

Environmental Assessment Report

Concept Plan

Mixed Use Development

21 – 35 Treacy Street, Hurstville

Prepared by
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10 December 2010

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Statement of Validity

This Environmental Assessment has been prepared and submitted under Part 3A of the *Environmental Planning and Assessment Act 1979* (as amended).

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Applicant name:	Earljest Pty Ltd ATF Hurstville Unit Trust
Applicant address:	POBox 8 Caringbah NSW 1495
Land to be developed:	21 – 35 Treacy Street, Hurstville
Proposed development:	Mixed use retail and residential development
Environmental Assessment:	An Environmental Assessment (EA) is attached
Statement of Validity:	I certify that I have prepared the contents of this Environmental Assessment in accordance with the Director General's Requirements dated 8 October 2010, and that to the best of my knowledge, the information contained in the environmental assessment is neither false nor misleading
Signature:	
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Date:	26 November 2010

CONTENTS

EXECUTIVE SUMMARY

1.0	INTRODUCTION	1
2.0	PROJECT BACKGROUND AND OVERVIEW	2
2.1	Background	
2.2	Vision for the Site	
2.3	Project Team	
3.0	SITE ANALYSIS AND CONTEXT	4
3.1	Regional and Local Context	
3.2	Site	
3.3	Zoning	
3.4	Existing Access and Public Transport	
3.4.1	Road Network	
3.4.2	Trains	
3.4.3	Buses	
3.4.4	Other	
4.0	CONCEPT PLAN	18
4.1	Concept Approval	
4.2	Design Options	
4.3	Land Use and Floor Area	
4.4	Built Form and Urban Design	
4.5	Vehicular Access and Parking	
4.6	Landscaping	
4.7	Ecological Sustainable Development	
4.8	Staging	
5.0	DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS	26
6.0	ENVIRONMENTAL ASSESSMENT	29
6.1	Relevant Environmental Planning Instruments and Guidelines	
6.2	Height and Built Form	
6.2.1	Consideration of Existing & Proposed EPI's Applying to the Site	
6.2.2	Height, Building Envelope & Contextual Studies Analysis	
6.3	Obstacle Limitation Height	
6.4	Land Use Mix	
6.5	Urban Design	

6.6	Environmental and Residential Amenity	
6.6.1	Solar Access	
6.6.2	Acoustic Privacy	
6.2.3	Visual Privacy	
6.2.4	View Loss	
6.2.5	Wind Impact	
6.7	Traffic Impacts and Parking	
6.8	Geotechnical and Ground Water	
6.9	Heritage	
6.10	Landscaping	
6.11	Public Domain	
6.12	Safety	
6.13	Ecological Sustainable Development	
6.14	Drainage	
6.15	Contributions	
6.16	SEPP 65 – Design Quality of Residential Flat Development	
6.17	Utilities	
6.18	Staging	
6.19	Contamination	
6.20	Noise and Vibration Assessment	
7.0	PUBLIC BENEFIT	48
8.0	DRAFT STATEMENT OF COMMITMENTS	49
8.1	Environmental and Residential Amenity	
8.4.1	Acoustic Privacy	
8.4.2	Wind Impact	
8.2	Traffic and Parking	
8.3	Obstacle Limitation Height	
8.4	Geotechnical and Ground Water	
8.5	Public Domain	
8.6	Safety	
8.7	Ecologically Sustainable Development (ESD)	
8.8	Drainage	
8.9	Contamination	
8.10	Noise and Vibration	

FIGURES

- 1** Regional Context
- 2** Local Context
- 3** Hurstville CBD Character Precincts
- 4** View of East Quarter (former AMCOR site)
- 5** View of 12 storey mixed use development
- 6** Aerial View of Site
- 7** View of 21 Treacy Street
- 8** View of 23 - 29 Treacy Street
- 9** View of 23 - 29 Treacy Street
- 10** View of 23 - 29 Treacy Street
- 11** View of 23 - 29 Treacy Street
- 12** View of 31 - 33 Treacy Street
- 13** View of 35 & 35A Treacy Street
- 14** View of Adjoining Site to East
- 15** View of 23 - 29 Treacy Street
- 16** Zoning Map
- 17** Visualisation of the Building Looking East Along Treacy Street
- 18** Visualisation of the Building Looking West Along Treacy Street
- 19** Visualisation of the Building Looking South Along Alfred Street
- 20** Development Stages

TABLES

- 1** Site Details
- 2** Land Use Mix
- 3** Summary of DGR's
- 4** Extent of Non-Compliance with DCP 2
- 5** Geotechnical Recommendations for Design and Construction

APPENDICES

- 1** Quantity Surveyor's Report
- 2** Site Survey
- 3** Architectural Design Report (Separate Volume)

- 4 Director General's Requirements
- 5 Consistency of Concept Plan with Relevant EPI's and Guidelines
- 6 Correspondence with Sydney Airport Corporation (SAC)
- 7 Traffic Impact Statement
- 8 Geotechnical and Ground Water Assessment
- 9 Heritage Impact Assessment
- 10 Drainage & Utilities Report
- 11 Stage 1 Environmental Site Assessment
- 12 Noise and Vibration Assessment

EXECUTIVE SUMMARY

The purpose of this Environmental Assessment report is to seek approval from the Minister of Planning for a Concept Plan under Section 75O of the Environmental Planning and Assessment Act 1979. This Environmental Assessment of the Concept Plan has been prepared in accordance with the Department's guidelines and addresses the key issues identified in the Director General's Requirements.

The Concept Plan relates to development of a mixed use retail and residential building at 21 – 35 Treacy Street, Hurstville that ranges in height from 15 to 55 metres (4 to 16 storeys), has a gross floor area of 29,022sm and accommodates 257 dwellings and 4,256sm of retail space with associated car parking. The site has frontage to Treacy Street and backs on to the Illawarra Rail Line. The site is a consolidation of five (5) individual commercial properties and has an area of approximately 4,119sm. The frontage to Treacy Street is approximately 130 metres with a depth ranging from 27m to 35m.

Regionally, the site is located in the Hurstville City Centre which is seen as a gateway to Sydney's south and is identified in the NSW Government's Metropolitan Strategy as a major centre which will emerge as a jobs, service and residential location. Building heights in the city centre range from predominantly 1-3 storeys to 20 storeys.

More locally, the site is located in what is referred to in the Hurstville City Centre Concept Master Plan 2004 (page 16) as the City Centre East precinct which *"is characterised by the extension of the retail strip along Forest Road and very much underutilised development along the railway line fronting Treacy Street"*.

The site is very well located in relation to access by both public and private transport being located within 400 metres (walking distance) of the Hurstville City Rail station and bus services along Forest Road.

Pursuant to Hurstville Local Environmental Plan 1994, the site is zoned 3 (b) - (City Centre Business Zone) and the proposed land uses are permissible development subject to the consent of Hurstville City Council.

Pursuant to Hurstville Development Control Plan 2 and draft Hurstville Local Environmental Plan (City Centre) 2010, development potential along Treacy Street is restricted to being between 15m and 23m in height and with floor space ratios of 3.0:1 and 4.0:1 respectively.

Concept approval is being sought for:

1. Demolition of the existing buildings on the site;
2. A mix of retail and residential land uses;
3. The building envelope for the mixed use land uses and associated basement car park as detailed in Architectural Design Report;

4. Building expression as detailed in Architectural Design Report;
5. A maximum Gross Floor Area (GFA) of 29,022m²;
6. A maximum height of 55 metres (RL 114.6 AHD);
7. Car parking arrangements; and
8. Staging.

The design concept for the site was developed by Stanisic Associates following detailed and comprehensive streetscape and contextual analysis, comparison of existing and draft development control standards for building height and floor space ratio, including development of a "fog" view, and analysis of several siting and layout options.

It is significant that in describing the character precincts in the Hurstville CBD, the Hurstville City Centre Concept Masterplan 2004 (page 16) recognises the "very underutilised development along the railway line in Treacy Street".

By continuing to restrict the development of high rise residential development along Treacy Street which is located within 400 metres of a major station on the CityRail network, the draft Hurstville City Centres LEP is not providing the opportunity for urban form to be developed consistent with the major centre status of the Hurstville City Centre.

This view is supported by Housing NSW who, as part of Section 62 consultation responses from public authorities in relation to the draft Hurstville City Centre LEP, made very strong representations that it "considers it essential that optimum residential redevelopment potential within the Hurstville City Centre, including Treacy Street, is enhanced by the Draft LEP and DCP given its advantageous location, layout and existing surrounding high density development".

An assessment of the Concept Plan has demonstrated that the proposal;

- is permissible development subject to the provisions of Hurstville Local Environmental Plan 1994;
- complies with the primary objective of the Draft City Centres LEP in that it will achieve appropriate urban form consistent with the major centre status of the Hurstville Town Centre;
- complies with the principles and objectives of the relevant State environmental planning instruments, strategies, policies and guidelines applying to the site;
- will have minimal adverse environmental effects;
- will provide considerable public benefit; and,
- showcases exemplary contemporary architecture with environmental sustainability a fundamental component of the design philosophy.

In summary, the site has the capacity to achieve a high density mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville Town Centre and an exemplar for higher density housing along Sydney's rail corridors.

Given the planning merits described above and the absence of any significant environmental impacts, it is requested that the Minister approve the Concept Plan under Section 75O of the EP&A Act.

1.0 INTRODUCTION

On the 6 September 2010 the NSW Minister for Planning formed the opinion that the proposed mixed use development at 21 – 35 Treacy Street, Hurstville (herein after referred to as “the site”) is development of a kind that is described in Schedule 1 of the *State Environmental Planning Policy (Major Development) 2005* – namely Group 5, Clause 13, ‘Residential, commercial or retail projects’, and is thus declared to be a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies for the purpose of Section 75B of that Act. A copy of the Quantity Surveyors Report detailing the cost of the Concept Plan to be \$147,404,994 is located in **Appendix 1**.

In forming that opinion, the Minister authorised the submission of a Concept Plan under Section 75M of the Act for the proposal.

This Environmental Assessment report has been prepared by Economia PDS on behalf of the project proponents, Earljest Pty Ltd ATF Hurstville Unit Trust (herein after referred to as Earljest Pty Ltd), and pursuant to Section 75M of the Act. The report:

- I. outlines the scope of the project and any development options; and,
- II. sets out any proposal for the staged implementation of the project; and,
- III. contains all the matters required by the Director-General issued on 8 October 2010.

The purpose of this Environmental Assessment report is to seek approval from the Minister of Planning for a Concept Plan under Section 75O of the Environmental Planning and Assessment Act 1979.

In preparing this report Economia PDS Pty Ltd has relied upon the adequacy and accuracy of the assessments and advice contained in the reports, plans, diagrams, tables, and so forth, prepared and provided by the respective specialist consultants in the project team and should be read in conjunction with the information appended to the report.

2.0 PROJECT BACKGROUND AND OVERVIEW

2.1 Background

The site was acquired by Earljest Pty Ltd in December 2008 and after initial discussions with Hurstville City Council in early 2009, a Development Application (DA) for mixed use retail, commercial and residential land uses was lodged with Council in August 2010.

The DA went before the Design Review Panel for consideration, where Council officers confirmed to Professor Webber (Architect and Panel Board Member) that Treacy Street will likely be re-zoned to permit higher density development in the new suite of environmental planning instruments being prepared by Council.

In September 2009, Earljest Pty Ltd were informed by Council that given the DA does not comply with the development control standards relating to building height and density in the current Hurstville Development Control Plan 2, it was unlikely the DA would receive favourable consideration from Council. Earljest Pty Ltd was also informed that a new Development Control Plan (DCP) will be on public exhibition soon and consideration should be given to withdrawing the current DA.

Subsequently, the DA was withdrawn and a submission was made to Hurstville Council regarding consideration being given to uplifting the building heights along Treacy Street in the preparation of a draft DCP.

Following lengthy delays in the preparation and exhibition of a draft DCP, Earljest Pty Ltd decided to request the NSW Minister for Planning to form an opinion that the proposed mixed use development at 21 – 35 Treacy Street, Hurstville is development of a kind that is a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies.

2.2 Vision for the Site

The vision for the site is to create a mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville Town Centre and be an exemplar for higher density housing along Sydney's rail corridors.

Stanisic Associates (Architects) were highly recommended and subsequently engaged to develop the vision for the site as part of a submission of a Concept Plan application for the site.

The design of the building for this important Hurstville site has emerged from a close and detailed contextual analysis of the existing and future urban form, streetscape and environmental parameters.

Stanisic Associates objective for the site is to create a very high quality, five-star green building of distinguished architecture, with an interconnected spatial network of landscaped, communal open spaces and public domain.

2.3 Project Team

The following highly specialised project team has been formed to deliver the project:

Urban Planning	Economia PDS Pty Ltd
Architecture & Urban Design	Stanisic Associates
Quantity Surveying	BMT & Associates
Surveying	John R Holt Surveyors Pty Ltd
Traffic and Parking	Lyle Marshall & Associates Pty Ltd
Landscaping	Habitation Landscape Architects
Stormwater/Utilities	APP
Geotechnical	Asset Geotechnical
Contamination	Environmental Investigations
Heritage	Cracknell & Lonergan Heritage Architects
Acoustics	Koikas Acoustics Pty Ltd

3.0 SITE ANALYSIS AND CONTEXT

3.1 Regional and Local Context

Regionally, the site is located in the Hurstville City Centre which is approximately 15km south west of Sydney (refer **Figure 1** below). Hurstville City Centre is identified as a major centre in the NSW Government's Metropolitan Strategy and is seen as a gateway to Sydney's south.

Hurstville City Centre is well located in relation to:

- Sydney Airport;
- Illawarra Rail Line; and
- M5 Motorway;

Figure 1 – Regional Context



Source: Hurstville City Centre – Concept Master Plan (Government Architects Office)

Hurstville Local Government Area is transected by two major railway lines, the Illawarra and the East Hills Line. Hurstville Station on the Illawarra Line is the main transport interchange in the region with an expansion proposed by the Council to the existing bus interchange in the city centre.

Hurstville City Centre (outlined in yellow in **Figure 2** below) is seen as the main centre for the St George region which comprises the Hurstville, Kogarah and Rockdale local government areas. The Hurstville CBD is an elongated east-west shape with the Hurstville Railway Station and the retail hub at its centre with Forest Road the main street running parallel to the Illawarra Railway Line.

Hurstville is recognised as the major centre for the region with retail, commercial, financial, community, recreational and residential land uses.

Figure 2 – Local Context



Source: Hurstville City Centre – Concept Master Plan (Hurstville Council)

The Hurstville City Centre Concept Master Plan 2004 (prepared by the Government Architects Office) divides the Hurstville CBD into “six distinct areas which have all been found to have their special characters” (refer **Figure 3** below).

Figure 3 – Hurstville CBD Character Precincts



Source: Hurstville City Centre – Concept Master Plan (Hurstville Council)

More locally, the site is located within the City Centre East precinct which is characterised in the master plan “by the extension of the retail strip along Forest Road and very much underutilised development along the railway line in Treacy Street”. Treacy Street provides the rear vehicular and service access to properties in Forest Road.

Existing building heights in the Hurstville CBD range from predominantly 1-3 storeys up to 20 storeys.

A number of existing high density residential developments are also located at the eastern end of the precinct (refer **Figure 2**), including;

1. East Quarter on the former AMCOR site, with existing fourteen (14) storey and six (6) storey residential buildings and vacant site for approved 16 storey residential building (see **Figure 4**) ; and,
2. Twelve (12) storey mixed use retail and residential development (see **Figure 5**).

Figure 4 – View of East Quarter (former AMCOR site)



Figure 5 – View of 12 storey mixed use development



3.2 Site

The site, shown outlined in red in **Figure 4**, has frontage to Treacy Street, Hurstville and backs on to the Illawarra Rail Line. The site, being land known as 21 – 35 Treacy Street, Hurstville is more formally identified in Table 1 and the survey plan located in **Appendix 2**.

Table 1: Site Details

Street No.	Lot No.	Deposited Plan	Area (sm)	Land Use
21	6	2752		Buber Mechanics (see Figure 7)
23 – 29	1 – 5	2752		Ferguson's Toyota (see Figures 8 – 11)
	1 – 2	2256951		Ferguson's Toyota (see Figures 8 – 11)
31	A	398056		Commercial Building (see Figure 12)
33	6	11931		Commercial Building (see Figure 12)
35 & 35A	5	11931		Jump Street Studio (see Figure 13)

The site is a consolidation of five (5) individual commercial properties and has an area of approximately 4,119sm. The frontage to Treacy Street is approximately 130 metres with a depth ranging from 27m to 35m.

Figure 6 - Aerial View of Site



Figure 7 - View of 21 Treacy Street (Buber Mechanics)



Figure 8 - View of 23 - 29 Treacy Street (Ferguson's Toyota)

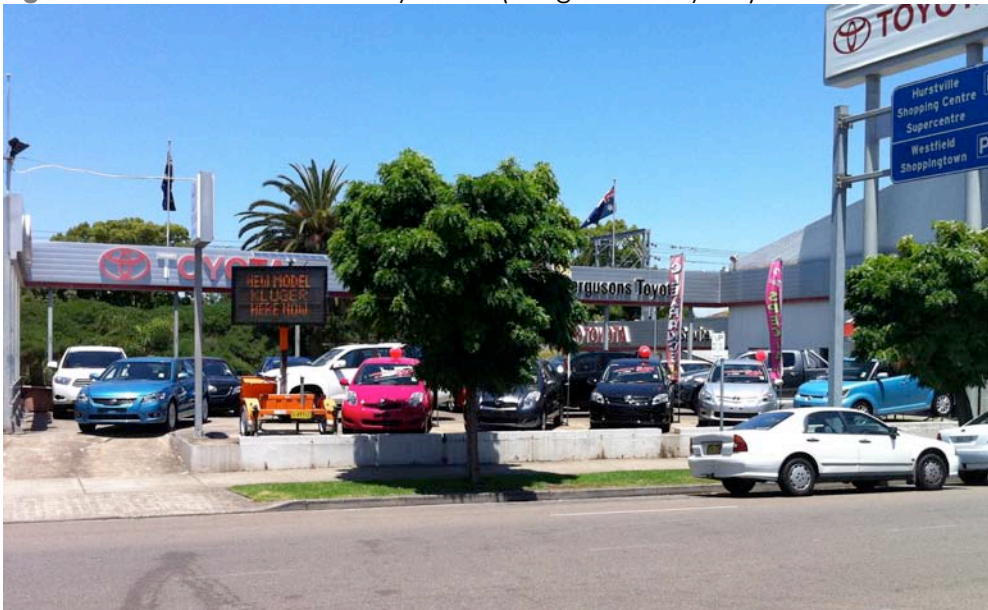


Figure 9 - View of 23 - 29 Treacy Street (Ferguson's Toyota)



Figure 10 - View of 23 - 29 Treacy Street (Ferguson's Toyota)

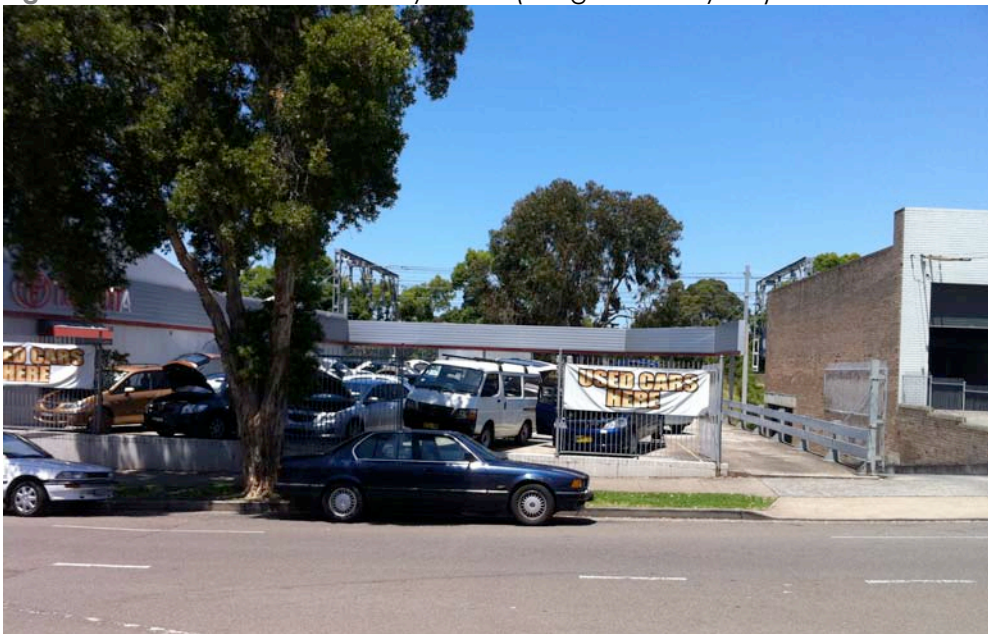


Figure 11 - View of 23 - 29 Treacy Street (Ferguson's Toyota)



Figure 12 - View of 31 - 33 Treacy Street



Figure 13 - View of 35 & 35A Treacy Street



Adjoining the site to the east is an existing 4 storey residential flat building (see **Figure 14**) and to the west is a council owned car park (see **Figure 15**).

Figure 14 - View of Adjoining Site to East



Figure 15 - View of 23 - 29 Treacy Street



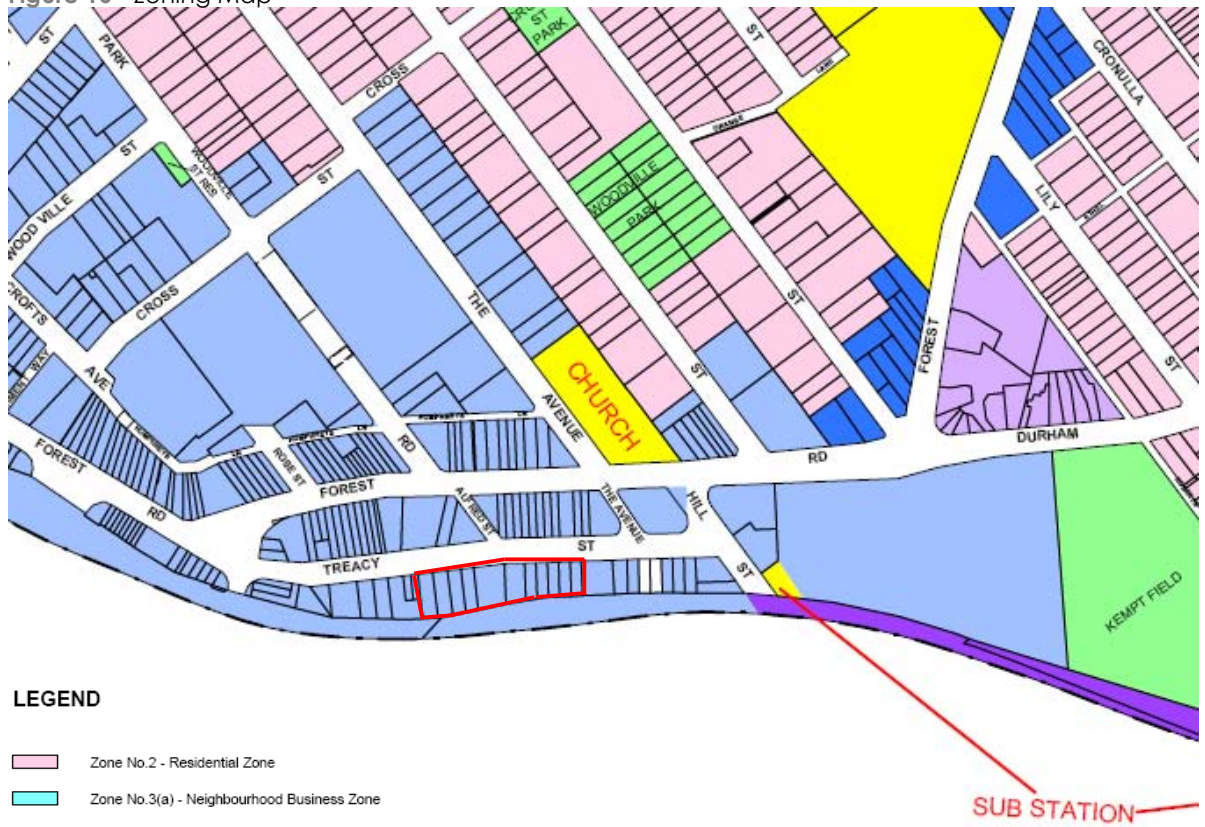
Architects and urban designers, Stanisc Associates, have undertaken a detailed contextual analysis of the site with regard to orientation and topography, pedestrian and vehicular movement, height and planning constraints. The analysis is provided in the Architectural Design Report which is located in **Appendix 3** as a separate volume.

3.3 Zoning

Land in Hurstville is zoned according to the types of development that can occur in each area. Pursuant to Hurstville Local Environmental Plan 1994 the site, outlined in red in **Figure 16** below, is zoned 3 (b) - (City Centre Business Zone).

The types of land uses that are permissible in the 3 (b) zone include shops, office premises, hospital and residential flat buildings.

Figure 16 - Zoning Map



LEGEND

- Zone No.2 - Residential Zone
- Zone No.3(a) - Neighbourhood Business Zone
- Zone No.3(b) - City Centre Business Zone
- Zone No.3(c) - Business Centre Zone
- Zone No.4 - Light Industrial Zone
- Zone No.5(a) - General Special Uses Zone
- Zone No.5(b) - Railways Special Uses Zone
- Zone No.6(a) - Open Space Zone
- Zone No.6(b) - Private Open Space Zone
- Zone No.7 - Waterways Zone
- Zone No.9 - Arterial Road Reservation Zone
- Local Government Area Boundary

Source: Hurstville LEP 1994

The objectives of the zone are:

- (a) to designate sufficient areas of land to meet the projected needs of the Hurstville Town Centre as a multifunctional regional centre,*
- (b) to facilitate development of land within the Hurstville Town Centre for commercial, retail, residential and community purposes,*
- (c) to provide a single business zone for the Hurstville Town Centre as a subregional centre,*
- (d) to facilitate the implementation of a development control plan for the Hurstville Town Centre:*
 - (i) by introducing appropriate floor space ratio controls,*
 - (ii) by encouraging an economically viable retail core which is centrally located and in close proximity to public transport,*
 - (ii) by enhancing employment opportunities and to service the needs of the local and regional community,*
 - (iv) by encouraging and facilitating the use of public transport,*
 - (v) by providing and enhancing pedestrian and public open space areas for shoppers and workers,*
 - (vi) by maintaining and improving the environmental and aesthetic quality of the Hurstville Town Centre and its surrounds,*
 - (vii) by ensuring adequate and accessible off-street car parking, and*
- (e) to improve traffic flow in and around the Hurstville Town Centre."*

Hurstville LEP 1994 provides no floor space ratio or building height control standards for development in the 3(b) zone.

3.4 Existing Access & Public Transport

The site is very well located in relation to access by both public and private transport.

3.4.1 Road Network

The Hurstville City Centre Concept Master Plan identifies four categories of streets in the city centre. Forest Road is the original main road in the formation of the town's structure and creates a distinctive local character for Hurstville.

Treacy Street is identified as a secondary street which is recognised as the main traffic arteries through the city centre. Treacy Street is a one-way street from east to west.

The Hurstville City Centre Concept Master Plan identifies the need to review traffic circulation patterns within the Hurstville CBD, including one-way traffic movement on Forest Road, following the implementation of the new bus interchange.

3.4.2 Train

The site is located approximately 300m – 400m (4 minute walk) from Hurstville railway station.

Hurstville station is a major station on the CityRail suburban Illawarra line and is the eighth busiest station on the CityRail network with up to 20,000 passengers passing through each day in peak times. The station was recently refurbished.

All scheduled passenger services that pass through Hurstville stop there. It is also the main terminating point for local all-stations services that operate to Bondi Junction on weekdays.

Basic service consists of 6 suburban trains per hour in each direction. Service frequency increases during peak periods, with up to 18 services an hour operating towards the city in the morning peak.

The Hurstville City Centre Concept Master Plan 2004 identifies the need to improve access to the railway station including a new entry near the bus interchange, along with improved escalator and lift access.

3.4.3 Buses

Located near the Hurstville railway station is a bus interchange. Hurstville City bus routes are serviced by:

Veolia Transport – servicing suburbs including Hurstville, Beverly Hills, Carlton and Kingsgrove

Punchbowl Bus Company – servicing suburbs including Hurstville, Riverwood, Narwee, Penshurst, Peakhurst, Lugarno, Mortdale and Riverwood

Sydney Buses – servicing suburbs including Hurstville and Kingsgrove

The Hurstville City Centre Concept Master Plan identifies the need for development of a new bus interchange which will enable the seamless coordination of local bus services and regional buses that are expected to travel through Hurstville in future.

3.4.4 Other

Hurstville CBD is currently well serviced by on-road cycleways. Forest Road has a cycle lane between McMahon Street and the Palm Court car park and Treacy Street has an on-road cycleway.

Taxi ranks are located on the northern and southern sides of Hurstville railway station.

4.0 CONCEPT PLAN

The Minister has authorised the submission of a Concept Plan under Section 75M of the Environmental Planning and Assessment Act 1979 for the proposal.

Section 75M of the Act requires a Concept Plan to provide only a broad overview of the proposal and if the plan is approved, further project approvals will be required (and may be given at the same time) before the project can proceed further. Future project applications are required to submit greater detail and will provide further opportunity for consideration of issues and community comment.

The Concept Plan has been informed by a comprehensive site and contextual analysis supported by detailed studies undertaken by a specialised project team.

The concept plan establishes the vision and development framework that has been established by Earljest Pty Ltd for any future project application.

4.1 Concept Approval

Concept approval is being sought for the following:

1. Demolition of the existing buildings on the site;
2. A mix of retail and residential land uses;
3. The building envelope for the mixed use land uses and associated basement car park as detailed in Architectural Design Report;
4. Building expression as detailed in Architectural Design Report;
5. A maximum Gross Floor Area (GFA) of 29,036m²;
6. A maximum height of 55 metres (RL 114.6 AHD);
7. Car parking arrangements; and
8. Staging.

An indicative visualisation of the building is shown in **Figures 17, 18 and 19**.

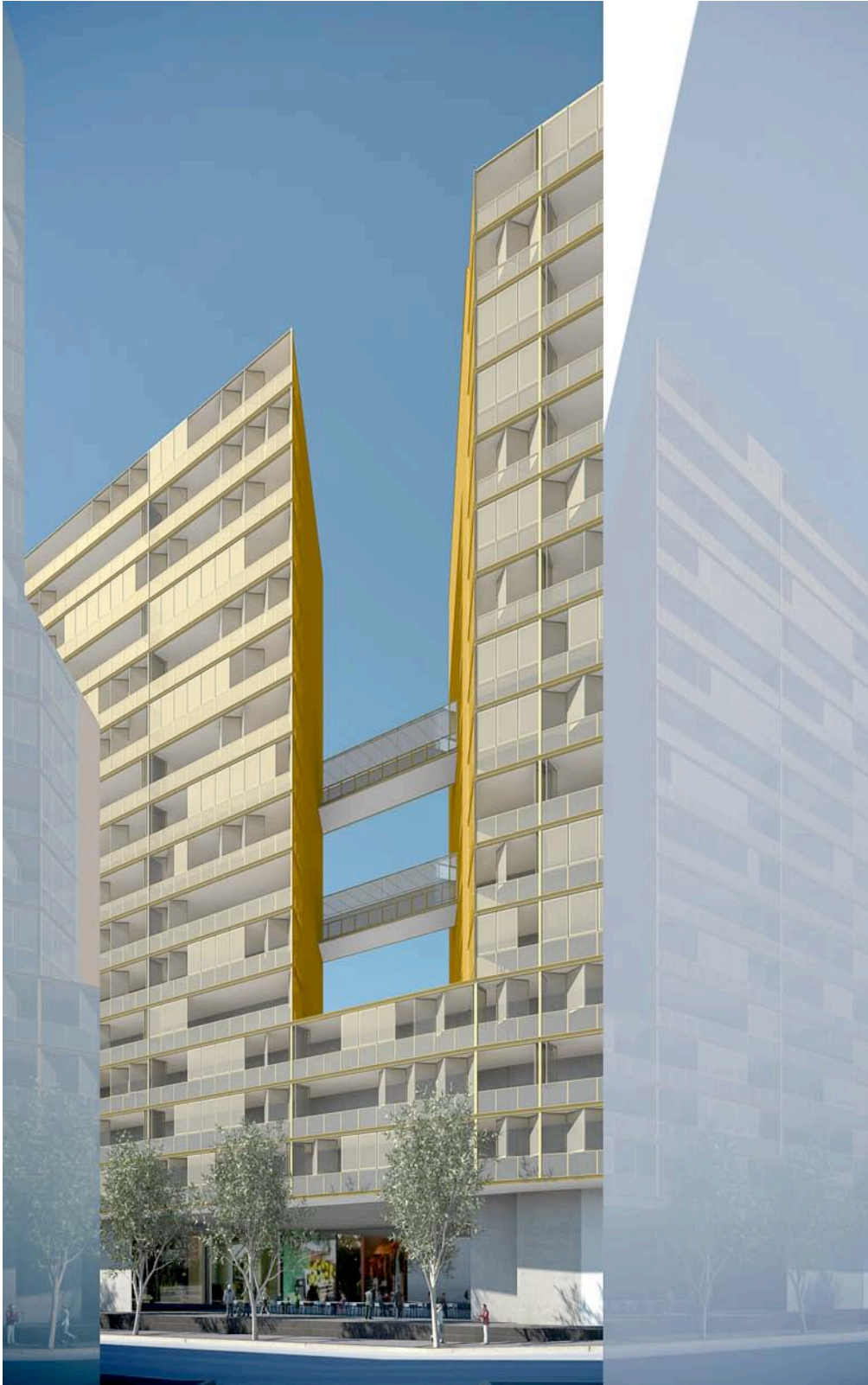
Figure 17 – Visualisation of the Building Looking East Along Treacy Street



Figure 18 – Visualisation of the Building Looking West Along Treacy Street



Figure 19 – Visualisation of the Building Looking South Along Alfred Street



4.2 Design Options

A number of siting and layout options for the site were developed and assessed by Stanasic Associates including a stepped street wall design, a street wall design with tower and a street wall design with twin towers. The design options are detailed in the Architectural Report which is located in **Appendix 3**.

The option that was chosen as being most suitable for the site and that would deliver the vision developed for the site is a hybrid form that is a unique fusion of three form types: the urban street wall, slab and towers (refer **Figures 17 and 18**). The building varies in height from 15 to 55 metres (4 to 16 storeys).

4.3 Land Use and Floor Area

The Concept Plan seeks approval for a mixed use development comprising both retail and residential land uses with a gross floor area of 29,022m² and maximum floor space ratio of 7.0:1.

The gross floor area and floor space ratio is calculated in accordance with the definition contained within the Dictionary which forms part of the NSW Government's Standard Instrument – Principal Local Environmental Plan.

Table 2 provides a summary of the land uses and GFA on a floor by floor basis for the proposed building.

Table 2: land Use Mix

Level	Land Use	Gross Floor Area (sm)
Basement (Levels 1- 3)	Car Parking	275 spaces
Lower Ground	Retail	1,979sm
Ground	Retail	1,950sm
Level 1	Retail	327sm
	Residential	1,565
Levels 2 - 15	Residential	23,201

The accommodation consists of 257 dwellings suited to a variety of lifestyles. The dwelling mix is 74 x 1 bedrooms (29%), 171 x 2 bedrooms (67%) and 12 x 3 bedrooms (5%), all in single or double level plans; and 26 (10%) adaptable dwellings have been provided.

The retail area consists of a “basket” supermarket on the lower ground floor and a food court on the ground level. The “basket” supermarket will help support a minimalist approach to provision of on-site car parking.

4.4 Built Form and Urban Design

The Architectural Design Report (refer **Appendix 3**) details how the design concept for the site *“has the capacity to achieve a mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville Town Centre and an exemplar for higher density housing along Sydney’s rail corridors”*.

The design concept for the site was developed by Stanisis Associates following detailed and comprehensive streetscape and contextual analysis, comparison of existing and draft development control standards for building height and floor space ratio, including development of a “fog” view, and analysis of several siting and layout options.

The key elements of the built form as detailed in the Architectural Design Report are:

- A maximum envelope, with building heights of 15 and 55 metres (4 and 16 storey), is developed to relate to surrounding, existing and proposed DHLEP-HCC building heights.
- The building height defines the urban edge of the southern boundary of the Hurstville Town Centre.
- There are no significant overshadowing impacts on the private open space of existing dwellings or public space.
- The maximum envelope is developed into a slab form, or street wall, with a maximum building width of 19 metres plus 3 metre rear articulation zone sitting on a single storey podium with communal courtyard.
- The building perimeter optimises light, the building depth optimises cross ventilation and the setback to the Illawarra Rail line.
- The building form is bisected with a slot into two, roughly equal, towers above the rear podium level. The slot is aligned with the visual axis of Alfred and Bellevue Streets and visually connects Hurstville and Kogarah, the two sides of the Illawarra Rail line.
- The building form is set back 6 to 10 metres from the southern site boundary to define a podium courtyard that interfaces with the Illawarra Rail line.

- The building form is further adjusted at the roofline by setting down the western end to 13 storeys, adjacent to the Council site to accommodate a projected future built form of 13 - 16 storeys.
- The ground level is setback 3 metres along Treacy Street to provide covered pedestrian area in lieu of an awning attached to the building over the footpath. The colonnade is raised at the western end to accommodate the higher footpath level.
- Basement and podium levels are set back 1 metre from the southern boundary with the rail line to accommodate access for maintenance and construction.

The Architectural Design Report describes the urban design of the building as follows:

The slender linear form emphasizes the built urban edge along the Illawarra Rail line and defines the southern edge of the Hurstville Town Centre. The form is a unique fusion of three form types: the urban street wall, slab and towers. This hybrid form is cut with a slot into two roughly equal parts and perforated with recesses to adjust its visual bulk and mass. Sky bridges are added in the slot to connect the two towers and allow views along the visual axis.

The building has a modern aesthetic that expresses the forward looking aspirations of the project and its spirit of innovation and environmental excellence.

The architects have successfully reduced the overall visual bulk and scale of the building by perforating the building form with carefully placed and proportioned urban-scaled recesses which are developed as linked sky gardens.

4.5 Vehicular Access and Parking

Car parking is provided for residents, visitors and retail customers in a 3 level basement, adopting a 'minimalist' approach to the provision of car parking spaces to encourage public transport usage, and innovative parking management.

The loading dock and waste collection for residential and retail is located above the three (3) lower car parking levels. There are a total of 275 residential car parking spaces over three basement car parking levels – 1 space per 2 bedrooms, 2 spaces (including 1 tandem) per 3 bedrooms and no spaces for 1 bedroom dwellings. Residential visitor parking is doubled up with retail parking.

Access to the car parking levels is off Treacy Street via a two-way driveway located at the eastern end of the site. Separate two-way access is provided for service vehicles towards the western end of the site.

The Architectural Design Report provides additional details and concept plans for vehicular access and car parking.

4.6 Landscaping

Landscaping plans have been prepared by Habitation Landscape Architects and are located in the Architectural Design Report (refer **Appendix 3**).

A landscape statement, as detailed in the Architectural Design Report and provided by Habitation, describes how the landscape has been designed in the following zones taking into account building form, orientation, climatic factors, visual amenity and resident interaction.

1. Treacy Street (Public Domain):
2. Communal Courtyard-Level One:
3. Skygardens. Levels 4, 7 & 10
4. Rooftop Garden-Level 13

4.7 Ecologically Sustainable Development

The Concept Plan has been designed to make efficient use of natural resources, energy and water throughout its full cycle, including construction. Energy efficient building response is developed through extensive passive design and sun control elements.

The upper roof garden has been designed to be both a green roof with succulent planting and an energy farm with solar collectors for heating hot water and photovoltaic panels for common area lighting.

The Architectural Design Report details a building design that is characterised by exceptional and dynamic qualities of space, natural light, air flow and solar access to achieve high personal comfort and low energy consumption.

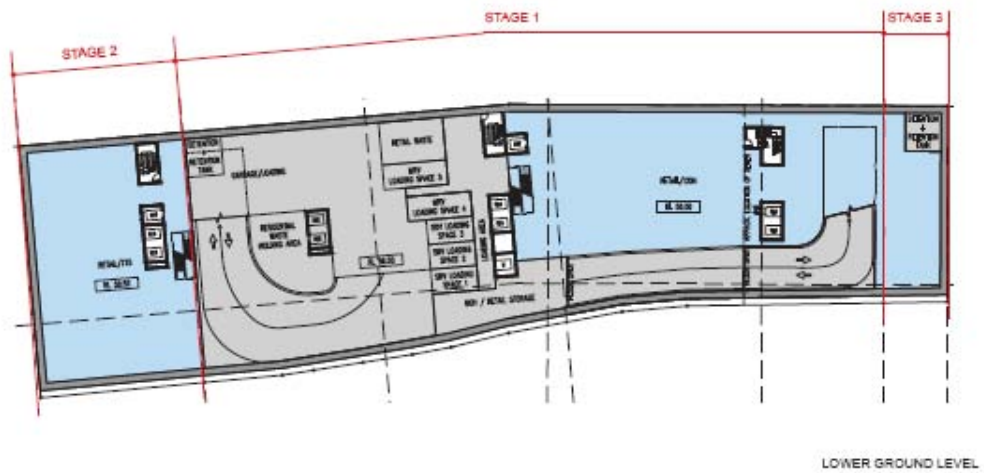
Stanisic Architects have developed strategies for ecological sustainable development that are based on Green Star Strategies for a 4-Star and 5-Star Rating Scheme. Details of the strategies are located in the Architects Design Report.

4.8 Staging

The building has been designed with multiple cores to facilitate staging of the development. The development can proceed as three (3) stages. Stage 1 is the central portion of the development and includes vehicle ramps to the basement car park levels, loading dock, waste collection, stormwater detention tanks, and main retail.

Stage 2 is adjacent to the Council car park at the western end and Stage 3 is at the eastern end of the site. Both Stages 2 and 3 can be constructed at a later time. The development stages are shown on **Figure 20**.

Figure 20 – Development Stages



5 DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

By letter dated 8 October 2010 the NSW Department of Planning issued the Director-General's Requirements (DGR's) for the preparation of an Environmental Assessment to accompany a Concept Plan for the project. A copy of the DGR's is provided in **Appendix 4**.

Table 3 provides a summary of the DGRs requirements and where each of the individual requirements, in particular the key issues, have been addressed in this report.

Table 3: Summary of DGR's

Director General's Requirements	Location
General	
1. Executive Summary	Page xii
2. Site Analysis	Section 3.0 & Appendix 3 – Architectural Design Report
3. Description of Proposed Development	Section 4.0 & Appendix 3 – Architectural Design Report
4. Assessment of the key issues (outlined below)	Section 6.0
5. Draft Statement of Commitments	Section 8.0
6. Plans and Documents (outlined below)	Appendix 3 – Architectural Design Report
7. Statement of Validity	Page i – EA Report
8. Quantity Surveyor's Certificate	Appendix 1
9. Conclusion and Justification	Section 7.0 and Section 9.0
Key Issues	
1. Relevant EPI's and Guidelines (outlined below)	Section 6.1
2. Height/Built Form	Section 6.2 and Appendix 3

3. Obstacle Limitation Height	Section 6.3 and Appendix 6
4. Land Use Mix	Section 6.4 and Appendix 3
5. Urban Design	Section 6.5 and Appendix 3
6. Environmental and Residential Amenity	Section 6.6 and Appendix 3
7. Traffic Impacts	Section 6.7 and Appendix 7
8. Parking	Section 6.7 and Appendix 7
9. Rail Corridor	Section 6.8 and Appendix 8
10. Heritage	Section 6.9 and Appendix 9
11. Landscaping	Section 6.10 and Appendix 3
12. Public Domain	Section 6.11 and Appendix 3
13. Safety	Section 6.12
14. Ecologically Sustainable Development	Section 6.13 and Appendix 3
15. Drainage	Section 6.14 and Appendix J
16. Contributions	Section 6.15
17. SEPP 65	Section 6.16 and Appendix C
18. Utilities	Section 6.17 and Appendix 10
19. Staging	Section 6.18 and Appendix 3
20. Contamination	Section 6.19 and Appendix 11
21. Noise and Vibration Assessment	Section 6.20 and Appendix 12
Plans and Documents	
1. Site Survey Plan	Appendix 2
2. Site Analysis Plan	Appendix 3
3. Locality/Context Plan	Section 3.0 and Appendix 3
4. Architectural Drawings	Appendix 3
5. Model	Appendix 3

6. Other Documents/Plans	
- View Analysis	Appendix 3
- Landscape Plan	Appendix 3
- Shadow Diagrams	Appendix 3
- Geotechnical Report	Appendix 8
Appendix A – Relevant EPI's & Guidelines	
Objects of the EP& A Act 1979	Appendix 5
NSW State Plan	Appendix 5
Draft South Sub-Regional Strategy	Appendix 5
SEPP 55 – Remediation of Land	Appendix 11
SEPP 65 – Design Quality of Residential Flat Development	Section 6.16 and Appendix 3
SEPP (Building Sustainability Index: BASIX) 2004	Appendix 3
SEPP (Infrastructure) 2007	Appendix 5
Hurstville LEP 1994 and relevant Hurstville DCP's and policies	Section 6.1 and Appendix 5
Airports Act 1996 and the Airports (Protection of Airspace) Regulations	Section 6.3 and Appendix 6
Metropolitan Transport Plan 2010	Appendix 5
Integrating Land Use and Transport policy package	Appendix 5
Development Near Rail Corridors and Busy Roads – Interim Guidelines	Section 6.20 and Appendix 12
Planning Guidelines for Walking and Cycling	Appendix 5
Nature and extent of any non-compliance with relevant EPIs, plans and guidelines and justification for non-compliance	Sections 6.1 and 6.2

6.0 ENVIRONMENTAL ASSESSMENT

6.1 Relevant Environmental Planning Instruments & Guidelines

The Director-General's Requirements (DGR's) require that all the following planning provisions applying to the site, including permissibility and the provisions of all the following relevant plans and policies be addressed:

- Objects of the Environmental Planning and Assessment Act 1979
- NSW State Plan
- Draft South Sub-regional Strategy
- State Environmental Planning Policy 55 – Remediation of land
- State Environmental Planning Policy 65 – Design Quality of Residential Flat Development
- State Environmental Planning Policy (Building Sustainability Index: BASIX)2004
- State Environmental Planning Policy
- Hurstville Local Environmental Plan 1994 and relevant Hurstville Development Control Plans and policies
- Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996
- Metropolitan Transport Plan 2010-10-20 Integrating Land Use and Transport policy package
- Development Near Rail Corridors and Busy Roads – Interim Guideline
- Planning Guidelines for Walking and Cycling

In addition to the planning provisions relating to the site as identified in the DGR's, due consideration is also given to the draft Hurstville Local Environmental Plan (Hurstville City Centre) 2010 which has been recently completed and forwarded to the Department of Planning accompanied by a request that it be endorsed for public exhibition as a priority.

An assessment of the Concept Plan's consistency with the relevant planning provisions and policies that apply to the site, including the draft City Centre LEP, is provided in **Appendix 5**.

In summary, the assessment has identified that the Concept Plan:

- complies with the objectives and planning provisions of the relevant zone and is permitted development subject to Council consent;

- does not comply with development control standards in Hurstville Development Control Plan 2 and draft Hurstville Local Environmental Plan (City Centre) 2010 relating specifically to height and floor space ratio; and,
- generally complies, or is able to comply, with all other relevant planning provisions and policies.

The nature and extent of the non-compliance is detailed in **Table 4** below.

Table 4: Extent of Non-Compliance with Relevant EPIs & Guidelines

DCP 2	Draft LEP (City Centre) 2010	Concept Plan
Building heights that range from 4 – 7 storeys	Building heights that range from 15m – 23m	Building heights that range from 15m – 55m
Max. floor space ratios that range from 2.2:1 to 4.0:1	Max. floor space ratios that range from 3.0:1 to 4.0:1	Residential floor space ratio of 7.0:1

Justification for the non-compliance of the Concept Plan with development control standards relating to height and floor space ratio is provided in the following Section which addresses the issue of height and built Form.

6.2 Height and Built Form

The Concept Plan proposes a mixed use retail and residential building which ranges in height from 15m – 55m, has a Floor Space Ratio (FSR) of 7.0:1 and is designed to complement the scale of the future surrounding buildings as defined in the Draft Hurstville LEP (Hurstville City Centre) 2010.

A rationale for the proposed height, bulk and scale and FSR is provided by considering the existing and draft environmental planning instruments applying to the site and undertaking detailed height, building envelope and contextual studies analysis in relation to the site’s location within the Hurstville Town Centre.

6.2.1 Consideration of Existing and Proposed Environmental Planning Instruments Applying to the Site

Hurstville LEP 1994 does not provide any development control standards for height and floor space ratio. Both Hurstville DCP 2 and draft Hurstville LEP (Hurstville City Centre) 2010 provide similar standards for height and floor space ratio controls for the site as summarised in **Table 4**.

In relation to built form controls, Hurstville DCP 2 provides the following design principles for future development of the site;

- *Develop buildings to 4-7 storeys as shown from Treacy Street level.*
- *Follow street alignment and line of railway cutting.*
- *Locate residential towards the front of the site*
- *If site amalgamations allow, create a view corridor as an extension of Alfred Street through to the railway line.*
- *Create a public square between the two new seven storey buildings.*
- *Allow additional storeys on either side of view corridor to facilitate the view corridor. If the view corridor is not possible, height remains at 4 storeys.*
- *The actual site boundaries of this area for the 7 storeys may vary depending on site amalgamation.*

The objectives for height contained in the draft Hurstville City Centre LEP are as follows:

- (a) To establish maximum building heights that achieve appropriate urban form consistent with major centre status of the Hurstville City Centre.*
- (b) To facilitate an appropriate transition between the existing character of areas or localities that are not undergoing and are not likely to undergo a substantial transformation.*
- (c) To minimise the adverse impact of development on heritage items.*
- (d) To minimise adverse environmental effects on the use or enjoyment of adjoining properties and the public domain.*

The objectives for floor space ratio contained in the draft City Centre LEP are as follows:

- (a) To ensure that the bulk and scale of development is compatible with the major centre status of the Hurstville City Centre.*
- (b) To facilitate an appropriate transition between the existing character of areas or localities that are not undergoing and are not likely to undergo a substantial transformation.*
- (c) To minimise the adverse impact of development on heritage items.*
- (d) To minimise adverse environmental effects on the use or enjoyment of adjoining properties and the public domain.*
- (e) To establish maximum building heights that achieve appropriate urban form consistent with the major centre status of the Hurstville Town Centre.*

In addition to the objectives and development control standards for height and floor space ratio's, the draft City Centre LEP also provides for an appropriate degree of flexibility in applying certain development standards to particular development which can be applied to the site.

The bulk and scale of development that can be achieved on the site by strict compliance to the seven storey (or 23 metre) height limit and maximum floor space ratio of 4.0:1 in the existing Hurstville DCP 2 and the draft City Centre LEP does not fully utilise the site's unique location within Hurstville CBD and within walking distance (400 metres) of efficient and reliable train and bus services.

Concentrating higher density residential development within recognised strategic centres such as Hurstville CBD has been a key feature of NSW Government planning policy for many years. The Metropolitan Strategy, NSW State Plan and the Metropolitan Transport Plan all have policies relating to concentrating higher density residential development within areas that are underpinned by services and efficient public transport links including both rail and buses. The benefits include;

- Improved access to retail, commercial, health, education, leisure, entertainment and cultural activities, and community and personal services;
- Making better use of existing infrastructure;
- Promoting sustainable transport and healthier communities by giving people a viable option of taking public transport, cycling or walking; and,
- Promoting housing affordability.

Strategic centres such as Hurstville are described in the Metropolitan Strategy as having a radius of 1km and will, in part, accommodate *"taller office and residential buildings"*. Although the site is located on the edge of the Hurstville CBD, the site is located very close to the commercial centre of Hurstville because of the elongated east-west nature of the CBD. In general, the closer to the commercial centre and to public transport the greater the residential density to enhance sustainability and vibrancy of the centre.

This is further supported through the Draft South Sub-Regional Strategy which identifies the sustainability of Hurstville will be enhanced by *"providing for some higher density, low cost housing"* and that the continued growth in this region *"relies on the interconnection of services and greater densities of commercial activities surrounded by high density residential to provide for vibrant centres allowing residents improved access to transport, services and employment"*.

At a meeting on 24th November 2010, it is understood that Hurstville Council has resolved against including some six precincts (outside the City centre) in the draft Hurstville Council (Comprehensive) LEP for medium density housing. Included in the resolution is an explanation that Hurstville Council's long held policy is that increased residential densities should be in the Hurstville CBD so as to save the City of Hurstville suburbs from increased urban infill. This policy statement is consistent

with the policy direction in Hurstville City Centre Concept Master Plan 2004 but is not reflected in the draft City Centre LEP.

It is significant that in describing the character precincts in the Hurstville CBD, the Hurstville City Centre Concept Masterplan 2004 (page 16) recognises the “very underutilised development along the railway line in Treacy Street”.

By continuing to restrict the development of high rise residential development along Treacy Street which is located within 400 metres of a major station on the CityRail network, the draft Hurstville City Centres LEP is not providing the opportunity for urban form to be developed consistent with the major centre status of the Hurstville City Centre.

This view is supported by Housing NSW who, as part of Section 62 consultation responses from public authorities in relation to the draft Hurstville City Centre LEP, made very strong representations that it “considers it essential that optimum residential redevelopment potential within the Hurstville City Centre, including Treacy Street, is enhanced by the Draft LEP and DCP given its advantageous location, layout and existing surrounding high density development”. Hurstville Council considered Housing NSW representations and resolved to retain the current Hurstville DCP 2 controls.

6.2.2 Height, Building Envelope and Contextual Studies Analysis

The Architectural Design Report located in **Appendix 3** provides a detailed height, building envelope and contextual studies analysis in relation to the site’s location within the Hurstville Town Centre. The report also includes a comparison of the Concept Plan to the existing and proposed building height profile of the CBD, view analysis to and from the site from key points and a number of options for the siting and layout of the building envelope that were proposed and assessed.

The Draft City Centre LEP proposes heights within the Hurstville Town Centre ranging up to 60 metres. A comparison of the proposed building heights in the Draft LEP and the concept plan is illustrated in a 3-D model in the Architectural Design Report.

The 3-D model reveals the site being in a ‘saddle’ of low to medium building heights between the Hurstville Rail station and the East Quarter residential development, where building heights of 55 and 60 metres are proposed. Cross-sections in the Architectural Design Report illustrate how the concept plan improves the definition of the urban edge along the Illawarra Rail line and is compatible with the increased heights in the town centre.

In addition, the 3-D modeling, cross-sections and “fog” diagrams detailed in the Architectural Design Report illustrate that existing and proposed building heights in the Hurstville City Centre do not form a “pyramid” structure with taller buildings located towards the centre and then tapering down towards the edges of the CBD. Taller buildings are more spread out forming more of a “plateau” structure. As part

of the “plateau” built form, the concept plan is seen to be compatible with existing and proposed built form in the locality.

The 3-D modeling also illustrates that the site is not in a position to facilitate a transition between the existing character of the Hurstville City Centre and adjoining localities that are not undergoing and are not likely to undergo a substantial transformation.

The cross-sections also illustrate how the Concept Plan will not impact on the lower building scale along Forest Road and the amenity of its pedestrians. The taller building of the Concept Plan cannot be seen by pedestrians walking on either side of Forest Road.

The Concept Plan is seen to be appropriate for the site and has the capacity to achieve a high density mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville Town Centre and an exemplar for higher density housing along Sydney’s rail corridors.

6.3 Obstacle Limitation Height

Correspondence has been entered into with the Airport Design Officer, Sydney Airport Corporation (SAC) regarding compliance of the Concept Plan with the Obstacle Limitation Height requirements (refer **Appendix 6**) .

Following the provision of information to the SAC, including maximum building height of 114.6 AHD and preliminary block plans, the SAC advised that “*the proposal does not appear to penetrate the OLS for Sydney Airport*” and that as the proposal is only at concept stage (and any number of changes is possible) it is probably best to wait until confirmed details are available before requesting any possible assessments.

6.4 Land Use Mix

The Concept Plan proposes a land use mix of retail, residential and associated car parking as detailed in **Table 2** which will support the objectives/aims of the relevant State and regional strategies for the locality and Council’s draft city centre LEP.

In relation to the Metropolitan Strategy, the relevant key element of the vision for the shape of Sydney in 2031 is that “*major centres will emerge as jobs, service and residential locations*”. The strategy identifies Hurstville as a major centre which will be a focus for shopping and high density housing.

The Concept Plan will support this key element of the Metropolitan Strategy by providing both retail and high density housing that is particularly well located (walking distance) in relation to public transport services (rail and bus). By providing a choice of public transport options that can be easily accessed by walking and cycling, future residents will be encouraged to reduce their reliance on cars, travel

shorter distances and make fewer trips and support the viable operation of the existing public transport services in the area.

The relevant key direction and associated actions of the draft South Sub-regional Strategy is to “*strengthen Hurstville's commercial centre*” by implementing the Hurstville City Centre Masterplan and limiting residential development within the commercial core of Hurstville.

The Hurstville City Centre Masterplan was developed in collaboration with the former NSW Government architect Mr Chris Johnson, and contains design principles to improve the amenity of the Hurstville City Centre and reinforce its role as a regional centre for the St George Region.

In relation to land use mix, the concept plan will support the key relevant outcomes in the Masterplan that requires residential development not be located in the commercial core of the CBD.

As a follow on from the adoption of the Hurstville Master Plan, Hurstville Council is currently preparing a new suite of planning controls (LEPs & DCPs) for the Hurstville City Centre. Although the draft City Centre LEP has not yet been endorsed for public exhibition, the following due consideration has been given to how the proposed land use mix in the concept plan will support the aims/objectives of the draft City Centre LEP.

The subject land is proposed to be zoned B4 – Mixed Use, the objectives of which are:

- *To provide a mixture of compatible land uses.*
- *To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.*
- *To allow for residential development in the Hurstville City Centre while maintaining active retail, business or other non residential uses at street level.*
- *To encourage a high standard of urban design and convenient urban living.*
- *To ensure a satisfactory transition to surrounding residential areas.*

Both “*retail premises*” and “*residential flat buildings*” are recognised compatible land uses that are permitted within the proposed B4 – Mixed Use zone subject to council consent.

The location of the concept plan in the Hurstville CBD and within 400 metres (walking distance) of both rail and bus public transport will provide significant encouragement to future residents to use existing public transport and walk or cycle to existing commercial, retail and civic facilities in the Hurstville CBD.

The Concept Plan provides for predominantly residential development with active retail uses at both the ground and lower ground levels, including a supermarket and food court which will be open to Treacy Street.

Sections 6.5 and 6.6 of this assessment provide details on how the proposed built form showcases exemplary contemporary architecture with environmental sustainability a fundamental component of the design philosophy.

The Concept Plan meets the relevant objectives of the B4 – Mixed Use.

6.5 Urban Design

The design concept and design description is detailed in the Architectural Design Report prepared by Stanistic Associates and located in **Appendix 3**.

The design proposal for the residential building and retail has emerged from a close and detailed contextual analysis of the existing and future urban form, streetscape and environmental impacts undertaken by Stanistic Associates.

In summary, the proposed built form showcases exemplary contemporary architecture with environmental sustainability a fundamental component of the design philosophy.

6.6 Environmental and Residential Amenity

The architectural statement in relation to environmental and residential amenity states the following:

The architectural design provides amenity through the physical, spatial and environmental qualities of the development. The dwellings have been designed to achieve access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts, service areas, outlook and ease of access and mobility for all ages.

Many dwellings have studies and media alcoves. The minimum ceiling height of living rooms is 2.7m, the floor to floor height is generally 3.0m. Each dwelling has access to a secure private open space, such as a balcony, terrace or court, with a minimum area of 6sqm for 1 bedroom and 8sqm for 2 bedrooms with a minimum depth of 2m. Most dwellings have considerably more private open space than the minimum. Southern facing private open space is provided in the form of wintergardens.

The Concept Plan achieves a high level of environmental and residential amenity that is likely to set a precedent for future urban development in the Hurstville CBD.

6.6.1 Solar Access

The Architectural Design Report provides shadow diagrams for the concept plan at 9am, 12pm and 3pm for the equinox (March 21), winter solstice (June 21) and summer solstice (December 21). The proposals impact on solar access has been assessed against the provisions of Kogarah LEP 2001 because the shadows cast by the concept plan will be over the railway line and onto existing development in the neighbouring Kogarah Local Government Area (LGA).

A review of the shadow impacts on 21 June (winter solstice) from the proposed building at one hour intervals between 9am and 3pm indicates that all affected neighbouring properties will either continue to receive 3 hours of solar access where this currently exists, or will not lose any solar access where there is currently less than 3 hours of solar access.

6.6.2 Acoustic Privacy

The proposed development is not envisaged to have any significant impacts on the acoustic privacy of residential developments in the vicinity. Only mechanical plant such as rooftop exhausts and air-conditioning associated with the concept plan has the potential to impact on nearby residential and commercial properties.

The details of the mechanical plant for the concept plan will be finalised at the Project Application stage. Therefore the proponent will commit to prepare an Acoustic Report to assess the impact and make necessary recommendation to manage these impacts as part of the Project Application stage.

6.6.3 Visual Privacy

The development will not look directly into or over any residential dwellings. The building will have distant views to existing residential development in the surrounding area both in the Hurstville and Kogarah LGAs but will not result in the loss of any visual privacy to those dwellings.

6.6.4 View Loss

Given the distances from other significant residential towers in the locality, the concept plan is not envisaged to result in the loss of any key or significant views from other residential towers in the Hurstville CBD.

6.6.5 Wind Impact

Accurate analysis of the effects of wind on the proposed building and the environment is required given the bulk and scale of the proposed building. This analysis generally requires the use of wind tunnel facilities with data acquisition and data processing systems.

To obtain a detailed and accurate analysis of the effects of wind on the proposed building and the environment it is necessary to have a firm concept in place of the built form, particularly in relation to façade treatments, openings in the building, balconies, windows etc.

The proponents will undertake a detailed and accurate wind analysis as part of the project application.

6.7 Traffic Impacts and Parking

Lyle Marshall & Associates Pty Ltd has undertaken a traffic impacts assessment of the Concept Plan. A copy of the report is located at **Appendix 7**.

The scope of the report addresses the traffic and parking issues arising from the construction and operation of the proposed mixed use development as stated in the Director General's Requirements and the RTA's requirements as detailed in a letter to the Department of Planning dated 2 November 2010.

The traffic impacts during construction will be assessed in more detail for the Project Application when the construction staging, construction period, truck movements and truck sizes are considered.

The assessment details how the traffic and parking impacts arising from the construction and operation of the Concept Plan can be managed satisfactorily subject to the following recommendations:

- The driveway gradients to the loading dock should be lengthened by moving it west to the end of Building D; and,
- A "Green Travel Plan" be adopted to reduce car based travel to encourage employees in the retail tenancies to make greater use of public transport, cycling, walking and car sharing for the journey to work.
- Application will be made for a 'Construction Zone' along the site frontage of approximately **130 metres** in the *kerbside parking lane*.
- *Traffic Control Plans* will be required for traffic management in Treacy Street for *each stage* of the construction period.

Consideration has also been given to the cumulative traffic impacts of the Concept Plan under the provisions for increased development from the draft City Centre LEP.

Hurstville Council has indicated to the Department that the draft City Centre LEP will create, in round terms, 500,000sm commercial/retail and 700,000sm residential as proposed. The Concept Plan will provide, in round terms, and additional 1.0% of increased density over and above that created by the draft City Centre LEP. This increased amount is so minor, it is well within any statistical margin of error and will

not impact on the traffic modeling undertaken in the background investigations for the preparation of the draft City Centre LEP.

6.8 Geotechnical and Ground Water

A preliminary geotechnical assessment of the concept plan has been undertaken by Asset Geotechnical and is located at **Appendix 8**.

The main objectives are to provide an assessment of likely subsurface conditions on the site and to provide preliminary geotechnical recommendations for the development of the concept plan with respect to excavations, temporary and permanent support, dewatering, and foundations.

More specifically, the report addresses RailCorp's concerns with respect to building envelope, suitable depth of excavation and proximity to RailCorp corridor, methodology of excavation and support, anticipated ground surface movements, and avoidance of permanent rock anchors extending into the rail corridor. Preliminary discussions were held with RailCorp management regarding their concerns and a copy of their "Standard Brief" was obtained and used for the preparation of the Geotechnical Report.

In summary, the Geotechnical Report has concluded that provided the concept plan is designed and constructed in accordance with the recommendations summarised in **Table 5**, the construction of the building detailed in the concept plan would not have an adverse impact on the adjoining rail corridor in terms of depth of excavation, building envelope and methodology of construction.

In relation to derailment protection, the Concept Plan will be assessed for derailment protection requirements as per *Rail Infrastructure Corporation (RIC) Standard C4004 Design Requirements for Pier or Column Protection* and then designed to the standard as appropriate. An engineering report will be provided at the Project Application stage for review by the RIC.

Table 5: Geotechnical Recommendations for Design and Construction

Scope of Work	Recommendations
Excavation	<p>Close controls by the excavation contractor over the rock excavation are necessary so that excessive vibration effects are not generated.</p> <p>Excavation methods should be adopted which limit ground vibrations at the adjoining developments to not more than 5mm/sec.</p>
Dewatering	Sump and pump techniques to be used to control any ground water seepage through bedrock.
Temporary & Permanent Shoring	Top-down construction to be used (refer report for details).
Footings	Could include permanent shoring piles around the perimeter, and internal piles or pad footings.
Further Investigations/Studies	<ol style="list-style-type: none"> 1. Drilling of a number of cored boreholes to at least 3m below the proposed lowest excavation level. 2. Installation of piezometers to allow ground water monitoring. 3. Computer modeling of the proposed basement excavation for design of temporary shoring.

6.9 Heritage

A Heritage Impact Assessment (HIA) has been prepared by Cracknell Lonergan Heritage Architects to assess the significance and potential impact of the concept plan on the aboriginal and non-indigenous archaeological resources. A copy of the HIA is located at **Appendix I**.

The HIA has revealed the site;

- is not listed in Schedule 2 of the Hurstville LEP 1994 or the NSW Heritage Branch Database;
- is not part of a Heritage Conservation Area; and,
- is in the vicinity of heritage items located at 16 and 18 Treacy Street.

The HIA concludes that the proposal will have no adverse impact on the heritage significance of the items in the vicinity of the site and the site has no European or Aboriginal heritage.

6.10 Landscaping

The landscape statement, as detailed in the Architectural Design Report and provided by Habitation Landscape Architects, describes how the landscape has been designed in the following zones taking into account building form, orientation, climatic factors, visual amenity and resident interaction.

5. Treacy Street (Public Domain):
6. Communal Courtyard-Level One:
7. Skygardens. Levels 4, 7 & 10
8. Rooftop Garden-Level 13

A detailed landscaping plan is located in the Architectural Design Report in **Appendix 3**.

6.11 Public Domain

Public domain improvements are generally in accordance with the Hurstville Public Domain Guidelines for Treacy Street. The footpath adjacent to the building will be paved in asphalt with banding and a back edge in pavers. Street trees are planted on the footpath.

Refer to Landscape Architect's Design Statement and Plans located in the Architects Design Report.

6.12 Safety

The Concept Plan has been assessed against the key principles of Crime Prevention through Environmental Design (CPTED). CPTED is based on a theory that when development is appropriately designed it can reduce the likelihood of crimes being committed and contribute to perceptions of increased public safety.

By introducing such measures it is anticipated that this will assist in minimising the incidence of crime and contribute to perceptions of increased public safety.

In developing the Concept Plan consideration has been given to the key principles of Crime Prevention through Environmental Design (CPTED). A detailed CPTED assessment will be undertaken at the Project Application stage.

The following four key principles have been used in consideration of the Concept Plan to minimise the opportunity for crime and will form part of the draft statement of commitments:

Principle 1: Surveillance

The Concept Plan will achieve “deterrence” of committing crime by providing a high level of surveillance by providing:

- clear sightlines between public and private places;
- effective lighting of public places;
- landscaping that makes places attractive, but does not provide offenders with a place to hide or entrap victims; and,
- the activation of Treacy street through the provision of shops and food court at ground level.
- orientating living rooms to Treacy Street

Principle 2: Access Control

Effective access control will be achieved by:

- creating landscapes and physical locations that channel and group pedestrians into target areas;
- creating public spaces which attract, rather than discourage people from gathering
- locating the access to lobbies directly from the street.
- controlled vehicular access to the project provided by secured car park access from Treacy Street with direct access from the car park to the main lobbies for residents, the audio intercom system at the main entries and the car park entry to communicate with residents, and key card access for residents.

Principle 3: Territorial Reinforcement

Territorial reinforcement will be achieved through:

- design that encourages people to gather in public space and to feel some responsibility for its use and condition;
- design with clear transitions and boundaries between public and private space;
- clear design cues on who is to use space and what it is to be used for.

Principle 4: Space Management

Space management strategies will include;

- site cleanliness,
- rapid repair of vandalism and graffiti,
- the replacement of burned out pedestrian and car park lighting and
- the removal or refurbishment of decayed physical elements.

6.13 Ecological Sustainable Development

The concept plan has been designed to make efficient use of natural resources, energy and water throughout its full cycle, including construction. It will meet the benchmarks of 25% energy reduction and 40% water reduction set out in the Building and Sustainability Index (BASIX). Energy efficient building response is developed through extensive passive design and sun control elements.

The Architectural Design Report details a building design that is characterised by exceptional and dynamic qualities of space, natural light, air flow and solar access to achieve high personal comfort and low energy consumption.

Stanisic Associates have developed strategies for ecological sustainable development that are based on Green Star Strategies for a 4-Star and 5-Star Rating Scheme. Details of the strategies are located in the Architects Design Report.

Based on the strategies, a 5-Star rating is achievable for the project however the strategies outlined will require confirmation from the design and development team at the project application stage.

6.14 Drainage

APP have undertaken a preliminary assessment of the drainage and flooding issues associated with the development of the site as proposed in the concept plan. The assessment addresses issues of stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design (WSUD) measures. A copy of the APP report is located at **Appendix 10**.

In summary, the preliminary assessment concluded the proposed development as detailed in the concept plan:

- Will appropriately manage flood risk for its own uses and does not adversely impact the flood behaviour in adjacent areas;
- Has habitable floor levels that meet Council's freeboard requirements;

- Has driveway crest levels for basements that meet Council's freeboard requirements;
- Has retail ground floor areas which either conform to Council's flood freeboard requirements or are appropriately flood proofed to minimise flood damages and risk to personal safety;
- Incorporates WSUD features such as rainwater harvesting and rain gardens;
- Does not require onsite detention to control impacts on the Council drainage system but has space allowances for two detention tanks, if required;
- Will contribute to the long term improvement in runoff water quality discharged to Council's drainage system.

6.15 Contributions

Section 94 of the *Environmental Planning and Assessment Act 1979*, enables local councils or other consent authorities to levy contributions for public amenities and services required as a consequence of development.

Subject to the approval of the concept plan and prior to the issue of a construction certificate, a Section 94 contribution will be calculated and required to be paid to Council. In Hurstville, contributions from the concept plan will fund the following amenities and facilities;

- Open Space,
- Library and Information Services,
- Community Services and Facilities,
- Drainage,
- Management (within Council),
- Traffic Management and Car Parking, and;
- Urban Spaces.

A significant funding contribution towards these community amenities and facilities will provide a public benefit and will help address any potential impacts the concept plan may have on the local community.

Hurstville City Council is currently reviewing its Developer Contribution Plans. Council adopted a new Draft Contribution Plan for the purpose of public exhibition on 25 August 2010. To date, the exhibition period has not formally commenced.

A preliminary review of the *Hurstville Development Contributions Plan 2010* identifies the concept plan as a type of development expected to impact on the demand for community infrastructure and will, in the public interest, be required to make significant contribution to address anticipated additional demand for community infrastructure generated by the new development.

In relation to the payment of contributions, there is no proposal by Earljest to enter into a Voluntary Planning Agreement with the Council.

6.16 SEPP 65 – Design Quality of Residential Flat Development

The primary objective of SEPP 65 is to improve the design quality of residential flat development in NSW. This Policy applies to the erection of a new residential flat building, which is defined as:

a building that comprises or includes:

(a) 3 or more storeys (not including levels below ground level provided for car parking or storage, or both, that protrude less than 1.2 metres above ground level), and

(b) 4 or more self-contained dwellings (whether or not the building includes uses for other purposes, such as shops),

but does not include a Class 1a building or a Class 1b building under the Building Code of Australia.

The provisions of SEPP 65 apply to the proposed residential component of the Concept Plan.

The proposal is a 4 to 16 storey mixed use residential development comprising 257 dwellings and 4,256 sqm retail. Most dwellings are orientated to the north to optimise solar access and cross flow. South facing dwellings have wintergardens. Stanistic Associates have undertaken a preliminary analysis of the concept plan in accordance with the SEPP (including an assessment of the proposal against the NSW Residential Flat Design Code) and forms part of the Architectural Design Report located in **Appendix 3**.

The preliminary analysis concludes that the concept plan is able to meet the aims of SEPP 65.

Assessment of the proposal against the NSW Residential Flat Design Code details how well the design of the concept plan responds to the topics, objectives or rules of thumb within the design code. In particular, the proposed building provides:

- Cross flow ventilation to 71% of units (min 60% required)
- Solar access for 3 hrs per day to 70% of units (min 70% required); and,

- 10% of units are south facing (max 10%).

6.17 Utilities

APP have undertaken a preliminary assessment of the existing capacity and requirements of the development of the site as proposed in the concept plan for the provision of utilities including staging of infrastructure works. A copy of the APP report is located at **Appendix 10**.

In their investigations, APP have identified the existing sewer, water, electricity and gas infrastructure available to the site and had preliminary discussions with service providers Sydney Water, Energy Australia, Telstra and AGL/Jemena about the additional servicing requirements likely to be generated by the proposed development.

In summary, the preliminary assessment concluded that the proposed development as detailed in the concept plan can be serviced with sewer, water, drainage, power and telecom and there will be no need to stage the provision of services to the development.

6.18 Staging

Details of proposed staging are provided in Section 4.8 of the EA.

6.19 Contamination

Environmental Investigations have undertaken a Stage 1 Environmental Site Assessment (ESA1) for the site. A copy of the report is located at **Appendix 11**.

The purpose of the ESA1 was to evaluate the potential for site contamination resulting from previous land uses. As part of the site contamination appraisal, the following scope of works was undertaken:

- A detailed site walk over;
- A review of land use changes on-site and within surrounding areas by detailed analysis of historical aerial photographs;
- A review of previous site ownership ;
- A search through the NSW EPA/DECC land Information records to confirm there are no statutory notices current on any parts of the site under the *Contaminated Land Management Act 1997*;
- Search of WorkCover database for records on previous licenses to store dangerous goods etc; and
- Search of historical Council records pertaining to previous site use.

On the basis of the preliminary environmental site assessment, a number of potential Areas of Environmental Concern and Contaminants of Concern were identified. In view of the findings of the ESA1, a number of recommendations are made and reflected in the Statement of Commitments.

6.20 Noise and Vibration Assessment

Koikas Acoustics Pty Ltd have undertaken an acoustic assessment of the Concept Plan in relation to impacts from rail related noise and vibration and road traffic noise. A copy of the report is located at **Appendix 12**.

The assessment has resulted in a number of recommendations that will, when implemented in the final detailed design of the building, achieve the desired rail/road traffic noise reductions so as to comply with relevant Australian Standards and the criteria as stated in the NSW Government's publication *Development Near Rail Corridors and Busy Roads – Interim Guidelines*.

The recommendations relate to:

- Selection of building materials in relation to external walls and windows/sliding doors;
- Mechanical ventilation in nominated spaces; and
- Building Code of Australia requirements in relation to walls, entry doors, soil and waste pipes and concrete sub-floor systems.

Predicted vibration levels have been found to have a less than low probability of adverse comment from residents within the proposed development and require no amelioration measures to be implemented.

7.0 PUBLIC BENEFIT

A net public benefit arises where the sum of all the benefits of a development outweigh the sum of all costs. The key benefits of proceeding with the Concept Plan include:

- Compatible with agreed State and regional strategic direction for development in the area and will support the region to meet draft housing targets set in the Metropolitan Strategy;
- Located in a strategic centre nominated within the Metropolitan Strategy;
- Will facilitate both a temporary and permanent employment generating activity;
- Will impact upon the supply of residential dwellings and therefore housing supply and affordability;
- Will provide for housing mix near jobs, transport and services
- Existing public infrastructure (roads, rail, utilities) is capable of servicing the site;
- There is good pedestrian and cycling access to and from the site;
- Will result in changes to the car distances travelled which will impact on greenhouse gas emissions, operating costs and road safety.
- Will support significant Government investments in trains and buses in the area;
- The amenity in the location and wider community will be improved by demolition of existing aged and generally tired commercial built form and construction of a building that showcases exemplary contemporary architecture with environmental sustainability a fundamental component of the design philosophy;
- Improvements to the public domain with the footpath adjacent to the building being paved in asphalt with banding and a back edge in pavers and street trees planted on the footpath.
- Will increase choice and competition by increasing the number of retail premises (supermarkets, food court) operating in the area.

8.0 DRAFT STATEMENT OF COMMITMENT

In accordance with the Director-General's Requirements, the following commitments are made by Earljest Pty Ltd in respect of environmental management, mitigation and monitoring measures that are to be implemented to manage and minimise any potential impacts of the project.

8.1 Environmental and Residential Amenity

8.1.1 Acoustic Privacy

The details of the mechanical plant for the concept plan will be finalised at the Project Application stage. Therefore the proponent will commit to prepare an Acoustic Report to assess the impact and make necessary recommendation to manage these potential impacts as part of the Project Application stage.

8.1.2 Wind Impact

The proponents will undertake a detailed and accurate analysis of the effects of wind on the proposed building and the environment as part of the project application.

8.2 Traffic and Parking

All access, servicing and internal layout will be provided in accordance with AS 2890.1:2004 and AS 2890.2 – 2002.

An assessment of the construction traffic generated by the development will be undertaken at the Project Application stage.

The traffic impacts during construction will be assessed in more detail for the Project Application when the construction staging, construction period, truck movements and truck sizes are considered. A construction traffic management plan will be undertaken at the Project Application stage.

A "Green Travel Plan" will be developed for the project application stage and will include initiatives such as:

- Bicycle storage, showers and changing facilities for employees and bicycle storage for residents.
- Provide train and bus timetables to staff and residents.
- Provision of a small commuter vehicle to transport elderly and infirm residents to Hurstville railway station and for local shopping trips etc. to the CBD.

8.3 Obstacle Limitation Height

Prior to lodging a project application, a request will be made to Sydney Airports Corporation regarding any further assessments of the proposal.

8.4 Geotechnical and Ground Water

The building will be designed and constructed in accordance with the recommendations prepared by Asset Geotechnical and summarised in **Table 5** of the Environmental Assessment.

The Concept Plan will be assessed for derailment protection requirements as per *Rail Infrastructure Corporation (RIC) Standard C4004 Design Requirements for Pier or Column Protection* and then designed to the standard as appropriate. An engineering report will be provided at the Project Application stage for review by the RIC.

8.5 Public Domain

The footpath adjacent to the building will be treated with bluestone banding with asphalt infill.

Street trees will be planted on the footpath at 8 metre centres.

8.6 Safety

A detailed Crime Prevention through Environmental Design assessment will be undertaken at the Project Application stage. The assessment will address the commitments expressed in the EA under the four key principles of surveillance, access control, territorial reinforcement and space management.

8.7 Ecologically Sustainable Development (ESD)

The proponents are committed to achieving a 5-Star rating (min. 4-Star rating) as detailed in the Architectural Design Report subject to confirmation from the design and development team at the project application stage.

8.8 Drainage

The proponents are committed to incorporating Water Sensitive Urban Design features such as rainwater harvesting and rain gardens which will be further detailed in the project application.

8.9 Contamination

A field based investigation comprising of a Stage 2 Environmental Site Assessment will be conducted prior to the commencement of any future site redevelopment and will form part of any project application.

A Hazardous Materials Assessment will be carried out prior to any site demolition.

8.10 Noise and Vibration

The proponents will incorporate the recommendations of the Acoustic Assessment prepared by Koikas Acoustics Pty Ltd and which relate to:

- Selection of building materials in relation to external walls and windows/sliding doors;
- Mechanical ventilation in nominated spaces; and
- Building Code of Australia requirements in relation to walls, entry doors, soil and waste pipes and concrete sub-floor systems.

9.0 CONCLUSION

This Concept Plan seeks approval for the development of a mixed use retail and residential building that ranges in height from 15 to 55 metres (4 to 16 storeys) and accommodates 257 dwellings and 4,256sm of retail space with associated car parking.

In summary, an assessment of the Concept Plan has demonstrated that the proposal;

- is permissible development subject to the provisions of Hurstville Local Environmental Plan 1994;
- complies with the primary objective of the Draft City Centres LEP in that it will achieve appropriate urban form consistent with the major centre status of the Hurstville Town Centre;
- complies with the principles and objectives of the relevant State environmental planning instruments, strategies, policies and guidelines applying to the site;
- will have minimal adverse environmental effects;
- will provide considerable public benefit; and,
- showcases exemplary contemporary architecture with environmental sustainability a fundamental component of the design philosophy.

In summary, the site has the capacity to achieve a high density mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville Town Centre and an exemplar for higher density housing along Sydney's rail corridors.

Given the planning merits described above and the absence of any significant environmental impacts, it is requested that the Minister approve the Concept Plan under Section 75O of the EP&A Act.

