental assessment and any preferred project report	The Proponent's EA is located on the assessment file (attached).
Any advice provided by public authorities on the project	All advice provided by public authorities on the concept plan application for the Minister's consideration is set out in this report.
Copy of any report of a panel constituted under Section 75G in respect of the project	No statutory independent hearing and assessment panel was undertaken in respect of this concept plan application.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project	Each relevant SEPP that substantially governs the carrying out of the concept plan application is identified immediately below.
Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	An assessment of the development relative to the prevailing environmental planning instrument is provided in section 4 of this report.
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The environmental assessment of the concept plan application is this report in its entirety.

A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The environmental assessment of the concept plan application is this report in its entirety.
Clause 8B criteria	Response
An assessment of the environmental impact of the project	An assessment of the environmental impact of the proposal is discussed in section 5 of this report.
Any aspect of the public interest that the Director-General considers relevant to the project	The public interest is discussed in section 5 of this report.
The suitability of the site for the project	The site is identified in the Redfern-Waterloo Built Environment Plan to be redeveloped for a mix of employment, educational, cultural and residential uses.
Copies of submissions received by the Director-General in connection with public consultation under section 75H or a summary of the issues raised in those submissions.	A summary of the issues raised in the submissions is provided in section 6 of this report.

Table 2 - Section 75(2) requirements for Director-General's Report

4.6 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIS)

4.6.1 Application of EPIs to Part 3A projects

To satisfy the requirements of section 75(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the concept plan application.

The primary controls guiding the assessment of the proposal are:

- State Environmental Planning Policy (Major Projects) 2005
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings
- State Environmental Planning Policy No. 55 – Remediation of Land
- Standard Instrument (Local Environmental Plans) Order 2006 (for definitions only)

Other controls to be considered in the assessment of the proposal are:

- The Redfern-Waterloo Built Environment Plan (Stage One) August 2006.

The provisions, including development standards of local environmental plans, and the Built Environment Plan (BEP) are not required to be strictly applied in the assessment and determination of major projects under Part 3A of the Act however, site specific land use and design concepts are more relevant from the BEP as it forms the basis for development controls in the MP SEPP. Notwithstanding, provisions of the BEP are relevant considerations as the DGRs require the proponent to address the relevant provisions. Accordingly, in addition to the relevant SEPPs, the BEP is considered below.

4.6.2 State Environmental Planning Policy (Major Projects) 2005

The MP SEPP applies to the project as discussed in section 4.1 of this report. The subject site is of state significance under Schedule 3, Part 5 of the MP SEPP, which sets out provisions relating to the Redfern-Waterloo development sites including zoning, height and floor space restrictions, design excellence, car parks, heritage, and the preservation of trees and vegetation.

Clause 21(3) of Schedule 3 of the MP SEPP allows the Minister to approve a concept plan which exceeds the maximum height and floor space ratio controls. As this application is for a concept plan, the height restriction is not a prohibition in this instance. The proposed variations to heights occurs only in parts of the site that are significantly below street level of Wilson Street. Given that the proposed heights are being redistributed across the site and do not exceed the maximum allowable height for the site, the proposed envelopes are acceptable and worthy of support.

Building Height

The development generally complies with the height controls across the site but, seeks a variation by redistributing heights across the site for some buildings (see Table 1).

Development Data Table – Building height

Table 3 - Assessment of North Eveleigh Redevelopment Concept Plan against numerical standards for building heights in MP SEPP

Western Precinct

Building	Proposed Height	Control (MP SEPP)	Compliance
A2 & A3	4 storeys	4 storeys	Yes
C4	Existing height	4 storeys	Yes
D4	6 Storeys	4 storeys	No
C1	12 storeys	10 storeys	No
C2	8 storeys		Yes
C3	5 storeys		Yes
D1	8 storeys	10 storeys	Yes
D2	12 storeys		No
D3	5 storeys		Yes

Central Precinct

Building	Proposed Height	Control (MP SEPP)	Compliance
R1 & S1	Existing building height	Existing building height	Yes

Eastern Precinct

Building	Proposed Height	Control (MP SEPP)	Compliance
E1, E2 & E3	4 storeys	4 storeys	Yes
F1	4 & 5 storeys	4 storeys	Yes/No
G1 & G2	6 storeys	4 storeys	No
H1	Existing building height	5 storeys	Yes
H2, h3 & H4	4 storeys	5 storeys	Yes
J1	8 storeys	5 storeys	No
K1 & K2	8 storeys	10 storeys	Yes
L1 & L2	8 storeys	10 storeys	Yes
M1 & M2	8 storeys	16 storeys	Yes
N1 & N2	Existing building height	Existing building height	Yes
P1	16 storeys	10 storeys	No
Q1	Existing building height	Existing building height	Yes

Table 3 – Assessment of proposed building heights against requirements in MP SEPP

The non-compliances result from the proposed building heights being redistributed across the site and are not higher than the maximum height allowed on the site. The building heights as proposed, results from a detailed urban design analysis, informed by the Bates Smart proposal, that has considered the most appropriate street layouts, building typologies and built forms across the site whilst maintaining the site's historical significance. Further, development potential is also constrained in part of the site due to the requirement by Railcorp to protect a future rail alignment option along the southern boundary.

Gross Floor Area / Floor Space Ratio

The permissible gross floor area for the site is as follows:

- Eastern precinct: 94,280m²
- Central precinct: 31,110m²
- Western precinct: 57,960m²

The additional floor space sought in the Central Precinct creates a non-compliance against the maximum allowable FSR for this part of the site by 3,478m². This additional floor space in the Central Precinct is proposed to be accommodated within the existing Carriageworks Building and Blacksmiths Workshop and is sought to enhance the development potential and use of the heritage buildings. Residential uses are not proposed in the Central Precinct and any additional floor space in this precinct is likely to be taken up by retail/commercial/cultural uses.

Although the proposed Concept Plan seeks a variation to the permitted floor space in the Central Precinct, this additional floor space does not increase the total permitted FSR across the whole site. The total permissible FSR across the whole site is 1.71:1 and the total proposed FSR totals 1.65:1.

Development Data Table – Floor Space Ratio / GFA

Table 4 - Assessment of North Eveleigh Redevelopment Concept Plan against numerical standards for floor space ratio (FSR) in MP SEPP

	Permitted Floor Space Ratio	Precinct Area (m ²)	Proposed Gross Floor Area	Proposed Floor Space Ratio	Compliance with FSR controls in MP SEPP
A (Western precinct)	2:1	28,980m ²	50,698m ²	1.75:1	Yes
B (Central precinct)	1:1 0.5:1 maximum for residential	31,110m ²	34,588 Nil	1.1:1 N/A	No
C (Eastern precinct)	2:1	47,140m ²	92,241	1.96:1	Yes
	1:1 maximum for residential		44,361m ²	0.94	Yes
Total	1.71:1	107,230m²	177,527m²	1.65:1	Yes

The proposed FSR non-compliance in the central precinct does not result in a non-compliance with the overall FSR control across the whole site.

Design Excellence

The MP SEPP (Clause 22(1) and (3), Schedule 3, Division 3) requires new development to exhibit design excellence and that a consent authority may require a design competition for any development over 12 storeys consistent with guidelines issued by RWA and approved by the Minister.

In August 2007, RWA invited 4 architects (Bates Smart, Cox, Hassell and Tzannes Associates) to participate in a design competition for the site, to prepare an urban design solution that would inform the preparation of a Concept Plan. RWA appointed an independent Urban Design Panel (Julie Bindon, Brendan Crotty, Margaret

Petrykowski, Lucy Turnbull and Prof. Peter Webber) which selected the Bates Smart proposal as the preferred entry. RWA have refined and incorporated the winning entry into the current Concept Plan application.

The design competition process undertaken by RWA does not have any statutory standing however, it is considered as relevant given the design excellence provisions in the MP SEPP.

As the proposal seeks concept approval only at this stage, a detailed assessment of design excellence cannot be undertaken however will be undertaken with the subsequent Project Application(s). The proponent has addressed compliance with the design excellence principles within the EA and Draft Statement of Commitments and has also provided typical apartment layouts for all buildings on the site.

The proposed building envelopes and indicative apartment layouts, as well as the commitment to applying ESD principles to the project enables assessment at this stage to conclude that subsequent project applications will be capable of meeting the specific design requirements of the MP SEPP. A modification to the Concept Plan requires a design competition for the proposed 16 storey residential tower, pursuant to Clause 22 is provided in the recommendation.

Heritage Conservation

The subject site is listed as the Eveleigh Railway Workshops on the State heritage Register, thus the whole site and associated structures are protected by the NSW Heritage Act however not all items are necessarily of State heritage significance. The Eveleigh Railway Workshops listing identifies the following items in the description:

- Carriage Workshop
- Paintshop
- Turntable and trackwork west of the large erecting shop
- Air raid shelters
- Numerous collections of machinery

A number of other buildings, including the Chief Mechanical Engineer's Office and machinery, have a separate State Heritage Register listing. The site is also listed on the City of Sydney LEP as a local heritage item, with separate listings for the Eveleigh Railway Workshops Machinery, Chief Mechanical Engineer's Office, and carriage Workshops.

The proposal seeks to retain all buildings identified as a heritage item under the MP SEPP as part of the redevelopment, and also retains the Clothing Store building in the western part of the site though it is not identified as a heritage item under the MP SEPP but is listed as a building of historical interest in the BEP. Further, items of historical interest, such as the "Fan of Tracks" have been retained and incorporated into the public domain and open space strategy for the site.

Clause 27 of the MP SEPP does not apply to development being assessed under Part 3A of the EP&A Act, and heritage conservation is not strictly applicable in this instance. The proponent however seeks to retain the listed buildings and has therefore given consideration to the heritage significance of these and the overall site in the Concept Plan proposal. The PPR makes requirements for the preparation of Interpretation Strategies as part of subsequent Project Applications and implemented as part of the redevelopment prior to the occupation of the buildings. A modification to the Concept Plan requires the proponent to carry out archival recording of the site and buildings.

4.6.3 State Environmental Planning Policy (Infrastructure) 2007

The proposed development meets the aims of the Infrastructure SEPP as it allows for the efficient redevelopment of surplus government owned land. The SEPP also seeks to assist in the effective delivery of public infrastructure and outlines issues to be addressed when proposing development near and over rail corridors, including any likely damage to rail infrastructure, use of cranes over the rail corridor, and electrolysis impacts.

The proposed design has been developed following consultation with the relevant rail authorities. Access to a separate rail access corridor by RailCorp is provided at the western and eastern ends of the site. The design also takes into consideration a potential rail alignment option along the southern boundary of the site.

Schedule 3 of the SEPP requires traffic generating development to be referred to the RTA. The RTA has raised no objections but has recommended specific conditions for the proposed development relating to intersection upgrades and Traffic Management Plan, which have been incorporated as modifications.

4.6.4 State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings

The PPR provides a detailed assessment of the proposal against State Environmental Planning Policy No.65 – Design Quality of Residential Flat Buildings (SEPP 65) as well as building envelopes and indicative floor plans for the various unit types that would enable a preliminary assessment against this SEPP. The proposal complies with the 10 principles of SEPP 65 as demonstrated below:

Ten Principles of Design

Principle 1: Context

The proposal is consistent with the surrounding residential context, which comprises of attached residential terraces and multi unit housing by responding appropriately to bulk and scale, building envelopes and location at various parts across the site. The site is located within easy access to public transport, commercial, retail and educational precincts and a range of services and community facilities, making it suitable for a mixed use development.

The Concept Plan responds well to the heritage characteristics and significance of the site whilst having regard to new infill development within an area that is undergoing renewal and change. The provision of public open space across the site, as amended by the PPR, provides a good response to the interface between the public and private domains as well between the site boundaries and adjoining properties.

The proposal is therefore deemed as satisfactory with respect to the surrounding context.

Principle 2: Scale

The Concept Plan proposes a series of predominantly 4-5 storey linear east-west buildings, providing a scale that is sympathetic to the heritage buildings on site. These buildings also appropriately respond to existing development along Wilson Street, which are predominantly 2-3 storey terrace developments.

Taller buildings are proposed along the southern boundary of the site adjacent to the rail corridor, where overshadowing and visual impacts to adjoining residential uses will be minimal. These buildings are primarily 8 storeys in height with the exception of two 12 storey buildings placed perpendicular to the rail line. The location of these two 12 storey buildings is considered appropriate given the lower ground levels at this part of the site thus minimising height impacts to the north, and for also enabling north-south sight lines. A 16 storey landmark building is proposed at the eastern most end of the site, adjacent to Redfern railway station, and provides an appropriate scale in relation to similar buildings immediately to the south such as the TNT Towers and Department of Housing apartment blocks (15-30 storeys high).

The difference in ground levels from Wilson Street down to the rail corridor minimise potential impacts of building dominance and overdevelopment. The retention of heritage buildings at their existing heights provides an appropriate balance to heights generally across the site. Further, the PPR deletes buildings at the western end of the site to reduce impacts of scale to existing residential development to the west.

The Concept Plan is satisfactory with respect to the principle of scale.

Principles 3: Built Form

The Concept Plan establishes two street patterns across the site, namely the creation of north-south streets and the alignment of east-west streets determined by the heritage buildings, creating the framework of traditional streets and blocks. This in turn has determined the location of the built forms across the site.

The low rise linear buildings in an east-west alignment provide a built form that is sympathetic to the heritage buildings and respects the scale of the adjoining neighbourhood. The proximity of buildings is consistent with that of surrounding residential development and of inner city living.

The new buildings on the site have been located to take advantage of distant and local views, whilst maintaining good solar access and respect for the historical significance of the site. This is demonstrated through the PPR which deletes buildings in proximity to the western boundary so as to maintain good solar access to existing dwellings in Iverys Lane.

The built form is consistent with the design concept outlined for the site in the Redfern-Waterloo Built Environment Plan (Stage 1) and as such the proposal is considered to be satisfactory with regard to this design principle.

Principle 4: Density

The density for the site is controlled by the MP SEPP and is separated into FSR controls across 3 precincts. A variation is sought to the FSR control in the central precinct, however the additional floor space of approximately 3,500m² does not increase the gross floor space allowable across the whole site. The Concept Plan application does not seek approval for the number of apartments or office buildings on the site but demonstrates the gross floor area that can be accommodated on the site.

The appropriateness of the density is based on urban analysis undertaken as part of developing the Redfern-Waterloo Built Environment Plan, and is supported by the locational benefits of the site. The proposed density maximises the opportunities presented by public transport infrastructure and Redfern town centre. The mix of uses and proposed density is consistent with the objectives for the zone in the MP SEPP.

The Concept Plan is satisfactory with respect to the principle of density.

Principle 5: Resource, energy and water efficiency

Many of the issues regarding resource, energy and water efficiency will be resolved during the detailed design stage undertaken with subsequent Project Applications. The Concept Plan is intended to enable the achievement of water and energy efficient reduction targets and satisfaction of BASIX at the Project Application stage.

The general location and orientation of the buildings maximises sunlight, daylight and ventilation to reduce reliance on artificial heating and cooling. Building design and indicative apartment layout enables crossover apartments, which maximise natural ventilation and solar access.

Solar access to apartments and courtyards have been tested so that all apartments receive in excess of 2 hours of sunlight to primary living areas and the courtyard receives 2 hours sunlight in excess of 50% of its area during mid-winter.

The Concept Plan makes a commitment to a range of ESD initiative which would be considered at Project Application stage.

The proposal is considered satisfactory with regard to the principle of resource, energy and water efficiency.

Principle 6: Landscape

A Landscape Strategy and conceptual Open Space Plan provides landscaping principles to guide further detailed design of the proposed open space and general landscaping throughout the site. Generally the landscaping principles seek to use landscape design to enhance connectivity and access across the site through shared pedestrian and vehicle streets, a series of open space areas that enable heritage interpretation and facilitate outdoor events, and an eastern plaza that acts as an arrival space from the proposed new pedestrian bridge from Redfern railway station (separate application). Landscaping elements will delineate between private and public spaces; whilst ensuring security and safety for both residents and the public through the use of lighting and plantings, and the retention and establishment of trees.

A detailed landscape plan will form part of the subsequent Project Applications. The proposal is satisfactory with regard to the principle of landscaping.

Principle 7: Amenity

The Concept Plan seeks to optimise amenity in terms of solar access, ventilation, views and outlook, private open space and access to public open space. The layout, mix and size of apartments does not form part of this Concept Plan application, however indicative apartment layouts demonstrate that the proposed building footprints, location and envelope intends to maximise residential amenity.

Principle 8: Safety and Security

In general, the concept design allows for good passive surveillance of the road networks, and public and private open space areas on the site. Attention will need to be given to the issue of safety and security in the detailed design of future project application(s) with respect to the proposed basement car parking areas, as well as entry points for apartments from the public open space and public domain areas.

Principle 9: Social Dimensions

The Concept Plan will increase housing choices within the Redfern area. A mix of apartment types is proposed as shown in the indicative apartment layouts, to encourage a diverse social mix within the Redfern area and to sustain a vibrant community. Affordable housing provisions for 12% of new dwellings on the site is targeted in the PPR and will be required to be addressed at the Project Application stage in accordance with the objectives for affordable housing as envisaged in the Redfern-Waterloo Built Environment Plan (Stage 1). The mechanism for achieving this will be determined by RWA's Affordable Housing Contributions Plan 2006.

Principle 10: Aesthetics

The external colours and materials of the proposal will be determined at the detailed design phase and are not a matter of consideration for the Concept Plan application. The Draft Statement of Commitments requires that the future Project Application demonstrates design excellence in terms of architectural design, materials and detailing, and overall building appearance. Furthermore, careful consideration of materials will be required to ensure the integrity of heritage items is maintained.

Residential Flat Design Code

The proposal has also been assessed against the following primary development controls of the Residential Flat Design Code (the Code):

Building depth

The maximum apartment building depth permitted by the Code is 18 metres (glass line to glass line). All new buildings in the Concept Plan comply with this aspect, with the exception of building P1, the landmark tower building at the eastern end of the site.

Building P1 (Landmark building) is 26.6 metres in depth at its axis and reduces in depth as it tapers toward its northern and southern ends. Based on the building types identified in the Code, building P1 is an elliptical tower building, which under the Code may have a building depth greater than 18 metres provided adequate amenity for building occupants in terms of achieving solar access and ventilation.

The indicative apartment layout demonstrates that proposed apartments in building P1 have opportunity for living areas and balconies to have northerly aspects, as well as views to the city skyline whilst allowing lift cores and services to be located toward the south-western facade of the building.

Building separation

The Code requires separation for buildings up to 4 storeys in height ranging from 6 metres between non-habitable rooms, 9 metres between habitable rooms/balconies and non-habitable rooms, and 12 metres between habitable rooms/balconies. For buildings between 5 to 8 storeys in height, the separation distances range from 9 metres between non-habitable rooms, 13 metres between habitable rooms/balconies and non-habitable rooms, and 18 metres between habitable rooms/balconies. The Code also allows for separation controls to be varied in response to site and context constraints and setting.

As the internal apartment layouts have not been determined, the exact location of habitable and non-habitable rooms is not yet designed however the maximum recommended separations between habitable rooms are achieved for most of the new buildings.

The separation between all proposed residential buildings complies with the requirements of the Residential Flat Design Code with the exception of building separation between Buildings D4 and D2, which are 6 and 12 storeys in height respectively. The recommended separation distances between habitable rooms for buildings between 6 and 12 storeys ranges from 18m to 25m, 13m to 18m between habitable and non-habitable rooms and 9m to 12m between non-habitable rooms. It is unlikely that habitable rooms will be placed along the southern

elevation of building D4 and principal living areas in buildings D1 and D2 are likely to be placed to maximise their north-east aspects. Accordingly, the 14.8m building separation is considered adequate.

4.6.5 State Environmental Planning Policy No. 55 – Remediation of Land

The site has been the subject of a number of contamination investigations since 1993, and assessment indicates the presence of soil and groundwater contamination. The proponent's site auditor advises that remediation is required in order for the site to be made suitable for the proposed uses. A remediation strategy has been prepared for the development with the main objective being to make the site suitable for the proposed land uses. The strategy outlined the remediation goals, proposed remediation strategy for soil and groundwater identified on the site and the environmental management procedures to be implemented as part of the remediation works, and following on from this will be the preparation of a remediation action plan.

The Draft Statement of Commitments includes a commitment to prepare a site audit statement(s) and a specific modification has been included to ensure that these are prepared at all appropriate stages of the development, as well as the preparation of a Remediation Action Plan.

4.6.6 Standard Instrument (Local Environmental Plans) Order 2006

The Standard Instrument (Local Environmental Plans) Order 2006 (Standard Instrument) is only relevant to the proposal for the purposes of determining meanings or words or expressions referred to in the MP SEPP. The proponent has used the definitions in the Standard Instrument where relevant within their Environmental Assessment and the calculations for FSR and height above have been based on these definitions.

4.7 OTHER PLANS AND POLICIES

The Proposal has been assessed against the following planning policies:

4.7.1 Redfern Waterloo Built Environment Plan (BEP)

The (BEP) was developed to assist in the social, environmental and economic revitalisation of the Redfern-Waterloo area, with Stage 1 designed to provide a planning framework for the redevelopment of the RWA's strategic sites, including the former Eveleigh Carriageworks site.

The site was previously zoned 'Railways' under SREP 26 - City West, which restricts land uses that are compatible with the zone objectives, that is, predominantly railway related activities. The BEP (Stage 1) adopts a mixed use for the whole site in order to create a vibrant, cultural, business and residential precinct and take advantage of the site's proximity to Redfern Railway Station and Town Centre. The proposed land use zone under the BEP (Stage 1) is 'Business Zone – Mixed Use' and has since been gazetted in the MP SEPP.

The Concept Plan proposal is considered to be consistent with the BEP.

4.7.2 RWA Development Contributions Plan and Affordable Housing Contributions Plan

In May 2007, the Minister for Redfern-Waterloo adopted the RWA Contributions Plan for the levying of development contributions for the provision of public facilities and infrastructure within the RWA's Operational Area, and therefore includes the subject site.

Under Clause 8 of the Contributions Plan, the Minister may impose, as a condition of approval or consent to the carrying out of development to which the Plan applies, a requirement that the proponent pay a development levy of 2% of the proposed cost of carrying out the development, excluding the costs of development that is an adaptive reuse of a heritage item.

As approval is sought for a Concept Plan in this application, s94A levies will be calculated, in accordance with s25J of the EP & A Regulation 2000, at subsequent Project Application stage.

Development of the site is also subject to the Redfern Waterloo Authority Affordable Housing Contributions Plan 2006. The contribution rate is applicable to the additional GFA of the new development. In this instance, the rate will apply to additional GFA which will be determined at Project Application stage. The total gross floor area of the existing buildings is 45,854m².

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

The DGRs and following key issues were considered in the Department's assessment of the Environmental Assessment:

- Land Use
- Building Form and Urban Design
- Traffic, Transport, Parking & Access, Intersection upgrades
- Open Space & Landscaping
- Amenity
- Ecologically Sustainable Development
- The Public Domain, Safety & Security
- Dedication of roads and public parks
- Heritage
- The Public Interest

5.1 Land Uses

The land use controls in the MP SEPP seek to encourage a mix of land uses and provides an incentive for non-residential uses by limiting residential floor space ratios in the central and eastern parts of the site. The location of non residential uses in these parts of the site benefits from the site's proximity to Redfern railway station, Redfern town centre, Abercrombie Street and the University of Sydney, as well as access to major arterial roads.

The proposal seeks to create a nexus with the Australian Technology Park, located across the rail line to the south, by locating commercial/retail/office land uses at the eastern part of the subject site. The proposed building envelopes have been designed to be flexible so as to encourage a range of commercial, educational and high technology uses.

The proposal locates retail uses towards the centre of the site and supports the need for a local supermarket on the site as analysis indicates a demand for a locally based centre which will benefit the new residents on the site as well as existing residents in the surrounding catchment.

Residential uses are proposed in the central part of the site and predominantly in the western part of the site, adjacent to existing residential uses in Macdonaldtown. Residential uses at 4 storeys in height are also proposed along the most part of Wilson Street, to complement the bulk and scale of existing 2-3 storey dwellings on the street, and some residential use is proposed in the eastern part of the site adjacent to Little Eveleigh Street.

The proposed land uses are consistent with the desired zone objectives for the site. The mix of land uses also removes the notion of the site being a 'gated community', encouraging people from around the locality to use services that will be available to the general public, as well as providing commercial/office uses that make the site accessible to a greater public population that may not necessarily be residents on the site.

The mix of land uses is considered to be an appropriate response to the site's strategic location.

5.2 BUILT FORM, URBAN DESIGN & LANDSCAPING

5.2.1 Built Form & Location

The proposed building heights across the site reflects and complements the scale of the retained heritage built form as well as the scale of adjoining neighbouring buildings, whilst introducing building forms that are suitably positioned with similar building heights in the adjoining town centre and employment centres.

The built form along Wilson Street is respectful to the existing residential development surrounding the site and the difference in ground level as the site falls away to the rail line enables the built form across the site to minimise its impact in terms of height, bulk and scale.

The landmark tower building acts as a prominent entrance into the site whilst responding to the scale of taller buildings within proximity to the south in the town centre and beyond.

The proposed built form across the site has regard for the site's historical significance and the existing residential context of surrounding suburbs however, the Concept Plan also responds to the future development potential of the site by proposing built forms that can provide greater choice for the various land uses. The proposed built form also allows a reasonable amount of development on the site as envisaged by the MP SEPP whilst also allowing for substantial open space areas on the site.

The proposed site layout results in a fine grain urban street layout which enables views through the site, and this is considered a positive outcome for the site.

5.2.2 Building Height, Bulk & Scale

The Concept Plan complies with the density controls for the site under the MP SEPP with the exception of additional floor space in the Central precinct contained within the CarriageWorks building. This will not result in loss of views or solar access to surrounding development as detailed in solar analysis submitted with the PPR, and the additional floor space does not increase the total permissible FSR across the whole site. New buildings on the site vary from 4 to 16 storeys, and have been positioned across the site with regard to adjoining development.

The relationship between the existing dwellings and new buildings along the Wilson Street frontage of the site is considered acceptable as the building heights respect the existing scale of dwellings. The relationship between the taller buildings on the site and surrounding areas is also considered acceptable as they are not located within proximity to existing residential dwellings but closer to the railway corridor where ground levels are lower and the impacts of overshadowing and loss of amenity are reduced.

The proposed heights across the site do not strictly comply with the maximum heights set out in Schedule 3 Clause 22(1) of the MP SEPP in all sections of the development. The redistribution of building heights has been necessary to provide an acceptable built form layout across the site as well as enable the strategic locations of public open space. The redistribution of heights is also considered acceptable as their proposed locations in relation to existing residential buildings and proposed new buildings will not create adverse impacts and that the general intent of the MP SEPP height controls is met.

Detailed design and articulation of each building will be provided at the Project Application stage, however the proposed bulk and scale of each new building is considered an appropriate response to the site and surroundings.

5.2.3 The Paint Shop Building

The proposed adaptive reuse of the Paint Shop building is considered acceptable as the building in its current form is structurally unsound and requires considerable improvements to ensure its useability and interpretation of heritage significance. The proposed additions to the building, in the form of mezzanine car parking for retail and residential uses in the building, will require further consideration in terms of the impacts on the heritage significance of the building and the visual impact of entry ramps to access parking levels as viewed from along the southern façade.

It is considered appropriate that a more sensitive design solution be explored to reduce the impact on the heritage significance of the building as well as present an improved design resolution to the building's southern façade. A modification to the Concept Plan requires alternative design options to be submitted prior to the project application for the Paint Shop building.

5.2.4 Open Space & Landscaping

The Concept Plan provides for larger contiguous parks totalling 9,980m² in area (See Figure 4 – Open Space Plan), increased from the originally proposed 6,500m² of proposed public open space.

The PPR increases public open space in a direct response to issues raised during the public consultation of the Concept Plan. Open space at the western end of the site greatly reduces any potential impacts that apartment buildings will have on residents located in Iverys Lane whilst also allowing for deep soil planting in this part of the site. The views of this open space area from the rail corridor will also have a softening impact on the built form.

The provision of open space over the Fan of Tracks enables heritage interpretation as well activating and providing passive surveillance from 2 residential buildings onto public domain space.

The proposed 'Eastern Plaza' open space near Redfern railway station provides a softened thoroughfare between the residential precinct north of the site, the elliptical residential tower building and pedestrian bridge and will enable activation of the space. This area is also an appropriate buffer from the rail corridor.

The two pocket parks along Wilson Street break up the built form along this street frontage as well as providing a physical, public connection between the site and existing development surrounding the site. The accessibility of these pocket parks to the main street (Wilson St) will encourage users from outside the site, so as not to create a 'gated community'.

The increase in public open space is an appropriate response to the site in terms of a balance with the proposed extent of built forms on the site, providing greater public domain spaces and breaking down perceived barriers between the site and its surrounds. The public plaza area at the eastern edge provides a gradual transition area to the site from the public domain of the railway station and private domains of dwellings on Little Eveleigh Street, and is intended to be a public space that invites pedestrians into the site.

The proposed dedication of new roads and public open space will 'open up' the site to the surrounding locality and encourage activation and participation, whereas currently the site has been largely closed off and separate since on-site operations ceased. The extent of public open space, their locations and dimensions provide for greater useability of public spaces, particularly in areas which would otherwise be inactive outside of business hours.

A modification to the Concept Plan will require detailed landscape plans to be submitted at the Project Application stage, informed by the following principles:

- Cultural values – reuse or reinterpret existing remnants and historical elements within the public domain; integrate and interpret fan of tracks as a key element.
- Integration of environmental infrastructure – enhance environmental quality within the public domain through use of water sensitive urban design principles.
- Design of public and private open space – create a safe environment based on CPTED principles.
- Accessible public domain – provide access to both pedestrians and cyclists, and opportunities for shared spaces.
- Amenable public domain – provide shaded areas and logical pedestrian connections within and between precincts.

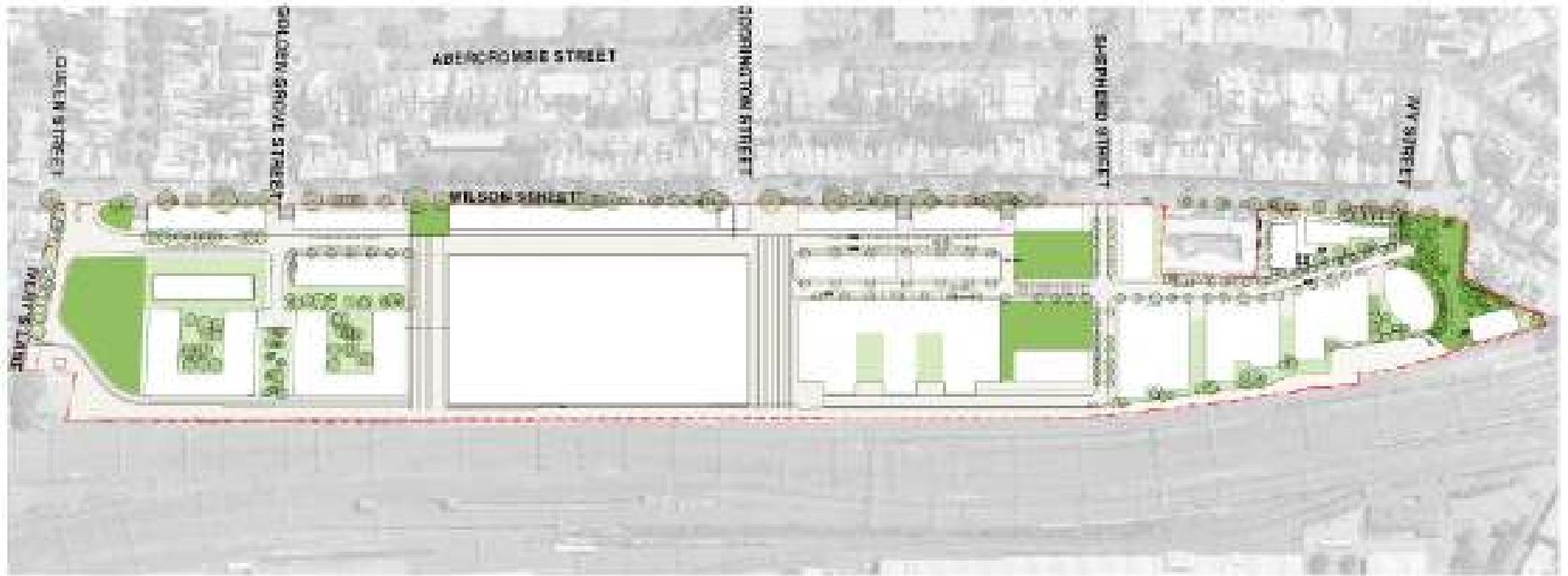


Figure 6 – Proposed open space plan

5.3 TRAFFIC IMPACTS, PARKING & ACCESS

5.3.1 Traffic Impacts

Traffic modelling undertaken by the proponent's traffic consultant analyses the traffic impacts of the subject redevelopment together with the future development of the Abercrombie Precinct by the University of Sydney (as required by the DGRs) and shows that the traffic impact of the 2 developments could be accommodated within the existing road network provided that improvement works are in place.

The traffic model showed that the traffic impact of the two developments could be accommodated within the existing road network provided that improvement works are in place with the completion and occupancy of both developments. This was assumed based on the testing of networks in the traffic modelling and included intersection upgrades as follows:

- **Shepherd St / Abercrombie St**
Removal of scramble pedestrian crossing phase and increasing the cycle time to 90 seconds or alternatively, introduce additional turning lanes at the expense of on-street car parking.
- **Cleveland St / Shepherd St**
Extend the left turn bay from 30m to 70m to increase storage capacity for cars waiting for the signal changes.
- **Abercrombie St / Lawson St**
Provide 30m of left turn bay and 30m of right turn bays in Lawson and Abercrombie Streets respectively.

If the above measures are implemented, all intersections will have an acceptable level of service up to 2016, and may remain acceptable for many years beyond, as stated by the traffic assessment report.

Given the established residential area surrounding the North Eveleigh site, concern was raised by residents about the impacts of traffic from the development on the amenity of the neighbourhood in terms of safety, security and ability for residents to use and enjoy their street environment. The traffic impact assessment states that the proposed development is not expected to create traffic conditions that would adversely impact on amenity and safety of the surrounding locality for the following reasons:

- Traffic flows will be within local road capacities
- Roundabouts along Wilson Street and the narrowness of other streets will calm traffic flows and speeding behaviour will reduce subject to roadside parking and turning restrictions
- Widening of carriageways is not proposed
- The existing low levels of heavy vehicle use in the locality.

The Department's independent assessment of traffic and transport impacts, undertaken by SKM, addressed traffic generation, particularly the assumptions made about traffic generated by the development, calculation and mode share assumptions, and on-site parking provision.

SKM assessed the calculation of traffic generation including the assumption that a 40% maximum mode share for private vehicle use will be achievable. This target is similar to that applied to other centres such as Chatswood, North Sydney and Bondi Junction, and was questioned by the SKM assessment on the basis that the other centres are focussed around rail stations with high frequency services, as well as numerous connecting bus services in comparison to the subject site. It is noted by SKM that the site, in particular the commercial component which is relying upon the 40% private vehicle mode share, is within close proximity to Redfern Station which already has high frequency train services. It is also considered that the site's accessibility to high frequency public transport services will reduce traffic generation characteristics, thus contributing to achieving the proposed mode share target. SKM concluded that it is likely that the target can be supported, subject to the identification of other measures by the TMAP, including the investigation of infrastructure-based approaches or behaviour-change programs.

The review of the proposed intersection upgrades is also supported by SKM, subject to further detailed modelling of critical local and regional intersections, calibrated and reviewed in consultation with the RTA and Council in the preparation of the TMAP, and approval of the TMAP by the Ministry of Transport.

SKM concludes that increased traffic generation can be suitably managed through appropriate measures, including intersection upgrades and recommends that a Transport Management and Access Plan (TMAP) be

developed to support the achievement of a maximum 40% mode share to car, proposed intersection upgrades subject to further detailed modelling of critical local and regional intersections, and identify further measures to support the car parking rates.

The recommendations have been incorporated as modifications to the Concept Plan.

5.3.2 Car Parking

The MP SEPP does not indicate car parking requirements for the site however, the PPR proposes 2 – 3 basement levels of car parking for approximately 1800 vehicles, with an additional 75 spaces at street level. These figures have been determined based on traffic and transport impact assessment undertaken by the proponent's traffic consultant.

The SKM assessment provided critical comment about the proposed parking rates, traffic generation and upgrades to mitigate potential impacts.

The proposal adopts parking rates set out in the City of Sydney LEP 2005 and the former South Sydney DCP 11 for both residential and commercial developments, and from these rates, the original EA proposed 1943 parking spaces across the whole site. The PPR reduces this to a maximum 1800 spaces (excluding on-street parking), calculated as follows:

Residential		Commercial
City of Sydney LEP		South Sydney DCP 11
• Studio apartments	0.25 spaces/dwelling	• 1 space per 125m ²
• 1 bedroom apartment	0.50 spaces/dwelling	
• 2 bedroom apartment	1.20 spaces/dwelling	
• 3 bed apartments	2.00 spaces/dwelling	

Table 5 – Adopted parking rates for proposed car parking spaces.

A modification to the Concept Plan imposes a maximum cap of 1800 spaces on the site (excluding any new on-street parking within the site) and also sets the above maximum rates for residential and commercial uses including for those new commercial/cultural uses involving additional GFA within the Carriage Works Building and Blacksmith's Shop Building.

This total figure and the adopted rates, are considered acceptable based on the proposed GFA and the site's accessibility to public transport. The rates for residential development reflect the RWA's mode share target of 60% for non-car travel within its area, and the wider mode share targets of the City of Sydney. Rates for commercial uses are considered to be in keeping with the objectives of both the City of Sydney and the RWA to constrain demand for commuter car travel while providing a sufficient level of parking to prevent excessive street parking. Similarly, the rates adopted for retail development are designed to reflect the accessibility of the site to public transport.

Following community consultation, the PPR reduced the GFA by 2,400m² thus reducing the required number of on-site parking spaces to 1800, being 1230 spaces for residential uses, 317 spaces for office and commercial uses, and 253 spaces for other uses including cultural and retail.

As specific car parking rates do not exist for the site, the proposed parking spaces calculated in accordance with rates for similar development in the area is considered satisfactory and can be further developed through the preparation of a Transport Management Accessibility Plan (TMAP) which is a recommendation of the SKM assessment and this report. The TMAP will identify further measures to support the car parking rates and mode share proportion to public transport for the site.

The SKM assessment supports the cap on parking supply and recommends that the TMAP identify measures and policies to minimise any potential for adverse parking impacts on the site and surrounding areas. The cap on parking supply is further supported by the site's proximity and accessibility to public transport services and will assist in containing traffic generation impacts, as discussed further below.

5.3.3 Access

Two vehicular access points are proposed on the site, one at the western end of the site and one at the intersection of Shepherd and Wilson Streets.

The western access is located between Forbes and Queen Streets and is an existing access point into the site that is proposed to be widened to ensure a safe line of sight for motorists and enable full movement for all vehicles that are expected to use this access point. Residents raised concerns about the western access point and the potential for vehicular conflicts and accidents. In response to these concerns, the PPR has undertaken a further study of 3 options for alternative vehicle access to the western part of the site.

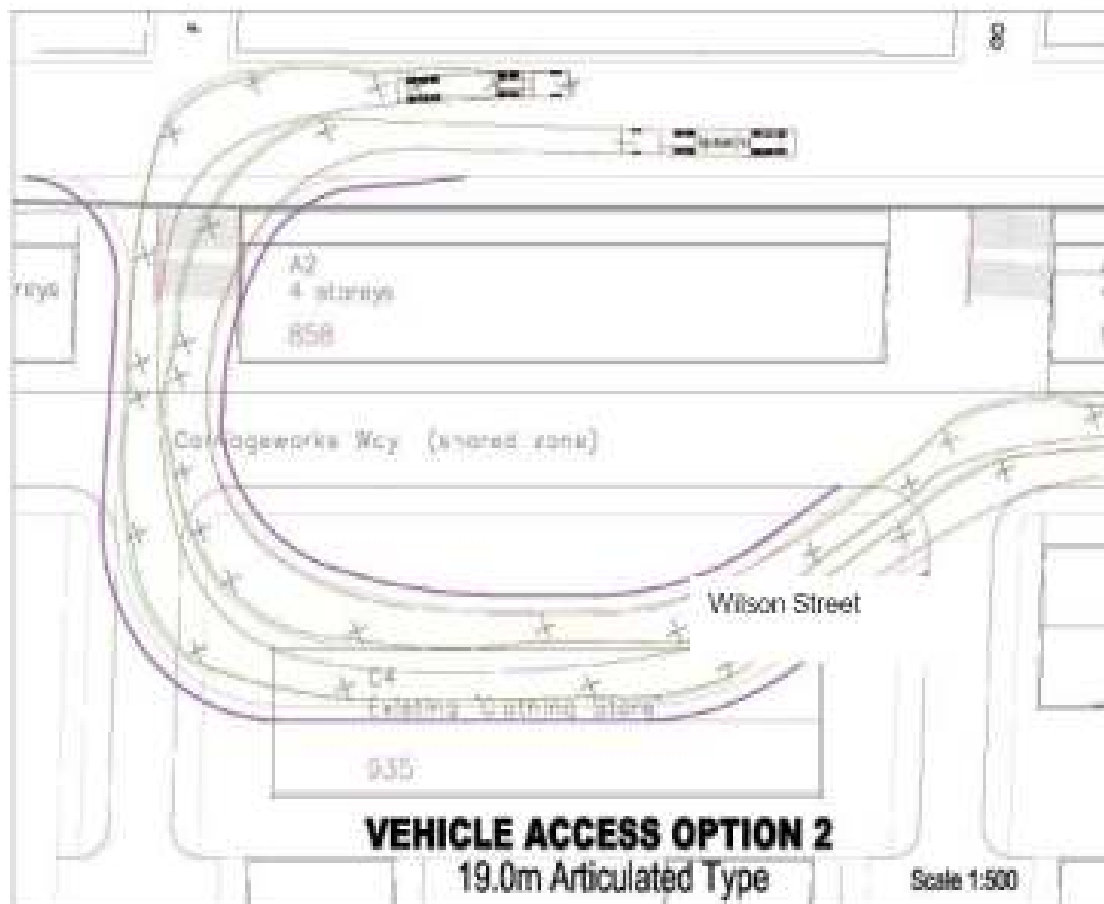
Option 1 (Preferred option)

This option proposes to widen further the western access, which could accommodate all vehicle movements and provide a direct route to the rail corridor. The deletion of proposed new buildings A1 and B1 improves the accessibility into the site at this point. This option also recommends that signage would indicate no access to Queen Street upon exiting the site.



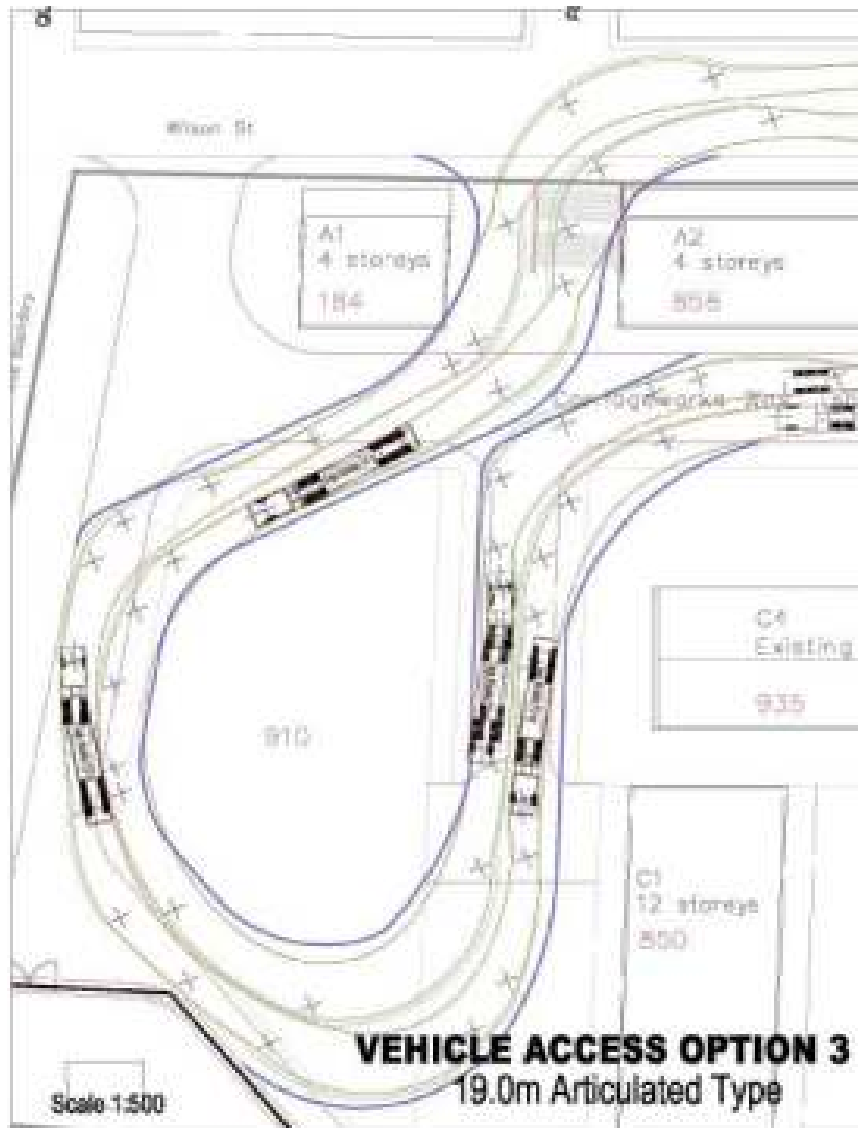
Option 2

This option proposes to locate the western access point opposite Forbes Street, which in turn would require the internal road (Carriageworks Way) to be moved to the approximate location of the Clothing Store building – the retention of this building makes this option difficult to achieve. Further, placing an access point at Forbes Street will create a cross-road situation which is less safe than the T-intersection currently proposed in the PPR.



Option 3

This option would relocate the western access opposite Forbes Street and proposes the access road to loop around the large tract of public open space at the western end and rejoin the access way at Carriageworks Way. This option preserves both Carriageworks Way and the Clothing Store building however its construction would require a retaining wall 5m in height at the end of the site which would be unsightly and isolate buildings and land west of this structure. This proposed route would also be indirect and result in additional journey time for all users.



The proposed access point, as currently proposed (Option1) is considered to be the most appropriate as it provides a buffer between the site boundary and other buildings, preserves the existing rail corridor easement, ensures a reasonable grade to access the CarriageWorks, and avoids segregating part of the site by building a large retaining structure.

Pedestrian access provides an acceptable level of permeability onto the site via a number of new footpaths, ramps and flights of stairs. Pedestrian access to the site is proposed via ramps alongside vehicle entry points, ramps to the proposed pedestrian and cycle bridge and via flights of stairs connecting the site to Wilson Street.

5.3.4 Transport

The site is located within proximity to Redfern railway station and high frequency bus services along key routes.

The high accessibility of public transport to the site, when utilised by residents, workers and users of the site, will reduce the number of vehicle movements in and out of the site thus easing congestion on the local road network. The cap on on-site parking will contribute to encouraging use of public transport.

5.4 AMENITY

5.4.1 Visual Privacy to residential properties adjacent to the site

The building setbacks as proposed will not result in overlooking impacts to the external or indoor living areas of adjoining properties and the proposed building setbacks within the site can satisfactorily mitigate impacts of overlooking. Although the Concept Plan does not seek approval for apartment layouts and design, indicatively proposed private open space such as balconies, terraces and courtyards can have views to streets and communal open space areas. Proposed building separation complies with the requirements of SEPP 65 thus visual privacy between new buildings will be acceptable. Apartments located at higher levels will have long distance views to the surrounding neighbourhood and beyond the rail corridor.

New dwellings fronting Wilson Street will be opposite the frontage of existing dwellings, which will create casual surveillance opportunities and the physical separation by the street reduces impacts of loss of privacy.

Potential overlooking and loss of privacy can be assessed in greater detail at the project application stage however the level of visual privacy provided by the indicative building layout in the proposed Concept Plan is considered acceptable.

5.4.2 Solar Access & Overshadowing

Impact on proposed residential buildings

Solar analysis for midwinter between 9am and 3pm indicates that in the western part of the site, all apartments in new buildings A2, A3, C4 and D4 will receive 3 hours of sunlight to living areas whilst 82% of apartments in buildings C1/C2/C3 and 85% of apartments in buildings D1/D2/D3 will receive 3 hours of sunlight to living areas. The remainder of apartments in buildings C1/C2/C3 and D1/D2/D3 will receive 2 hours sunlight to living areas.

Solar analysis for residential buildings in the eastern part of the site, for the same period, indicates that 100% of apartments in E1, E2, E3, G1, G2, and J1 will receive 3 hours of sunlight to living areas whilst 79% of apartments in building F1, 73% of apartments in buildings H2/H3, and 85% of apartments in building H4 will receive 3 hours of sunlight. The remainder of apartments in buildings F1, H2, H3 and H4 will receive 2 hours of sunlight to living areas.

The number of apartments receiving solar access across the whole site during midwinter is considered to be satisfactory

Impact on adjoining developments

Shadows cast by the proposed development to the south will have a negligible impact as the railway corridor is located to the south of the site. Overshadowing of adjoining residential development to the east is also negligible, whilst the large setback of new buildings from the western boundary of the site results in partial overshadowing of 3 residential properties at the southern end of Iverys Lane from 9.00am – 9.30am in midwinter. Detailed diagrams indicate that these properties will receive solar access from 9.30am onwards.

Assessment of overshadowing has been undertaken for equinox and winter solstice and is considered to not adversely impact upon existing levels of solar access enjoyed by adjoining residential development, which are located to the west of the site. Shadows generated by new buildings at equinox fall predominantly within the site and to the rail corridor located to the south.

Midwinter overshadowing (21 June)

The Fan of Tracks public domain area will largely receive solar access, with a partial area in shadow at the south-eastern corner at 9am. By midday it will have full solar access. At 3pm, shadows on the Fan of Tracks public area are limited to the western part of the public space.

Approximately 50% of the large open space at the western end of the site is in shadow at 9am and this is reduced to a small portion at the south-eastern edge by 12 midday. At 3pm this public open space is not affected by shadowing.

The two pocket parks fronting Wilson Street are partially affected at 9am but remain in sunlight from 12 midday.

Equinox overshadowing

At 9am and 3pm at Equinox, the Fan of Tracks space is in partial shadow however more than 50% of this space receives direct solar access between 9am and 3pm.

At 9am at Equinox, the two pocket parks and large open space at the western end are in partial shadow however, by 3pm only a small portion of the pocket park adjacent to the Blacksmiths' Shop building is in shadow.

The impacts of additional overshadowing resulting from the proposed building envelopes are minimal and will ensure a satisfactory level of solar access is retained throughout the year to adjoining developments and buildings and public open space areas within the site and are considered to be acceptable.

5.4.3 Wind impacts

A wind environment statement was submitted with the EA which provided an assessment of the prevailing conditions on the site with regard to wind effects. At the site meeting held with residents, the impacts of wind created by the proposed development was raised and a further assessment of the pedestrian level wind effects, being wind effects in ground level public areas and accessways in and adjacent to the proposed buildings, was carried out by the proponent's wind-engineering consultants and submitted with the PPR. The regional wind climate, the exposure of the proposed development to wind, the geometry and orientation of the proposed development, the interaction of flows with adjacent developments, and the intended use of the public areas affected by wind flows were main considerations in the assessment of impacts.

The study outlines assessment criteria for maximum gust speed and maximum wind speed, and makes recommendations for comfort levels associated with specific aspects of the development. It is recommended that public footpaths be acceptable for walking, (maximum mean speed of <10m/s and maximum gust speed of <16m/s); building entrances be acceptable for standing (maximum mean speed of <7m/s and maximum gust speed of <13m/s); and public open spaces be acceptable for sitting (maximum mean speed of <5m/s and maximum gust speed of <10m/s).

The assessment makes recommendations for implementation and these have been included as modifications to the Concept Plan. Overall, the proposed development is not expected to generate wind conditions in excess of the criterion for sitting in public parklands and with the implementation of the recommendations outlined in this report, winds can be controlled to ensure the site is comfortable throughout the year.

The study recommends that a wind tunnel test be conducted when the architectural design of buildings are progressed to determine the type and scope of wind-break features that may be required to achieve acceptable wind conditions in adjacent ground level areas.

The following major recommendations are provided for the 16 storey landmark building, 8 storey office buildings, open spaces/parklands and residential buildings C1-C3 and D1-D3:

- Curved edges to the towers to assist in reducing corner acceleration flows and improve pedestrian comfort conditions;
- Canopies around the base of each medium to high rise building; and
- The use of street tree planting in combination with canopies in streets and park lands.

These issues will be required to be addressed in future project applications and this is a requirement of the recommended approval.

5.5 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The commitments made by the PPR to achieve high sustainability targets for both commercial and residential development will contribute to achieving sustainable design benchmarked against objective rating schemes. As discussed in section 4.4.1, the proponent has demonstrated at this Concept Plan stage their commitment to achieving a development that is ecologically sustainable and this will be further assessed in detail at the project application stage.

The site is not subject to any known flooding impacts. The various levels across the site, ranging from RL31 at Wilson Street to RL 25 – RL 26 adjacent to the rail corridor, provides an adequate pathway for stormwater runoff and further detailed design at Project Application stage will require the inclusion of OSD and measures to ensure the site is appropriately drained.

The PPR introduces sustainability targets for commercial development which will require future project applications to achieve best practice equivalent to 4 Star Green Star for Commercial buildings and 4.5 Star NABERS Office Energy. A modification to the Concept Plan recommends a minimum 4.5 star ABGR and equivalent Greenstar rating.

The proposed orientation of building envelopes intended to maximise amenity to residential apartments and office buildings will contribute to achieving a high level of ESD initiatives such as solar access. Water reuse and recycling initiatives in the statement of commitments will also contribute to ESD.

The Concept Plan is compliant with the objects of the Act, including the 5 accepted ESD principles, and is therefore considered to satisfactorily address this issue.

5.6 THE PUBLIC DOMAIN

The Concept Plan has considered the public domain environment of the site and the safety and security of the site and its users in the designing of the buildings, open space and landscaping. Specifically, the principles of Crime Prevention Through Environmental Design (CPTED) have been considered as follows:

- The location of buildings on site ensures sightlines are achieved between public and private spaces. In this regard, the alignment of buildings promotes sightlines from Wilson Street through the site to the southern boundary. The location of buildings, wrapped around the proposed public open spaces promotes casual surveillance of the private and public realm.
- The proposed use of lighting and landscaping to create safe places for residents and users of the site.
- The use of physical barriers such as landscaping and security fencing to delineate between the private and public domains.
- The provision of public open space that is accessible to both residents and workers of the site as well as the general public will reinforce the safety and security of that space, ensure passive surveillance over open space areas as well as promote a sense of ownership.

Whilst the details of the development will be considered and resolved at project application stage, the overall layout of buildings and placement of uses relative to the proposed open space has been considered with regard to the existing heritage items and the need to provide a residential environment that will function in an aesthetically pleasing, safe and secure setting. The proposal is considered to be satisfactory in regard to safety, security, the public domain and linkages to the surrounding locality to better integrate the site in the context of the wider community.

5.7 HERITAGE

The retention and adaptive reuse of the existing heritage buildings and considered placement of new buildings of an appropriate scale ensure that the heritage values of the site will be retained.

The heritage impact statement (HIS) undertaken by the proponent reveals that much of the site's importance is vested in the historic, aesthetic and technological significance of the site's industrial use however cessation of this use and the removal of machinery has diminished the significance of the place in terms of technical significance and has made an understanding of the function and value of the site difficult without some form of interpretation.

The HIS recommends that this significance is best maintained and recognised through a comprehensive interpretation strategy, which would form part of a Conservation Management Plan. An Interpretation Strategy was submitted with the PPR, and proposes to recognise 3 main strands of history and significance on the site:

- Aboriginal history
- Workers' history, and
- Railway history

Interpretation is proposed by means of a Worker's Wall through the provision of interpretive plaques, in commercial buildings through the location of machinery/industrial apparatus in building foyers, the Fan of Tracks through its location outside commercial buildings and amongst public open space, and as part of the Heritage Walk which connects the site to ATP sites across the rail corridor.

The approach adopted by the proponent to ensure that the significance of the site and buildings is considered in the Concept Plan, taking into account the site's historic and existing character and enhancing the presentation of its significant areas and values, is considered to be an acceptable response to heritage matters associated with the site and redevelopment. Further, the Heritage Council is in agreement with proposed measures to retain and interpret the site's significance.

5.7.1 Aboriginal Heritage

A Preliminary Aboriginal Heritage Assessment of the site, dated March 2008, reveals that no previously registered Aboriginal sites are located within or immediately adjacent to the subject land and for this reason, the subject lands are assessed as retaining no potential for surface or subsurface Aboriginal archaeological material. The findings do not consider further Aboriginal archaeological works to be necessary prior to any future development within the subject lands and the preparation of a formal Aboriginal Cultural Heritage Impact Assessment is not warranted on archaeological grounds.

Correspondence from the Metropolitan Local Aboriginal Land Council supports the assessment that the site does not have the potential to contain Aboriginal archaeological remains and further archaeological investigation is not required. It is requested that the Aboriginal history of the North Eveleigh site, which included a number of Aboriginal workers in the railyards complex, be documented through oral histories as well as historical research.

The study recommends that archival and oral historical research together with the local Aboriginal community into the nature and significance of the Aboriginal connections with the railyards as a whole, be undertaken prior to or during the preparation of an Interpretation Plan for the site. A modification to the Concept Plan will require this to be undertaken.

5.7.2 Archaeology

An Archaeological Development Impact Assessment & Zoning Plan report, dated April 2008, indicates that the site has moderate to high potential to contain relics associated with historical, railway era occupation. The assessment also identifies a small area of land in the north-eastern part of the site adjacent to Wilson Street that may contain soils with potential to contain Aboriginal sites or objects.

Contrary to the recommendations of the Preliminary Aboriginal Heritage Assessment report, the archaeological assessment recommends the preparation of an Aboriginal impact assessment for the small area of land adjacent to Wilson Street. Further targeted historical research is also recommended at the project application stage for areas identified as having moderate historical archaeological potential and significance, and where the results of this research suggest that it is warranted, that archaeological test excavation be undertaken.

The recommendations of this report include the requirement for an Aboriginal Heritage Impact Assessment on archaeological grounds, to be submitted at the project application stage.

5.8 SOCIAL & ECONOMIC IMPACTS

The proposal will deliver a number of important social and economic benefits, including:

Heritage Conservation – the historical, social and aesthetic importance of the former Eveleigh Carriage Works will be respected and incorporated into the new mixed use development through the adaptive reuse and preservation of heritage listed buildings.

Housing – the new development will provide increased housing and offer housing choice within proximity to public transport, community facilities, employment, educational, commercial and retail centres.

Public Open Space – the provision of public open space will be a direct benefit to the community.

Community Facility – proceeds from the sale of the development will be used to develop a new community health centre in the Redfern area, which will have benefits to the wider community.

Jobs – new jobs will be created during the construction phase of the development as well as on-going operational jobs. Further, the project makes a commitment to Aboriginal employment in the locality.

Sustainability – commercial uses located close to major railway station to encourage sustainable travel schemes.

The proposed development will generate a mix of uses on a currently disused parcel of government owned land, which will have positive social and economic impacts to the community.

5.9 PUBLIC INTEREST

The proposed redevelopment of the North Eveleigh site will provide significant benefits to the community, including:

- Provision of housing choice.
- Employment opportunities through the construction and on-going phase of the development.
- Provision of funds from the sale of the site to be injected back into community projects, such as the Redfern railway station upgrade.
- Provision of public open space.

The development also incorporates the adaptive reuse of an existing heritage building on the site as well as a heritage listed structure, ensuring that the heritage significance of the site is retained and interpreted sympathetically.

The proposal will also result in an appropriate building form and urban design that ensures that the development will not have any adverse impacts upon the amenity currently enjoyed by the local community.

Accordingly, the proposal is considered in the public interest for the above reasons.

6 CONSULTATION AND ISSUES RAISED

6.1 PUBLIC EXHIBITION DETAILS

The Concept Plan application was exhibited from 1 May 2008 to 12 June 2008 for 43 days and was published in the newspaper. The EA was made available to the public in the Department's Information Centre and at the City of Sydney Council's Town Hall House office as well as the Redfern Neighbourhood Centre. During the exhibition period, the RWA also conducted a number of community information sessions enabling residents to discuss issues about the proposal.

6.2 SUBMISSIONS RECEIVED ON ENVIRONMENTAL ASSESSMENT

The Department received a total of 10 submissions from public authorities, and 161 public submissions.

6.3 PUBLIC SUBMISSIONS

The following key issues were raised:

- *Traffic, Transport and Parking* – The proposed redevelopment will lead to increased traffic, heavy vehicular movement and adverse impacts in terms of proposed location for vehicular access points.

Comment:

The Proponent makes a commitment to traffic and parking guidelines that minimise the generation of private car travel and directs heavy traffic to designated routes. The traffic report and model simulated traffic conditions in the AM peak hours as this was the period of greatest traffic congestion and results suggest that traffic flow to the south is not expected to significantly change as a result of the development. The western access to the site has been reconfigured to minimise potential vehicular conflicts from vehicles exiting the site. The Statement of Commitments has been amended to require the provision of a TMAP which includes traffic management measures to prohibit a right hand turn from Wilson Street into Queen Street when exiting the site. As the site has been largely unused for the last 20 years, the impact of increased traffic will be noticeable however manageable.

- *Car parking* – Concerns were raised that proposed car parking was inadequate but also that proposed car parking should be reduced. Concern was also raised about the impacts on existing on-street parking conditions which is already a problem.

Comment:

The adopted parking control rates based on the City of Sydney LEP and South Sydney DCP 11 aim to provide a maximum acceptable level of parking for the whole site that both limits vehicle trips and ensures 'overflow' parking does not affect neighbouring streets. The site's proximity and accessibility to public transport services is also taken into account. A maximum total of parking for the whole site was set to match the capacity of the local road network and the PPR reduces car parking on the site, resulting from reduced GFA, by providing for a maximum of 1800 spaces which is reduced from the original 1943 spaces proposed.

- *Open Space* – Inadequate provision of open space, proposal should reduce amount of hard spaces.

Comment:

The PPR has modified the proposal to increase open space across the site by 3,480m², from approximately 6,500m² to 9,980m², and also deletes buildings A1 and B1 to accommodate this increase. The park in the western precinct has been increased to 3,350m² and open space amongst the Fan of Tracks has been improved by relocating building J1 closer to the rail line. Building A1 has been removed to create a small pocket park 280m² in size, along with another pocket park fronting Wilson Street. A total of 9,980m² of public parks is provided and proposed to be dedicated to Council, which is a positive outcome for the development and surrounding locality.

- *Building heights* – Proposed building heights are too high, out of character with the area, will have adverse impacts on heritage buildings and amenity impacts in terms of privacy, overshadowing, wind and visual impacts. The proposed non-compliance was also raised.

Comment:

The building heights generally comply with the height controls in the MP SEPP, with the 16 storey landmark tower building being within the maximum height limit permitted for the site. The proposal seeks variations to the height limits across the site by redistributing heights to achieve better site design. Buildings fronting Wilson Street comply with the height controls and provide a sensitive interface with the existing residential properties on Wilson Street. Taller buildings are proposed away from Wilson Street towards the rail corridor and closer to the town centre precinct of Redfern. The PPR deletes proposed new buildings A1 and B1 from the western part of the site, which creates a better relationship at the edge with Iverys Lane. The existing built form and layout of the site was not in keeping with the residential character of Darlington and Newtown, having been used for railway workshops and as such each area has developed adjacent to but, separately from each other. Further, a two storey height limit across the site would not achieve the objectives of the Metropolitan Strategy and would not be a sustainable development of the site, nor would it allow for the opportunities for so much public open space, as is proposed by the current Concept Plan.

- *Pedestrian/Cycle access* – Impacts on Wilson Street cycleway and pedestrian access

Comment:

Access to the site has been limited to 2 points to minimise vehicle crossings of the marked regional bike routes, and the Statement of Commitments requires the preparation of a TMAP that outlines a strategy for pedestrian and cycle safety. The Concept Plan also proposes a cycle route through the site, and a unified traffic, cyclist and pedestrian guidance system is required to be introduced across the site.

- *Heritage* – Impacts on heritage/conservation area of Newtown and Darlington and impacts on heritage on the site.

Comment:

As the subject site and adjoining conservation areas are distinctly different in character, the impacts of the redevelopment primarily relate to views from the conservation area and the relationship of new buildings. The height of buildings on Wilson Street is limited to 3 storeys at street level whilst buildings ranging from 8 to 12 storeys are located towards the centre and southern parts of the site adjacent to the rail corridor. The 12 storey buildings are set back approximately 64m from Wilson Street reducing their visibility from Wilson Street, as illustrated in the section drawings. Contemporary architecture and the use of high quality materials and finishes will distinguish new development from the existing heritage significance of the site and surrounding conservation areas, thus allowing an appreciation for both styles. The proposal will retain the on-site heritage and will not negatively impact on it or the surrounding conservation area.

- *Community Facilities/Infrastructure* – Consideration not given to a new school given increase in families and the impacts on existing schools; strain on childcare facilities; lack of facilities.

Comment:

The Department of Education and Training advise that existing schools within the area have current capacity and as such a new school for the proposed development is not required, and this is further supported by the fact that the former South Sydney LGA had the lowest yields of school aged children in both houses and medium/multi-unit dwellings of all Sydney LGAs. Also, the provision of approximately 1200 medium density dwellings for the site does not meet the trigger for the establishment of a new school. The PPR amends the statement of commitments by increasing the provision for childcare facilities from one 45-place centre to the equivalent number necessary for the proposed residential and working population to meet the recommended requirements of the South Sydney Council Childcare Centres DCP 2005. The adaptive reuse of the Scientific Services Building for 'Cultural/Community Purposes' allows for the site to be used for community facilities. Educational facilities are also permissible on the site and are not precluded from occurring in the future subject to a separate approval process.

- *Density* – Proposed development is too dense

Comment:

The proposal through the PPR has reduced its total gross floor area by 2,480m² to 177,527m² across the site and has an overall FSR of 1.65:1, which is less than the overall permissible FSR across the whole site of 1.71:1. Although a variation to FSR is sought in the Central Precinct, the additional floor space is provided within the existing heritage buildings and will not result in additional building height or bulk. The site is well served by public transport, being in proximity to bus routes and Redfern railway station, and development of the site will assist in achieving the urban consolidation objectives of the Metropolitan Strategy. Buildings have been deleted from the proposal to increase the provision of public open space and requirements for increased child care facilities and take into account the growth in population resulting from the development. The proposed density is generally compliant with the requirements of the MP SEPP and is acceptable.

- *Sustainability* – Proposed sustainability measures are inadequate and don't go far enough

Comment:

The proposal through its PPR amends its Statement of Commitments to require 4 Star Green Star (Office Design) rating and 4.5 Star NABERS Office Energy (Base Building) ratings for commercial buildings and BASIX achievement for residential buildings. In addition, a requirement is in place for developers to investigate achieving higher targets. These measures are acceptable.

- *Affordable housing* – Proposal does not provide affordable housing

Comment:

The RWA Affordable Housing Contribution Plan provides for the levying of contributions toward the provision of affordable housing in the RWA Operational Area. The PPR introduces a target of 12% of the dwellings in the proposal for affordable housing, which will be managed by a registered community housing organisation or government agency and it is proposed that this will be funded by the RWA's affordable housing contributions. A Voluntary Planning Agreement between RWA and the owners of the former CUB site is currently on public exhibition and will generate funds towards the provision of affordable housing in the RWA Operational Area.

6.4 SUBMISSIONS FROM PUBLIC AUTHORITIES

The following submissions were received from public authorities:

6.4.1 Heritage Council of NSW

Issue

The Heritage Council overall raises no objection to the proposed development, acknowledging that the redevelopment of the site would see it revitalised and positive step taken to retain the remaining heritage fabric. Comments were raised about demolition, alteration and construction works to extant buildings and items identified as having heritage significance, including the Stores buildings, the Paintshop building and construction over the Fan of Tracks. The Heritage Council also recommends that appropriate conditions be imposed requiring binding conditions (eg s88B instrument) attached to all future lots creating a combined obligation to maintain and conserve all heritage fabric and spaces in the future, and that these obligations be extended to the funding for maintenance and upgrading of interpretation material/devices/buildings that form part of this consent.

Comment

RWA responds that the Stores buildings have over the years become structurally unsound with large timber sections extensively damaged by termites. Adjoining and infill buildings to the Paint Shop building make a meaningful adaptive reuse of it impractical. The PPR improves the site layout by opening up the Fan of Tracks in front of the Paint Shop building to allow for better interpretation.

The Heritage Council supports the redevelopment of the site and requires that the overall industrial character of the site is retained in the detailed site layout, public domain works and design of individual buildings. The proposal provides for the site to retain as much of its heritage significance as possible and also requires Interpretation Strategies to be developed for heritage interpretation in subsequent Project Applications.

6.4.2 RTA

Issue

The RTA did not raise any objection to the development, and provided comments for consideration in the assessment and for inclusion in the final conditions of approval. Specifically, the RTA requires improvements to intersections that will be directly affected by the redevelopment of the site. A traffic management plan was also requested and this is incorporated in the statement of commitments.

Comment

Modifications to the Concept Plan will ensure that RTA's requirements are met.

6.4.3 RailCorp

Issue

RailCorp raised issues that can be included as modifications to the Concept Plan however the following matters have been addressed in the statement of commitments:

- corridor protection
- derailment protection
- ongoing RailCorp access
- protection of the future North Eveleigh dive alignment, and
- stormwater discharge.

Specifically, the matters raised requires the proponent to prepare a geotechnical and structural report, excavation and construction methodology, cross sectional drawings showing ground surface, rail tracks, sub soil profile, basement excavation and structural design of sub ground support for any structure within 25m of the rail corridor that involves ground penetration of greater than 2m, the preparation of a derailment protection risk assessment, provision of on-going access to the rail corridor, and design of proposed structures within 25m of the dive alignment to be in accordance with RailCorp criteria. The PPR amends the design of basements for Blocks B, C and D to comply with the exclusion zone requirements for the dive alignment.

Comment

The statement of commitments requires stormwater drainage to be discharged from the site across the rail corridor and to provide RailCorp with the necessary information. It also requires that the detention system is designed to ensure post development flow rates from the site are not more than the pre development site discharge.

Specific matters raised about the design and finishes of buildings on the site, including noise and vibration, location of balconies and windows, reflective materials, fencing and landscaping can be addressed in future project applications and have been included as modifications to the Concept Plan.

6.4.4 NSW Ministry of Transport

The Ministry of Transport supports the proposal's target of 60% non-car mode share for commuters but requests that RWA test and investigate assumptions about the feasibility of this target. This target has been set for the peak hour commuter trips to the site and was arrived at following initial studies outlined in the BEP. This target is supported given the proximity of Redfern station and strategic regional bus routes, along with a realistic approach to parking supply on the site.

The Ministry recommends car parking be minimised based on the site's accessibility to public transport and the PPR addresses this by reducing the overall number of parking spaces on the site, with further opportunity to reduce parking provision as the number of parking spaces is set at a maximum.

The Ministry also recommends that assessment determine the likely transport needs of the proposed development and the capacity of the existing transport services to meet demand, and identify the level of additional infrastructure, if any, required to satisfy the demand. The *Compendium of City Rail Travel Statistics* shows that Redfern Station has no platform or capacity constraints. The station's perceived security and permeability requires more consideration and this can be undertaken through the proposed upgrade of Redfern Station, which will be funded from the sale of the subject site.

Resolution

The PPR amends the statement of commitments to include the preparation of a TMAP with future project applications.

The proposed Concept Plan Application has also been considered in relation to the transport strategy outlined in the Redfern-Waterloo Built Environment Plan (Stage One).

6.4.5 City of Sydney Council

Issue

The Council is supportive of the intention to revitalise the North Eveleigh precinct however, has made specific comments with regard to the impacts of such a proposal, including sustainability, heritage, site planning and built form, traffic impact, road design and dedication, pedestrian and cycle issues, parking, access, housing affordability and diversity, community facilities, local employment and training, staging, dedication of public open space, and public domain impacts.

Comment

The proposal demonstrates a commitment to sustainable development, as discussed in this report, and this is reflected in the statement of commitments. A modification to the Concept Plan requires future project applications for commercial development to demonstrate a minimum 4.5 Star ABGR or equivalent Green Star rating. The PPR also provides for increases in useable public open space and makes a commitment to the provision of affordable housing.

Traffic impacts have been addressed earlier in the report and the SKM independent traffic review provides further assessment to the impacts of car parking and traffic generation from the site. From this review, the proponent has reduced proposed on site car parking spaces and proposed measures to minimise impacts on surrounding streets.

The impacts on the heritage significance of the Paint Shop building is discussed in this report and a modification to the Concept Plan requires the proponent to undertake further assessment and consideration to amending the proposal so as to minimise the impacts of mezzanine parking areas. The condition of the existing Paint Shop structures makes it impractical to retain a majority of the building structure in its present form and adaptive reuse and addition to the building is supported however, it is considered that the impact to the heritage significance of the building particularly to its southern façade could be compromised by proposing ramped entry point to access mezzanine parking areas.

The issues raised by Council have been noted and most have been addressed directly in the PPR and amended statement of commitments. Issues not addressed directly in the PPR can be dealt with at the project application stage and are incorporated as modifications to this approval.

6.4.6 Arts NSW

Issue

The main concern raised by Arts NSW relates to the existing use of the Carriage Works building for cultural purposes, including that of a performance space, and associated impacts of this in terms of the increased residential development within proximity to the building. It is also requested that adequate car parking be provided for the use of the Carriage Works building as well as provision of access at all times, minimum standards for all pedestrian and vehicle access, emergency vehicle access, and a bus interchange close to the venue. It was also requested that adjoining building works have minimal disruption to the Carriage Works use and that new residents to the site shall not complain about performances from the venue.

Comment

Car parking for the Carriage Works will be in accordance with relevant development consent for the use, and additional pedestrian access along with existing access will be provided. The Concept Plan states that a bus set down area could be considered on Traverser 2.

A site management agreement between Art NSW and the landowner will be prepared to address issues relating to noise and its management in relation to new residential development, and this is included as a modification to the Concept Plan.

6.4.7 Sydney Water

Sydney Water did not raise objection to the proposal but requested collaboration with RWA to provide reticulated recycled water for non-potable uses on the site. It was also requested that if connection to the Sydney Water network is required then liaison should occur to ensure infrastructure is appropriately sized.

The requests from Sydney Water are noted and included as modifications.

6.4.8 NSW Police

The submission made by NSW Police relate to issues that can be addressed by crime prevention through design principles, specifically surveillance, lighting, landscaping, territorial reinforcement, environmental maintenance, space/activity management, and access control. Future project applications will be assessed with regard to the creation of safe areas, particularly in the transition areas from private to public spaces, potential conflict areas, and safety of users of the site. Safety in the design of basement car parks will be considered in detail in subsequent project applications and CPTED principles will be required to be incorporated.

The proposed layout of built form and public domain and open space areas encourages safety by design for future project applications and the proposed landscape masterplan requires future landscaping to provide safe, legible public domain areas to create safe environments, clear lines of sight and maximise opportunities for passive surveillance.

The statement of commitments requires a Safety Management Strategy to be prepared at project application stage that provides guidelines for the application of CPTED principles and Safer by Design best practice models. In

addition, a detailed landscape plan is required that uses landscape design to delineate between private and public spaces and ensures the design of open spaces will create a safe environment based on CPTED.

6.4.9 Department of Health – Sydney South West Area Health Service

The Department of Health made comments with regard to the proposal and its effect on maintaining healthy lifestyles, particularly the maintenance of a cycle friendly environment, establishing a bridge connection to the south to extend the cycling route, and the reduction in car parking. Matters relating to noise and vibration impacts on health, impacts of soil and groundwater contamination, and the provision of affordable housing were raised.

The proposal makes provision for cycle routes within the site without impacting on existing routes, and the PPR reduces on-site parking spaces and makes provision for affordable housing. Modifications to the Concept Plan require liaison with the Public Health Unit of the Area Health Service if health risks arise from soil and groundwater contamination.

7 CONCLUSION

The Department has assessed the EA and PPR and considered the submissions in response to the proposal. The key issues raised in submissions relate to building density and heights, traffic impacts, parking, access, public open space, heritage, sustainability, and promotion of public transport use. The Department is satisfied the proponent's response to the key issues in their EA and Draft Statement of Commitments will ensure there are minimal environmental impacts as a result of the proposal.

Key features of the Concept Plan proposal includes the adaptive reuse and upgrade of heritage buildings to be retained, and the provision of large areas of dedicated public open space. The public benefit of the redevelopment is highly desirable, with the provision of new housing and job opportunities and the proceeds from the sale of the site directed toward the upgrade of Redfern railway station.

The Concept Plan application has demonstrated general compliance with the height and density controls in the relevant environmental planning instruments and has given adequate consideration to the site's capability to accommodate this type of development. The intent of the proposal meets the objectives identified for the site in the Redfern-Waterloo Built Environment Plan (Stage 1) and complies with all relevant provisions within the MP SEPP that relate to the Redfern-Waterloo Sites.

Key recommendations made to the proposal and included as modifications to the Concept Plan are as follows:

- Further consideration of design options for works to Paintshop Building and Carriageworks
- Preparation of a TMAP to progress proposed intersection upgrades, identify measures to enhance public transport and pedestrian infrastructure, and support achievement of 40% mode share to car.
- Staging of development to ensure adequate access for vehicles and pedestrians and provision of services.
- Site management agreements for construction and ongoing operations between Carriageworks and owner(s) of residential and commercial buildings.
- Requirement to incorporate car share schemes and increased childcare provision in future project applications.

The Department has determined that the site is suitable for the proposed development and is in the public interest. Accordingly, the Department recommends that the Concept Plan be approved, subject to the modifications.

8 RECOMMENDATION

For concept plan application:

It is recommended that the Minister:

- (A) consider all relevant matters prescribed under Section 75O(2) of the *Environmental Planning and Assessment Act, 1979*, including those relevant matters prescribed by Section 75N and 75I(2) as contained in the findings and recommendations of this report;
- (B) approve the concept plan application, subject to modifications, under section 75O *Environmental Planning and Assessment Act, 1979* having considered all relevant matters in accordance with (A) above; and
- (C) sign the Instrument of Approval (**TAG B**).

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APPENDIX A. DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Application number	MP 08_0015
Project	Concept Plan for North Eveleigh redevelopment for the purposes of residential, commercial, retail and cultural uses.
Location	Part Lot 4 and Part Lot 5 in DP 862514, Wilson Street, North Eveleigh
Proponent	Redfern-Waterloo Authority
Date issued	
Expiry date	2 years from date of issue
Key issues	<p>The Environmental Assessment (EA) must address the following key issues:</p> <ol style="list-style-type: none"> 1. Relevant EPI's, Policies and Guidelines to be addressed Planning provisions applying to the site, including permissibility and the provisions of all plans and policies including: <ul style="list-style-type: none"> SEPP (Major Projects) 2005 Schedule 3, The Redfern-Waterloo Authority Sites Standard Instrument (Local Environmental Plans) Order 2006 SEPP (Building Sustainability Index: BASIX) 2004 SEPP 55 – Remediation of Contaminated Sites SEPP 65 – Design Quality of Residential Flat Development Draft SEPP No. 66 – Integration of Land Use and Transport SEPP (Infrastructure) 2007 Sydney Metropolitan Strategy (and any relevant draft or endorsed Subregional Strategy) The Redfern-Waterloo Built Environment Plan (Stage One) Provision of public infrastructure having regard to the Redfern Waterloo Authority Contributions Plan Provision of affordable housing in accordance with the Redfern Waterloo Authority Affordable Housing Contributions Plan Nature and extent of any non-compliance with relevant environmental planning instruments, plans and guidelines and justification for any non-compliance 2. Land Use <ul style="list-style-type: none"> Demonstrate suitability of proposed land uses in the context of the surrounding area. In determining the final proposed land uses, including location of and access to each use, maximise opportunities having consideration for the proximity of the university. 3. Built Form / Urban Design <ul style="list-style-type: none"> The proposal must be capable of exhibiting design excellence in accordance with the provisions contained in Schedule 3, Part 5, Clause 22 of the SEPP Major Projects (2005) - The Redfern-Waterloo Authority Sites. Location of plant equipment to minimise the visual and acoustic impacts. Demonstrate that the proposed buildings will satisfy the requirements of SEPP 65 – Design Quality of Residential Flat Development. Provide street level connections between the proposed development and Wilson Street.

4. Environmental and Residential Amenity

- Address solar access, acoustic privacy, visual privacy, view loss and wind impacts and achieve a high level of environmental and residential amenity. The proposal must demonstrate that the proposed siting of buildings does not have unacceptable level of impacts on overshadowing, privacy and views of buildings within the site and on adjoining sites.

5. Safety / Public domain / Landscaping

- Demonstrate how the proposed building envelopes, building design and treatment of the public domain will:
 - maximise safety, security and public surveillance within the public areas including disabled access and car park access. Specific regard should be given to the Department of Planning's Guideline; *Crime prevention and assessment of development applications*, 2001;
 - address linkages within and between other public domain spaces, including Redfern train station;
 - ensure access for people with disabilities;
 - minimise potential for vehicle and pedestrian conflicts.
- Provide an arborist's report to assess the condition of existing trees proposed to be removed and methods of protection during construction.
- Provide landscaping plan in particular for the public domain.

6. Car parking / Traffic Impacts (Construction and Operational)

Demonstrate the provision of sufficient on-site car parking for the proposal having regard to local planning controls and RTA guidelines. The EA shall also provide a Traffic Impact Study prepared in accordance with the RTA's Guide to Traffic Generating Developments, considering traffic generation, any required road / intersection upgrades, access, loading dock(s), car parking arrangements, measures to promote public transport usage and pedestrian and bicycle linkages. The Traffic Impact Study shall address and assess:

- traffic generation including daily and various peak traffic movements, determining and identifying modal split targets for peak periods, and the increase in the level and type of traffic associated with the proposal;
- impacts and resultant upgrades to street parking, the road network including laneways, arterial roads, intersections, signage and road capacity resulting from the project; cumulative impacts of adjoining and adjacent developments, where appropriate;
- measures to be implemented to mitigate any impacts identified;
- any required upgrading of roads and improvement works to ameliorate impacts associated with the development and the proposed source of associated funding;
- cumulative impacts on the local and subregional area including the future development by University of Sydney, and develop a traffic network model to determine impact(s);
- details of public transport accessibility and strategies to encourage public transport patronage, including pedestrian and cyclist flows; links to Redfern Railway Station and the future bridge link; connections to existing cycle network(s);
- details of provisions for service and delivery vehicles movements/loading;
- vehicular access, car parking location and bicycle arrangements, and detail proposed access points.
- details of adequate emergency vehicle access.

7. Ecologically Sustainable Development (ESD)

Detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.

8. Heritage

- Identify any items of European (including rail) heritage significance and provide a heritage impact statement in accordance with the *Heritage Manual*, (NSW Heritage Office & DUAP 1996). Specifically, the design and form of the proposal needs to respond, and assess any impacts on the character of the surrounding conservation area and nearby heritage items. The Heritage Impact Statement should address:
 - the impact of the proposed demolitions on the significance of the subject heritage item as a whole (as a group of buildings with related uses); and
 - take into consideration the relevant provisions of the Conservation Management Plan (CMP) and any other relevant conservation framework and principles.
- Identify whether the site has significance to Aboriginal cultural heritage and where applicable prepare an independent Archaeological report in accordance with the *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment & Community Consultation*, DEC, July 2005.
- The proposal must have regard for the character of the Golden Grove Conservation Area, as listed in the South Sydney LEP with particular consideration to development along Wilson Street.

9. Rail Impacts

- Address noise and vibration impacts from adjacent rail activities, including mitigation and monitoring measures where appropriate, consistent with guidelines published by Rail Corp including *Interim Guidelines for Applicants – Consideration of Rail Noise and Vibration in the Planning Process* and *Interim Guidelines for Councils – Consideration of Rail Noise and Vibration in the Planning Process*.
- Address the impact(s) of the proposed North Eveleigh Dive Alignment (future underground rail connection), along the southern boundary of the subject site.
- Identify the existence of any existing RailCorp services (such as pipes and cables) and structures within the development area by initiating the appropriate service searches. Where RailCorp services exist, an agreement must be made with RailCorp regarding the accommodation of the services.
- Address impacts on geotechnical and structural stability and integrity of Railcorp's facilities and corridor.
- Demonstrate that access to Railcorp's facilities for maintenance purposes is retained.

10. Social and Economic Impact Assessment

- Identify cultural, social and residential opportunities that will be provided to support the development of a sustainable community within the broader Redfern-Waterloo area. Address social impacts of the proposal.
- The Plan must address long term social sustainability issues and address impacts on community safety, the local community impacts, and measures to ensure the minimisation of crime and anti-social behaviour.
- Address impacts on the Aboriginal and European community within Redfern.
- Address the economic impact of the proposal and include an investigation into the impact upon the retail, commercial and residential industry within the locality and have regard to the hierarchy of centres in the relevant regional and sub-regional strategy.

11. Staging

Include details regarding any proposed staging of the development.

	<p>12. Dedication Details of any proposed dedication of open space and roads to Council / ownership and maintenance proposals of public domain.</p> <p>13. Drainage and Flooding</p> <ul style="list-style-type: none"> • Address drainage/flooding issues associated with the development/site, including: stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures. • Address the issue of managing the downstream impacts of stormwater on Sydney Water's stormwater network, including a stormwater management system and the capture and reuse of rainwater. • Explore non-potable water supply sources, including onsite recycling of grey water, rainwater and stormwater harvesting. • Address stormwater and drainage impacts on rail corridor. <p>14. Contamination The EA is to demonstrate compliance that the site is suitable for the proposed use in accordance with SEPP 55.</p> <p>15. Utilities</p> <ul style="list-style-type: none"> • In consultation with relevant agencies, address the existing capacity and requirements of the development for the provision of utilities including staging of infrastructure works. <p>16. Consultation Undertake, in accordance with the Department's <i>Major Project Community Consultation Guidelines October 2007</i>.</p>
Deemed refusal period	120 days

APPENDIX B. RESPONSE TO SUBMISSIONS

A response from the Proponent to matters raised in submissions is provided with the PPR.

APPENDIX C. ENVIRONMENTAL ASSESSMENT

To be provided on disk.