# Redfern–Waterloo Draft Built Environment Plan 2 [BEP2]

Submission to the Redfern-Waterloo Authority 11 April 2011







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Figure 1. Artist's view of Waterloo-Redfern housing redevelopment end state looking north-east, RWA BEP 2, January 2011 Figure 2. Three Poets, Redfern -17 storey slab tower blocks proposed to be retained



## **1.0 Executive Summary**

The City of Sydney (the City) welcomes the opportunity to review the planning study prepared by LFA Architects and transport study by Parsons Brinckerhoff which is referred to as the draft Redfern-Waterloo Built Environment Plan Stage 2 (draft BEP 2) prepared under the instructions of the Redfern Waterloo Authority (RWA) and the Director-General of the Department of Planning.

The City's submission sets out key recommendations for consideration by the Redfern-Waterloo Authority Chief Executive, RWA Board, Director-General of the Department of Planning and the Minister for Planning in progressing the next phase for this project.

## **1.1 Recommendations Outline**

## Key Recommendations:

- 1. An inquiry into potential rail access and potential intensification in Waterloo is essential
- 2. The inquiry must consider the cost/benefit and strategic value of a Waterloo rail station
- 3. Residential rezoning should be through the Sydney LEP 2011 rather than Part 3A
- 4. RWA/SMDA should sub-delegate any planning proposal and determination to the City
- 5. ESD commitments must be evident and highly evolved in the future master plan
- 6. Appropriate Contributions for social and affordable housing need to be re-examined
- 7. Full rate Contributions for HNSW private sector housing or sites should apply
- 8. Alternative sites for displaced social housing within Sydney LGA must be resolved
- 9. Healthy trees need to be retained and a canopy cover of 30% achieved
- 10. Built form heights, floor space ratios and setbacks need to be amended

## Supported:

- (a). Concept approach to housing mix, although the integration strategy is unknown
- (b). Concept of height transitions to neighbouring residential, although too high in places
- (c). Concept of variations in height throughout to ensure SEPP 65 is met
- (d). Concept of compact block planning with through-site links
- (e). Car parking under building footprints allowing areas of deep soil

## To be addressed:

- (f). Retain trees through building setbacks and building placement
- (g). Minimum 10% of block area allocated to passive, publicly accessible pocket parks
- (h). Improve height transitions in Precincts A and B
- (i). Define future building height by 'percentage proportion' rather than 'predominant'
- (j). Retain and refurbish the stepped 1982 buildings Drysdale and Dobell
- (k). Underground all services including street wiring
- (I). Distributed services and evacuated waste in the master plan study
- (m). Social infrastructure gaps through a Social infrastructure Needs Assessment

## 1.2 Recommendations Expansion

- 1. **Inquiry into rail access:** That the RWA and the Director-General advise the Minister that an *inquiry* be held into the potential for rail access and potential intensification of land use around potential rail access in Waterloo. This could be either via expansion of existing transport studies or as part of *potential precinct* inquiry, a request which is in accordance with Part 2 Cl. 9 (4) of *SEPP (Urban Renewal) 2010*;
- 2. Inquiry to consider a new railway station in Waterloo: That any *inquiry* consider in detail the design, cost/benefit and strategic contribution to the Metropolitan Plan of locating a new railway station in Waterloo on the Airport Rail Link to directly serve current and future key worker and social housing residents who may have low car ownership and be heavily reliant on public transport, and to relieve potential commuter congestion for new private sector residents who will have higher levels of car ownership;
- 3. **Residential rezoning through Sydney LEP rather than Part 3A:** That the redevelopment of all Housing NSW sites be achieved through a refined planning proposal incorporated into the draft *Sydney LEP 2011* (which is currently on exhibition) rather than through the SEPP/Part 3A process. The City does not support residential sites under its jurisdiction being removed via the Part 3A process. The study in relation to Locations 2, 3, 4 and 5 is insufficiently justified to gain Part 3A 'declaration';
- 4. RWA to sub-delegate any Part 3A planning proposal and determination role to the City (CSPC): If, contrary to Recommendation 3, the Housing NSW sites are declared significant sites under SEPP (Major Development) 2005 either before or after any inquiry noted in Recommendations 2 and 3, the RWA sub-delegate to the City the function of completing a planning proposal for the Housing NSW sites in accordance with Clause 13 (3) of the Redfern Waterloo Act 2004 in addition to sub-delegating the consent authority role of individual projects which follow over the following 20-25 year period;
- 5. Sustainability: That as the Redfern-Waterloo renewal has the potential to be a low carbon zone in the City's southern area, it should therefore have the ability to interconnect with any nearby city based decentralised utility scheme. The City specifically seeks the RWA and Housing NSW's commitment to deliver compatibility with, and the capacity to interconnect to (at a precinct scale):
  - low carbon and renewable energy systems; and
  - advanced waste and water collection and treatment systems;
- 6. Address appropriate Contributions for social and affordable housing: That the Contributions for the social and affordable housing components be examined in co-

operation with the City in relation to the appropriate apportionment to any Contributions Plan;

- 7. Address appropriate Contributions for private sector housing: That the HNSW private sector housing Contributions be at a rate that would normally apply to any equivalent private sector housing development under a Contributions Plan;
- Alternative public housing sites to be identified: That new sites for the displaced 700 public housing dwellings located within the City of Sydney LGA, be identified with strategies and funding for their relocation confirmed as part of the master plan study. A firm and costed relocation plan, prior to the evacuation and demolition of any further social housing is essential;
- 9. **Tree retention:** That the existing canopy cover provided by existing mature, healthy street and HNSW located trees be generally retained and incorporated into the future design. A canopy cover of 30% is sought from the overall proposal; and
- 10. **Incorporate built form/streetscape concerns:** That the public domain and built form concerns noted in this submission and summarised in section 1.4 are included as a requirement in any brief for any future study, master plan or developed planning proposal.

## 1.3 Good Aspects

- (a) Improved housing mix: generally the proposed increase in housing stock, including retention of public housing, additional affordable housing and additional private sector housing, which will contribute to the housing targets in the City of Sydney 2030 plan;
- (b) Height transitions: recognition that height transitions are needed between the lower scale of the surrounding and the higher scale of the development although some require amendment particularly in Precincts A & B;
- (c) **Variations in height:** generally the approach to height variations to break down the scale of the development and to potentially address overshadowing of other apartments (although satisfactory solar access is not demonstrated);
- (d) Compact block planning: Using the existing wide streets as primary outlook and introducing through-site links to increase the building envelopes and floor area future courtyard trees will be fundamental in preventing cross viewing and privacy;
- (e) **Car parking under buildings:** Basements should be located under building footprints only, with deep soil areas for tree planting in all courtyards.

## 1.4 Issues to be Addressed (during the next phase)

- (f) Retain quality, mature healthy trees: Indicative building layouts on Blocks 1-8 and 10-18 are yet to integrate existing mature trees, many of which are a major asset as well as a sustainability and amenity feature (trees are poorly acknowledged in BEP 2). This will require a street setback of 4 metres, and in relation to internal courtyards, deep soil and trees must address cross viewing;
- (g) Require a minimum percentage of each Block area for pocket parks (no less than 10%): Each Block should include small well-defined publicly accessible pocket parks for the immediate passive use of local residents given the significant reduction in open space for rebuilding, consistent with 4.4 of draft BEP 2;
- (h) **Improve Height Transitions:** The draft BEP 2 objective to ensure appropriate height transitions against neighbour residential is not fully achieved.
- (i) Define building height flexibly but with more certainty: Do not use 'predominant height' as a control with +/- 4 stories which is an 8 storey leeway. Instead, define variable height outcomes as percentage proportion of building footprint (i.e., a control that says for any Block – no more than 20% of building footprint to be 4 storeys, 60% of building footprint to be 6 storeys, 20% of building footprint to be 8 storeys) – this provides flexibility and certainty;
- (j) Retain and refurbish the buildings Dobell and Drysdale: The Dobell building (Block 18) and Drysdale building (Block 20) should be retained, refurbished and re-landscaped (where needed) to save money, conserve resources and to retain a valuable record of examples of better designed public housing from the 1980s (green roofs may be possible with these buildings);
- (k) **Remove Overhead wiring:** Redevelopment of the superblocks must include undergrounding of wiring as other developers are required to in similar localities;
- (I) Consider distributed utilities and waste: In conjunction with the City of Sydney, consider infrastructure renewal possibilities of providing or connecting to trigeneration (locally produced and distributed electricity, heating and cooling through a pipe network) and an evacuated waste system; and
- (m) Address social infrastructure: That the opportunities to address social infrastructure gaps and issues through the redevelopment are clearly articulated in a refined planning proposal through a *Social Impact Assessment - Scoping Study* and a *Social Infrastructure Needs Assessment*. New social infrastructure is required to addresses the scattered, aged and constrained buildings from which social services currently operate in the area.

## 2.0 Overview

## 2.1 Introduction

As a conceptual housing strategy, the City supports the initiatives of the Redfern Waterloo Authority<sup>1</sup> (RWA) and Housing NSW to revitalise two key housing estates in Redfern and Waterloo (Location 1, Precincts A, B, F & G). The City supports the inclusion of new affordable housing in the proposal. Affordable housing is a priority for the City, and the provision of 700 units will contribute to the City's target for this important housing option. A commitment to ensure that all displaced public housing dwellings will be relocated elsewhere in the LGA is essential and critical for the City's social housing target<sup>2</sup>.

## **BEP 2 Planning study**

As an initial planning study, part of draft BEP 2 has good documentation<sup>3</sup> but only in relation to Location 1, Precincts A, B, F & G. Insufficient detail is provided in relation to Location 2 Precincts E, C, D and Locations 3, 4 and 5 generally to fulfil the requirements of a required 'study'<sup>4</sup> however, and only in relation to Location 1, the City draws attention to key issues, strengths and concerns. The proposed LFA<sup>5</sup> built form recommendations are but one set of solutions to find the best outcome for the sites, and it is acknowledged that finding the right overall scheme, given the variables, is a challenge for any design team. The City aims to assist the RWA and SMDA to give the proper weight to competing considerations and a consensus process.

The City is mindful that independent planning consultants HBO + EMTB recommended future urban form, densities and potential controls in their *Waterloo* + *Redfern Draft Urban Design Report 2006* which cover the sites in question. At the time however, they were not fully aware of Housing NSW intentions in relation to housing mix, apartment mix or the proposed extent of demolition. This has been taken into account in this submission.

## Floor Space Ratios

The City has examined the RWA's proposed target yields (Floor Space Ratios [FSRs]) in

<sup>&</sup>lt;sup>1</sup> The Redfern Waterloo Authority (RWA) is a development corporation (similar to the former Darling Harbour Authority) with plan making and development consent powers created under the *Redfern-Waterloo Authority Act 2004*. However, projects over \$5 million in value are determined by the Minister for Planning (or delegate) under Part 3A of the EP&A Act in accordance with *SEPP (Major Projects) 2005*. The funding agreement with the NSW Government expires on 30 June 2011 and there are plans to transfer RWA functions to the newly created Sydney Metropolitan Development Authority. <sup>2</sup> This is highly important as the City's 2030 target is for social housing within the LGA to reflect 7.5% of total dwellings by 2030.

<sup>&</sup>lt;sup>3</sup> The exception to good documentation: Location 1 (Precincts A, B, F & G) being the *Open Space and Public Domain Characteristics Analysis* on BEP 2 page 24 which fails to record the 'significant vegetation' within and around the HNSW sites and streets in Redfern and Waterloo.

<sup>&</sup>lt;sup>4</sup> Location 1 (precincts C, D & E), and Locations 2, 3, 4 and 5 generally are not sufficiently detailed, and in the City's view do not meet the 'study' obligations of Part 2 CI.9(1) of the Urban Renewal SEPP or the Guidelines for State Significant Sites in order to be 'declared' or 'scheduled' under *SEPP (Major Developments) 2005*, which the City opposes in any case. <sup>5</sup> LFA (Pacific) Pty Ltd, also known as Lester Firth Associates, is a consultant to the RWA.

the draft BEP 2 across sample sites and testing indicates that the proposed target FSRs are generally greater in Redfern than what the RWA's built form plans and perspectives suggest. Characteristically they involve extensive on-site and street tree removal in order to be realised. More refined FSRs and heights (rather than target FSRs and indicative 'predominate' heights) will need to be addressed in the next master plan phase. It is likely that some Blocks in Redfern will need to have FSRs revised downwards while others in Waterloo may be revised upwards depending on prudent investment in public transport.

## 2.2 Background

The stated purpose of the draft BEP 2 planning study<sup>6</sup> is to obtain initial feedback from the community and stakeholders regarding the redevelopment/planning framework for the Housing NSW sites in Waterloo and Redfern over a 20-25 year time frame.

The subject sites are currently under the planning jurisdiction of the City of Sydney and should not change. The City has not previously prepared a detailed planning proposal other than considered the advice of urban design consultants HBO+EMTB who conducted a broader study on behalf of the City in preparation of the draft *Sydney LEP 2011*.



Figure 3. Outline of Locations 1 and 2 of the Redfern-Waterloo Built Environment Plan 2 (RWBEP 2) planning study Underground Airport railway line alignment shown in broken yellow line

The exhibition of the draft BEP 2 planning study is also a critical step in potentially having the sites 'declared' or 'scheduled' under *State Environmental Planning Policy (Major Development) 2005*<sup>7</sup> in accordance with the recent requirements of *State Environmental* 

<sup>&</sup>lt;sup>6</sup> Page 3, RWA draft BEP 2

<sup>&</sup>lt;sup>7</sup> http://www.legislation.nsw.gov.au/fullhtml/inforce/epi%2B194%2B2005%2BFIRST%2B0%2BN/

*Planning Policy (Urban Renewal) 2010*<sup>8</sup>, in which they would be subject to the protocols, processes, and determinations under Part 3A of the *Environmental Planning & Assessment Act 1979* (EP&A Act). Alternatively, the City advocates a refined planning proposal to be developed and adopted as part of the draft *Sydney LEP 2011* which is currently on exhibition.

The draft BEP 2 study represents the preliminary groundwork for effectively rezoning and/or changing the consent authority function for the consolidated Housing NSW sites in Redfern and Waterloo, the adjoining conservation areas and other 'scattered' smaller sites for increased housing density through an urban development agency<sup>9</sup>. Although the draft BEP 2 sites are not yet 'declared' under *SEPP (Major Development) 2005* or *SEPP (Urban Renewal) 2010*, and although currently within the planning jurisdiction of the City of Sydney, they have been excluded from the draft *Sydney LEP 2011* at the request of the NSW Department of Planning and the Redfern-Waterloo Authority (RWA). Therefore, the existing planning controls which apply to the sites are contained within the *South Sydney LEP 1998* which do not anticipate a major urban renewal project by Housing NSW.

## SEPP (Urban Renewal) 2010

From December 2010, three areas including the entire RWA operational area (Figure 4) were identified in the Urban Renewal SEPP as a *potential* [urban renewal] *precinct*.<sup>10</sup>



Figure 4. RWA Operational Area from SEPP (Urban Renewal) 2010 with Location 1 and 2 (of 5) identified in red outline.

<sup>&</sup>lt;sup>8</sup> <u>http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+691+2010+cd+0+N</u>

<sup>&</sup>lt;sup>9</sup> RWA and SMDA

<sup>&</sup>lt;sup>10</sup> To be declared an urban renewal precinct under *SEPP (Urban Renewal) 2010*, an appropriate planning study must have exhibited for a minimum of 30 days.

The SEPP requires planning studies to be exhibited for 30 days and that all subdivision approvals and development consents by the City and the Department of Planning in excess of \$5 million capital investment value be consistent with the urban renewal objectives in accordance with Part 2 Clause 10 (3) of the SEPP<sup>11</sup>.

The RWA has produced one earlier built environment plan, BEP 1 in 2005 (also known as Stage 1). It contained specific state significant sites<sup>12</sup> generally associated with the former Eveleigh railway yards and carriage works, Crown land sites in Redfern (i.e. former courthouse, police station and Rachel Foster Hospital sites) and The Block. The potential future inclusion of the public housing sites (BEP 2), but not necessarily the 'scattered sites', was foreseen in 2004 by the Carr Labor Government when the RWA legislation was introduced into Parliament. Despite this, the City does not support their removal from the Sydney LEP for a rezoning process via Part 3A or Major Development SEPP.

## 2.2 Redfern-Waterloo Authority (RWA)

It is important to note that a Built Environment Plan (BEP) is only one element of the aims and obligations of the RWA. When the *Redfern-Waterloo Authority Act 2004* commenced operation in January 2005, it obligated the Authority to address social, employment and development objectives with plans as set out in Section 3 of the Act. The objectives in the Act are to:

- encourage the development of Redfern-Waterloo into an active, vibrant and sustainable community;
- promote, support and respect the Aboriginal community in Redfern-Waterloo having regard to the importance of the area to the Aboriginal people;
- promote the orderly development of Redfern-Waterloo taking into consideration principles of social, economic, ecological and other sustainable development;
- enable the establishment of public areas in Redfern-Waterloo; and
- promote greater social cohesion and community safety in Redfern-Waterloo.

## Potential declaration of strategic sites

To implement the development objective, the RWA is able to seek declaration of specific strategic sites to which it would apply its exclusive control (generally sites within the boundaries of the RWA operational area<sup>13</sup> [Figure 4]). The focus on government owned

SEPP (Urban Renewal) 2010, Part 2 Clause10 (3):

(c) access to, or development of, infrastructure, other facilities and public domain areas associated with existing and future public transport in the potential precinct.

<sup>11</sup> http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+691+2010+cd+0+N

For the purposes of subclause (2), the consent authority is to take into account whether or not the proposed development is likely to restrict or prevent the following:

<sup>(</sup>a) development of the potential precinct for higher density housing or commercial or mixed development;

<sup>(</sup>b) the future amalgamation of sites for the purpose of any such development within the potential precinct;

<sup>12</sup> http://www.redfernwaterloo.com.au/other/rwa\_strategic\_sites.pdf

<sup>&</sup>lt;sup>13</sup> <u>http://www.redfernwaterloo.com.au/other/rwa\_map.pdf</u>

land was clearly enunciated when the Bill was read in Parliament. In the second reading on 11 November 2004, the Hon. Frank Sartor MP described the functions of the RWA as:

"The Redfern-Waterloo Authority will manage public infrastructure, land and properties in the area and promote the social and economic development of the community. Infrastructure development in Redfern and Waterloo is one of the keys to creating a sustainable and strong community. The New South Wales Government is the largest landowner in the area, with prime assets such as the Australian Technology Park, the railway station, Rachel Forster Hospital and Redfern Public School sites and the public housing estates. The development of these government assets in Redfern and Waterloo must deliver significant social and economic returns. It is important that the Government maximises its return on these assets if the urgent needs in the area are to be addressed"<sup>14</sup>

Potential co-operation and sharing arrangements were also included in the speech:

"Clause 28 refers to the declaration of State-significant sites. This will enable the Minister to be given development consent authority to Statesignificant developments within the authority's area of operations. The Minister may then sub-delegate this function to the authority or the Council of the City of Sydney. The Government will continue to work closely with the council." <sup>15</sup>

The City of Sydney has been in operation for 169 years. The RWA will have been in operation for 5 years and 6 months when the RWA funding agreement with the NSW Government expires on 30 June 2011. The former Keneally Labor Government had planned that the newly formed SMDA would absorb the functions of the RWA including funding arrangements, assets and liabilities. Prior to the defeat of the Labor Government on 26 March 2011, the Minister for Redfern-Waterloo was also the local member for Heffron, an electorate which overlapped with the RWA operational area. Some administrative transfer and absorption of human resources has already taken place. The City does not see a continuing role for the RWA or the SMDA within the Sydney LGA.

## 2.3 Sydney Metropolitan Development Authority (SMDA)

The draft BEP 2 indicates that 'feedback' will inform a *future study* which will be at the direction of the recently created Sydney Metropolitan Development Authority (SMDA). The SMDA was formally announced by the then Minister for Planning Hon. Tony Kelly MLC on 1 October 2010 having been previously announced to the press in February 2010 and later

<sup>&</sup>lt;sup>14</sup> <u>http://www.parliament.nsw.gov.au/prod/parlment/hansart.nsf/V3Key/LA20041111010</u>

<sup>15</sup> ibid

considered by the NSW Cabinet in September 2010. It was implemented by virtue of its inclusion in Schedule 1 of the *Growth Centres (Development Corporations) Act 2004*<sup>16</sup>. Minister Kelly described its role as:

"The Sydney Metropolitan Development Authority will also help to create more sustainable urban areas by maximising public transport use, assist the revitalisation of existing centres and create lively, interesting places where people can live, shop, play and work within the one area..... Both the Sydney Metropolitan Development Authority and the State environmental planning policy will help create a more connected city where new housing and jobs are linked to public transport." <sup>17</sup>

SMDA functions are reported<sup>18</sup> to include:

- working with transport and planning departments to identify precincts for renewal;
- undertaking land use planning investigations and feasibility studies;
- delivering and overarching precinct plan;
- co-ordinating transport and infrastructure planning;
- planning for open space in identified precincts;
- levying infrastructure contributions and entering into planning agreements;
- deal with land;
- borrowing and managing funds and private entities when necessary; and
- partnering with public agencies and private entities when necessary.

SMDA functions do not include development assessment or determination, which it is expected would be carried out by the Department of Planning unless it is delegated to an alternative consent authority such as the City of Sydney.

## SMDA capacity to expand jurisdiction

Any site(s) within the entire operational area of the RWA may be transferred exclusively to the SMDA provided that an appropriate planning study for the particular area in question has been on public exhibition for a minimum of 30 days. Under the Urban Renewal SEPP, any such area being the subject of a study, may also be subject to an *inquiry* under Part 2, Cl.9 (4). The BEP 2 planning study acknowledges that there are alternatives available in

<sup>&</sup>lt;sup>16</sup> The Sydney Metropolitan Development Authority was created in December 2010 under the *Growth Centres (Development Corporations) Act 1974 <u>http://www.austlii.edu.au/au/legis/nsw/consol\_act/gcca1974454/</u> and has the potential for planning power over land identified in <i>SEPP (Urban Renewal) 2010* (which includes the Operational Area of the RWA).
<sup>17</sup> http://www.parliament.nsw.gov.au/prod/parlment/hansart.nsf/V3Key/LC20100923026

<sup>&</sup>lt;sup>18</sup> <u>http://www.urbanalyst.com/in-the-news/new-south-wales/289-plans-to-establish-the-sydney-metropolitan-development-authority-approved-by-cabinet.html</u>

achieving the intended statutory and development outcomes:

*"It is proposed that the planning controls for the various HNSW sites will be implemented through several statutory planning instruments including the City of Sydney's LEP and the Urban Renewal SEPP which may amend State Environmental Planning Policy (Major Development) and/or the City of Sydney LEP."*<sup>19</sup>

#### 2.4 Built Environment Plan 2 (BEP 2)

The draft BEP 2 planning study identifies five *Locations* and various *Precincts*. In relation to Locations 1-5, the study<sup>20</sup> proposes urban design guiding principles, land use zones, height and floor space controls, preliminary public domain strategy, design excellence provisions and sample Block plans of how SEPP 65 might be satisfied on three Blocks within Location 1<sup>21</sup>. The City, however, does not agree with all of the conclusions and finds the *Open Space and Public Domain Characteristics Analysis* to be inaccurate.



Figure 5. RWA Operational Area in red outline, existing significant sites in blue outline, 'Locations' shown numbered, proposed sites to be declared in BEP 2 shown hatched in crimson

<sup>&</sup>lt;sup>19</sup> Page 67 of BEP 2

<sup>&</sup>lt;sup>20</sup> As previously noted, there is reasonable documentation in relation to Location 1 (Precincts A, B, F & G) except for the *Open Space and Public Domain Characteristics Analysis* on BEP 2 page 24 which fails to record the 'significant vegetation' within and around the HNSW sites and streets in Redfern and Waterloo; however, it is the City's view that there is insufficient documentation in draft BEP 2 in relation to Locations 2, 3, 4 & 5 to meet the criteria required by the *Guidelines for State Significant Sites under the Major Project SEPP*.

<sup>&</sup>lt;sup>21</sup> Location 1 is the Redfern and Waterloo consolidated HNSW sites

The five Locations included in the draft BEP 2 are:

- Location 1: The Redfern and Waterloo consolidated HNSW sites
- Location 2: Waterloo Conservation HNSW sites
- Location 3: Scattered HNSW sites
- Location 4: South Eveleigh HNSW sites
- Location 5: Eveleigh Street Precinct HNSW sites



Figure 6. Proposed Blocks and Precincts within Location 1. Other than the Location 2 heritage conservation areas (Blocks 22, 23 and 24), all other Blocks contain architectural development from the 1960s through to the recently completed dwellings built in 2010 (Block 8 – shown on the cover of draft BEP 2)

Due to time constraints, this CoS submission is confined to Location 1, which is the large holding of Redfern-Waterloo consolidated HNSW sites where the greatest concentration of housing exists and where the greatest degree of redevelopment will occur.

One of the aims of the draft BEP 2 in relation to Location 1 is to develop a *vision* for the redevelopment of the 24 existing public housing Blocks in Location 1 and 2 over the next 20-25 years (Figure 6). These Blocks currently have public housing estates located on them; three Blocks are heritage listed conservation areas (Location 2 - Blocks 22, 23 and 24), and three blocks contain high-rise towers which BEP 2 indicates are to remain (Blocks 9, 10 and 13).



Figure 7. RWA BEP 2 document cover, January 2011

The key assumptions in the draft BEP 2 study appear to be that:

- most mature street trees and those within the properties will be sacrificed in order to bring building lines to the boundary;
- public transport enhancements and car mode share impacts will remain minimal without additional permanent public transport;
- the use of 'predominant' height (which can be plus or minus four storeys being good practice;
- all nine high-rise residential tower buildings over ten storeys should remain; and
- all low-rise residential buildings under ten storeys should be demolished.

A number of these key assumptions, or at least the degree to which these assumptions should be implemented are questioned in the City's review of the draft study, particularly in relation to transport, widespread tree removal and building demolition.

The draft BEP 2 study has provided information on which buildings are to be demolished and notes which significant vegetation might be retained. It also has statements about requirement for new parks and open spaces, the upgrade of existing parks and open spaces, and the reopening of existing road closures.

This submission by the City of Sydney provides comment and feedback on the preliminary concepts contained in this planning study but only in relation to Location 1.



Figure 8. HNSW consolidated sites and conservation area superimposed over composite map from c.1890 by Higinbotham & Robinson. By this stage Mt Carmel Public Park (present day Waterloo Park and Oval) and Redfern Park have been established. (*City of Sydney Archives*)

#### **Historical Synopsis**

At its inception in 1942, the NSW Housing Commission identified Waterloo and Redfern as areas suitable for slum clearance and redevelopment. In the period 1946-49, 12.5 hectares was cleared which in Waterloo included 606 terraces and cottages and more than 30 other buildings were demolished including numerous hotels (Middlesborough, Beehive, Evening Star, Rose of Demark to name but a few), religious and public schools, post and telegraph offices, churches and industrial buildings (the Duke of Wellington Hotel was spared). North of Raglan Street, a number of roads were later closed. In the period 1949-53, the first three and four storey walk-up flats were constructed in Redfern and Waterloo [figure 29a]. Larger 'external balcony access' flats [figure 30d] were built in the 1960s together with some single storey aged units. High-rise construction came in 1966 with the three poets towers [Kendal, Gilmore and Lawson, figure 29c], followed in 1969 by the entire block four-winged McKell building [figure 29b]. Between 1974 and 1976, the Endeavour project consisting of the four 16 storey towers by Stafford Moor and Farrington [Manton, Daniel Solander, James Cook and Joseph Banks, figure 30b] and the two 30 storey slimline towers especially designed for the elderly [Matavai and Tauranga, figure 30a] were built. The East Waterloo conservation areas (east of Pitt Street, figure 29d) which had been resumed in 1972 for high-rise, were the subject of community protests against high-rise from 1974 and BLF Green Bans in 1975, and the area was retained as low-rise infill (as was Woolloomooloo at this time). The last two buildings from 1982, Dobell and Drysdale responded to the community's strong distaste for highrise with unusual 5-7 storey stepped building forms reflecting cutting edge public housing in Europe [figure 30c].

## 3.0 Urban Design Guiding Principles

## 3.1 Background

As previously noted, the draft BEP 2 is a precursor to a number of other master planning studies and reviews which will need to be prepared in order to inform future concept plans or project applications under Part 3A or amendments to the draft *Sydney LEP 2011*. It is acknowledged that the purpose of the draft BEP 2 is to obtain community feedback prior to any future studies so that issues can be considered and addressed (and which has been a long time coming - the aims of BEP 2 have been speculated on since 2005).

The draft *Urban Design Guiding Principles* set out in the draft BEP 2 planning study includes the following subject areas:

- vision
- community
- public domain and open space
- Iand use
- urban street pattern
- built form and design
- environment and heritage
- safety and security

The following table (Figure 9) sets out the BEP 2 proposed *Urban Design Guiding Principles* with accompanying comments by the City of Sydney against each BEP 2 principle. It is understood that the next phase is to prepare a more detailed analysis and master plan which will address comments made by the City and other stakeholders.

Figure 9. Table of proposed Urban Design Guiding Principles and City comments

BEP 2 Urban Design Guiding Principles	City of Sydney Comment
Vision	
To create a sustainable community represented by a mix of social, affordable and private housing and a diversity of housing types that responds to the needs of existing and future residents of Redfern and Waterloo by maintaining and renewing social housing and replacing obsolete housing stock with new private sector development Develop a new sense of community within a rich, distinctive,	Agreed but not evident. The planning study does not indicate any real diversity of housing types in the new building stock. The only diversity indicated in the new stock is varying building height. This needs to be
liveable urban environment	reviewed.

Community	
Social mix – achieve over time a sustainable social mix with a target of 40% social housing and 60% private/affordable housing	Agreed. The proportion of affordable housing within the 60% needs to be separately defined as a principle
Promote active community engagement and community capacity building throughout the renewal process to inform and strengthen the community	Agreed
Public Domain and Open Space	
Create a quality public domain which signals and supports a strong and successful community	Agreed
Provide for attractive, well located, clearly defined, safe and usable open spaces and pedestrian linkages	Agreed. Each block should have a minimum of 10% public open space and min 6.25% deep soil
Provide private open spaces to all dwellings in the form of courtyards, terraces, balconies or roof top gardens	Agreed
Delineate the progression of spaces from public to private and provide a clear definition of territory and ownership of all spaces	Agreed
Facilitate resident surveillance of public spaces and common areas	Agreed
New public open spaces to be contiguous with streets, highly visible with opportunities for surveillance	Agreed
Review the existing landscape qualities in streets and open spaces to maximise amenity and safety and create new high quality landscape design for public spaces. Respect existing quality streetscapes	Agreed but not evident. Sample block layouts do not address existing tree assets sufficiently
Land Use	
Mixed use – introduce opportunities for local retail, community orientated commercial activities and social infrastructure/services, setting a GFA allowance for such uses across the Precincts in the future Master Plan. Where appropriate the GFA for such uses to be excluded from the total allowable GFA for a block	Not agreed. The provision of commercial space, particularly at the ground level of the Elizabeth Street buildings must be part of the maximum permitted FSA consistent with the LEP Template requirements
Allow for ground level community, commercial or home office uses where residential uses are located on busy roads	Agreed
Encourage mixed use development in activity strip locations and existing local centre and corner shop locations	Agreed
Convert under-utilised spaces at ground level within existing towers to community uses, studios, and workshops	Agreed
Urban Street Pattern	

Reinforce the existing street network to re-integrate precincts with the surrounding neighbourhood, improve accessibility and permeability and to provide for pedestrian links	Agreed
Retain street and lane patterns that contribute to the character of the precincts	Agreed
Create new road and/or cross site pedestrian links to overly long blocks to improve permeability and convenience	Agreed
Open up existing road closures where this would improve public amenity, permeability, access, safety and security	Agree worth reviewing in conjunction with new TMAP
Built Form and Design	
Integrate new buildings within the established urban fabric, achieving design excellence	Agreed – subject to further detail from the City of Sydney
Mitigate the visual impact of high-rise buildings within precincts by developing street-edge low-rise built form (acknowledge the existing high-rise presence but break down its dominance by modifying buildings and introducing street edge buildings in the foreground)	Agreed – in addition, the more defensive design (reduced wall to wall glazing) of the higher buildings should address this as well (Moore Park Gardens)
Achieve appropriate density that balances the need to expand housing opportunities with the need for human scale and integration with surrounding areas	Agreed
Achieve appropriate built scale – encourage fine grained, street edge development utilising average or predominant height controls of up to 8 storeys (+/-4 four storeys) to encourage diversity	Principles agreed. Height range is not agreed. Plus or minus four stories is a flexibility/uncertainty range of eight stories. This
All development to comply with SEPP 65 and the residential flat code	suggests that many blocks drawn at 8 stories could be 12 stories. While this may be
As part of the revitalisation of the precinct prepare physical intervention and upgrading strategies for existing high-rise buildings which fall below contemporary standards of amenity, security, accessibility and building performance (as defined in SEPP 65 and the residential Flat Design Code	appropriate in some limited locations, it would not be appropriate across the wide range of blocks currently shown as 8 stories
Integrate new social housing within defined precincts with local neighbourhood character and ensure that it achieves the same visual quality as private housing	Agreed
Where possible, provide a transition of scale between new development and adjacent heritage conservation areas (provide a transition of building height between surrounding neighbourhood and higher density precincts)	Not 'where possible' – this should be in all cases – where new housing is added. Where there is no adjoining conservation area, transitions can be more dramatic
Align building edges parallel with streets and provide a clear identifiable delineation between public and private realms at street level	As a generic rule agreed – but not at the expense of high quality mature trees. These will
Maximise building connection to the public streets, create activated and pedestrian friendly street level frontages and a clear street address	serve to break monotony and allow occasional setback courtyards (Moore Park

	Gardens)
Encourage street corners to be articulated by architectural design elements such as increased height, balcony projections and colour accent etc	Balcony projections are not encouraged at higher levels – they should remain within the line of the building façade
Include design excellence provisions in the final planning controls for the precincts. A process of assessment of design excellence should also be indentified	Agreed. This must be described by a process
Environment and Heritage	
Environment systems and energy management to be incorporated in all existing housing upgrades	Agreed. This has been a major shortcoming of public housing estates which only accommodate electrical space
Implement precinct wide sustainable design principles particularly for power and waste disposal	heaters at high running costs. Distributed hot water should be considered
Provide a new residential development which meets sustainable design principles (Green Star targets)	Agreed – but what star?
Recognise Indigenous and non-Indigenous heritage qualities within, and adjacent to the Precincts, including urban conservation areas	Agreed. This subject area is the weakest – and the only place to recommend that the two artists
Conserve the unique setting of important landmarks such as Mt. Carmel	buildings – <i>Dobell</i> and <i>Drysdale</i> be retained and that key trees be retained
Seek innovative solutions to ensure environmentally sustainable development	Agreed
Safety and Security	
Create a strong sense of safety and security	Agreed
Ensure a high degree of accessibility and provide for appropriate design for safety and amenity for residents and visitors	Agreed
Utilise CPTED principles in the design and/or management of public spaces	Agreed

## 3.2 Outline Response

As can be seen from the table above, the City can support many of the high level *Urban Design Guiding Principles* as expressed in the document. Key concerns with the draft BEP 2 relate to the need for a more sensitive and contextual approach towards retaining high quality existing trees (especially along street alignments but also within sites), the need to allocate a minimum pocket park area allocation in concert with the more detailed tree retention analysis, improved areas of deep soil, how height and FSR controls are defined (and how they are to be expressed as a 'control' in any future instrument) and the unsupported demolition of the two 1982 'artist' series buildings *Drysdale* and *Dobell*.

## 3.3 Housing Mix

The City generally supports the proposed mix of public, private and affordable housing, although the proportion of affordable housing (10%) must not be reduced. At present 2,184 dwellings are contained in buildings of 8 storeys or more. The proposal includes provision for increased private and affordable housing dwellings and outlines a dwelling mix that includes:

Private dwellings:	3500	(50%)
Social housing dwellings:	2800	(40%)
Affordable housing	700	(10%)

The City's support for the provision of affordable housing is not to be at the expense of the overall quantum of social (public) housing throughout the Sydney Local Government Area.

The City also supports the inclusion of more market sector housing in the area to provide diversity in tenure, balanced social mix and economic injection. The City supports the commitment made by Housing NSW to ensure that the reduction in social housing dwelling numbers in Redfern-Waterloo will be relocated elsewhere in the Sydney LGA. It is essential to identify these locations during the master plan stage and prior to any further evacuation or demolition and before statutory approval of a revised planning proposal.



Figure 10. Three Poets public housing complex (1966), Morehead Street, Redfern

## 3.4 Differential Built form Controls

While being supportive at a high level, the City is concerned about how the RWA and Housing NSW intend for the social and affordable housing to be delivered through the

wording of controls in any future Environmental Planning Instrument (EPI). The significant uplift in development density and significant change in built form, can set an undesirable precedent for surrounding private land owners and land speculators, seeking to increase surrounding land values without delivering the social and affordable housing outcomes that is proposed for the Housing NSW sites. It is essential that the future FSR and height controls are properly constructed to prevent a perception or precedence in the investor market place, where escalated land values are a key affordability problem.

## Bay Street Glebe experience

The City has co-operated with Housing NSW on a similar redevelopment for an estate on Bay Street, Glebe. In that instance, the City has ensured purpose-constructed controls apply to the delivery of social and affordable housing on the site, by establishing a differential FSR control that enables development incorporating social and affordable housing at higher densities. This set a positive precedent for neighbouring sites by clearly establishing that the greater densities are clearly linked to the delivery of a community benefit - in the form of social and affordable housing.

## New York experience

A recent rezoning approach in New York City boroughs, is that 70% of a site's maximum FSR and height is available for private development (as of right) and access to the remaining 30% of height and FSR must be through the provision of 20% 'inclusionary housing' (affordable housing), streetscape improvements and other predefined public benefits. Typically developers locate the 'inclusionary housing' at the lower levels of such developments, and exploit the additional height and views for the private housing component at the upper levels where higher returns can be made.

As with the site in Glebe and the New York example, the housing estates in Redfern and Waterloo can deliver the proposed private/social/affordable housing mix without being reflected in specific planning controls - provided the land owner remains commited and is held to account. However, in order to provide more certainty among the community, and to discourage unsupportable 'spot rezoning' planning proposals for uplifts on neighbouring investment sites, the City strongly urges that the social and affordable housing component in any planning controls be 'differentiated' to reflect the components.

## 3.5 Relocation of Existing Social Housing

The draft BEP 2 planning study proposes a reduction of 700 social housing dwellings in the Redfern-Waterloo area and their relocation to other sites in the Sydney LGA. While the draft BEP 2 includes a statement that these 700 dwellings will be provided elsewhere in the City of Sydney, there is currently no plan for either *where* or *when* these dwellings will be replaced. Based on this high-level commitment, the City supports the retention and relocation of 700 social housing dwellings within the City of Sydney LGA. Some further growth in social housing will meet the City's target of 7.5% social housing in 2030.

A confirmed plan that includes a detailed commitment on the timing and location for the replacement of these 700 social housing dwellings by Housing NSW is essential to accompany the statutory exhibition of the controls in whatever form they are exhibited.



Figure 11. New public housing meets old – the recently completed social housing on the right is significantly lower in height than what is existing on left or what is proposed in the BEP 2 (see Figure 12).



Figure 12. Artist's impression of housing scale (and future landscape) in George Street Waterloo, BEP 2, January 2011.

## 3.3 Social Planning Approach – Scoping Study

Although there are observations about population increase, demographic age, smaller household sizes, community diversity, changing profile of social housing tenants and comments about high unemployment and low household income, it would appear that the proposed controls have not been informed by key social planning studies for the sites which it is acknowledged may be undertaken at the master plan stage.

The two key components of social planning work which have not been included in the draft BEP 2 planning process are a *Social Impact Assessment - Scoping Study* and a *Social Infrastructure Needs Assessment*.

There are a range of social impacts associated with a major renewal projects such as this. Typically, a comprehensive social impact assessment may be conducted at the master plan stage, such as in Minto (NSW), Bonnyrigg (NSW) and Kensington (Vic), where the research and considerations of a study is able to be based on more detailed design, dwelling mix and ownership scenarios.

Notwithstanding this, the extent to which social impacts will be systematically considered in the planning process, and at what phase of the process impacts will be considered, should be defined in a *Social Impact Scoping Study* at the first stage of planning. A Social Impact Assessment - Scoping Study should be prepared to accompany the future BEP 2 statutory exhibition to:

- identify the social impacts<sup>22</sup> that will be assessed;
- define the level of involvement of key stakeholders in the Social Impact Assessment process (e.g. for data sharing purposes, involvement in public forums);
- set the scope of the evidence to be gathered, and a plan to gather it; and
- examine opportunities for collating and delivering community and/or human services and facilities in the area covered by the draft BEP 2.

<sup>&</sup>lt;sup>22</sup> From impacts on education, special transport needs and health services through to impacts on community gardens

## Recommendation 1

**Social Housing Relocation:** A clear acquisition and funding plan that includes a detailed commitment to the timing and the location/s for the replacement of 700 displaced social housing dwellings by Housing NSW, is required to accompany the statutory exhibition of the controls in what ever form they are exhibited.

## **Recommendation 2**

**Differential Built form Controls:** To ensure well constructed controls apply to the delivery of social and affordable housing on the site, establish a differential FSR control that enables development incorporating social and affordable housing at higher densities.

## **Recommendation 3**

**Social Impacts:** A *Social Impact Assessment - Scoping Study* and a *Social Infrastructure Needs Assessment* should be prepared to accompany the future BEP 2 statutory exhibition to:

- identify the social impacts that will be assessed;
- define the level of involvement of key stakeholders in the Social Impact Assessment process (e.g. for data sharing purposes, involvement in public forums);
- set the scope of the evidence to be gathered, and a plan to gather it; and
- examine opportunities for collating and delivering community and/or human services and facilities in the area covered by the draft BEP 2.

## 4.0 Public Domain Strategy

## 4.1 Introduction

A denser and more diverse population will result in an increased demand for usable open space and recreational opportunities. A detailed public domain strategy is required and should include amongst other things:

- quantum of park and open space to be provided;
- identification of the location, size and functions of park and open space; and
- analysis of the modifications to the street network including planning for bike and pedestrian movements.

Planning for the modifications to the road and street network should be undertaken with the objective of improving surveillance and safety. This should be through a combination of reintroducing vehicular traffic to some streets that are currently closed to vehicles and through good urban design providing passive surveillance, but not at the expense of healthy trees.

These inclusions are generally consistent with the high-level public domain objectives set out in the BEP 2 document. However, the City draws attention to a number of its concerns with the material in BEP 2 that relate to the green streetscape, target FSRs and building footprints.

## 4.2 Street Alignment Impact on Street Trees

Three sample block studies<sup>23</sup> in Section 04 of BEP 2, while they do indicate some minor variation in street boundary setbacks as drawn, show that this will be insufficient to ensure that current and future mature street trees will be protected from damage. As a general rule, a 4 metre setback (with some façade variability as suggested in BEP 2) is needed to ensure that the current and future street tree canopy cover (and which is well established in Redfern and Waterloo) is not unnecessarily damaged or cut down.

It should be noted that streets, paths and street trees are under the control of the City of Sydney, which will carefully review any detailed tree survey submitted, or conduct its own survey and inventory. The City has an experienced team of tree specialists and arborists reflecting its care and control of the city's major urban parks. Appropriate street setbacks and gardens must also be considered in creating high quality landscape design in relation to the privacy of dwellings at the ground level.

The existing canopy cover provided by existing mature, healthy street and private trees must be retained and incorporated into the future design. A canopy cover of 30% is sought

<sup>&</sup>lt;sup>23</sup> Block 5, Block 12 and Block 16







for the overall proposal. Examples of the landscaped streetscape which will need to be the subject of detailed arborist studies is shown in Figures 13-15.

It is evident from aerial day photos (Figure 16) and night thermal photos (Figure 17) that both the Redfern and Waterloo estates contribute mature and significant areas of green and tree canopy which will need to be respected and carefully planned for.

It is suggested that a tree mapping and tree evaluation survey be undertaken to influence the layout and footprint of buildings, setbacks and the location of pocket parks and open space. The existing vegetation also contributes to the area's biodiversity, insect and birdlife.



Figure 16. Aerial photo of Redfern Waterloo

## 4.3 Retention of Tree Canopy

The City has identified tree canopy as a mitigation factor in relation to climate change. A program of thermal imaging (Figure 17) taken at night illustrates that tree canopy actively reduces the 'urban heat island effect' for roadways, where re-radiation actively increases morning temperatures and causes summer temperatures in the city to be noticeably higher than non-urban areas. Hotter temperatures add to increased energy loads. The City of Sydney requests that the existing canopy cover provided by existing mature, healthy street and private trees be retained and incorporated into the future design. A canopy cover of 30% is sought from the overall proposal, a target which applies to all urban development, including the public domain and street trees.



Figure 17. Thermal Image to record 'urban heat island effect' recorded 6 February 2009



Figure 18 (top) *Open Space and Public Domain Analysis* BEP 2 page 24 with Figure 20 inset shown in red Figure 19 (above left) aerial photo showing 'significant vegetation' on Precincts F and G Figure 20 (above right) inset from Figure 18 at the same scale showing an absence of much 'significant vegetation'

## 4.4 Response to Public Domain Principles

The inadequate recording of significant vegetation in BEP 2 will need to be addressed in the future master plan stage. The *Open Space and Public Domain Characteristics Analysis* (Figure 18) on page 24 of BEP 2 inadequately records the 'significant vegetation' in Precincts A, B, F & G. A detail taken from the *Analysis* (Figure 20) when compared to a matching aerial photo at the same scale (Figure 19), reveals the quantum of mature tree cover which has been overlooked. This will need to be reviewed and addressed in any future master plan.

## 4.5 Provision for new parks

The sample Block plans in draft BEP 2 (Block 5, Block 12 and Block 31) do not indicate new parks which conform to the stated BEP 2 objective of *New public parks and open spaces should be located along street frontages to maximize accessibility and visibility.* 

The three sample Block plans illustrated in BEP 2 however do indicate small landscaped open spaces (internal courtyards within buildings) which are not located along street frontages, and therefore must not be intended to serve the objective. Some confusion may exist between the reality and the objective. As noted in BEP 2, Waterloo is well serviced by larger district parks, and any redevelopment will need to consider publicly accessible pocket parks<sup>24</sup> and community gardens, which serve a different purpose.

If any new publicly accessible neighbourhood park is created, consideration should be given to redefining a large green space in Block 10 (Figure 21).



Figure 21 Possible neighbourhood park location

<sup>&</sup>lt;sup>24</sup> Small publicly accessible open space which is not dedicated to Council

The following table (Figure 22) sets out the City's preliminary response to the *Preliminary Public Domain Strategy* set out in draft BEP 2:

BEP 2 Preliminary Public Domain Strategy	City of Sydney Comment
New Parks and Open Spaces	
The renewal of Redfern and Waterloo HNSW sites is to make provision for new public parks and open spaces. The location of future parks and open spaces is to be identified within the future master plan, in close consultation with the social housing residents, as well as the wider community	Agreed. Each block should have a minimum provision which reflects the density of the block. An absolute minimum of 10% of the site area of any block should be stipulated for usable pocket parks (excludes verges and other non-consolidated open space)
New public parks and open spaces should be located along street frontages to maximize accessibility and visibility	Agreed
New public parks and open spaces should accommodate facilities appropriate for the envisaged uses and functions i.e., playgrounds, seating, lighting, shading, etc	Agreed. These need to be included in the budget/funding for the development and
New public parks and open spaces are to be designed in accordance with Crime Prevention Through Environmental Design (CPTED) criteria to maximize safety of the spaces for users	should be part of the suite of public domain furniture and facilities adopted in the City of Sydney public domain codes
New public parks and open spaces are to incorporate environmentally sustainable features in their design e.g., water sensitive urban design	Agreed – but not at the expense of existing trees
New public park and open spaces are to incorporate landscaping and appropriate tree planting to maximise the use and amenity e.g., adequate sunlight, daylight and shade, while minimizing opportunities for crime and anti-social behaviour	Agreed
Upgrade of Existing Parks and Open Spaces	
Maximum use and enjoyment of these spaces by the community	Agreed
Improve safety and security within the parks and open space	Agreed in principle, however this is being partly achieved by changing the demographic. Unwarranted tree removal is not a solution in itself
The facilities provided in the parks and open spaces [playgrounds, etc.,] are most appropriate for those using the parks and open space	Agreed
Existing landscaping and vegetation does not adversely	To be further discussed to the

impact on the amenity, use or safety of the parks and open space	extent that it involves streets owned by the City of Sydney	
Reopen existing road closures <sup>25</sup>		
Intersection of George and McEvoy Streets	Reopening of streets by the	
Intersection of Phillip and Walker Streets	City of Sydney will be further discussed after consideration	
Intersection of Elizabeth and Kettle Streets	of an appropriate traffic report	
Morehead Street between Redfern and Kettle Streets	and TMAP	
Facilitate resident surveillance of public spaces and common areas	Agreed	
New public open spaces to be contiguous with streets, highly visible with opportunities for surveillance	Generally agreed	
Review the existing landscape qualities in streets and open spaces to maximise amenity and safety and create new high quality landscape design for public spaces. Respect existing quality streetscapes	Streets, paths and street trees are owned by the City of Sydney which may conduct its own survey. The City has an experienced team of tree specialists and arborists who will review any tree survey submitted. Street setbacks must also be considered in creating high quality landscape design. The existing canopy cover provided by existing mature, healthy street and private trees must be retained and incorporated into the future design. A canopy cover of 30% is sought from the overall proposal	
Creation of new through-site links and streets To maximize accessibility, permeability and safety of the Redfern and Waterloo HNSW sites, opportunities for new through-site links must be identified. Through-site links are pedestrian routes that may be combined with cycle links where appropriate. Through-site links must be designed and located to ensure that direct routes, clear lines of sites and maximum surveillance from surrounding streets, dwellings and development.	Through-site links provide more building frontage in order to increase the density of existing blocks and need to be balanced against safety concerns. The design and construction of through-site links should be capable of accommodating police, ambulance and emergency vehicles trying to reach an injured person or person in distress.	

<sup>&</sup>lt;sup>25</sup> RWA states that Arup Pty Ltd has been requested to undertake a transport and traffic analysis of the proposed road openings. The RWA advises that Arup concluded that the transport and traffic analysis indicates that minimal through traffic intrusions are likely as a result of the proposed openings. The City of Sydney is not aware of any report by Arup that arrives at these conclusions and the City is part of the stakeholder group.

The appropriateness of creating new 'shared ways', which are shared routes for pedestrians and cars will also be considered to increase activity, surveillance, and safety through the sites.	To be further examined with the City of Sydney	
The final location, function and location of new links will be the subject of extensive consultation of the development of a detailed public domain strategy for the master plan.	Agreed	
Upgrade of existing laneways, through-site links and streets		
Improve safety and security for pedestrians and improve the quality and appearance of streets and laneways	Agreed	
Improve and enhance the existing landscape to maximize safety, visibility and appearance of streets, laneways and through-site links	Sustainability considerations are also required	
A detailed review of the existing streets, laneways and through-site links will be undertaken in the development of the public domain strategy for the master plan to identify where upgrades are required	To be further discussed	
Landscaping Plan and Tree Assessment		
The development of the detailed public domain strategy for the master plan will need to be supported by a comprehensive landscape plan and tree assessment which:	This has not been sufficiently allowed for in the draft BEP 2 sample plans or target yields.	
<ul> <li>provides an assessment of the existing landscaping and street trees in terms of their quality, condition, significance and appropriateness;</li> </ul>	A landscape strategy must address street tree retention (including appropriate allowances for future street	
<ul> <li>identify significant trees and landscaping elements that should be retained and enhanced;</li> </ul>	trees, for example 4 metre street setbacks), and a strategy towards retaining the	
<ul> <li>identify trees and landscaping for removal due to their poor condition or inappropriateness for maximizing safety and amenity;</li> </ul>	majority of well located specimen trees within the sites in question retaining deep soil in defined locations	
<ul> <li>recommends the most appropriate tree species and vegetation for streets, through-site links and laneways, which maximize visibility and amenity; and</li> </ul>	The existing canopy cover provided by existing healthy street and private trees be	
<ul> <li>recommends landscaping treatments and designs for existing and new parks and open spaces which maximizes amenity, safety, useability and quality of these</li> </ul>	retained and incorporated into the future design. A canopy cover of 30% is sought from the overall proposal	
spaces for the enjoyment of the community.		

Figure 22. Table of proposed Preliminary Public Domain Strategy and City comments
# Recommendation 4

**Tree Retention:** That the layout of the building footprints and the street setbacks must reflect the retention of highly valuable existing mature trees. The existing canopy cover provided by existing mature, healthy street and private trees must be retained and incorporated into the future design. A canopy cover of 30% is sought from the overall proposal.

# Recommendation 5

**Street setbacks:** To protect street trees generally, the development requires a minimum street setback of 4 metres, and in relation to internal courtyards, introduce deep soil and trees which will improve cross-viewing privacy and contribute to project sustainability.

# **Recommendation 6**

**Pocket Parks:** That no less than 10% of each typical Block area should be reserved for pocket parks. Each Block should include small well-defined publicly accessible pocket parks (with capacity for community gardens where desired by the residents) for the immediate passive use of local residents given the significant reduction in open space for rebuilding unless that block contains a larger publicly accessible park (consistent with the aims of section 4.4 of draft BEP 2).

# 5.0 Preliminary Transport Strategy

# 5.1 Background

The City is a key stakeholder on the Steering Committee for the transport study which arose from BEP 1. We understand from SMDA that this study will now be expanded in order to meet the additional study requirements in *SEPP (Urban Renewal)* 2010.

The majority of the roads are under the control of the City, which has made extensive investments in improving pedestrian and cyclist amenity and a keen interest in minimising car growth in the area. The City is closely involved with the State in three other studies that include the RWA area, being:

- the Botany Road Corridor Study, which is completed in draft;
- a revised TMAP for the Green Square Town Centre which is investigating the impacts of surrounding developments and removal of the Station Access Fee at the rail station; and
- a major multi-modal corridor study extending from the City Centre to Port Botany and Kingsford Smith Airport.

# Traffic concerns

The City has two primary concerns with the proposed traffic and transport impacts from the draft BEP 2. The first concern is that there is the potential for misrepresentation of the real impacts of traffic arising from the proposals due to conservative assumptions in the current modelling.

The second is that given the significant potential for greater development and the attractiveness to private developers, some major sensitivity analyses is required to ensure that assessments of greater density are not based on initially conservative estimates of either transport supply or demand.

# 5.2 Modelling Issues

The current traffic analysis is quite limited and does not adequately account for the draft BEP 2 site position in relation to the State road network and proximity to existing congested roads such as Botany Road and Regent, Wyndham, Gibbons and Chalmers Streets. These form part of the national freight network and are economically significant. Consequently, any increase in private trip generation by car or bus, will potentially have serious economic and congestion consequences. For that reason the State proposed a zero car growth target at Green Square, and the same should apply for the draft BEP 2.

The assumption in the traffic modelling that historic low levels of car use will remain, fundamentally ignores the different demographic mix proposed with premium housing stock for draft BEP 2. Furthermore, there is limited data available for the background modelling as low income earners are not included in Journey to Work data.

This will inevitably lead to much higher than historic car use if alternative high-quality transport options are not in place from initial habitation. This has already been experienced in the Green Square redevelopment area, where public transport use was low and car use increasing before the removal of the station access fee at both Green Square and Mascot stations after which rail trips were reported to have improved. The City contests that neither bus services on congested roads, nor a long walk to Redfern Station will comprise quality transport links to a high socio-demographic with financial capacity to purchase a car. The redevelopment will also lead to other regional attractors being developed in the area, and it should be expected that the industrial lands on the edge will become attractive to higher density residential and commercial development.

#### Traffic analysis

The traffic analysis is extremely conservative and all but ignores very real threats to the viability of the existing and proposed road networks from State and Regional Road overflow as congestion pressure grows.

A sensitivity analysis that looks at growth flowing through the area from Green Square, the surrounding development potential, the greater density potential within the study area and the Metro Plan density effects on the regional road network needs to be undertaken to understand the real transport corridor and network impacts that both affect the draft BEP 2 area, and the effect of the draft BEP 2 area on the surrounding network.

#### 5.3 Value Capture Through Transit Oriented Development

Redfern Station, the proposed walking catchment for rail passengers, is the fifth busiest on the inner-city Cityrail network. It is also very difficult to service efficiently by feeder bus due to the one way street pair of Wyndam/Gibbons and Regent/Botany Streets.

There are also quite poor pedestrian conditions and connections through to Redfern Station, which further mitigates against the choice to use public transport. The conditions are affected by the one-way street pair which requires greater waiting time for pedestrians and the need to pass through Redfern Lane which has little street activation and has been the site of aggressive behaviour.

#### **Redfern station**

There are existing proposals to upgrade Redfern Station which will involve creating additional pedestrian facilities that will accommodate the new station entrances. These should also be considered in terms of desire lines and walking catchments.

#### **Bicycle network**

Some bicycle network detail needs to be further negotiated with the City to ensure that this transport option is available in a high quality manner that is attractive to residents. The current analysis is based on a previous iteration of the City's proposed cycle network. There are opportunities to improve outcomes for both cyclists and motorists through signal enhancements.

### Airport Rail Link

A real and significant opportunity to not only minimise car dependence, but to enhance the development attractiveness of the draft BEP 2 area exists due to its location above the Airport Rail Link.

Rail consistently ranks as more attractive to users than bus services. Developers rank fixed infrastructure, such as rail, more highly when deciding to invest because of its relative permanence compared to bus routes, even of dedicated busways.

This generates greater opportunity for value capture through VPA or s94 contributions and reinvestment into the public domain, public transport network and the ability to enhance the economic return on the site.

This would create a true Transit Oriented Development with local networks feeding a local rail hub and reducing reliance on private motor vehicles for employment, recreation, retail and civic service access.

#### 5.4 Potential new rail station

A new station in the vicinity of George and Raglan Streets (or Wellington Street) is not without its challenges. The gradient of the climb would make station design critical and because the existing alignment could not be disturbed, edge platforms would be required. Nonetheless, the benefits would be significant.

Simply avoiding further choking of the existing State and Regional road network would delay major road upgrades and investments that will otherwise be brought forward by the developments. This is not only true of car growth, but much greater bus growth if no rail station was provided.

Re-distributing rail passengers across the two lines would reduce congestion at Redfern which will face significant growth as densification occurs around Redfern Station and the Australian Technology Park. The State owned and operated Australian Technology Park would have an expanded rail catchment, and the pedestrian flow from a new station would help sustain a vibrant street level economy, enhancing safety and connecting the various developments.

#### Rail capacity

The Airport Rail Link currently operates at between 85 and 100 per cent of capacity in the peaks, with a 15 per cent patronage increase expected at Green Square and Mascot Stations due to the very recent rescission of the station access fee. However, as capacity is measured on seated passengers, carriages are capable of 132 per cent capacity before crush capacity is reached, and this is acceptable for one or two stations. It is noted that while there are only eight trains per hour currently, this is expected to increase to 12 trains per hour when the South West Rail link is operational and provide a nominal capacity lift at the station of 2000 people per hour inbound. Outbound capacity in the morning would be significantly higher, serving the Green Square and southern employment area.

The relatively short distances to the southern and city centre employment generators means that seated capacity would not be critical, giving time for the network to be enhanced without relying on instant capacity growth to be viable.

The station itself would give a focal point to the local pedestrian network, creating an identifiable street hierarchy. If a zero or near-zero car-growth target is to be achieved it would need this maximum 800 metre radius catchment for new residents.

Combined with a strong on-street car-share presence with a rental car on every corner, a network of bike paths and an amenable pedestrian network a new rail station could make the area work and support greater density.



Figure 23. Indicative value capture through new rail capacity – densities can be lowered in Redfern where transitions are more sensitive and potentially increased (subject to testing) in Waterloo provided there is public transport infrastructure

Enhancing the range of transport options and including high quality links is essential to prevent what might be a vibrant and attractive precinct from becoming a congested and isolated island development.

Some preliminary concepts suggest that with further testing, a rebalance of target GFA from Redfern to Waterloo may be achievable as indicated in Figure 23. The suggestions

which increase the FSR of selected Waterloo blocks are entirely based on a new railway station being located under the George Street alignment. The possibilities include:

- increasing the density and height of Blocks 11 and 12 (due to their location to the western edge of the estate and with mixed use and business to the west);
- the addition of a 5-6 metres building depth to the four slab towers, which will increase the dwelling count by approximately 100 dwellings per tower side and halve the unit sizes in the process (a two bed unit becomes two one bedroom units and likewise, a one bed becomes two studios). Preliminary architectural analysis suggests this may be achievable without significant structural changes to the existing building.

# 5.5 Inquiry

The purpose of the SMDA is to create more sustainable urban areas by maximising public transport... and to create a more connected city where new housing and jobs are linked to public transport.<sup>26</sup> Consistent with this specific aim, the City recommends that an *inquiry* be held into the engineering and economic feasibility of locating a new rail station on the Airport Rail in the vicinity of George and Raglan Streets, Waterloo.

The objectives of the new rail station for the purpose of the inquiry should be to:

- minimise congestion growth on the existing and proposed road network;
- provide quality public transport access linking to employment, retail, civic and entertainment;
- enhance the density potential of draft BEP2 and adjacent developments;
- maximise the return on the existing rail infrastructure;
- create opportunity for value capture and investment in public infrastructure; and
- provide a focus for local transport connections, forming a Transit Oriented Development site.

The work would need to consider options for the station location with respect to:

- gradients and associated Disability Discrimination Act requirements for passenger access;
- vertical transport requirements and options for direct connection to major sites;
- opportunity to transfer between platforms;
- interchange capacity for local bus networks to feed the rail station, provision of kiss and ride, bicycle network links, bicycle parking and high grade walking connectivity; and
- long-term capacity supply over the design life of a station, nominally 50 years.

<sup>&</sup>lt;sup>26</sup> http://www.parliament.nsw.gov.au/prod/parlment/hansart.nsf/V3Key/LC20100923026

There are two options to undertake such an inquiry. The first is to significantly expand on the existing transport studies being undertaken by the SMDA and include the rail station option. The second is to activate Part 2 Clause 9 (4) of the *SEPP (Urban Renewal) 2010* which empowers the Minister to direct that such an inquiry be undertaken.

# Recommendation 7

That the RWA and the Director-General advise the Minister that an *inquiry* be held into potential rail access and potential intensification of land use around potential rail access in Waterloo. This could be either via expansion of existing transport studies or as part of *potential precinct* inquiry, the request of which is in accordance with Part 2 Cl. 9 (4) of *SEPP (Urban Renewal) 2010*.

# Recommendation 8

That any *inquiry* should consider the design and cost /benefit of a new rail station in the vicinity of George and Raglan Streets, Waterloo on the Airport Rail Link and should be undertaken with the objective of minimising car use, maximising public transport use and determining funding strategies related to development densities. This could include expansion of the existing transport and traffic studies to address feedback to the draft BEP 2 proposal. Alternatively, these objectives and issues should be investigated through an *inquiry* in accordance with Part 2 Clause 9 (4), *SEPP (Urban Renewal) 2010*.





Figure 24 (top). Tauranga, one of two 30 storey towers designed for the elderly viewed from George Street, Waterloo.

Figure 25 (above). *Daniel Solander*, one of four 17 storey slab towers viewed from the north (all building elevations similar). The windows provide limited outlook and views were little discussed as a feature when built. The high-set windows were designed to relieve fears of vertigo for occupants and are markedly different from equivalent private sector housing today.

# 6.0 Built Form: Land Use, Floor Space and Height

### 6.1 Introduction

As previously noted, the Redfern-Waterloo draft BEP 2 is a precursor to a number of other studies and reviews which will be prepared in order to inform future amendments to *SEPP (Major Development) 2005* and/or *State Environmental Planning Policy (Urban Renewal) 2010* (Urban Renewal SEPP) and/or the draft *Sydney LEP 2011*. It is acknowledged that the purpose of the draft BEP 2 is to obtain community and stakeholder feedback prior to any future studies. The City's response only relates to Precincts A, B, F & G at Location 1.

The City is one of the more important stakeholders as the sites are currently under its planning control, and the roads, street closures, drainage infrastructure and external-toblock public domain (including street trees) threaded through the development are under its operational control.

#### **Building demolition**

Except for the heritage listed conservation areas (Blocks 21-24), draft BEP 2 proposes extensive demolition of buildings in Location 1, except for the nine high-rise towers over ten storeys. This is consistent with Government commentary (since at least 2005) that there was little economic justification without compelling evidence of technical or structural failure or concrete cancer to demolish the high-rise towers (three in Redfern and six in Waterloo) built between 1966 and 1976. They represent major housing investments that are approximately half-way through their economic life. From an aesthetic and living view point, the slab towers are not ideal, and in time they may need to be demolished and reconstructed with more a suitable format, unless intervention occurs in the mid term.

#### **Building retention**

The retention argument is more compelling in relation to the 1974-76 Endeavour project in Waterloo<sup>27</sup>. This was a show-piece project in its day (Figures 24 & 25). The six-tower Endeavour concept, which focuses on Cook's voyage and has a metaphorical theme for the majority non-Australian born tenants when completed, includes four 17 storey slab towers<sup>28</sup> containing 214 units (16 x 1 bed and 198 x 2 bed each) in each of three towers (*Joseph Banks, Marton<sup>29</sup> and Daniel Solander<sup>30</sup>*), and 212 units in the fourth (*James Cook*). The case for retention is even stronger in the case of the two 30 storey slimline towers *Matavai*<sup>31</sup> and *Tauranga*<sup>32</sup> (Figure 24 & 30a) which were specifically designed for elderly tenants<sup>33</sup>.

<sup>&</sup>lt;sup>27</sup> Designed by architects Stafford Moor and Farrington in conjunction with architects from the Housing Commission of NSW
<sup>28</sup> Each slab tower is served by two lifts and has a structure of load bearing concrete blade walls (no perimeter columns) with crushed quartz and white marble chip external panels. Each building sits on 407 Frankiepiles driven to six metres. The design suggests that the cross blade structure is relatively stiff and may be capable of expansion (this requires validation).
<sup>29</sup> *Marton* is named after the Yorkshire village of James Cook's birth.

<sup>&</sup>lt;sup>30</sup> Daniel Solander was a Swedish naturalist, who was invited to accompany Joseph Banks on the Endeavour voyage.

<sup>&</sup>lt;sup>31</sup> Matavai is named after the bay in Tahiti where Captain James Cook anchored HMS Endeavour in April 1769. (continues)

Technically, the structural in-situ cross-wall design of the four slab towers may lend themselves to an additional structural bay being added to the exterior, allowing existing apartments on the side in question to be reduced in size and doubled in number (as notionally indicated in Figure 23). This could add approximately 100 additional dwellings per tower per extended side. This approach accepts that the 17 storey slab outline against the sky is a given, and that adding an additional bay of 5 or 6 metres in width, utilizing the existing services (although an additional lift may be needed), creates very little additional mass to the existing slab silhouette.

The construction of these towers in the early seventies led to a community backlash in 1974 and a Builder's Labour Federation union Green Ban in 1975 over the planned demolition and high-rise renewal of East Waterloo (resulting in the current conservation area). The only blocks to be built after this period were the two 'artist series' buildings *Drysdale* [34 dwellings, Block 20] and *Dobell* [95 dwellings, Block 18] (Figures 26-28).

Given the different design values and potential, it is recommended that *Dobell* and *Drysdale* be retained and refurbished to save money, conserve resources and to retain a valuable record of examples of better designed public housing from the 1980s to be found anywhere in the world. The proposed replacement buildings have a similar height.



<sup>32</sup> (from previous page) *Tauranga* is the Maori word for 'landing place' Figure 26, *Dr* used to commemorate Cook anchoring in New Zealand on his first voyage.

Figure 26, Drysdale (1982) from Reeve Street

<sup>33</sup> Accommodating 522 elderly men and women, and considered best practice when built (but not today), both 30 storey towers *Matavai* and *Tauranga* had special features for the elderly including slow moving lift doors and a call-for-help monitoring system with alarm buttons throughout each unit. Advances included circuit breakers instead of fuses, arthritic control taps, non-slip 'plunge' shower bases, clothes dryers in units as well as separate clothes drying equipment and air drying spaces and common rooms on each floor. It also had elaborate fire detection measures, smoke exhaust system and lift failure, air-conditioning failure and sprinkler failure monitoring. They were positioned offset to avoid cross viewing, and had a glass observation room on the 30<sup>th</sup> floor.



Figure 27. Drysdale and Dobell aerial view. These buildings may be capable of green roofs.



Figure 28. Drysdale (1982) from Pitt Street



early 1950s 3-4 storey walk-ups Demolition proposed

Precinct A – Block 1

1969 8-9 storey mid-rise tower *McKell* 284 dwellings Demolition proposed

Precinct B – Block 6





1966 3 x 17 storey towers *Kendall Gilmore Lawson* 576 dwellings Retention proposed

# Precinct B – Block 9

1980s-90s (reuse) 2-3 storey terraces and infill. Following BLF 'Green Bans' conservation area 500 + dwellings Retention and infill proposed

Precinct C – Block 23





Figure 29a-d. Redfern Built Form

29b

29c

29d

#### 1976

2 x 30 storey towers Matavai Tauranga 409 dwellings Retention proposed

Precinct F – Block 10

#### 1974

4 x 17 storey towers James Cook Joseph Banks Marton Daniel Solander 854 dwellings Retention proposed

#### Precinct F – Block 13

1982 2 x 4-7 storey terraced blocks Dobell Drysdale 129 dwellings Demolition proposed Should be retained

Precinct G – Block 20

1961









Precinct G – Block 19



Figure 30a-d. Waterloo Built Form

30b

30c

30d

30a

# 6.1 Proposed Land Use

In principle, the proposed land use zones of B4 along Elizabeth Street in Redfern and Cope Street in Waterloo (Figure 31) is not objected to, although the proposed controls exclude non-residential uses from the maximum FSR controls which is not supported and is not contemplated by the draft LEP template. The General Residential zone R1 elsewhere is generally supported.



Figure 31. Proposed Zonings, draft BEP 2 January 2011.

# 6.2 Proposed Floor Space Ratios (FSRs)

One of the City's key areas of concern with the draft BEP 2 relates to the proposed 'predominant' heights definition and the target FSR controls which are notably higher than the recommended FSR and height controls contained in the *Waterloo* + *Redfern Draft Urban Design Report 2006*. Testing undertaken for this submission by the City of Sydney across a number of Blocks suggests that the target FSRs are too ambitious in some Blocks (given the drawn heights in the accompanying artist's perspectives) and area unlikely to be realised having regard to:

 an appropriate strategy for street tree retention (including appropriate allowances for future street trees, for example 4 metre setbacks) and a strategy towards retaining the majority of well located specimen trees within the sites in question retaining deep soil in defined locations (i.e, shaped car parking under buildings generally);

- the need to incorporate meaningful height variations as suggested in the draft BEP 2 study to break the building mass down, provide air and outlook in the proposed tightly planned blocks;
- the need to ensure some degree of solar access to the internal courtyards of the proposed sub-block designs for the landscaping to survive;
- the need to ensure SEPP 65 solar access is achieved to the lower (north facing) units of the proposed buildings (in order to be consistent with the commitments in the draft BEP 2);
- the need to meet the need for appropriate height transitions against exist non-HNSW neighbourhoods and heritage-listed conservations areas; and
- the opportunity for increased development near high levels of public open space and parks and permanent public transport infrastructure (i.e., under 800 metres to heavy rail).

The City has reviewed the proposed FSRs in BEP 2 and taken into account the above factors. Taking into account Recommendations 7 and 8 contained in Section 5 *Preliminary Public Transport Strategy* in this submission, the City has reviewed two scenarios:

- Scenario 1. No Station (existing circumstances no new railway station)
- Scenario 2. Station (new railway station as recommended in Section 5).

With this in mind, comments are provided on the three sample Blocks. A summary of the review of FSR and GFA is contained in the following table (Figure 32):

Block	Site Area	BEP2	BEP2 GFA	CoS FSR No Station	No Station GFA	CoS FSR Station	Station GFA
1	13,230	2.75	36,383	2.00	26,460	2.00	26,460
2	8,939	2.50	22,348	2.00	17,878	2.00	17,878
3	8,832	2.50	22,080	1.85	16,339	1.85	16,339
4	2,308	2.00	4,616	1.50	3,462	1.50	3,462
5	8,635	3.00	25,905	3.10	26,769	3.10	26,769
6	9,127	3.00	27,381	2.65	24,187	2.65	24,187
7	10,802	3.00	32,406	2.35	25,385	2.35	25,385
9	20,300	2.50	50,750	2.50	50,750	2.50	50,750
10	32,654	3.00	97,962	1.85	60,410	4.00	130,616
11	11,092	3.00	33,276	2.75	30,503	4.00	44,368
12	9,654	2.50	24,135	2.25	21,722	4.00	38,616
13	19,691	3.00	59,073	2.80	55,135	4.00	78,764
15	6,228	2.50	15,570	2.25	14,013	2.50	15,570
16	11,184	3.00	33,552	2.25	25,164	2.25	25,164
17	7,281	2.75	20,023	2.00	14,562	2.00	14,562
19	10,152	2.50	25,380	2.25	22,842	2.50	25,380
21	6,666	2.50	16,665	2.00	13,332	2.00	13,332
Total			547,504		<b>448,911</b> 82%		<b>577,601</b> 105%

Figure 32. FSR and GFA spread across blocks in Location 1.



Figure 33. Block 5 aerial photo (number of storeys indicated)

# Block 5 Precinct B

# Existing

Format: 3-5 storey walk-ups FSR: 1.1 – 1.25: 1 Site Area: 8,635 m<sup>2</sup> Dwellings: 130 in total Density: 149 dwellings/ha net





Figure 34. Sample Block 5 design by RWA superimposed on aerial photo (number of floors indicated)

# Block 5 Precinct B

#### **BEP 2 Proposed**

Format: 8, 6 and 4 storey lifted apartments FSR: 3:1: 1 Site Area: 8,635 m<sup>2</sup> GFA: 25,905 m<sup>2</sup> Proposed Dwellings: 266 in total Density: 308 dwellings/ha net

Note: Elizabeth Street ground floor 100% commercial is additional

#### Comment

The proposed height along Elizabeth Street is 8 storeys and this frontage is to be zoned Mixed Use, allowing both commercial and residential uses. Commercial, however, must be included in the FSR and not excluded as proposed. The remainder of Block 5 is to be zoned Residential.

70% of existing trees are cut down and there is insufficient setback for tree retention. Heights along Elizabeth Street could be tested marginally higher.



# Figure 35. City of Sydney indicative height adjustments - Block 5 (Proposed to be tested at master plan stage)

Note: All top floors are to be setback from the parapet on all sides and must be no greater than 70% of the area of the floor below.

#### Block 5 Sample FSR Review

#### BEP 2 scheme:

The target FSR for the block is 3.0:1. Based on a calculation of the enclosed areas (including external walls) this assumes an efficiency of 95% (results in FSR of 2.97:1). A more realistic assumption of 90% would result in an FSR of 2.8:1. This footprint results in potential loss of 70% of trees from the block (excluding those to the north).



#### BEP 2 scheme (efficiency ratio adjusted):

A more realistic assumption of no more than 90% efficiency would result in an FSR of 2.8:1. However the draft BEP 2 footprint results in potential loss of 70% of trees from the block (excluding those to the north) and does not allow for retention of existing or future street trees.



#### **CoS Refined Footprint Plan:**

A 4 metre setback (for street tree canopies) and occasional specific major tree setback, results in an FSR of 2.65:1 at the draft BEP 2 proposed heights which is a reduction of 11%. However, due to the location along Elizabeth Street, it may be possible to test the Elizabeth Street heights at 10 storeys (parapet at nine storeys, 10<sup>th</sup> storey setback 3m) and 8 storeys along Morehead Street (parapet at 7 storeys, 8<sup>th</sup> storey setback 3m). This results in an FSR of 3.09 (with FSR of .09:1 dedicated to ground floor commercial use).



Figure 36 a, b, c. Yield testing (FSRs) Block 5



Figure 37. Block 12 aerial photo (number of storeys indicated)

# Block 12 Precinct F

# Existing

Format: 3 storey walk-ups FSR: 0.6: 1 Site Area: 9,654 m<sup>2</sup> Dwellings: 109 in total Density: 114 dwellings/ha net





Figure 38. Sample Block 12 design by RWA superimposed on aerial photo (number of floors indicated)

# Block 12 Precinct F

#### **BEP 2 Proposed**

Format: 8, 6, 5 and 4 storey lifted apartments FSR: 2.5:1: 1 GFA: 24,135 m<sup>2</sup> Site Area: 9,654 m<sup>2</sup> Proposed Dwellings: 248 in total Density: 257 dwellings/ha net

#### Comment

Block 12 should be designed in conjunction with Block 11. Testing of this block during the master plan stage may suggest that the FSR and height could increase where it co-joins with the commercial use fronting Botany Road provided that there is new rail access. An increase in FSR together with increased setback along George Street to 4 metres (to allow for street trees) will absorb some FSR relocated from Redfern's more sensitive sites.



# Figure 39. City of Sydney indicative height adjustments - Block 11 & 12

Proposed to be tested at master plan stage

Note: All top floors are to be setback from the parapet on all sides and must be no greater than 70% of the area of the floor below



Figure 40. Concepts worth testing if railway station is located along George Street in Block 10.



Figure 41. Moore Park Gardens Plan and Section 2.5:1 with its park *courtesy AJ+C Architects* 

#### Comment

Block 11 and 12 is one of the few locations which may be able to take more height following detailed testing during the master plan stage. Any increase in height must absorb the reduction in height and FSR at the more sensitive sites in Redfern and Waterloo. The more sensitive sites are: Blocks 1, 2, 3, 4, 6, 7, 16, 17, and 21. An increase in FSR to 4:1 for Blocks 11 and 12 would produce a similar result to Moore Park Gardens (MPG) if it is assumed that the area of open space( or park) at MPG is provided on Block 10 as shown in Figure 40.





Figure 42. Block 16 aerial photo (number of storeys indicated)

# Block 16 Precinct G

# Existing

Format: 3 storey walk-ups FSR: 0.8: 1 Site Area: 11,184 m<sup>2</sup> Dwellings: 98 in total Density: 88 dwellings/ha net





Figure 43. Sample Block 16 design by RWA superimposed on aerial photo (number of floors indicated)

# Block 16 Precinct G

#### **BEP 2 Proposed**

Format: 12, 10, 9, 8, 6, 5, and 4 storey lifted apartments FSR: 3.0:1: 1 Site Area: 11,184 m<sup>2</sup> GFA: 33,552 m<sup>2</sup> Proposed Dwellings: 344 in total Density: 308 dwellings/ha net

#### Comment

The proposed height and bulk on this Block is generally supported however the existing green canopy is not integrated. More site specific building designs and footprints with setbacks are required which will result in somewhat reduced FSRs (see Figure 45).



# Figure 44. City of Sydney height indicative adjustments - Block 16

Proposed to be tested at master planning stage

Note: All top floors are to be setback from the parapet on all sides and must be no greater than 70% of the area of the floor below

#### **Block 16 Sample FSR Review**

#### BEP 2 scheme:

The target FSR for the block is 3.0:1. Based on a calculation of the enclosed areas (including external walls) this assumes an efficiency of 95% (results in FSR of 2.97:1). A more realistic assumption of no more than 90% would result in an FSR of 2.8:1. However, this results in potential loss of 75% of trees from the block (excluding those to the north).



### BEP 2 scheme (setbacks adjusted):

With the setbacks adjusted to retain the key trees, the FSR at the draft BEP 2 heights is 2.25:1.

In Scenario 2 with the rail station included, the lost FSR on this block could be absorbed in one of the other blocks (subject to further testing and analysis) providing rail infrastructure is provided.



Figure 45 a, b. Yield testing (FSRs) Block 16

# 6.3 FSR by Block – Scenario 1 – No station (existing circumstances) minimal setbacks potentially significant tree losses

Block	BEP2 Proposed FSR	CoS Review FSR	Change	Comment
1	2.75 : 1	2.25 : 1	- 0.5	Higher street wall not appropriate on this section of Elizabeth Street
2	2.5 : 1	2.25 : 1	- 0.25	
3	2.5 : 1	2.0 : 1	- 0.5	Proximity to conservation area limits heights
4	2.0 : 1	1.5 : 1	- 0.5	Proximity to conservation area limits heights
5	3.0 : 1	3.0 : 1	No change	
6	3.0 : 1	2.5 : 1	- 0.5	Mid block does not support very high street walls
7	3.0 : 1	2.5 : 1	- 0.5	Proximity to conservation area limits heights
8	2.5 : 1	2.0 : 1	- 0.5	Proximity to conservation area limits heights
11	3.0 : 1	2.75 : 1	- 0.25	
12	2.5 : 1	2.25 : 1	- 0.25	
15	2.5 : 1	2.5 : 1	No change	

Block	BEP2 Proposed FSR	CoS Review FSR	Change	Comment
16	3.0 : 1	2.25 : 1	- 0.75	Lower street wall height on McEvoy Street
17	2.75 : 1	2.0 : 1	- 0.75	Lower street wall height on McEvoy Street
18	2.5 : 1	1.5 : 1	- 1.0	Required dedication for streets reduces yield
19	2.5 : 1	2.25 : 1	- 0.25	
20	2.5 : 1	2.25 : 1	- 0.25	
21	2.5 : 1	2.5 : 1	No change	

# 6.4 FSR by Block – Scenario 2 – Station (new railway station) preferred setbacks with likely significant tree retention

Block	BEP2 Proposed FSR	CoS Review FSR (No station)	CoS Review FSR (with Station)	Comment
1	2.75 : 1	2.0 : 1		Higher street wall not appropriate on this section of Elizabeth Street
2	2.5 : 1	2.0 : 1		
3	2.5 : 1	1.85 : 1		Proximity to conservation area limits heights
4	2.0 : 1	1.5 : 1		Proximity to conservation area

				limits heights
5	3.0 : 1	3.1 : 1		
6	3.0 : 1	2.65 : 1		Mid block does not support very high street walls
7	3.0 : 1	2.35 : 1		Proximity to conservation area limits heights
8	2.5 : 1	Existing		Recently developed lot
10	3.0 : 1	Existing	3.0 : 1	
11	3.0 : 1	2.75 : 1	4.0 : 1	
12	2.5 : 1	2.25 : 1	4.0 : 1	
13	3.0 : 1 2.5 : 1 (a)	Existing	4.0 : 1	
15	2.5 : 1	2.25 : 1	2.5 : 1	
16	3.0 : 1	2.25 : 1		Lower street wall height on McEvoy Street
17	2.75 : 1	2.0 : 1		Lower street wall height on McEvoy Street
18	2.5 : 1	Existing heritage (max 1.5 : 1)		Required dedication for streets reduces yield
19	2.5 : 1	2.25 : 1	2.5 : 1	
20	2.5 : 1	Existing heritage		

		(max 2.1 : 1)	
21	2.5 : 1	2.0 : 1	

#### 6.5 Built form conclusion

Without a new rail station, the proposed CoS required modifications would result in a 15% reduction in target yield compared with the draft BEP 2 proposed FSRs. With rail, the proposed modifications would result in a 105% outcome (5% uplift sufficient to count the commercial space along Elizabeth Street which is currently excluded from calculations in draft BEP 2).

#### Further general comments

- The draft BEP2 does not contain a consolidated built form strategy this should be provided with a concise rationale.
- It is recommended that the draft BEP 2 incorporate the detailed built form controls relating to residential flat buildings and mixed use buildings contained in the draft Sydney Development Control Plan 2011.
- More detail should be provided in relation to the public domain particularly the location and design of new streets and location of through-site links. This documentation should be linked to controls for building alignments/setbacks.
- Building heights should be shown as maximums on a percentage basis to provide greater certainty in relation to built form character outcomes.
- The proposed maximum building heights should be shown in metres consistent with the Standard Instrument - Principle Local Environmental Plan definition (ie includes roof forms, plant rooms and lift overruns).
- Although the use of 'predominant heights' is not supported in principle, if they are to be used, it is recommended that the maximum variation from the predominant height should be reduced to an additional 2 storeys over 15% of the site.

#### 6.6 ESD Commitments

The City's commitment to Ecologically Sustainable Development (ESD) and its *Sustainable Sydney 2030* strategy has consistently informed its discussions with Government across a range of projects. The City seeks a commitment from the State Government and RWA/SMDA to work with the City to deliver ESD outcomes.

The draft BEP 2 report makes no mention of the future sustainable design principles in relation to reticulated services and managing future energy consumption, although one of the key reasons why buildings are to be demolished is that they have reached the end of their *service life*. The City recommends that the master plan stage address the following:

- potential for low carbon decentralised energy supply through establishment of a tri-generation district energy system capable of also supplying adjacent areas to the site and/or connection to one or more of the City's Low Carbon Zones trigeneration systems;
- identify how the development will supply 100% of its electricity requirements from local low carbon and renewable generation in accordance with Sustainable Sydney 2030;
- ensure that the development has compatibility with, and the capacity to interconnect to, precinct scale low carbon and renewable energy systems, and advanced waste and water collection and treatment systems;
- identify how the development will reduce CO<sub>2</sub> emissions by 70% in accordance with Sustainable Sydney 2030, or appropriate alternative provisions;
- identify how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development;
- address street and public domain LED lighting throughout the development;
- address water management for the site by including an "Integrated Water Management Plan" that achieves the objectives of water conservation through options that have the lowest carbon footprint. The plan should include the establishment of a non potable water network interconnected to one or more of the City's Low Carbon Zones non potable water networks, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures;
- at least 20% of the development's operational greenhouse gas emissions (after reductions from energy efficiency or ESD measures and tri-generation) should be provided by onsite renewable energy;
- address waste through the establishment of a segregated automated waste system interconnected to one or more of the City's Low Carbon Zones automated waste systems;
- identify the different proportions of recycled and non recycled waste and how waste will be utilised as a resource, particularly as a renewable gas resource to supply the tri-generation system(s); and
- ensure the undergrounding of overhead wiring with the renewal of services.

Housing NSW, with the assistance of the RWA, the City of Sydney and the SMDA should begin benchmarking the site across a range of target measures which will be improved so that it has the data to record its achievements.

# 6.7 Design Excellence

The City of Sydney introduced the term *Design Excellence* in 1997 and has more experience with design excellence processes than any other statutory authority in

Australia. The City will comment on Design Excellence strategies at the master plan phase.

# Recommendation 9

**Building Retention: Retain and refurbish buildings Dobell and Drysdale:** The Dobell building (Block 18) and Drysdale building (Block 20) should be retained and refurbished to save money, conserve resources and to retain a valuable record of examples of better designed public housing from the 1980s to be found anywhere in the world (green roofs may be possible with these buildings).

# Recommendation 10

**Improve Height Transitions:** The draft BEP 2 objective to ensure appropriate height transitions against neighbour residential is not fully achieved. Amendments are required.

# Recommendation 11

**Define building height flexibly but with more certainty:** Avoid 'predominant height' as a control with +/- 4 stories which is an 8 storey leeway. Instead, define variable height outcomes as 'percentage proportion' of building footprint (i.e., a control that might describe any block as – no more than 20% of building footprint to be 4 storeys, 60% of building footprint to be 6 storeys, 20% of building footprint to be 8 storeys – this provides flexibility and certainty.

# Recommendation 12

**Sustainability:** Consider, in conjunction with the City of Sydney, infrastructure renewal possibilities of providing or connecting to tri-generation (locally produced and distributed electricity, heating and cooling through a pipe network) and an evacuated waste system. The City specifically seeks the RWA and Housing NSW's to consider and to commit to compatibility with, and the capacity to interconnect to (at a precinct scale):

- low carbon and renewable energy systems; and
- advanced waste and water collection and treatment systems.

# **Recommendation 13**

**Overhead wiring:** Redevelopment of the superblocks must include undergrounding of wiring just as other developers are required in similar localities.

# 7.0 Statutory Implementation

It is proposed by the RWA that the planning controls for the various HNSW sites will be implemented through several statutory planning instruments including the City of Sydney's LEP and the Urban Renewal SEPP which may amend State Environmental Planning Policy (Major Development) and/or the Sydney's LEP. The breakdown of the HNSW sites is provided in Figure 5. The statutory planning instruments that are proposed by the RWA to be amended for each of the HNSW sites are identified in Figure 48.



Figure 48. Proposed Implementation of Planning Controls, RWA draft BEP 2, January 2011.

# 7.1 Redfern and Waterloo HNSW sites (Precincts A, B, F and G)

The draft BEP 2 document states:

The zoning, floor space ratio and building height controls, along with the guiding principles and design excellence strategy, for the Redfern and Waterloo HNSW sites are proposed to be included within the Urban Renewal SEPP which may amend the SEPP (Major Development) and/or the City of Sydney LEP 2011. The majority of social housing within the RWA Operational Area is located within the Redfern and Waterloo sites in apartment buildings (i.e., around 3500 out of a total of 4300). Accordingly, these housing sites present the greatest opportunity and need for renewal, and are the focus of the draft BEP 2. The benefits and scale of the renewal

are considered to be of state significance and in this regard the planning controls may warrant inclusions in the Urban Renewal SEPP.

So long as the SEPPs and/or Part 3A is not repealed by the NSW Coalition Government, it is accepted that Housing NSW through the RWA and the SMDA is able to seek to have the site 'declared' state significant. However, consistent with the stated aims of the NSW Coalition Government, the City of Sydney is of the view that the planning work should continue and that a refined planning proposal be developed and considered for potential incorporation into the draft *Sydney LEP 2011* through the City of Sydney Council and the Central Sydney Planning Committee (CSPC). To this effect, any future master plan should be presented to the Council and the CSPC for consideration before being declared by the Minister for Planning as 'state significant', which in any case the City is opposed.

# 7.2 Waterloo Conservation Area HNSW sites (Precincts C, D and E)

The draft BEP 2 document states:

The zoning, floor space ratio and building height controls for the Waterloo Conservation Area HNSW sites are recommended for inclusion in the draft Sydney.

This is supported; however the removal of consent powers is not agreed.

# 7.3 Recommended Planning Approach

Given the desire by HNSW to renew the consolidated HNSW sites (Location 1 in draft BEP 2), it is important that any master plan, subsequent planning proposal or rezoning is arrived at through a consensus approach via a transparent, public process. This was the approach recently taken with the Glebe Affordable Housing project and the rezoning of Harold Park from open space.

A master plan which amends the draft *Sydney LEP 2011* would be more transparent, effective method of achieving a development outcome that builds consensus with stakeholders using a proven public process with appropriate checks and balances. The factors which contribute to this preference include:

- the City has extensive interests in the street and road network;
- the draft LEP is on exhibition and could be relatively easily amended following renotification;
- amendments to the LEP mean that the area will not be excluded in relation to the broader planning controls and future assessment of applications in relation to the private component of the project which after transfer will not have Crown status;
- the Coalition Government has expressed concern on relation to the continued use of Part 3A for projects which can be assessed under Part 4 by local authorities; and
- the City has the resources to deal with the scale of the project.

# 7.4 Contributions

The City of Sydney provides wide services to the locality which is the subject of this submission. The revitalisation of Redfern Park and Oval, which involved the demolition of the former tiered seating, lowering of the pitch and restoring the public park is an example of the high quality investment that the City undertakes. The City has added more sustainable high quality public assets (including libraries, parks, community centres and pools) to its LGA than perhaps any other local authority in Australia in recent years.

It is acknowledged that social housing which is paid from tax revenue has special consideration in relation to the contributions that it might make towards streetscape improvements and facilities generally. The s94 Plan acknowledges that exemptions can be made for social housing.

Nevertheless it is important that renewed discussions be held in relation to an approach towards the quantum of Contributions that might be equitably payable for:

- social housing by HNSW;
- affordable housing by HNSW;
- private housing developed by HNSW; and
- private housing approvals on-sold by HNSW to private investor/developers.

In the case of HNSW developing or on-selling land for private sector development, full Contributions should apply even if the application is made by the Crown.

# Recommendation 14

**Residential rezoning through Sydney LEP rather than Part 3A:** That the redevelopment of all Housing NSW sites be achieved through a refined planning proposal incorporated into the draft *Sydney LEP 2011* (which is currently on exhibition) rather than through the SEPP/Part 3A pathway. The City does not support residential sites under its jurisdiction being removed via the Part 3A process. In addition, the draft BEP 2 in relation to Locations 2, 3, 4 and 5 is insufficiently justified to gain Part 3A 'declaration'.

# **Recommendation 15**

**RWA to sub-delegate any Part 3A planning proposal and determination to the City:** If, contrary to the above Recommendation, the Housing NSW sites are declared State significant sites under *SEPP (Major Development) 2005* either before or after any inquiry into rail transport, the RWA sub-delegate to the City the function of completing a planning proposal for the Housing NSW sites in accordance with Clause 13 (3) of the *Redfern Waterloo Act 2004* in addition to the determination role of individual projects which follow over the following 20-25 year period.

# **Recommendation 16**

Address appropriate Contributions for social and affordable housing: That the Contributions for the social and affordable housing components be re-examined in co-operation with the City in relation to the appropriate apportionment to any Contributions Plan.

# Recommendation 17

Address appropriate Contributions for private sector housing: That the private sector housing Contributions be at a rate that would normally apply to any equivalent private sector housing development under a Contributions Plan.

End of Submission