Attachments Excluded from Agenda

Burwood Local Planning Panel Meeting

Thursday, 16 October, 2025

6:00 PM

Table of Contents

General Business

GB4/25 Planning Proposal for Group Heritage Listing of The Strand, Croydon

Attachment 1: Draft Planning Proposal for Group Heritage Listing- The Strand 3

Attachment 2: GML Final Heritage Assessment Report, The Strand Croydon, August 2025 43

Attachment 3: Draft Heritage Inventory Sheet - The Strand 135

Attachment 4: List of Submissions - The Strand 149

Development Applications

DA14/25 Section 4.55(1A) Modification to DA.2022.44, which approved the Burwood Urban Park and Cultural Centre. The modification seeks to achieve a 4 Green Star Rating for the development.

Attachment 1: Statement of Environmental Effects (Exluded from agenda) ... 157

Attachment 2: ESD Report (Excluded from agenda) 166

Attachment 3: Section J Statement 237

Attachment 4: Notice of Determination of original DA aproved by the Sydney Eastern City Panel on 27 February 2023 (Excluded from agenda) 253

Attachment 5: Recommended Modified Conditions of Approval (Excluded from agenda) 292

Burwood
Inc.1874

Planning Proposal

Amendment of Schedule 5 of the Burwood LEP 2012 to list The Strand, Croydon as a Group Heritage Item

October 2025

A Planning Proposal is the first step in proposing amendments to Council's principle environmental planning instrument, known as the Burwood Local Environmental Plan (BLEP) 2012. A Planning Proposal explains the intended effect of the proposed amendment and also sets out the justification for making the change. The Planning Proposal is submitted to the NSW Department of Planning, Housing and Infrastructure (DPHI) for its consideration, referred to as the Gateway Determination, and is also made available to the public as part of the community consultation process.

Planning Proposal

Introduction 3

Background 3

Site Description 5

Part 1 – Objectives and Intended Outcomes 11

Part 2 – Explanation of Provisions 12

Part 3 – Justification of strategic and site-specific merit 13

Section A – Need for the planning proposal 13

Section B – Relationship to the strategic planning framework 17

Section C – Environmental, Social and Economic Impact 25

Section D – Infrastructure (Local, State and Commonwealth) 26

Section E – State and Commonwealth Interests 26

Part 4 – Maps 27

Part 5 – Community Consultation 29

Part 6 – Project Timeline 36

Attachment 1 – Final Heritage Assessment of The Strand, GML, August 2025 37

Attachment 2 – Council Report, Extraordinary Meeting of 29 January 2025

Attachment 3 – Minutes of Council's Extraordinary Meeting of 29 January 2025

Attachment 4 – Site Identification Map

Attachment 5 – Proposed Amendment to Burwood LEP 2012, Heritage Map

Introduction

This Planning Proposal seeks to amend Burwood Local Environmental Plan 2012 (BLEP 2012) to include The Strand, Croydon as a local Group Heritage Item consistent with the findings of the heritage assessment undertaken by GML Heritage.

The Strand is currently located in a Heritage Conservation Area, however it is not formally listed as a heritage item. By amending BLEP 2012, a formal heritage listing would afford The Strand enhanced heritage protection under planning legislation.

The properties / area to which this Planning Proposal applies: 1 – 50, The Strand, Croydon.

Background

On 29 January 2025, Council held an Extraordinary Meeting to determine Council's alternative response to the NSW Government's Transport-Oriented Development (TOD) Program for Croydon. A copy of the Council's Extraordinary meeting report is attached separately in the planning portal. In response to the NSW Government's Croydon TOD Program, Council resolved to adopt Option 4 as its alternate response, which includes uplift in The Strand, Croydon (Figure 1).

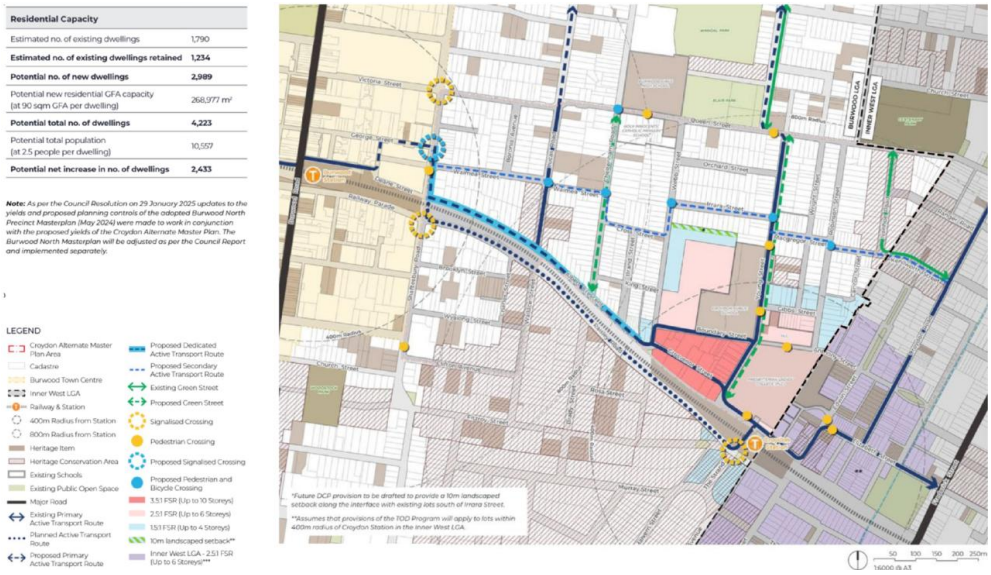


Figure 1: Council's adopted Croydon Masterplan which includes uplift in The Strand, in response to NSW Government's TOD Program (Source: Ethos Urban)

The adopted masterplan proposed a maximum building height of 4 storeys and an increase of the Floor Space Ratio from 1:1 to 1.5:1 within the Strand. The proposed uplift of The Strand is summarised in Table 1.

Table 1: Proposed Building Envelope Controls under the adopted masterplan

Building Envelope Controls	Existing Controls	Proposed Controls
Maximum Building Height	10m	a maximum of 4 storeys
Maximum Floor Space Ratio	1:1	1.5:1
Zoning	E1 Local Centre	No change

As part of Council's alternative response to the NSW Government's Croydon TOD Program, Council resolved to uplift certain lands in Croydon and Burwood North including The Strand located immediately south of Croydon Station, and resolved the following (see relevant components in bold text):

"1. That Council adopt Option 4 as an alternate response to the NSW Government Transport Orientated Development (TOD) program as included under Attachment 1.

2. That Option 4 include The Strand, Croydon; in including this area:

a) Council's engaged consultants commence a precinct-specific study for The Strand, Croydon, in the Burwood LGA zoned E1 area to identify opportunities to preserve and strengthen the character provisions in the DCP.

b) Council request the NSW Department of Planning Housing and Infrastructure and NSW Minister for Planning and Public Space as part of the submission, to list The Strand, Croydon, in the Burwood LGA zoned E1 as local heritage item group under the Burwood Local Environmental Plan 2012. ***In the event the Minister declines the request for immediate heritage listing, Council commence a heritage review to progress the heritage listing process via a Planning Proposal****.*

c) Council issue an Interim Heritage Order under the NSW Heritage Act 1977 for the properties at The Strand, Croydon, in the Burwood LGA zoned E1. The area requires further heritage inquiry and investigation and must be protected, as it is likely to be harmed whilst Council undertakes the heritage review and develops precinct controls.

3. That Council amend the Burwood North Masterplan adopted in May 2024 to include the changes identified in Option 4, Figure 9 on Page 19 of the agenda report for the Burwood North Masterplan area along with any other required corresponding amendments.

4. That Council endorse the Burwood Local Environment Plan 2012 clause amended as exhibited.

5. That the adopted Option in (1) above be forwarded to the NSW Department of Planning Housing and Infrastructure and NSW Minister for Planning and Public Space by 31 January 2025 as Council's endorsed alternate response to the NSW Government Transport Orientated Development (TOD) program.

6. That Council prepare a report on the adopted option outlined in (1) above, which includes a public domain plan and works schedule, an updated Infrastructure Contributions Plan, and a Development Control Plan.

7. That the General Manager be delegated to undertake minor modifications to any numerical, typographical, interpretation and formatting errors, or amend any element of the adopted Option in (1) above, in order to address any post submission concerns or issues raised by the NSW Department of Planning Housing and Infrastructure and the NSW Minister for Planning and Public Space if required to enable the Option's implementation.

8. That all persons who made a submission to the draft Masterplan and landowners within the study area be advised of Council's decision.

9. *That the Director City Strategy continue discussions with senior officers of the DPHI to request the acceleration of the Burwood North Masterplan Precinct implementation via a State Environmental Planning Policy."*

This Planning Proposal responds to Resolution No. 2(b) of Council's Extraordinary meeting of 29 January 2025.

Status of Council's alternative response to Croydon TOD

Following the resolution of 29 January 2025, Council submitted its response to the NSW Department of Planning, Housing and Infrastructure on 31 January 2025. Council at this stage is seeking DPHI's endorsement of Council's alternative response and its implementation via a self-repealing SEPP.

Under the TOD Program pathway, the group heritage listing of The Strand is unlikely to be supported and therefore a separate planning proposal has been prepared for DPHI's consideration. Upon further investigation and legal advice sought by Council, issuing of an Interim Heritage Order was considered not warranted due to the existing Heritage Conservation Area status of The Strand.

The Site: The Strand, Croydon

Regional Context

The Strand, Croydon is located approximately 12km west of the Sydney Central Business District and is recognised as an established neighbourhood centre in the inner-western suburbs of Sydney.

Positioned immediately south/south-west of Croydon Railway Station on the Inner West Line (Figure 2), the subject site has strong connections to the metropolitan rail network, providing direct access to Sydney CBD and key centres such as Strathfield, Burwood and Ashfield. Bus services operating along the Strand, Paisley Road, Burwood Road and Shaftesbury Road further enhance accessibility to surrounding suburbs.

Parramatta Road is located approximately 1.5km to the north and provides east–west connectivity across metropolitan Sydney. Frederick Street to the east and Liverpool Road (Hume Highway) to the south provide additional arterial links. Together, these transport connections reinforce Croydon's role as a highly accessible neighbourhood within the broader Sydney transport network, while also influencing patterns of land use, movement, and development in the area.

Local Context

Located to the immediate south/south-west of Croydon train station, The Strand comprises a compact local centre with commercial uses on the eastern and western sides of The Strand road reserve, forming a small neighbourhood shopping strip.

The subject site is bound by Paisley Road to the north, Paisley Lane to the east, Thomas Street/Malvern Avenue to the south, and Post Office Lane to the west. The eastern edge of The Strand fronting Paisley Lane is the boundary between Burwood and Inner West local government areas (Figure 3).

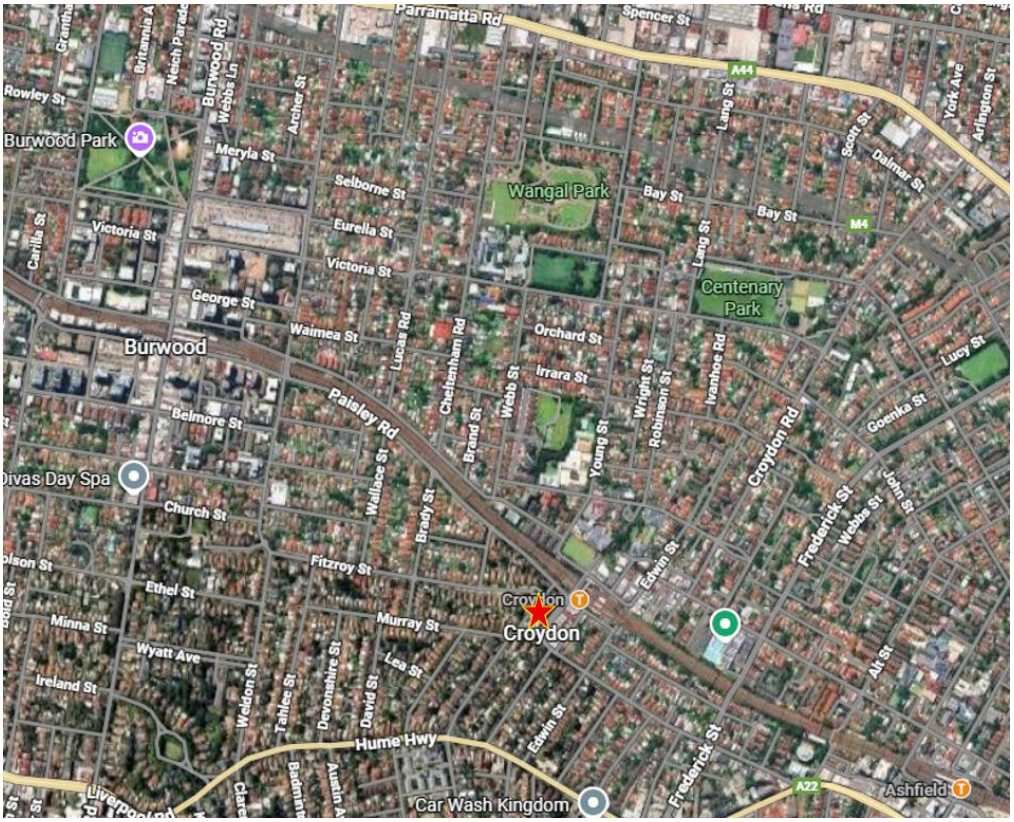


Figure 2: Regional Site Context, The Strand (Source: Google Map)



Figure 3: The Strand, Arial View (source: Council GIS)



Figure 4: The Strand, Cadastre details Croydon (Source: Council GIS)

Statutory Context

The Strand comprises a total of 37 allotments (Figure 4) located along the eastern and western edges of The Strand road reserve and is currently zoned E1 Local Centre (previously B1 Local Centre) pursuant to BLEP 2012.

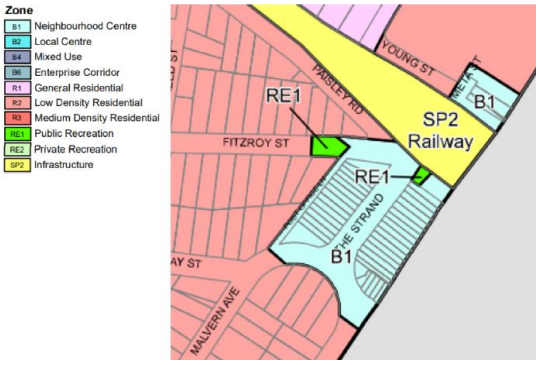


Figure 5: Existing Zoning

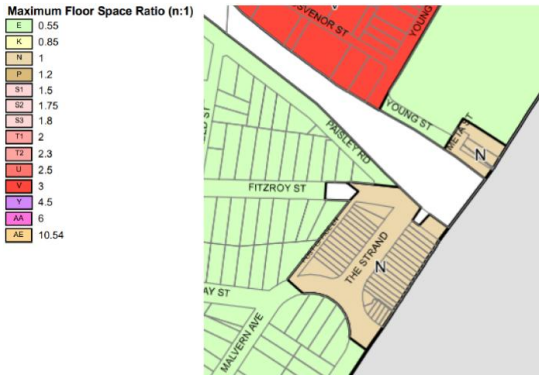


Figure 6: Existing Maximum Floor Space Ratio

Under BLEP 2012, the existing Maximum Floor Space Ratio, Maximum Height of Building and the status of Heritage Conservation Area applicable to The Strand is shown in Figures 6, 7 and 8.



Figure 7: Existing Maximum HoB

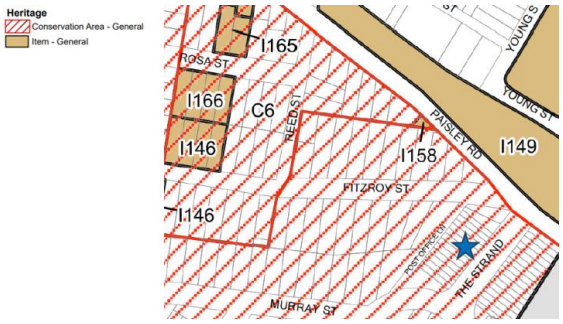


Figure 8: Existing Heritage Conservation Status

Malvern Hill Heritage Conservation Area

The Strand is located within the Malvern Hill Heritage Conservation Area (HCA) (C13) under *Schedule 5 Environmental Heritage* of BLEP 2012. As shown in Figure 9, the subject site is also adjacent to the Cintra Estate HCA (C6) and Wallace and Brady Streets HCA (C20) to its west (under BLEP 2012) and the Gads Hill HCA (C40) to its east, which is listed in the Inner West LEP 2022.

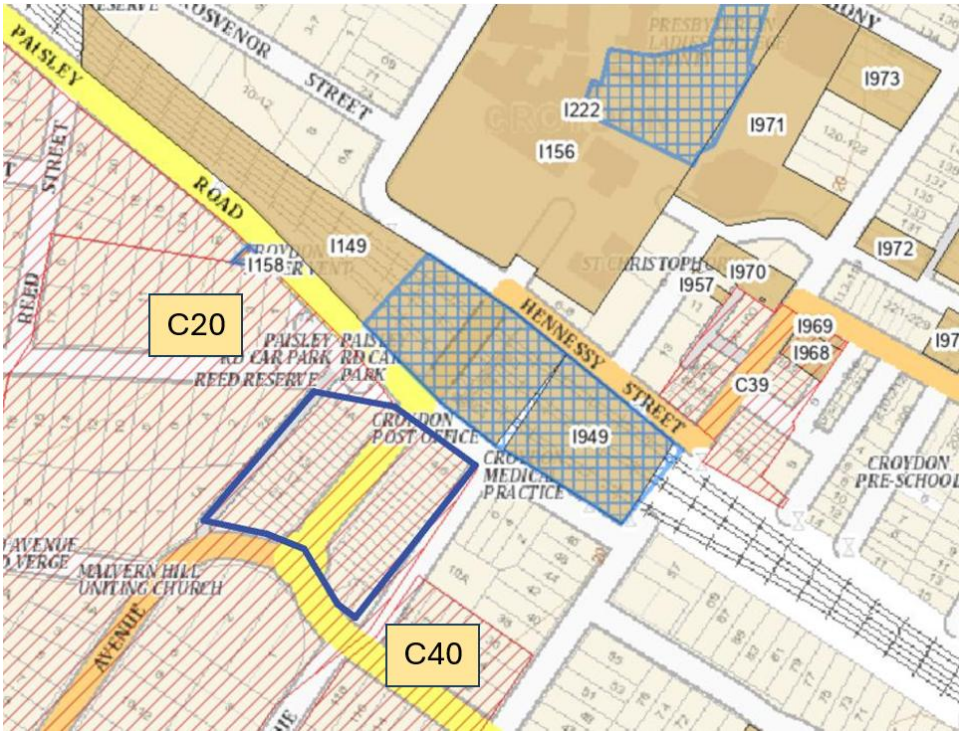


Figure 9: Heritage map showing The Strand outlined in dark blue, local heritage items (shaded ochre), HCAs (hatched in red) and SHR items (cross-hatched in blue). (Source: GML 2025)

The Strand was first developed between 1910 and 1923 in association with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. Integral to the model suburb planning of the Malvern Hill Estate, The Strand was specifically designed as the commercial centre for the suburb. The subject site comprises two distinct blocks divided by a wide road with an avenue of palm trees.

The Statement of Significance for the Malvern Hill HCA, extracted from the NSW State Heritage Inventory (SHI), is as follows:

> *The Malvern Hill Estate is of local significance because together with Appian Way, the Badminton Road to Culdees Road Conservation Area, the Wallace and Brady Streets Conservation Area, and the Mosely and Roberts Streets Conservation Area, it is a key part of what distinguishes Burwood from other parts*

of Sydney and containing good quality Federation housing, street planning and planting, and as an example of an early model suburb.

It is highly intact relatively large area of quality Federation and California Bungalows on substantial blocks of regular size together with an integral neighbourhood shopping centre divided by wide tree lined streets presenting cohesive but varied streetscapes.

Malvern Hill has connections with a number of important Sydney people and a number of well-known architects. The areas' particular scale and detail presents a highly desirable area for family living.

The broader area around the subject site contains a range of low-rise building typologies, predominantly residential properties including Federation style and early interwar buildings. Commercial development of the area is primarily confined to the neighbourhood shopping strip concentrated mostly on the subject site. The subject precinct marks a transition between Croydon Station and the residential streets of the broader area.



Figure 9: View west from Croydon station towards the old post office at the intersection of Paisley Rd.



Figure 10: View southwest towards The Strand from Croydon station at Paisley Rd



Figure 11: View north along The Strand at the intersection of Malvern Avenue and Thomas Street.



Figure 12: View of the eastern half streetscape with Art Deco façade of the former commonwealth Bank (now a dance academy) at the left of the image and Malvern Hall in the centre of the image.



Figure 13: View northwest of The Strand from the central road reserve



Figure 14: View southwest from Croydon Station towards post office building



Figure 15: View west from The Strand road reserve



Figure 16: View east from The Strand road reserve

Part 1 – Objectives and Intended Outcomes

This Planning Proposal proposes to list Nos.1-50, The Strand in as a group heritage item of local heritage significance under Schedule 5 of the Burwood Local Environmental Plan (BLEP) 2012. The legal description of the subject sites are included in Table 1 below.

Table 2: Sites included in the Planning Proposal

Addresses - West of The Strand	**LOT & DP**
1-1A The Strand CROYDON 2132	Lot 1, Sec D, DP5613; Lot 2, Sec D, DP5613
3 The Strand CROYDON 2132	Lot 1, DP255126
5 The Strand CROYDON 2132	Lot 21, DP719900
7 The Strand CROYDON 2132	Lot 22, DP719900
9 The Strand CROYDON 2132	Lot 3, DP255126
11 The Strand CROYDON 2132	Lot 4, DP255126
13 The Strand CROYDON 2132	Lot 5, DP255126
15 The Strand CROYDON 2132	Lot 6, DP255126
17 The Strand CROYDON 2132	Lot 7, DP255126
19 The Strand CROYDON 2132	Lot 8, DP255126
21 The Strand CROYDON 2132	Lot 9, DP255126
23 The Strand CROYDON 2132	Lot 10, DP255126
25 The Strand CROYDON 2132	Lot 11, DP255126
27 The Strand CROYDON 2132	Lot 14, Sec D, DP5613
Addresses - East of the Strand	**LOT & DP**
2 The Strand CROYDON 2132	Lot 4, Sec C, DP5613
4-6 The Strand CROYDON 2132	Lot 5, Sec C, DP5613
4-6 The Strand CROYDON 2132	Lot 6, Sec C, DP5613
8-10 The Strand CROYDON 2132	Lot 7, Sec C, DP5613; Lot 8, Sec C, DP5613
12 The Strand CROYDON 2132	Lot 1, DP255125
14 The Strand CROYDON 2132	Lot 2, DP255125
16 The Strand CROYDON 2132	Lot 3, DP255125
18 The Strand CROYDON 2132	Lot 4, DP255125
20 The Strand CROYDON 2132	Lot 5, DP255125
22 The Strand CROYDON 2132	Lot 6, DP255125
24 The Strand CROYDON 2132	Lot 7, DP255125
26 The Strand CROYDON 2132	Lot 8, DP255125
28 The Strand CROYDON 2132	Lot 9, DP255125
30 The Strand CROYDON 2132	Lot 10, DP255125
32 The Strand CROYDON 2132	Lot 11, DP255125
34-40 The Strand CROYDON 2132	Lot 12, DP255125
42 The Strand CROYDON 2132	Lot 13, DP255125
44 The Strand CROYDON 2132	Lot 14, DP255125
46 The Strand CROYDON 2132	Lot 15, DP255125
48 The Strand CROYDON 2132	Lot 16, DP255125
50 The Strand CROYDON 2132	Lot 17, DP255125

Part 2 – Explanation of Provisions

The Planning Proposal seeks to achieve the intended objectives and outcomes by amending BLEP 2012 as follows:

- Amend Schedule 5 - Environmental Heritage of BLEP 2012 to include the properties at 1-50 The Strand, Croydon as indicated in Table 2 below (blue font represents an insertion):

Table 3: Proposed Additions to Schedule 5 Environmental Heritage of BLEP 2012

Suburb	*Item name*	*Address*	*Property description*	*Significance*	*Item no*
Burwood	*The Strand*	*1-50 The Strand Croydon 2132*	*See Table 1*	*Local*	*I237**

Note: * *Heritage Item Nos. are indicative only at this stage and are to be confirmed at the finalisation stage.*

- Amend the *Heritage Map* (ref: 1300 COM HER 001 010 20240603) to add properties at 1-50 The Strand, Croydon as a local group heritage item as indicated in Figure 18 below.

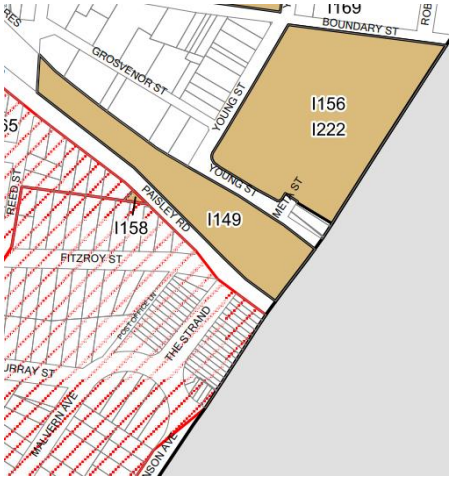


Figure 17: Existing Heritage Map

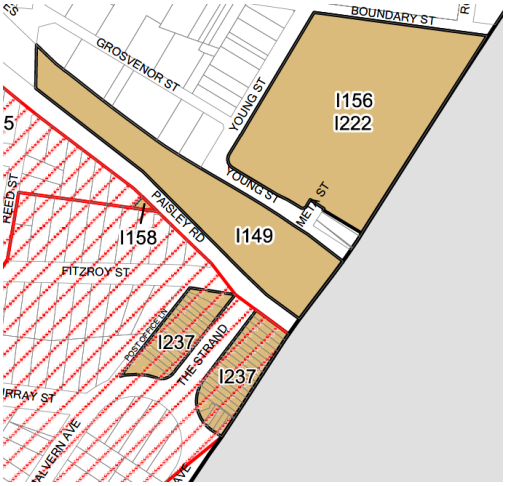


Figure 18: Proposed Heritage Map

Part 3 – Justification of strategic and site-specific merit

Section A – Need for the planning proposal

1. Is the planning proposal a result of an endorsed LSPS, strategic study or report?

This planning proposal has been prepared as a result of Burwood Council's resolution of 29 January 2025 in the context of Council's alternative response to NSW Government's TOD Program for Croydon.

As part of Council's alternative response to the NSW Government's Croydon TOD Program, Council resolved to uplift certain lands in Croydon and Burwood North including The Strand, the E1 commercially zoned land immediately south of Croydon Station.

Council at the meeting also resolved to list The Strand as a group heritage item in order to ensure the future redevelopment of The Strand is sympathetic to its existing heritage characteristic. The subject sites at The Strand are located within the Malvern Hill Heritage Conservation Area (HCA), which is currently listed as an HCA in Schedule 5 of the Burwood LEP.

In April 2025, Council sought professional services from GML Heritage to undertake Heritage Assessment of The Strand, consistent with the intent of Council resolution. The report included an assessment of significance of the subject properties in accordance with the standard criteria established in the NSW Heritage Office guidelines. These guidelines provide the framework for heritage assessment and incorporate the seven types of cultural heritage values identified in the Burra Charter into a structured framework.

The Heritage Assessment Report completed by GML is included as a separate attachment to this Planning Proposal. Table 4 below includes a summary of heritage assessment against the assessment framework which confirms that the subject sites meet multiple heritage assessment criteria as demonstrated below.

Table 4: NSW Heritage Assessment Criteria applying to The Strand

NSW Heritage Criteria	The Strand, Croydon
Criterion (A) Historical Significance	Yes
Criterion (B) Historical Association	Yes
Criterion (C) Aesthetic/Technical Significance.	Yes
Criterion (D) Social, Cultural and Spiritual Significance	Yes
Criterion (E) Research Potential	No
Criterion (F) Rarity	Yes
Criterion (G) Representativeness	Yes
Integrity Buildings at the Strand vary in integrity but are highly legible.	Yes

The paragraphs below provide a detailed heritage assessment of The Strand against the assessment framework demonstrating relevant evidence supporting its proposed listing.

Criterion (A) Historical Significance: The Strand meets the threshold for Criterion (A) Historical Significance with the following significance indicator:

- Demonstration of important periods or phases in history

The subject precinct is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. The Strand was developed as a shopping strip between 1913 and 1920 as part of the new model suburb' of Malvern Hill. It was integral to the planning of Malvern Hill Estate and formed the neighbourhood shopping strip. Its location adjacent to Croydon Station was strategically planned while providing a transition to the wider area with its residential premises. Most of the two-storey shops with dwellings above were designed and built by IILBC, the developers of Malvern Hill Estate.

In addition to the shops, the subject precinct included a post office, bank, community hall and garage workshops. No pubs or hotels were included as per the commercial precinct planning principles of the garden suburb typology.

The scale of development in the immediate surrounds has respected the character of the area and the street still provides a transition between Croydon Station and the residential streets of the wider area.

The shops of The Strand are linked to the Federation and interwar development of Malvern Hill and Croydon. Developed adjacent to the railway station, The Strand has historically supported the local community and continues to do so today. Physically, the shops—particularly the upper storeys of the buildings—demonstrate an intactness in the Federation style that defines the character of the Malvern Hill Estate.

The subject precinct contributes largely to the development of the Malvern Hill Estate, which is an area of local significance within the wider Croydon area. The Strand still continues to function according to its original use and is an active commercial strip demonstrating its historical link.

Criterion (B) Historical Association: The Strand meets the threshold for Criterion (B) Historical Association with the following significance indicator:

- A key phase(s) in the establishment or subsequent development at the place or object was undertaken by, or directly influenced by, the important person(s) or organisation;
- An event or series of events of historical importance occurring at the place or object were undertaken by, or directly influenced by, the important person(s) or organization.

The subject precinct is associated with the IILBC, a company that operated from 1885 to 1960. It dealt with real estate, and operated as a bank and financial agent in the Australian colonies. IILBC owned most lots in the subject precinct and built the first three shops on 3-7 The Strand, which first accommodated a stationery shop, a pastry shop and a drapery. Until the 1920s, a majority of the shops (approximately 30) were owned and built by the company. At that time, the shops were possibly the most substantial group of Federation-era shops built by a single owner in Sydney.

The development of The Strand into a commercial precinct for the wider Malvern Hill Estate formed an integral part of the planning and advertising for the suburb. The IILBC was instrumental in recognising, developing and marketing the precinct.

The subject precinct also has historical associations with a few prominent architects. The Roy Brothers-owned garages at 27 The Strand was designed by architect Charles H Christian, known for the design of curvilinear Art Deco buildings in the interwar era.

Meanwhile, 4-6 The Strand, originally a branch of the Government Savings Bank, is associated with a few different well-known architectural firms including Ross & Rowe and Booker and Wilson. Ross & Rowe was a prominent practice in Sydney between 1911 and 1937. Examples of their buildings include the Metropolitan Hotel, the Commonwealth Bank of Australia building, and the Downing Centre.

Booker and Wilson, a post-World War II firm in operation until the 1980s, designed various banks, shops, factories and housing commission projects around Sydney.

No. 8-10 The Strand, originally designed as Malvern Hall, was designed by architect Spencer and Spencer. The subject precinct is a good example of a site that includes several architect-designed buildings from the early to mid-twentieth century.

Criterion (C) Aesthetic or Technical Significance: The Strand meets the threshold for Criterion (C) Aesthetic or Technical Significance with the following significance indicator:

- Recognition as a landmark or distinctive aesthetic natural environment.
- Recognition of artistic or design excellence.

The subject precinct was designed as a broad and elegant shopping area and promenade between the railway station and the residential areas. It contributes greatly to the Federation-style character of the broader Malvern Hill Estate area. The earliest buildings of The Strand, including 3-7 The Strand and 1 The Strand (including the former post office), are legible. Located at a prominent corner position facing the railway station, the post office is a landmark building on The Strand.

The buildings to the east and west side of The Strand are different in building forms providing The Strand with a distinctive aesthetic character. Most of the properties on the eastern side are unified by a parapet and the strip of shops curve towards the southern end. This shape is reflected on the western side by the southernmost property (garage) the form of which curves inwardly. The western side provides a picturesque streetscape of individual buildings.

Generally, all buildings in the subject precinct have undergone refurbishments though the shop facades still provide a consistent aesthetic streetscape. All buildings have been altered on the ground floor but the upper storey is largely intact. For instance, some windows have been replaced on the second storey but overall the early fenestration and features are largely apparent. The additions and refurbishments are mostly sympathetic and much of the original design intent remains legible.

Based on photographic evidence, some of the buildings have a high level of integrity to the original design. Art Nouveau features including leadlight glass and tile patterns are still evident on some shopfronts. The integrity and intactness of the buildings as a whole are not compromised and the aesthetic nature of the subject precinct is retained.

Criterion (D) Social, Cultural and Spiritual Significance: The Strand meets the threshold for Criterion (C) Aesthetic or Technical Significance with the following significance indicator:

- Highly regarded by a community as a key landmark (built feature, landscape or streetscape) within the physical environment
- Important to the community as a landmark within social and political history
- Important as a place of symbolic meaning and community identity
- Important as a place of community service (including health, education worship, pastoral care, communications, emergency services, museums)

Since its formation in 1912, the subject precinct is still in use as the commercial centre for the wider area. Though a detailed social values assessment has not been undertaken, it is likely that the precinct has social significance for the current and past local community as a whole as a place to gather, shop and socialise.

From the Public-Exhibition of Alternative Croydon TOD Masterplan - Engagement Outcomes Report (prepared by Burwood Council, dated January 2025) which highlighted the key issues from the October 2024 formal exhibition period, heritage was a key issue (with 43.3% of submissions mentioning the theme), and there submission with specific discussions about the Railway South Precinct, the Malvern Hill Estate HCA and The Strand in particular.

Submissions highlighted the heritage significance of the Malvern Hill HCA and supported and appreciated the intent of the Masterplan towards protecting the existing HCA.

Submissions also highlighted the heritage significance of The Strand, however, a number made reference to The Strand location and the need for revitalisation with opportunities for character sympathetic development being able to be undertaken at the location to create a more vibrant and activated town centre.

While not a formal social values assessment, this recent public exhibition process demonstrates that there is community affinity for The Strand and desire for its conservation.

Criterion (F) Rarity: The Strand meets the threshold for Criterion (F) Rarity due to the following significance indicator:

- Distinctiveness in demonstrating an unusual historical, natural, architectural, archaeological, scientific, social or technical attribute(s) that is of special interest.

The 34 properties at The Strand are examples of Federation two-storey shoptop brick buildings. The comparative analysis identified numerous fine examples of this style from these periods, which are identified as heritage items either individually or within HCAs.

However, as a collective, The Strand is unique in its form and layout. Designed with rear lanes, its layout is still legible and the division of lots it comprises still evident. Designed as a street with blocks of shops on each side, The Strand has retained much of its integrity and intactness to date. The other groups of Federation-style shops, though comparable in character and architectural style, comprise a smaller group of shops limited to one side of the main road.

As a planned commercial area within a planned suburb, The Strand represents a typology of model suburb planning that was rare to its time. As the commercial portion of the Malvern Hill Estate, it was and still remains segregated from the surrounding residential areas. The Strand does not include a pub or hotel enabling the Malvern Hill Estate to be an uncommon form of suburb development in Sydney possible for the level of control executed by the estate owners by the use of building covenants and the desire for a garden suburb.

The Strand is an example of a large group of buildings developed at the same time by a single owner i.e. the IILBC. It is possibly the largest group of shops built by a single owner with none having been demolished. It is the only one of its type and is therefore distinct in the wider Burwood LGA as a distinguishable commercial precinct from the Federation era.

As a whole, the subject precinct is considered to be rare and the only example of its type.

Criterion (G) Representativeness: The Strand meets the threshold for Criterion (G) Representativeness with the following significance indicator:

- A class of places or objects that demonstrate an aesthetic composition, design, architectural style, applied finish or decoration of historical importance

The subject precinct includes a group of Federation-style shoptop buildings that collectively form a fine example of this type. The setting, condition and scale of The Strand have remained uncompromised. It can be regarded as outstanding because of its integrity and intactness.

The Strand is still a prominent feature and defining street for the original subdivision of Malvern Hill Estate. It has its own distinct characteristics—for instance, the post office and former butchers form an entrance into the promenade. The row of palm trees dividing it add to its aesthetic character. The form, scale and height of the buildings defining the streetscape remain largely legible. It is an outstanding representation of its type in the LGA, forming a transition to the nearby residential areas.

The comparative analysis has determined that in comparison to other examples The Strand is a good example of the Federation/interwar two-storey shoptop typology, especially in its intactness. It still maintains a cohesive character and retains its streetscape presence and prominence in comparison to the other examples. Its form, setting and retention of a shopfront configuration together with its current use echo its original purpose and are consistent with the variety of commercial premises it originally housed.

Integrity

The setting and context of The Strand have remained unchanged since the development of its buildings. The planned layout of the pedestrian realm and central avenue of trees is still extant and adds to the character of the precinct. The buildings vary in integrity. Most shopfronts on the northern side of the road are intact. Features including pressed metal ceilings have been retained. All of the shops have been altered at ground level with changes in use and tenancy. However, in general, most buildings retain some original features such as ceramic tiled front porches with Art Nouveau motifs, tessellated tile patterns, brass sashes around windows, leadlight glazing and terracotta vents.

The upper-storey fabric is mostly intact across all buildings. No new openings and limited infills were noted for the upper storeys of the buildings. Features such as recessed facades in arches, original sash windows, parapets and details in brickwork remain intact and legible. The buildings can be considered to have integrity consistent with original design, composition and external materiality. Overall, the planned layout of The Strand and the Federation-style character of its buildings remain highly legible.

2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The planning proposal is the only means of listing the subject lands as a group heritage item of local significance and ensuring their protection within the Malvern Hill HCA.

Section B – Relationship to the strategic planning framework

3. Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy?

Yes. The planning proposal is consistent with metropolitan, subregional and district strategies and plans.

The State Government has prepared the *Eastern City District Plan* (applicable to the Burwood LGA) to manage growth for the next 20 years in the context of economic, social and environmental matters at a district level, to contribute towards the 20-year vision for Greater Sydney. It contains the planning priorities and actions for implementing the Greater Sydney Region Plan, *A Metropolis of Three Cities*, at a district level, and is a bridge between local and regional planning.

Objective 13 of *A Metropolis of Three Cities* states that '*environmental heritage is identified, conserved and enhanced*'. Meanwhile, Planning Priority E6 of the *Eastern City District Plan* relates to '*creating and renewing great places and local centres, and respecting the District's heritage*'. In addition, the *Eastern City District Plan* states:

> *Heritage and history are important components of local identity and great places. The District's rich Aboriginal, cultural and natural heritage reinforces its sense of place and identity.…*

> *Identifying, conserving, interpreting and celebrating Greater Sydney's heritage values leads to a better understanding of history and respect for the experiences of diverse communities. Heritage identification, management and interpretation are required so that heritage places and stories can be experienced by current and future generations.*

By identifying the subject lands as a group heritage listing of local significance, this planning proposal supports Objective 13 of the Region Plan, and Planning Priority E6 of the District Plan in interpreting significance of The Strand as part of its future redevelopment.

4. Is the planning proposal consistent with a council LSPS that has been endorsed by the Planning Secretary or GSC, or another endorsed local strategy or strategic plan?

Yes. The planning proposal is consistent with Council's Local Strategic Planning Statement (LSPS) which was endorsed by the former GSC in March 2020. Council's LSPS sets a long term vision for the growth of the LGA and identifies objectives and planning priorities in achieving the goals.

Planning Priority 5 of the LSPS states *Identify local character areas considering preservation, enhancement and cultivation.* The LSPS also states on its vision statement that one of the mechanisms in achieving Council's long-term vision is via ensuring *Local character is protected and enhanced.*

The planning proposal intends to protect and enhance heritage significance of The Strand and bring a sensitive integration of medium density development with The Strand. By identifying properties of local heritage significance, this planning proposal is in keeping with the vision and objectives of the LSPS.

The Burwood 2036 Community Strategic Plan (CSP) set the vision as follows:

> *Burwood is a welcoming and inclusive community that is defined by our diversity of people, liveable places and progressive ideas. We acknowledge and celebrate our history and place, protect our heritage and environment and share a quality of life that is equitable, sustainable and supports each other to thrive and prosper.*

The CSP further states:

> *Our places are built around people, protecting our heritage and are well planned and liveable with housing, transport and infrastructure that meet the diverse and changing needs of our community.*

This Planning Proposal intends to ensure that as The Strand transforms in the future to meet the changing community needs, the intrinsic value and heritage significance of The Strand is appropriately acknowledged and celebrated in the future redevelopment of The Strand.

The Planning Proposal is also consistent with Council's Housing Strategy and Local Environmental Plan 2012.

- Consistent with the Housing Strategy, this Planning Proposal intends to ensure that as The Strand transforms in the future to meet the changing community needs, the intrinsic value and heritage significance of The Strand is appropriately acknowledged and celebrated whilst supporting vibrancy, vitality and activity of The Strand.

- This Planning Proposal is consistent with the objectives of Burwood LEP 2012 in conserving environmental heritage via listing significant items in Schedule 5 of the LEP.

5. Is the planning proposal consistent with any other applicable State and regional studies or strategies?

Yes. The planning proposal is consistent with the Standard Instrument – Principal Local Environmental Plan and all other applicable State Environmental Planning Policies.

6. Is the planning proposal consistent with applicable State Environmental Planning Policies?

Yes. There are no State Environmental Planning Policies (SEPPs) which would be contravened by the amendments proposed in the planning proposal.

All SEPPs applicable to the Burwood local government area are set out in Table 5 below, together with a comment regarding the planning proposal's consistency:

Table 5: Consistency with State Environmental Planning Policies

SEPPs	Comments
State Environmental Planning Policy (Biodiversity and Conservation) 2021	The planning proposal does not contain any provisions which are in contrary to the objectives of the SEPP.
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008	The heritage listing of the properties may alter whether development under the Codes SEPP may be carried out on the subject sites, but all properties are currently included within the Malvern Hill Heritage Conservation Area (HCA). However, this planning proposal would not contravene the SEPP in any way.
State Environmental Planning Policy (Housing) 2021	The proposed heritage listing will ensure that significant elements within the Strand are identified and protected. This will ensure the future redevelopment of The Strand is sympathetic to its heritage character and cultural significance. The planning proposal does not contain any provisions which will contravene SEPP.
State Environmental Planning Policy (Industry and Employment) 2021	The planning proposal does not contain any provisions which are in contrary to the objectives of the SEPP.
State Environmental Planning Policy (Planning Systems) 2021	Not relevant
State Environmental Planning Policy (Precincts—Central River City) 2021	Not relevant
State Environmental Planning Policy (Precincts—Eastern Harbour City) 2021	Not relevant

SEPPs	Comments
State Environmental Planning Policy (Precincts—Regional) 2021	Not relevant
State Environmental Planning Policy (Precincts—Western Parkland City) 2021	Not relevant
State Environmental Planning Policy (Primary Production) 2021	Not relevant
State Environmental Planning Policy (Resilience and Hazards) 2021	There is no indication that previous uses at the subject sites would trigger remediation requirements. The subject sites are note located within the coastal areas identified by this SEPP.
State Environmental Planning Policy (Resources and Energy) 2021	Not relevant
State Environmental Planning Policy (Sustainable Buildings) 2022	The planning proposal does not contain any provisions which are in contrary to the objectives of the SEPP.
State Environmental Planning Policy (Transport and Infrastructure) 2021	The planning proposal does not contain any provisions which are in contrary to the objectives of the SEPP.

7. Is the planning proposal consistent with applicable Local Planning Directions (Former Ministerial Directions)?

Yes. Consistency with the list of Directions (under section 9.1(2) of the *Environmental Planning and Assessment Act 1979* issued by the Minister for Planning) is set out in Table 6.

Table 6: Consistency with Local Planning (Former Ministerial) Directions

Direction		Comments
Focus area 1: Planning Systems		
1.1	Implementation of Regional Plans	Not relevant.
1.2	Development of Aboriginal Land Council land	Not relevant.
1.3	Approval and Referral Requirements	The planning proposal will not contain provisions which require the concurrence, referral or consultation of other public authorities, nor identify any use as designated development.
1.4	Site Specific Provisions	Not relevant.
1.4A	Exclusion of Development Standards from Variation	Not relevant.

Direction		Comments
Focus area 1: Planning Systems – Place based		
1.5	Parramatta Road Corridor Urban Transformation Strategy	Not relevant. The subject lands are not within the Parramatta Road corridor, nor undermine the achievement of that Strategy's vision or objectives.
1.6	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	Not relevant.
1.7	Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not relevant.
1.8	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not relevant.
1.9	Implementation of Glenfield to Macarthur Urban Renewal Corridor	Not relevant.
1.10	Implementation of the Western Sydney Aerotropolis Plan	Not relevant.
1.11	Implementation of Bayside West Precincts 2036 Plan	Not relevant.
1.12	Implementation of Planning Principles for the Cooks Cove Precinct	Not relevant.
1.13	Implementation of St Leonards and Crows Nest 2036 Plan	Not relevant.
1.14	Implementation of Greater Macarthur 2040	Not relevant.
1.15	Implementation of the Pyrmont Peninsula Place Strategy	Not relevant.
1.16	North West Rail Link Corridor Strategy	Not relevant.
1.17	Implementation of the Bays West Place Strategy	Not relevant.
1.18	Implementation of the Macquarie Park Innovation Precinct	Not relevant.
1.19	Implementation of the Westmead Place Strategy	Not relevant.
1.20	Implementation of the Camellia-Rosehill Place Strategy	Not relevant.
1.21	Implementation of South West Growth Area Structure Plan	Not relevant.
1.22	Implementation of the Cherrybrook Station Place Strategy	
Focus area 2: Design and Place		
Focus area 3: Biodiversity and Conservation		
3.1	Conservation zones	Not relevant.
3.2	Heritage Conservation	Refer to discussion below
3.3	Sydney Drinking Water Catchments	Not relevant.
3.4	Application of C2 and C3 Zones and	Not relevant.
3.5	Recreation Vehicle Areas	Not relevant.
3.6	Strategic Conservation Planning	Not relevant.

Direction		Comments
3.7	Public Bushland	Not relevant.
3.8	Willandra Lakes Region	Not relevant.
3.9	Sydney Harbour Foreshores and Waterways	Not relevant.
3.10	Water Catchment Protection	Not relevant.
Focus area 4: Resilience and Hazards		
4.1	Flooding	Not relevant.
4.2	Coastal Management	Not relevant.
4.3	Planning for Bushfire Protection	Not relevant.
4.4	Remediation of Contaminated Land	Not relevant.
4.5	Acid Sulfate Soils	The lands have been identified as Class 5 on the Acid Sulfate Soils Map, representing the lowest probability of containing Acid Sulfate Soils.
4.6	Mine Subsidence and Unstable Land	Not relevant.
Focus area 5: Transport and Infrastructure		
5.1	Integrating Land Use and Transport	The planning proposal applies to heritage listing of certain properties in The Strand which is located adjacent to Croydon Station. As the planning proposal does not alter the land zoning, and as such, would not affect travel demand or the availability of transport options.
5.2	Reserving Land for Public Purposes	Not relevant.
5.3	Development Near Regulated Airports and Defence Airfields	Not relevant.
5.4	Shooting Ranges	Not relevant.
5.5	High Pressure Dangerous Goods Pipelines	Not relevant.
Focus area 6: Housing		
6.1	Residential Zones	Not relevant. The planning proposal does not seek to amend the zoning or range of permissible uses for the subject lands.
6.2	Caravan Parks and Manufactured Home	Not relevant.
Focus area 7: Industry and Employment		
7.1	Employment Zones	Refer to discussion below
7.2	Reduction in non-hosted short-term rental accommodation period	Not relevant.
7.3	Commercial and Retail Development along the Pacific Highway, North Coast	Not relevant.
Focus area 8: Resources and Energy		
8.1	Mining, Petroleum Production and Extractive Industries	Not relevant.
Focus area 9: Primary Production		
9.1	Rural Zones	Not relevant.
9.2	Rural Lands	Not relevant.
9.3	Oyster Aquaculture	Not relevant.
9.4	Farmland of State and Regional Significance on the NSW Far North	Not relevant.

3.2 Heritage Conservation

The objective of this Direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance. This Direction applies when a relevant planning authority prepares a planning proposal (see Table 7 below).

Table 7: Heritage Conservation Direction Assessment

Direction Requirement	Assessment
A planning proposal must contain provisions that facilitate the conservation of:	
a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area	The Heritage Assessment of the subject sites conducted by GML concluded that the sites have heritage significance in terms of historical, associative, aesthetic, rarity, and representative values to warrant their listing as a group heritage item of local significance. This planning proposal seeks to list the subject lands as a group heritage item. Once listed the provisions of Clause 5.10 Heritage Conservation of the Burwood LEP would apply to these lands. This clause seeks to conserve the environmental heritage of Burwood.
b) Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and	N/A.
c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.	The heritage investigation conducted by GML does not encompass any Aboriginal assessment.

Based on GML's detailed analysis of the subject sites against the NSW Heritage Assessment Criteria as noted in Question 1, Section A of this Planning Proposal, GML provided the following as the Statement of Heritage Significance for The Strand:

> *The Strand, Croydon, has cultural significance at the local level for its historic, associative, aesthetic, social, representative and rare attributes.*
>
> *The Strand, located adjacent to Croydon Station and developed between 1910 and 1923, has historic significance to the locality of Croydon. It is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. Integral to the model suburb planning of the Malvern Hill Estate, The Strand was specifically designed as the commercial centre for the suburb. Its planning and segregation from the residential zone of the suburb demonstrate the influence of the garden suburb movement of the early 20th century. The precinct comprises two distinct blocks divided by a wide road with an avenue of palm trees.*

The Strand is associated with the Intercolonial Investment Land and Building Company (IILBC). A majority of the shops were owned and constructed by the company, making The Strand possibly the most substantial group of Federation-era shops built by a single owner in Sydney. The IILBC was instrumental in recognising, developing and marketing the precinct. The Strand is also a good example of a precinct featuring buildings designed by a few different architectural firms/architects including Ross & Rowe, Booker and Wilson, Spencer and Spencer, and Charles H Christian.

The Strand is a broad, elegant shopping area that significantly enhances the Federation-style character of Malvern Hill Estate. Its aesthetic appeal is defined by varied building forms including its curvilinear shape, unified parapets, and picturesque streetscapes on both sides. Despite refurbishments, the original design intent remains clear, preserving the precinct's aesthetic significance and integrity. Notable landmarks like the former post office at 1 The Strand contribute to its distinctive character. The intactness of original Art Nouveau features, such as leadlight glass and tile patterns, contribute to its aesthetic attributes.

Designed as a distinct commercial precinct within a garden suburb, The Strand has retained its original and historic commercial function. The Strand is representative of a collection of good-quality Federation and early interwar two-storey shoptop buildings developed adjacent to a railway station. It contributes greatly to the Federation-style character of the wider suburb. The buildings comprising The Strand are highly intact and not compromised in integrity. It has maintained its aesthetic character with street planning and planting.

The Strand has social value as a community centre which has been a place to gather, shop and socialise since the 20th century.

While not a formal social values assessment, the recent public exhibition process of the Alternative Croydon TOD Masterplan demonstrates that there is community affinity for The Strand and desire for its conservation.

The Strand is a rare example of a highly intact Federation-era commercial precinct. Envisaged as a commercial strip on both sides of a main road, it has retained much of its integrity. Unlike other Federation-style shops, which are limited to one side of the main road, The Strand is a planned commercial area within the Malvern Hill Estate, segregated from residential areas and lacking pubs or hotels. This reflects the estate owners' vision for a garden suburb.

Developed by a single owner, the IILBC, The Strand is possibly the largest group of shops built by one owner, with none demolished. It stands out as a distinct commercial precinct from the Federation era in the Burwood LGA, making it a rare and unique example of its type. It is the only one of its type across the local area.

Proposed Boundary of the Group Heritage Item

The proposed heritage boundary of The Strand is shown in Figure 19 which takes into consideration significant views of The Strand, its setting and contextual relationships with its surrounding.

Located adjacent to Croydon Station, The Strand exhibits strong aesthetic qualities that contribute to its setting and broader context. Notable views include the southwest vista from the railway station, which frames the former Post Office (No. 1 The Strand) and the former Butchery (No. 2 The Strand) at the junction of The Strand. These landmark buildings function as visual markers and provide a principal entry point into the commercial precinct. While views from the south are of lesser significance, the presentation of each streetscape along The Strand contributes to the overall character of the precinct.



Figure 19: Proposed Boundary of the Group Heritage Item (Source: GML, 2025)

The planning proposal is consistent with Direction 3.2 Heritage Conservation.

7.1 Employment Zones

The objectives of this Direction are to encourage employment growth in suitable locations, protect employment land in employment zones, and support the viability of identified centres.

As part of a planning proposal applying to Employment Zones, a planning proposal must retain the areas and locations of Employment zones, and not reduce the total potential floor space area for employment uses and related public services in Employment Zones.

This planning proposal is consistent with the objectives of this Direction as the planning proposal applying to the Employment Zone does not propose to alter the catchment of the employment zone and /or reduce the total potential floor space area for employment uses and related public services.

The subject sites are located within the Malvern Hill Heritage Conservation Area and are zoned E1 Local Centre, under the Burwood LEP 2012. With the proposed heritage listing of the properties within E1 Local Centre, the planning proposal intends to identify items of heritage significance and allow their appropriate integration in the future development of The Strand.

The planning proposal is consistent with Direction 7.1 Employment Zones.

Section C – Environmental, Social and Economic Impact

8. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected because of the proposal?

No. There is no known critical habitat or threatened species, populations or ecological communities, or their habitats affected by the planning proposal.

9. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

No. There are no other likely environmental effects as a result of the planning proposal, such as flooding, landslip, bushfire hazard and the like.

10. How has the planning proposal adequately addressed any social and economic effects?

The planning proposal is considered to have positive social effect for the community, as it will enhance the protection and retention of local heritage, and will ensure best practice urban design and development that retains character of The Strand as part of its future redevelopment.

The objectives of the planning proposal is to identify significant elements within The Strand to list within Council's Local Environmental Plan as local heritage item so that sensitive integration of heritage is possible in future development of The Strand.

The planning proposal is not expected to have any adverse social or economic effects.

Section D – Infrastructure (Local, State and Commonwealth)

11. Is there adequate public infrastructure for the planning proposal?

The proposal seeks to list the subject sites as a group heritage item in Schedule 5 of the Burwood LEP 2012. As a result, it does not have the potential to increase the current demand on public infrastructure.

Section E – State and Commonwealth Interests

12. What are the views of state and federal public authorities and government agencies consulted in order to inform the Gateway determination?

Pre Gateway consultation

The proposal is minor in nature and as such, no State or Commonwealth authorities have been consulted as part of the preparation of this planning proposal.

Post Gateway consultation

Following the receipt of any Gateway Determination, Council proposes to seek the views of the following state and federal public authorities and government agencies:

- Heritage NSW
- TfNSW

Part 4 – Maps

The planning proposal seeks to amend the existing Heritage Map (ref: 1300 COM HER 001 010 20240603) to list 1-50 The Strand as a group heritage item.

The planning proposal does not seek to alter the zoning, height of buildings, floor space ratio, or any other Burwood LEP maps.

FIGURE 20: Existing Heritage Map

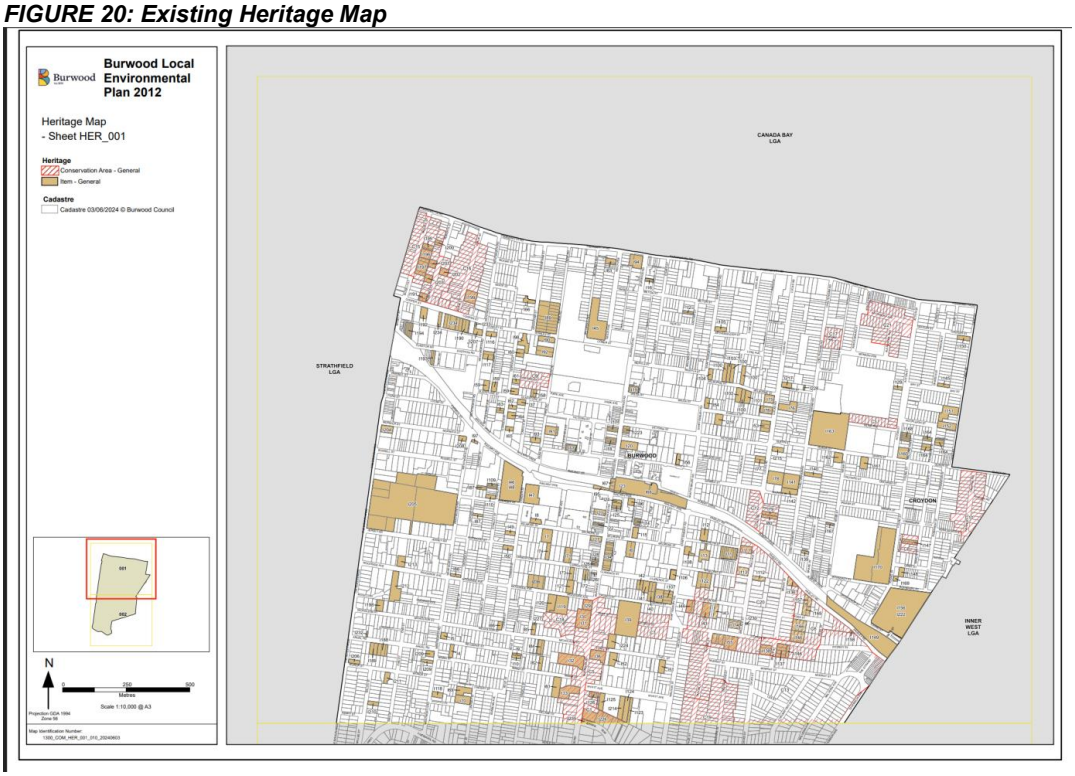


FIGURE 21: Proposed Heritage Map

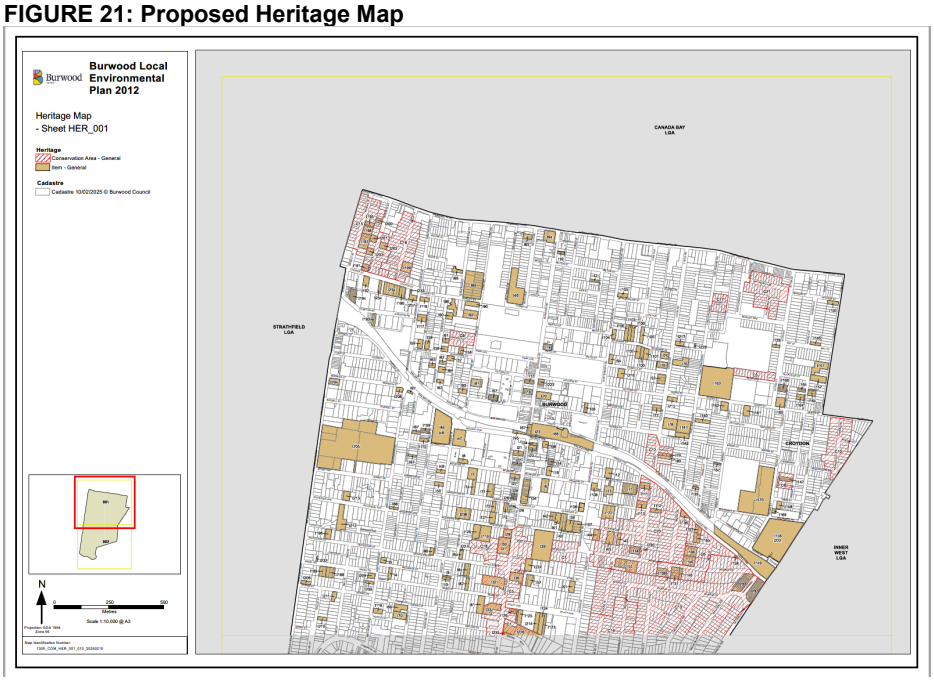
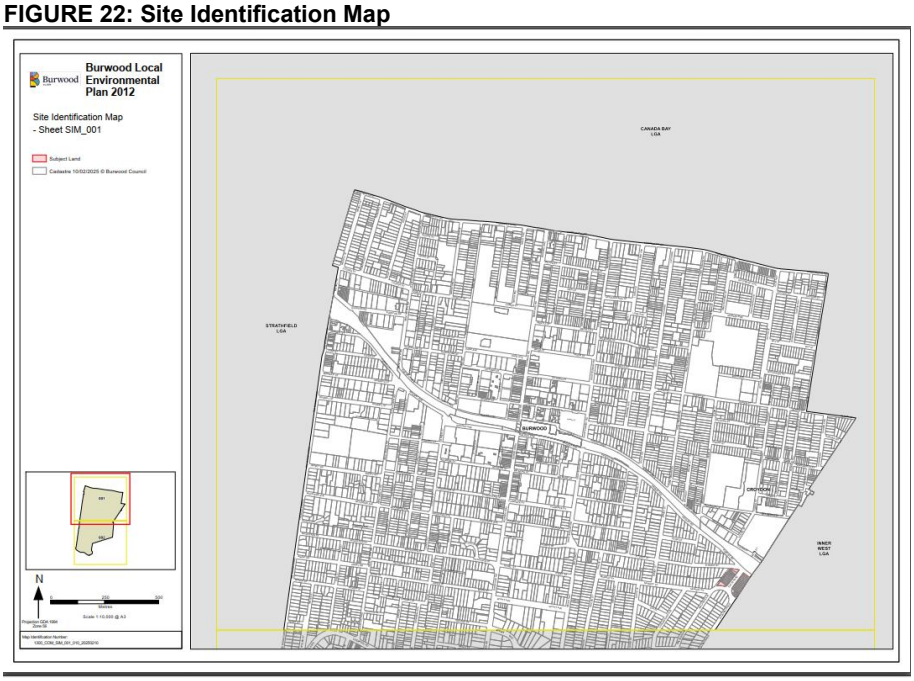


FIGURE 22: Site Identification Map



Part 5 – Community Consultation

It is proposed to publicly exhibit the planning proposal for 28 days in accordance with NSW Department of Planning & Environment's "A Guide to preparing local environmental plans." The planning proposal will be available to view on Council's website and the community will be notified through Council's newsletters. Affected property owners and adjoining landowners will be notified. The Burwood District Historical Society and National Trust will also be notified. This section will be further updated once a formal community consultation has been completed following the receipt of the Gateway Determination.

Early engagement

On 15 August 2025, early engagement notification letters were sent out to the property owners in The Strand who would be directly impacted by the proposed heritage listing. The intent of the notification letter was to inform the property owners of Council resolution of 29 January 2025, the Heritage Assessment report prepared by GML and the commencement of pre-engagement for the proposed group heritage listing.

The objective of undertaking early engagement was to gather feedback from the affected property owners and the wider community on the proposed group heritage listing of The Strand prior to reporting the matter to the Burwood Local Planning Panel.

A dedicated section was established on Council's online platform, *Participate Burwood* with the following documents being displayed for review and submission:

- Heritage Assessment Report of the Strand, GML Aug 2025
- Draft Heritage Inventory Sheet, GML Aug 2025
- Site Identification Map
- Proposed amendments to the Heritage Map of the Burwood LEP 2012

Email correspondence was sent to Inner West Council, the Burwood & District Historical Society, and local Councillors to advise them of the proposed group heritage listing and the accompanying GML report, and to invite their feedback.

Early engagement commenced on 18 August and concluded on 22 September 2025. During this period, a total of 23 submissions were received. 19 submissions were received via online *Participate Burwood* platform, and (4) four submissions were received as direct email correspondence to Council which included the submissions from the Burwood & District Historical Society and the NSW National Trust of Australia.

None of the submissions received objected to the proposed group heritage listing of The Strand. Table 8 below details the submissions received:

Table 8: Summary of key matters noted in early engagement submissions

Submissions	Support (Y/N)	Summary of Submission received	Council response
Submission 1	Y	The submission strongly supports the proposal for group heritage listing of the Strand.	Noted

Submission 2	Y	The submission supports the independent and comprehensive assessment of The Strand and the proposed group heritage listing. The submission emphasises that the current status of the Strand as a Heritage Conservation Area is unable to provide legal protection the precinct deserves and that only formal heritage listing can ensure long-term protection and integrity of The Strand. The submission also recommends that Council explore support measures for property owners, such as reduced development fees, a central contact point, and access to grant opportunities.	Noted. Matters relating to heritage development applications and relevant fees are reviewed on a case-by-case basis. All development application related queries are taken by Council's duty planning officer. Any specific queries regarding heritage Development Applications (DAs) can be further discussed with Council's Senior Heritage Planner. Recommendation in relation to grant funding will be further explored by Council as part of future heritage conservation initiatives.
Submission 3	Y	The submission supports the proposed group heritage listing of The Strand. Concern is raised in relation to future maintenance of the heritage value of The Strand and that it should not put significant burden on rate payers.	Council's Local Environmental Plan contains provisions that enable the sustainable redevelopment of heritage items through adaptive reuse, supporting their ongoing maintenance and long-term viability. Any future development applications proposing adaptive reuse will be considered and assessed on a case-by-case basis, guided by Council's heritage advisor.
Submission 4	Y	The submission strongly supports the proposal for group heritage listing of the Strand.	Noted
Submission 5	Y	The submission strongly supports the proposal for group heritage listing of the Strand.	Noted

Submission 6	Y	The submission supports the assessment undertaken by GML, the extent of the heritage boundary and the proposed group heritage listing of the Strand. It supports the recommendation that a conservation management plan be prepared for the ongoing protection of the Strand. The submission commends Council for initiating the heritage listing of the Strand.	The preparation of a Conservation Management Plan is a recognised approach to protecting and maintaining heritage items. Council's Local Environmental Plan also provides for the sustainable redevelopment of heritage items through adaptive reuse, helping to ensure their ongoing upkeep and long-term viability. As part of any future development, a Conservation Management Plan or Strategy will be required to accompany a Development Application. In addition to the heritage assessment, Council will undertake further specialist studies in accordance with Council's resolution to undertake a precinct-specific study of The Strand. Future Conservation Management Plans or Strategies will be guided by the recommendations of this further work and the community will be consulted accordingly.
Submission 7	Y	The submission supports the proposal for group heritage listing of the Strand.	Noted
Submission 8	Y	The submission supports the proposal for group heritage listing of the Strand.	Noted
Submission 9	Y	The submission supports the proposal for group heritage listing of the Strand.	Noted
Submission 10	Y	The submission supports the proposal for group heritage listing of the Strand and commends Council on this initiative.	Noted

Submission 11	Y	The submission commends Council's initiative on protecting the Strand via a group heritage listing. It recommends that individual heritage listing would assist with a reduced land tax for individual property owner.	The proposed group heritage listing aligns with the recommendations of the 2025 GML Heritage Assessment. Its purpose is not to limit future redevelopment opportunities along The Strand, and as such, the listing is not expected to affect land value or associated land tax. Council's Local Environmental Plan includes provisions that encourage the sustainable redevelopment of heritage items through adaptive reuse, ensuring their ongoing maintenance and long-term viability. Development applications seeking adaptive reuse will continue to be reviewed and assessed on a case-by-case basis.
Submission 12 (Burwood and District Historical Society)	Y	The Burwood & District Historical Society strongly supports the proposed heritage listing of The Strand, Croydon and the proposed boundary for the listing. The Historical Society supports the findings of GML Heritage Assessment which states: "*that The Strand, Croydon meets the threshold for heritage listing under the historic, associative, aesthetic, social, representative and rare criterion of the NSW Heritage Assessment Criteria. These attributes are contributory to, but distinct from, the values of the Malvern Hill HCA as a whole*." The report highlights The Strand's rarity as a retail precinct predominantly developed by a single developer in the early 20th century, giving it a unique and cohesive character. In addition to supporting the listing, the Society recommends the preparation of a Conservation	Council acknowledges and appreciates the support of the Burwood & District Historical Society for the proposed heritage listing of The Strand. Council also notes the recommendation for the preparation of a Conservation Management Plan (CMP) to guide future development. The preparation of a CMP is a recognised mechanism to protect and maintain heritage items and will form an important part of the ongoing management of The Strand. Council's Local Environmental Plan includes provisions that enable sustainable redevelopment of heritage items through adaptive reuse, ensuring their ongoing maintenance and long-term viability. As such, any future development applications involving The Strand will be required to include a Conservation Management Plan

		Management Plan to guide future development and ensure the long-term protection, maintenance, and integrity of The Strand's heritage significance.	or Strategy for assessment. Further, Council has also commissioned additional studies on the Character Area, Built Form Testing, and a Public Domain Plan for The Strand. These specialist reports will inform the preparation and assessment of future CMPs to ensure that redevelopment is balanced with the protection and enhancement of The Strand's heritage significance.
Submission 13 (The National Trust of Australia)	Y	The National Trust of Australia (NSW) commends Council on the proposed listing of The Strand on the Local Environmental Plan and supports the proposed listing. The National Trust agrees with the Heritage Assessment undertaken by GML Heritage that states: *"The Strand, Croydon meets the threshold for heritage listing under the historic, associative, aesthetic, social, representative and rare criterion of the NSW Heritage Assessment Criteria. These attributes are contributory to, but distinct from, the values of the Malvern Hill HCA as a whole."*	Noted
Submission 14	Y	The submission supports the proposal for group heritage listing of the Strand. It was developed by a single owner and continues in place unchanged and together with the adjoining Malvern Heritage Estate presents a model suburb layout which was unusual at the time.	Noted
Submission 15	Y	The submission supports the proposal for group heritage listing of the Strand.	Noted

Submission 16	Y	The submission supports the proposal for group heritage listing of the Strand due to its unique character and rarity.	Noted
Submission 17	Y	The submission supports the proposal for group heritage listing of the Strand due to its unique character and suburban charm.	Noted
Submission 18	Y	The submission strongly supports the proposal for group heritage listing of the Strand, an area of historic significance that is well used by the local community and visitors equally.	Noted
Submission 19 (Burwood and District Historical Society)	Y	The author of "The Model Suburb: A History of the Malvern Hill Estate, Croydon NSW" has expressed strong support for Council's proposal to group list The Strand shops as a heritage item, noting this will further strengthen protections of the Strand. The submission emphasises that the detailed studies underpinning Council's proposal provide clear evidence of The Strand's heritage significance and its contribution to the integrity of the Malvern Hill Estate. The submission commends Council's initiative and advises that the Burwood Historical Society intends to propose State heritage listing for the entire Malvern Hill Estate.	Council notes that the process for State heritage listing is the responsibility of the NSW Heritage Office. While Council does not have the authority to initiate or determine State heritage listings, it is more than willing to review and consider any proposal prepared by a qualified heritage consultant.
Submission 20	Y	The submission supports the proposal for group heritage listing of the Strand which is unique to the Inner West and important to the community's wellbeing as a gathering place. It proposes that allowing development within and around will change the character of the place.	Council acknowledges community concerns that allowing new development within and around The Strand may adversely affect the character of this important precinct. Council's adopted Croydon Masterplan provides for a maximum height of four storeys, a scale that has been deliberately set to facilitate

			sustainable change while not detracting significantly from the existing heritage character and village atmosphere. The current heritage assessment represents the first step in formally identifying and acknowledging the elements of The Strand that are of greatest importance to the community. In line with Council's resolution of 29 January 2025, further detailed planning work is underway, including the preparation of a Local Area Study and built form controls for The Strand. These measures will ensure that any future redevelopment occurs in a manner that is sympathetic to the precinct's heritage significance, while also supporting its long-term vitality and liveability. Through this approach, Council seeks to balance the need for managed renewal with the protection of the cultural and historic values that make The Strand a distinctive and valued place.
Submission 21	Y	The submission supports the proposal for group heritage listing of the Strand	Noted
Submission 22	Y	The submission supports the proposal.	Noted
Submission 23	Y	The submission supports the proposal and commends Council for its initiative.	Noted

Part 6 – Project Timeline

The project timeline is outlined below:

Table 9: Project Timeframe

Submit to DPHI seeking a Gateway Determination	Oct 2025
Receive Gateway Determination	Nov 2025
Public Exhibition	Jan/Feb 2025
Review of Public Submissions and Post Exhibition Report to Council	Feb 2025
Seek Parliamentary Counsel Office's (PCO) opinion	March 2025
Submit maps for DPE review	April 2025
Gazettal of LEP amendment	May 2025

Appendix

Attachment 1 - Final Heritage Assessment of The Strand, GML, August 2025 (presented as a separate document in Planning Portal)

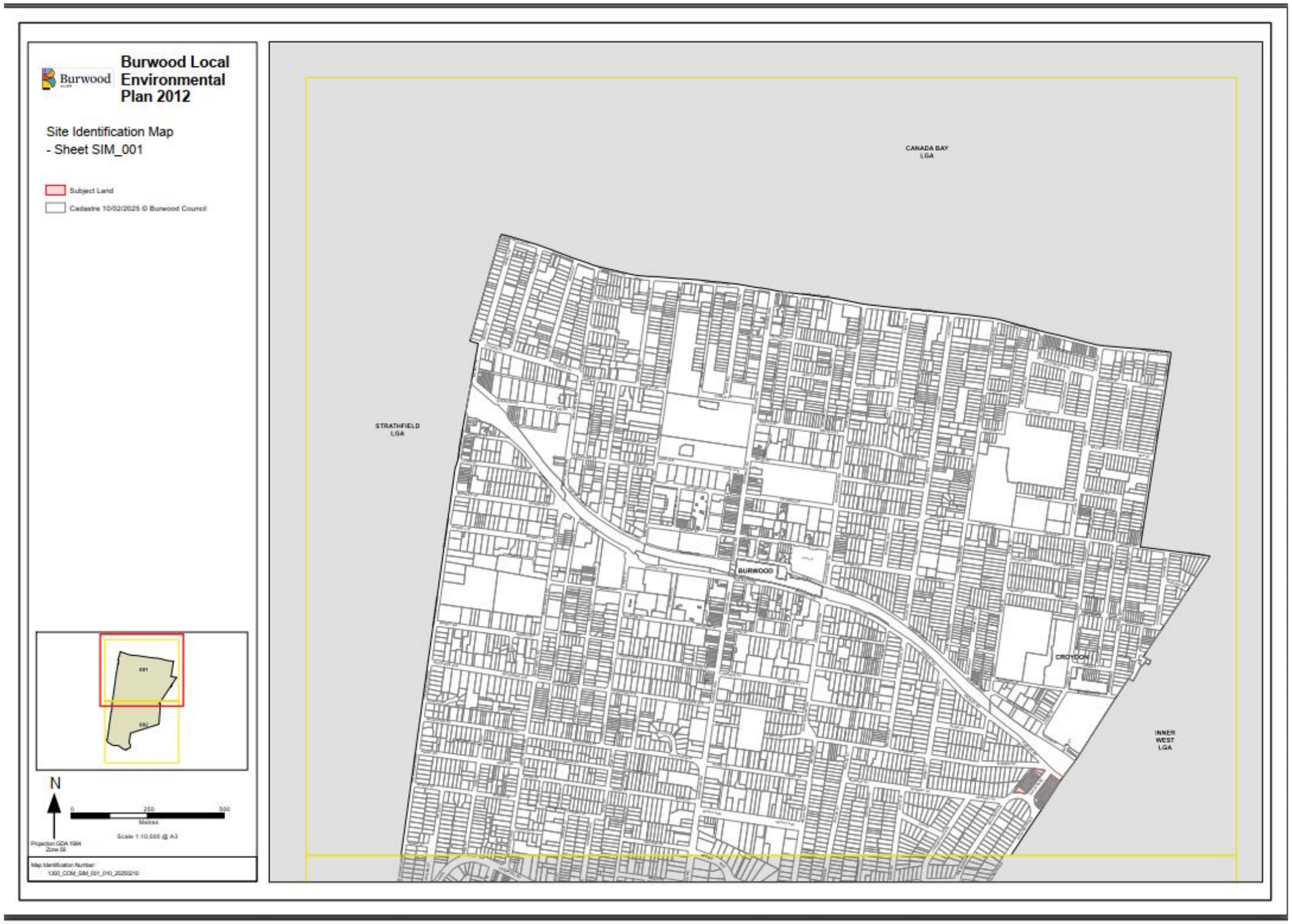
Attachment 2 - Council Report - Extraordinary Meeting of 29 January 2025 (presented as a separate document in Planning Portal)
Agenda of Burwood Council Meeting - Wednesday, 29 January 2025

Attachment 3 - Minutes of Council's Extraordinary Meeting of 29 January 2025 (presented as a separate document in Planning Portal)
Minutes of Burwood Council Meeting - Wednesday, 29 January 2025

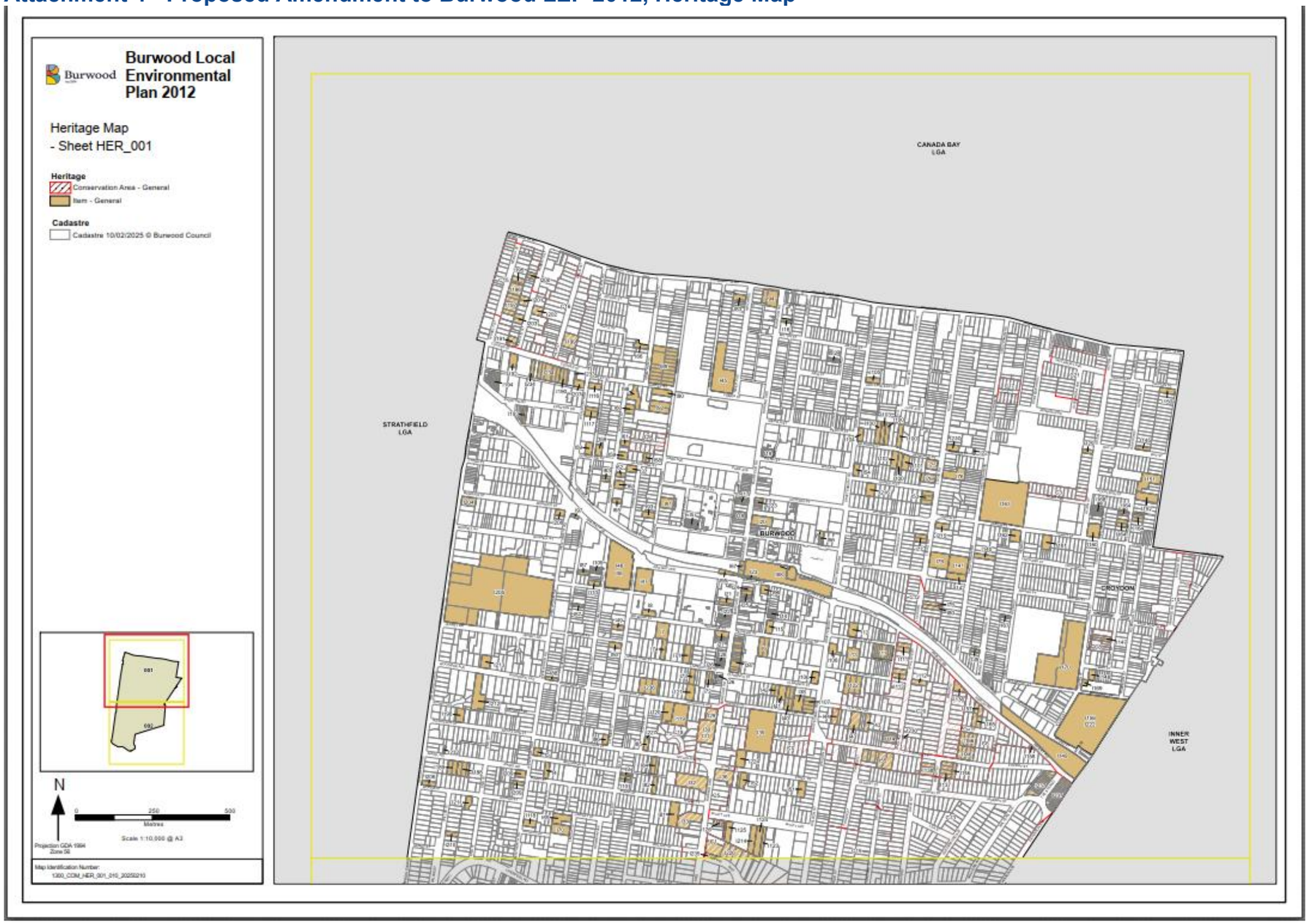
Attachment 4 - Site Identification Map

Attachment 5- Proposed Amendment to Burwood LEP 2012, Heritage Map

Attachment 4 - Site Identification Map



Attachment 4 - Proposed Amendment to Burwood LEP 2012, Heritage Map





The Strand, Croydon

Heritage Assessment

Prepared for Ethos Urban on behalf of Burwood Council

August 2025

GML HERITAGE

Acknowledgement of Country

We respect and acknowledge the Wangal people, their lands and waterways, their rich cultural heritage and their deep connection to Country, and we acknowledge their Elders past and present. We are committed to truth-telling and to engaging with Wangal people to support the protection of their culture and heritage. We strongly advocate social and cultural justice and support the Uluru Statement from the Heart.

Cultural warning

Aboriginal and Torres Strait Islander readers are advised that this report may contain images or names of First Nations people who have passed away.

GML HERITAGE

Report register

The following report register documents the development of this report, in accordance with the GML Heritage Pty Ltd (GML) Quality Management System.

Job No.	Issue No.	Notes/description	Issue date
25-0083	1	Preliminary Draft Report for Lisa Trueman Review	2 May 2025
25-0083	2	Draft Report for Council Review	9 May 2025
25-0083	3	Final Draft Report for Lisa Trueman Review	27 June 2025
25-0083	4	Final Draft Report for Council Review	2 July 2025
25-0083	5	Final Report	4 August 2025

Quality management

The report has been reviewed and approved for issue in accordance with the GML quality management policy and procedures.

It aligns with best-practice heritage conservation and management, *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance, 2013* and heritage and environmental legislation and guidelines relevant to the subject place.

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Cover image

The Strand, Croydon. (Source: GML Heritage)

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Executive summary

Ethos Urban Pty Ltd, on behalf of Burwood Council (Council), has engaged GML Heritage Pty Ltd (GML) to undertake a precinct-specific heritage assessment of The Strand, Croydon, to determine whether it reaches the threshold for listing as a heritage item within Schedule 5 of the *Burwood Local Environmental Plan 2012* (Burwood LEP).

In 2024, the NSW Government introduced the Transport Oriented Development (TOD) program State Environmental Planning Policy (SEPP) for 37 locations, including Croydon Station, to support the objectives of the TOD program which are to:

- increase housing supply in well-located areas;
- enable a variety of land uses (residential, commercial, recreational) within walking distance of train and metro stations;
- deliver housing that is supported by attractive public spaces, vibrancy, and community amenity; and
- increase the amount of affordable housing in these locations.

The first stage of the NSW Government's TOD planning reforms has been implemented through an amendment to the SEPP (Housing) - Chapter 5 Transport Oriented Development (the Housing SEPP). The SEPP includes new standards and changes to planning controls, applicable to heritage conservation areas (HCAs), with merit-based assessments and relevant heritage controls. Council resolved, in part, to undertake a preliminary, in-house assessment to determine whether there are any potential heritage items (including within HCAs) within the Burwood local government area that have not been identified as individual heritage items. The preliminary assessment, undertaken by Council's Heritage Advisor (January 2024), found that The Strand, Croydon (all addresses), is likely to meet the threshold for listing under at least five of the seven standard criteria for heritage listing.

In April 2024, the Croydon rezoning proposal was deferred to allow Council to conduct its own planning process with community involvement. Ethos Urban prepared the Draft Croydon Housing Investigation Area (HIA) Masterplan, which went on public exhibition in late 2024. Following the public exhibition period, Ethos Urban prepared four alternative options that considered feedback from the community. Council adopted Option 4, endorsing a lower-density masterplan near Croydon Station, which was submitted to the NSW Government for consideration in January 2025.

At a council meeting on 29 January 2025, Council resolved at to engage an independent heritage consultant to undertake a precinct-specific heritage assessment of The Strand, Croydon, to determine its level of heritage significance.

This report fulfils the requirements of that resolution. This assessment will support a Planning Proposal to list The Strand as a local heritage item on Schedule 5 under the Burwood LEP.

This report has assessed the heritage significance of The Strand, Croydon, based on historical research, on-site investigation of the subject precinct, a comparative analysis against similar (predominantly locally listed) heritage items, and an assessment against the standard criteria set out in the Heritage NSW Assessing Heritage Significance guidelines.

We conclude that The Strand, Croydon, demonstrates heritage significance at the local level for the following reasons:

- Its historical importance as a distinctive planned and designed commercial area in close proximity to the railway station and residential development for the Malvern Hill Estate that reflects model suburban growth and development during the twentieth century.
- The subject precinct holds strong historical associations with the Intercolonial Investment Land and Building Company and is a good example of a collection of Federation-era shops built by a single owner in Sydney. The built form showcases several architect-designed buildings.
- The subject buildings are good examples of their type and are relatively intact. Though all shops have been altered on the ground floor, the character of the streetscape as a whole is cohesive and consistent. The alterations have been sympathetic and the streetscape is harmonious.
- 1 The Strand, the former post office, has landmark qualities, representing an entrance to the subject precinct.
- It has social value to the community as a local place to gather, shop and socialise.
- The buildings are fine examples of the Federation style and collectively the Strand is unique, having retained much of its integrity. The comparative analysis demonstrates that though there are numerous examples of Federation/interwar shoptop buildings across Sydney, as a collective The Strand is the only one of its kind in its local area.

The following Statement of Significance is provided in Section 5 of the report:

> The Strand, Croydon, has cultural significance at the local level for its historic, associative, aesthetic, social, representative and rare attributes.
>
> The Strand, located adjacent to Croydon Station and developed between 1910 and 1923, has historic significance to the locality of Croydon. It is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. Integral to the model suburb planning of the Malvern Hill Estate, The Strand was specifically designed as the commercial centre for the suburb.

Its planning and segregation from the residential zone of the suburb demonstrates the influence of the garden suburb movement of the early 20th century. The precinct comprises two distinct blocks divided by a wide road with an avenue of palm trees.

The Strand is associated with the Intercolonial Investment Land and Building Company (IILBC). Most of the shops were owned and constructed by the company, making The Strand one of the most substantial groups of Federation-era shops built by a single owner in Sydney. The IILBC was instrumental in recognising, developing and marketing the precinct. The Strand is also a good example of a precinct featuring buildings designed by well-regarded architectural firms/architects of the period including Ross & Rowe, Booker and Wilson, Spencer and Spencer, and Charles H Christian.

The Strand is a broad, elegant shopping area that significantly enhances the Federation-style character of Malvern Hill Estate. Its aesthetic appeal is defined by its street layout, pattern and form, complemented by public domain and lineal plantings, with varied building forms including its curvilinear shape, unified parapets, and characterful streetscapes on both sides. Despite refurbishments, the original design intent remains clear, preserving the precinct's aesthetic significance and integrity. Notable landmarks such as the former post office at 1 The Strand contribute to its distinctive character. The intactness of original Art Nouveau features, such as leadlight glass and tile patterns, add to the sensory appeal.

Designed as a distinct commercial precinct within a garden suburb, The Strand has retained its original and historic commercial function. The Strand is representative of a collection of good-quality Federation and early interwar two-storey shoptop buildings developed adjacent to a railway station. It contributes greatly to the Federation-style character of the wider suburb. The buildings comprising The Strand are substantially intact and demonstrate high integrity. It has maintained its aesthetic character with street planning and planting.

The Strand has social value as a community centre which has been a local place to gather, shop and socialise since the 20th century. While not a formal social values assessment, the recent public exhibition process of the Alternative Croydon TOD Masterplan demonstrates that there is community affinity for The Strand and desire for its conservation.

The Strand is a rare example of a highly intact Federation-era commercial precinct. Envisaged as a commercial strip on both sides of a main road, it has retained much of its integrity. Unlike other Federation-style shops, which are limited to one side of the main road, The Strand is a planned commercial area within the Malvern Hill Estate, separated from residential areas and without pubs or hotels. This reflects the estate owners' vision and influences of the garden suburb movement.

Developed by a single owner, the IILBC, The Strand is possibly the largest group of shops built by one owner, with none demolished. It stands out as a distinct commercial precinct from the Federation era in the Burwood LGA, making it a rare and unique example of its type. It is the only one of its type across the local area.

The assessment concludes that The Strand, Croydon, warrants being added to Schedule 5 of the Burwood LEP as a group item of local heritage significance.

Contents

1 Introduction 1
1.1 Background 1
1.2 Identification of the precinct 3
1.3 Heritage context 7
1.4 Methodology 8
1.5 Limitations 9
1.6 Authorship and acknowledgements 9
1.7 Endnotes 9

2 Statutory context 10
2.1 Introduction 10
2.2 Heritage Act 1977 10
2.3 Environmental Planning and Assessment Act 1979 10
2.3.1 State Environmental Planning Policy (Housing) Amendment (Transport Oriented Development) 2024 10
2.4 Burwood Local Environmental Plan 2012 11
2.5 Burwood Development Control Plan 11

3 Historical overview 13
3.1 Introduction 13
3.2 Aboriginal history 13
3.3 Early land grants and European occupation 14
3.4 The Strand 22
3.4.1 Historical aerial images 29
3.5 Intercolonial Investment Land and Building Company Limited 32
3.6 Endnotes 32

4 Site analysis 34
4.1 Site and setting 35
4.2 Detailed features (selected) 38

5 Assessment of significance 41
5.1 Integrity 41
5.2 Comparative assessment 42
5.2.1 Comparative analysis conclusion 52
5.3 Garden Suburb Movement 53
5.4 Assessment against standard criteria 54
5.4.1 Criterion A (historic significance) 54
5.4.2 Criterion B (historical association) 56
5.4.3 Criterion C (aesthetic/creative/technical achievement) 57
5.4.4 Criterion D (social, cultural and spiritual significance) 58
5.4.5 Criterion E (research potential) 59
5.4.6 Criterion F (rarity) 60
5.4.7 Criterion G (representativeness) 61
5.5 Statement of Significance 63
5.6 Proposed boundary of heritage item 64
5.7 Endnotes 65

6 Conclusions and recommendations 66
6.1 Conclusions 66
6.2 Recommendations 67
6.2.1 Recommended management guidance 68

Appendix A—Summary histories of individual properties on The Strand 71

1 Introduction

1.1 Background

Ethos Urban Pty Ltd, on behalf of Burwood Council, has commissioned GML Heritage Pty Ltd (GML) to undertake a heritage assessment of The Strand, Croydon, to determine whether it reaches the threshold under one or more of the assessment criteria for listing as a heritage item under Schedule 5 of the *Burwood Local Environmental Plan 2012* (Burwood LEP).

In 2024, the NSW Government announced the Transport Oriented Development (TOD) program State Environmental Planning Policy (SEPP) to be applied to 37 locations around NSW, including Croydon Station. The locations were identified to support the objectives of the TOD program which are to:

- increase housing supply in well-located areas;
- enable a variety of land uses (residential, commercial, recreational) within walking distance of train and metro stations;
- deliver housing that is supported by attractive public spaces, vibrancy, and community amenity; and
- increase the amount of affordable housing in these locations.

The first stage of the NSW Government's TOD planning reforms has been implemented through an amendment to the SEPP (Housing) - Chapter 5 Transport Oriented Development (the Housing SEPP). The SEPP includes new standards and proposed changes to planning controls that will be applicable to heritage conservation areas (HCAs). Additionally, the NSW Government has said that a merit-based assessment will continue to apply to developments in these locations and relevant heritage controls will apply to the extent they are not inconsistent with the new standards.

The NSW Government announced in April 2024 that it would defer the Croydon rezoning proposal, to allow Burwood Council (Council) to undertake its own planning process with community involvement to inform future urban renewal in the area. Ethos Urban prepared the Draft Croydon Housing Investigation Area (HIA) Masterplan, which went on public exhibition in late 2024. Following the public exhibition period, Ethos Urban prepared four alternative options that considered feedback from the community. Of these, Council resolved to adopt Option 4 and in January 2025 endorsed a refined, lower-density masterplan near Croydon Station. Option 4 was submitted to the NSW Government for consideration as an alternative to the TOD program .

As part of this submission, Council has resolved to undertake a precinct-specific heritage assessment for The Strand in the Burwood local government area (LGA), zoned E1, to identify opportunities to preserve and strengthen the character provision in the *Burwood Development Control Plan* (DCP). Council intends for the assessment to support the lodgement of a Planning Proposal to list The Strand as a local heritage item under the Burwood LEP.

Prior to this, Council has undertaken a preliminary heritage assessment [1] to determine whether there are any potential heritage items (including within HCAs) that are within the Burwood LGA and have not been identified as individual heritage items.

This study noted the intactness of the HCAs to be potentially impacted by the TOD and includes mapping of HCA areas impacted for contributory, potential neutral and potential non-contributory buildings. The Strand, which is included in the Malvern Hill HCA, has been listed as a potential new heritage item including 1 The Strand (former post office) and 27 The Strand (interwar service station).

The approach, methodology, assessment procedures, criteria and recommendations of the report are in accordance with the *Australia ICOMOS Charter for Places of Cultural Significance, 2013* (the Burra Charter) and with *Assessing Heritage Significance: Guidelines for Assessing Places and Objects against the Heritage Council of NSW Criteria* (Assessing Heritage Significance guidelines) prepared by the former NSW Department of Planning and Environment (now the Department of Planning, Housing and Infrastructure).

This report has been prepared to align with the following Council Resolutions of the Minutes of the Extraordinary Meeting held on 29 January 2025:

> 2. a) Council's engaged consultants commence a precinct-specific study for The Strand, Croydon, in the Burwood LGA zoned E1 area to identify opportunities to preserve and strengthen the character provisions in the DCP.
>
> b) Council request the NSW Department of Planning Housing and Infrastructure and NSW Minister for Planning and Public Space as part of the submission, to list The Strand, Croydon, in the Burwood LGA zoned E1 as local heritage item group under the Burwood Local Environmental Plan 2012. In the event the Minister declines the request for immediate heritage listing, Council commence a heritage review to progress the heritage listing process via a Planning Proposal.

1.2 Identification of the precinct

The subject precinct is The Strand, Croydon, within the Municipality of Burwood, and is located approximately 12 kilometres east of the Sydney CBD (Figure 1.1).



Figure 1.1 Site location map showing the location of Croydon in the context of the Inner West and wider Sydney. (Source: Google Maps with GML overlay)

The site is on the southern side of Croydon Station and comprises two blocks on the eastern and western sides of The Strand. The eastern block is bounded by Paisley Road to the north, Paisley Lane to the east and Thomas Street to the south. The western block is bounded by Fitzroy Street to the north, Post Office Lane to the west and Malvern Avenue to the south (Figure 1.2).



Figure 1.2 Location map of The Strand in the context of Croydon Station. (Source: Nearmap with GML overlay)

The subject precinct includes 34 individual properties from 1–50 The Strand, which comprise commercial tenancies on the ground level and residential properties above. Tables 1.1 and 1.2 list the properties in the western and eastern blocks respectively.

Table 1.1 Properties of the eastern block.

Address	Lot/Deposited Plan (DP)	Current zoning, Burwood LEP 2012
2 The Strand 2A The Strand	4/C/DP5613	E1 Local Centre
4–6 The Strand	5/C/DP5613 6/C/DP5613	E1 Local Centre
8–10 The Strand	7/C/DP5613 8/C/DP5613	E1 Local Centre
12 The Strand	1//DP255125	E1 Local Centre
14 The Strand	2//DP255125	E1 Local Centre
16 The Strand	3//DP255125	E1 Local Centre
18 The Strand	4//DP255125	E1 Local Centre

Address	Lot/Deposited Plan (DP)	Current zoning, Burwood LEP 2012
20 The Strand	5//DP255125	E1 Local Centre
22 The Strand	6//DP255125	E1 Local Centre
24 The Strand	7//DP255125	E1 Local Centre
26 The Strand	8//DP255125	E1 Local Centre
28 The Strand	9//DP255125	E1 Local Centre
30 The Strand	10//DP255125	E1 Local Centre
32 The Strand	11//DP255125	E1 Local Centre
34–36 The Strand 38 The Strand	12//DP255125	E1 Local Centre
40–42 The Strand	13//DP255125	E1 Local Centre
44 The Strand	14//DP255125	E1 Local Centre
46 The Strand	15//DP255125	E1 Local Centre
48 The Strand	16//DP255125	E1 Local Centre
50 The Strand	17//DP255125	E1 Local Centre

Table 1.2 Properties of the western block.

Address	Lot/DP	Current zoning, Burwood LEP 2012
1–1A The Strand	1/D/DP5613 2/D/DP5613	E1 Local Centre
3 The Strand	1//DP255126	E1 Local Centre
5 The Strand	21//DP719900	E1 Local Centre
7 The Strand	22//DP719900	E1 Local Centre
9 The Strand	3//DP255126	E1 Local Centre
11 The Strand	4//DP255126	E1 Local Centre
13 The Strand	5//DP255126	E1 Local Centre
15 The Strand	6//DP255126	E1 Local Centre
17 The Strand	7//DP255126	E1 Local Centre
19 The Strand	8//DP255126	E1 Local Centre
21 The Strand	9//DP255126	E1 Local Centre
23 The Strand	10//DP255126	E1 Local Centre

Address	Lot/DP	Current zoning, Burwood LEP 2012
25 The Strand	11//DP255126	E1 Local Centre
27 The Strand	14/D/DP5613	E1 Local Centre

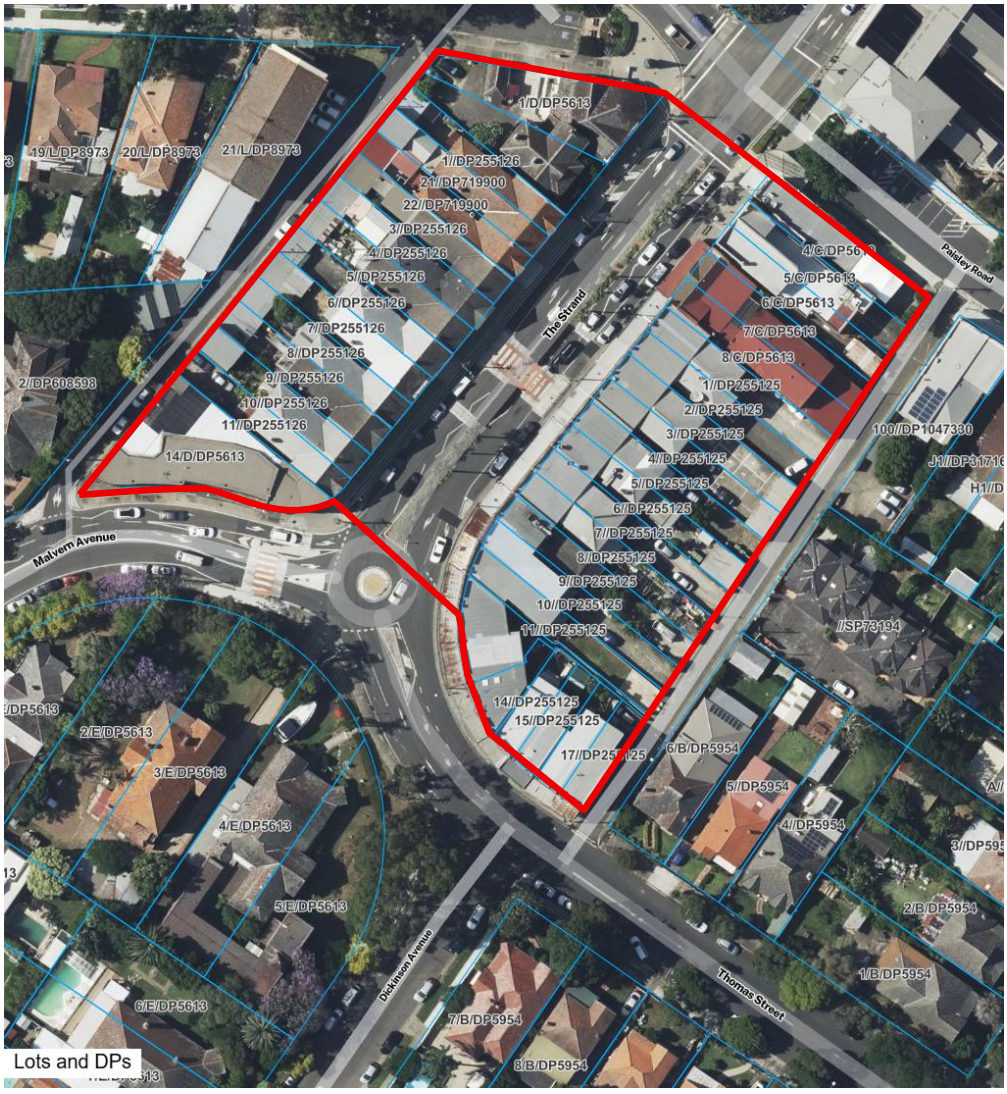


Figure 1.3 Lot and DP map of The Strand. (Source: Spatial Services, Department of Customer Service NSW, with GML overlay)

Further details are provided in Section 4 and Appendix A of this report.

1.3 Heritage context

The subject precinct is not individually listed as an item under the Burwood LEP 2012. However, it is located within the Malvern Hill HCA (C13). The area was initially listed as Malvern Hill Estate in the Burwood LEP 1989.

The Statement of Significance for the Malvern Hill HCA, extracted from the NSW State Heritage Inventory (SHI), is as follows:

> The Malvern Hill Estate is of local significance because together with Appian Way, the Badminton Road to Culdees Road Conservation Area, the Wallace and Brady Streets Conservation Area, and the Mosely and Roberts Streets Conservation Area, it is a key part of what distinguishes Burwood from other parts of Sydney and containing good quality Federation housing, street planning and planting, and as an example of an early model suburb.
>
> It is highly intact relatively large area of quality Federation and California Bungalows on substantial blocks of regular size together with an integral neighbourhood shopping centre divided by wide tree lined streets presenting cohesive but varied streetscapes.
>
> Malvern Hill has connections with a number of important Sydney people and a number of well-known architects. The areas' particular scale and detail presents a highly desirable area for family living.

The closest heritage item to the subject precinct, being Croydon Railway Station Group (State Heritage Register (SHR) ID 01125), is located to the north of the subject precinct.



Figure 1.4 Heritage map showing the subject precinct (outlined in dark blue), local heritage items (shaded ochre), HCAs (hatched in red) and SHR items (hatched in blue). (Source: NSW Planning Portal Spatial Viewer with GML overlay, 2025)

The site is also adjacent to the Cintra Estate HCA (C6) and Wallace and Brady Streets HCA (C20) to its west and Gads Hill HCA (C40) to its east, which is listed on the Inner West LEP 2022.

1.4 Methodology

This heritage assessment uses methodology and terminology consistent with the guidelines of the Burra Charter[2] and with the (former) NSW Department of Planning and Environment guidelines, including the Assessing Heritage Significance guidelines.[3]

This report acknowledges the preliminary heritage assessment[4] undertaken by Burwood Council (dated January 2024) that identifies The Strand, Croydon, including 1 The Strand (former post office) and 27 The Strand (interwar service station) as potentially meeting the threshold for local heritage listing.

1.5 Limitations

This report was subject to the following limitations:

- All properties were inspected from the public domain only. No comprehensive inspection of interiors was undertaken though views of some ground-floor interiors were possible from the public domain. No inspection of any first floors were undertaken.
- Historical research was undertaken as a desktop activity. Limited additional archival research has been undertaken.
- The assessment of Aboriginal cultural heritage values, historical archaeological values, or social values did not form part of this assessment.
- Detailed heritage assessment of the individual properties of the subject precinct has not been undertaken.

1.6 Authorship and acknowledgements

This report has been prepared by Adiba Rahman, GML Heritage Consultant, with review and input from Julian Siu, GML Principal. The historical overview was prepared by Léonie Masson, GML Associate and Historian. Strategic review has been provided by Sharon Veale, GML CEO and Partner.

Lisa Trueman, from Lisa Trueman Heritage, has provided strategic input and review.

Katarzyna Malicka (Local Heritage Librarian, Burwood Library) and John Johnson (Burwood and District Historical Society) provided valuable input to the historical overview.

1.7 Endnotes

[1] Croydon Transport Oriented Development – Preliminary Heritage Assessment, prepared by Gavin Patton, Burwood Council, dated January 2024.

[2] Australia ICOMOS Inc, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013*, Australia ICOMOS Inc, Burwood, VIC, 2000.

[3] Department of Planning and Environment 2023, *Assessing Heritage Significance: Guidelines for Assessing Places and Objects against the Heritage Council of NSW Criteria,* <https://www.environment.nsw.gov.au/sites/default/files/assessing-heritage-significance-guidelines-assessing-places-objects-against-criteria-230167.pdf>.

[4] Croydon Transport Oriented Development – Preliminary Heritage Assessment, prepared by Gavin Patton, Burwood Council, dated January 2024.

2 Statutory context

2.1 Introduction

In NSW, items of built heritage significance are afforded statutory protection under the following New South Wales Acts:

- *Heritage Act 1977* (Heritage Act); and
- *Environmental Planning and Assessment Act 1979* (EPA Act).

2.2 Heritage Act 1977

The Heritage Act is a statutory tool designed to conserve the state's environmental heritage. It is used to regulate the impacts of development on the state's heritage assets. The Heritage Act describes a heritage item as 'a place, building, work, relic, moveable object or precinct'.

The subject precinct is not listed on the SHR. Croydon Railway Station Group, listed on the SHR, is in the vicinity of the subject precinct.

2.3 Environmental Planning and Assessment Act 1979

The EPA Act is administered by the NSW Department of Planning, Housing and Infrastructure and provides for environmental planning instruments to be made to guide the process of development and land use. The EPA Act also provides for the protection of local heritage items and conservation areas through listing on Local Environmental Plans (LEPs) and State Environmental Planning Policies (SEPPs), which provide local councils with the framework required to make planning decisions.

2.3.1 State Environmental Planning Policy (Housing) Amendment (Transport Oriented Development) 2024

The *State Environmental Planning Policy (Housing) Amendment (Transport Oriented Development) 2024* (TOD) is an amendment of *State Environmental Planning Policy (Housing) 2021*. Under the EPA Act, it is administered by the Department of Planning, Housing and Infrastructure. It applies to land in selected LGAs that has been identified as a TOD area, which is generally land within 400 metres of a railway or metro station. Croydon Station, located in the Burwood LGA, has been identified as a TOD area.

2.4 Burwood Local Environmental Plan 2012

The *Burwood Local Environmental Plan 2012* (Burwood LEP) is the principal environmental planning instrument applying to the land. Schedule 5 of the LEP identifies heritage items (Part 1) and HCAs (Part 2) within the LGA. The objectives of Clause 5.10 are as follows:

(a) to conserve the environmental heritage of Burwood,

(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,

(c) to conserve archaeological sites,

(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

The subject precinct is not individually listed as a heritage item but is located within the Malvern Hill HCA (C13).

2.5 Burwood Development Control Plan

The *Burwood Development Control Plan* (Burwood DCP) details the various standards, policies and guidelines related to construction and development for the Burwood LGA. Section 3.10 applies to the development of heritage items (including potential or draft heritage items), properties in a HCA, and development in the vicinity of a heritage item or a HCA, where the developable property or heritage property is located in a Centre or Corridor.

The objectives of Section 3.10 are as follows:

O1 To support the retention of heritage properties and maintain their heritage significance.

O2 To ensure that alterations or additions to heritage properties are sympathetic to the heritage significance of the property and in keeping with its character.

O3 To ensure that development located in the vicinity of a heritage item is designed and sited in a manner sympathetic to the significance of the heritage property and its setting.

O4 To facilitate adaptive re-use of heritage properties where such a use would contribute to the ongoing maintenance and viability of that item or place.

Section 4.8.2 contains specific objectives and provisions for the Malvern Hill HCA. However, most of these provisions are more applicable to the residential components of the HCA. This section contains some provisions specific for The Strand Shopping Centre (P68 to P79).

P68 Preservation, reinstatement and maintenance of original façades and shopfronts is required.

P69 To achieve appropriate development to the original façades and shopfronts within The Strand, proposals shall satisfy the following aims:

- Preserve and maintain original parapets, with existing detailing, unpainted and free of hoarding and signs.
- Restore and maintain original upper level windows, with alternatives, being sympathetic in scale and proportion.
- Replacement downpipe and guttering to be circular in section.
- Retention of continuous awning at unified heights and fascia to each shop.

P70 First floor balconies should remain open, as important functional and architectural elements of the front façade. Enclosure of balconies will only be permitted if compatibility with original window types can be demonstrated.

P71 Rear elevations and structures are to be treated and maintained in a manner that is of quality and character appropriate to The Strand and its controls.

P72 The profile of the front parapet wall should be maintained as a silhouette against the sky.

P73 The removal of first floor windows that have altered the profile of former openings is encouraged, with the original window to be restored.

P74 The level of overhead awnings above footpath level should match existing.

P75 Overhead awnings shall be of a uniform depth and form to match that predominant within the terrace group, with timber fascia and gutter to be maintained or reinstated on buildings that originally featured a timber fascia, where appropriate.

P76 New shopfronts shall reflect original details and proportions, including the siting of recessed entrance doors.

P77 Gable ends to the roof above eaves level should retain their existing details, where present.

P78 The symmetry about the central shop within each group of three shops shall be maintained, in particular at eaves level, in roof pitch and ridge level.

P79 Visible pitched roofs shall be finished in slate or unglazed "Marseilles" terracotta tiles.

Consistent with Council Resolutions of the Minutes of the Extraordinary Meeting held on 29 January 2025, specific DCP controls for The Strand will be prepared following the Character Study with an aim to identify opportunities to preserve and strengthen the character provisions in the DCP.

3 Historical overview

3.1 Introduction

This section provides an overview of the historical background of the subject precinct. It is based upon secondary sources, supplemented with additional primary research from the National Library of Australia), the State Library of NSW, NSW Land Registry Services and Burwood Council. The principal printed source for background information on the area and subject precinct was the draft history of Malvern Hill written by John Johnson, which is to be published in 2025 by the Burwood and District Historical Society. An invaluable source for the history was a University of Sydney thesis on The Strand Conservation Area, Croydon of Helen Lochhead and Stephen Togher in November 1983. The National Trust of Australia (NSW) Listing Card for the Malvern Hill Conservation Area was also consulted.

Additional details about the construction, development and tenancy of individual properties of The Strand are included in Appendix A.

3.2 Aboriginal history

The Strand is located on the traditional land of the Dharug-speaking Wangal clan. Wangal Country stretched along the southern shore of Parramatta River from Darling Harbour to Parramatta and south to the Cooks River.

On 5 February 1788, Lieutenant William Bradley documented seeing a number of Wangal people along the banks of the river around present-day Mortlake when his party landed to cook breakfast on the shore opposite:

> We made signs to them to come over & waved green boughs, soon after which 7 of them came over in two Canoes & landed near our Boats, they left their spears in the canoes and came to us; we tied beads etc about them & left them our fire to dress their Muscles [sic] which they went about as soon as our Boats put off.[1]

A well-known Wangal man was Bennelong, who was captured with Colbee, a Cadigal man, under orders from Governor Arthur Phillip on 25 November 1789. Bennelong travelled to England with Phillip in December 1792 and returned to the colony with Governor John Hunter in 1795. Following his return, Bennelong was unable to find full acceptance among his countrymen or the Europeans and later died in 1813.

The smallpox epidemic of 1789 is estimated to have killed half of Sydney's Aboriginal population. The Aboriginal people who survived the smallpox outbreak were rapidly dispossessed of their traditional lands including hunting and fishing grounds.

There is scant evidence of the fate of the Wangal people, but survivors of the early contact with Europeans likely intermarried or united with other clans and spread out across the colony.

There are sites related to the Wangal people located along the Cooks and Parramatta rivers.

According to the 2021 Census, there were 33 Aboriginal and/or Torres Strait Islander people living in the Burwood LGA (including much of the suburb of Croydon), making up 0.2% of the population.

3.3 Early land grants and European occupation

The first land grant in the vicinity of The Strand was made in 1794 to Sarah Nelson, the free settler wife of convict Isaac Nelson. She was granted 15 acres (6 hectares) in the vicinity of present-day Malvern and Dickinson avenues. In the same period the governor issued several small grants, ranging from 25 to 30 acres (10–12 hectares), along the Parramatta Road.

On 3 August 1799, Governor John Hunter granted Captain Thomas Rowley 260 acres in the District of Liberty Plains. Rowley's grant (known as Burwood Farm) was situated on the southern side of Parramatta Road and was bordered on the western side by allotments granted to Thomas Rose and Joseph Webb. Rowley increased the size of Burwood Farm in 1803 by adding the grant of Joseph Webb and the end of Rose's 120 acres to it. Rowley used his farm for grazing Merino sheep but did not live there.

The farm was later extended to 750 acres (304 hectares), encompassing most of Burwood and Croydon. In 1812, Rowley's executor illegally sold Burwood Farm to Sydney businessman Alexander Riley. Following Riley's death in 1833, Rowley's heirs successfully challenged the estate and regained ownership of the entire 750 acres granted to Rowley and illegally sold in 1812. Rowley's original farm was then divided among his heirs, John Rowley, Thomas Rowley, John Lucas and Henry Briggs. Subdivision of the estate commenced in 1835.

In November 1808, 1000 acres (405 hectares) was granted to William Faithful, a retired private soldier from the New South Wales Corps. Faithful's Farm, as it was known, was south of Thomas Rowley's 750-acre (303-hectare) Burwood estate and extended from Rowley's property in the north to the Cooks River in the south. Rowley's and Faithful's grants excluded Sarah Nelson's 15 acres.[2]

Augustus Alt was granted 100 acres (40 hectares) to the east of Sarah Nelson's grant in February 1794 and this land known as Hermitage Farm. His farm was attacked by Aboriginal people in 1798 and his house burnt down. He was also granted an adjoining 280 acres (113 hectares). The grants were collectively named Ashfield Park.

During the 1830s and 1840s, the area remained sparsely settled and dominated by farming. A railway station was constructed at Burwood and Ashfield in 1855 after the railway line was constructed from Sydney to Parramatta.

Railway services encouraged subdivision and development in the townships of Burwood and Ashfield, as the wealthy purchased allotments in close proximity to the station and railway corridor. Substantial residences in the area included The Lea, Schuldham Hall and Gads Hill Villa.

The Municipality of Burwood was incorporated in 1874. The following year a new railway station was opened in February 1875 known as Five Dock Platform. This event, in conjunction with the rapid population growth experienced in the colony from 1880, encouraged property speculation and subdivision in the Croydon area. Prominent local residents led by Ashfield Mayor Daniel Holborow and George Hardie of Hardie and Gorman lobbied the Minister of Public Works to make improvements to the railway station including renaming it Croydon. The name change was approved in 1876. According to historian John Johnson, 'the naming of Croydon station and the subdivision of Croydon Park Estate are intimately linked'.[3] A village developed to the north of Croydon Station in Edwin Street.



Figure 3.1 Meta Street overbridge looking southwest towards Dickinson's land after a severe thunderstorm, June 1902. This area was later developed as The Strand and Malvern Hill Estate. (Source: Museums of History NSW, NSW State Archives Collection, NRS-17420-2-29-886/020)



Figure 3.2 View looking north over the future line of Dickinson Avenue towards The Strand and Croydon Station in the aftermath of the hailstorm of 3 June 1902, possibly viewed from the verandah of The Hall. (Source: Burwood and District Historical Society)

By the early 1900s, a large swathe of land in Croydon remained locked up in the ownership of George Murray, Samuel Dickinson and Walter Friend, including substantial villas The Lea and Schuldham (The) Hall. Following the death of Dickinson in 1904 and Murray in 1909, The Lea and The Hall properties were sold to the Intercolonial Investment Land and Building Company (IILBC).

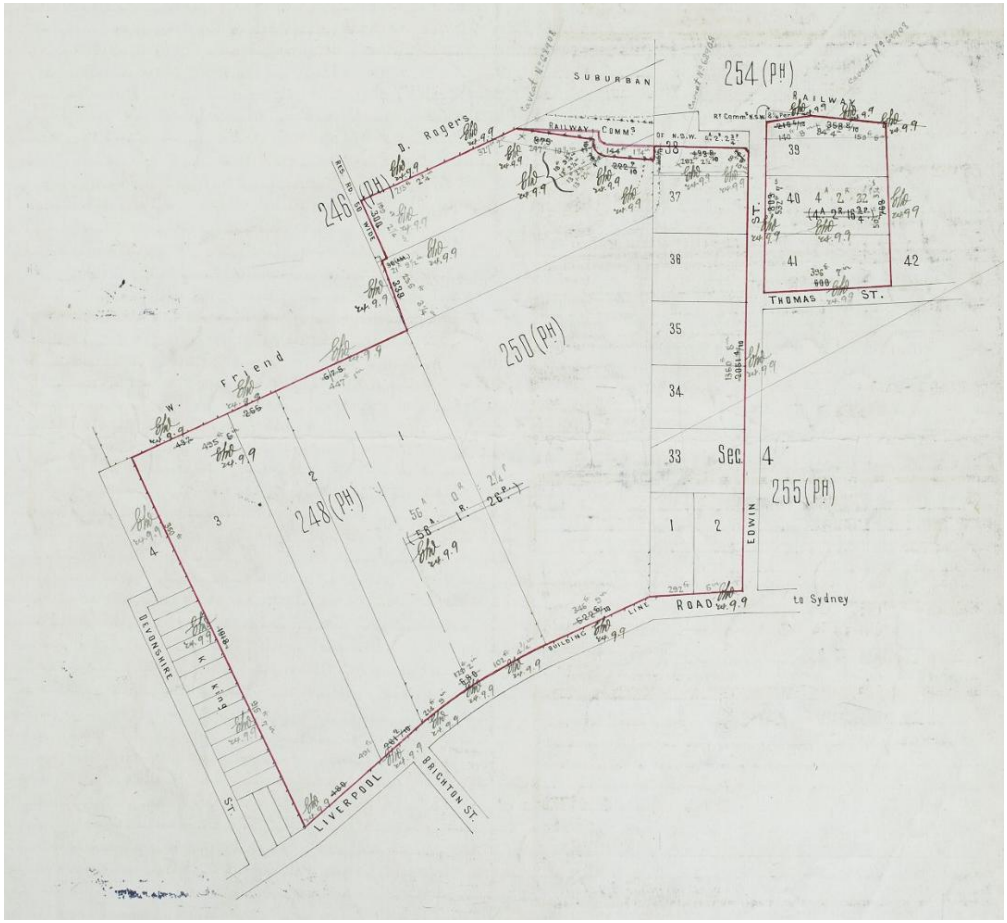


Figure 3.3 Land at Croydon acquired by IILBC, May 1909. (Source: NSW Land Registry Services, CT Vol 1972 Fol 120)

That company completed the purchase of 56 acres (22.6 hectares) on 29 May 1909 as shown in the block plan at Figure 3.3.[4] By this date, the IILBC had commenced subdivision and sale of the new model suburb of Malvern Hill at Croydon Station on 1 May (Figure 3.4).

> That splendid property at Croydon, so long the residence and grounds of Mr S Dickinson and known as "Malvern Hill" has been subdivided by the Intercolonial Investment Land and Building Company Limited, and will be offered for auction on Saturday, May 1. It is right at the station, and is one of the most picturesquely situated estates in the suburbs. The sale will be conducted by Messrs Richardson and Wrench.[5]

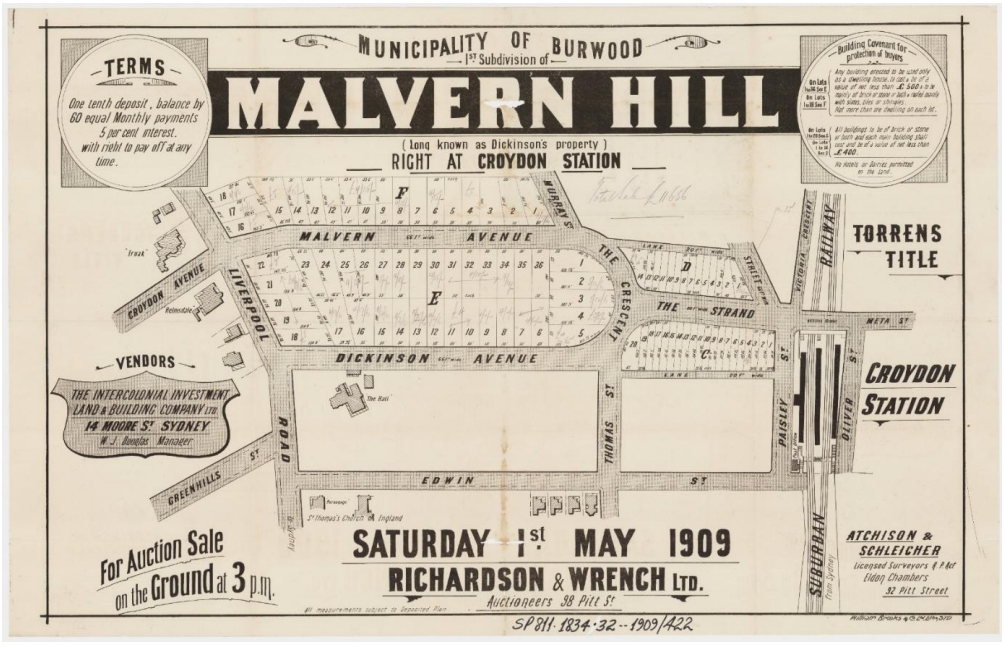


Figure 3.4 First subdivision of Malvern Hill, 1 May 1909. (Source: State Library of NSW)

Burwood Council placed strict regulations on the IILBC in respect of Malvern Hill in accordance with the *Local Government Act 1906* (NSW) to ensure the area was developed as a 'salubrious residential suburb free from the threat of commercial activity springing up among the houses.'[6]

The final plan of the suburb was approved by Council in March 1909, subject to the conditions that the streets be at least 66 feet (20 metres) wide and metalled, and that the company pay for all drainage work.[7] The company undertook the preliminary work on the estate and paid Council £1,100 to form and metal the roads.[8]

The subdivision contained a building covenant specifying all buildings on the estate be built of brick or stone (or both) with a slate or terracotta roof, and there was a minimum value of £400–500. The covenant prohibited the construction of semi-detached or terrace houses, and 'that (excepting the lost in The Strand), any building erected in the Estate could only be used as a dwelling house and built no closer to the street alignment than 20 feet'. Commercial activity was only permitted in The Strand. There was a special condition in the Conditions and Terms of Sale in respect of the allotments in The Strand were as follows:

- (vi) That all buildings and outbuildings erected should of brick or stone, or both, and cost not less than 400 pounds to build.[9]

According to Lochhead and Togher, the building covenant was a significant factor in preventing semi-detached or terrace housing development and use of inferior materials such as weatherboard, which in turn increased the desirability of the new suburbs and assured prospective buyers that Malvern Hill would be a 'salubrious residential suburb free of the threat of commercial activity springing up amongst the houses'.[10]

The Malvern Hill street layout was designed by Atchison and Schleicher, a prominent and well-respected firm of surveyors and civil engineers.

Richardson and Wrench heralded the auction sale on 1 May 'most successful' with 44 allotments sold at prices ranging from £12 10s to £4 per foot and realising a total of £11,227 16s.[11] These figures were, however, incorrectly reported, there being 49 lots sold, realising £12,400.[12]

Malvern Hill was progressively subdivided with sales in September 1909, October 1910 and May 1911. IILBC purchased a further 7 acres (2.8 hectares), which were subdivided and advertised for auction in March 1912.



Figure 3.5 Second subdivision of Malvern Hill, 25 September 1909. (Source: State Library of NSW)

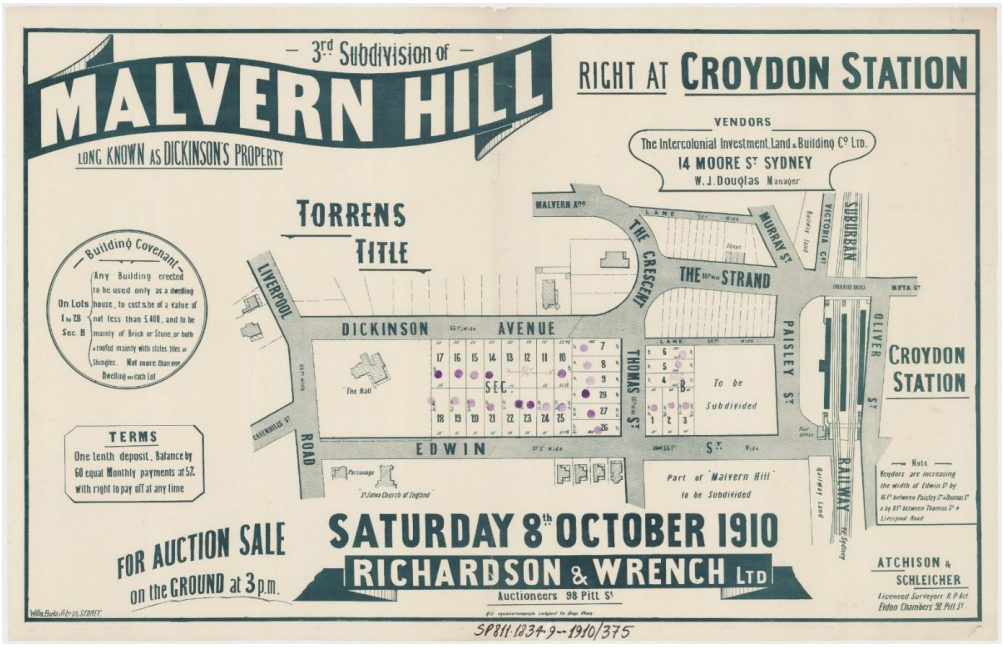


Figure 3.6 Third subdivision of Malvern Hill, 8 October 1910. (Source: State Library of NSW)



Figure 3.7 Auction sale of allotments in Malvern Hill, 13 May 1911. (Source: State Library of NSW)

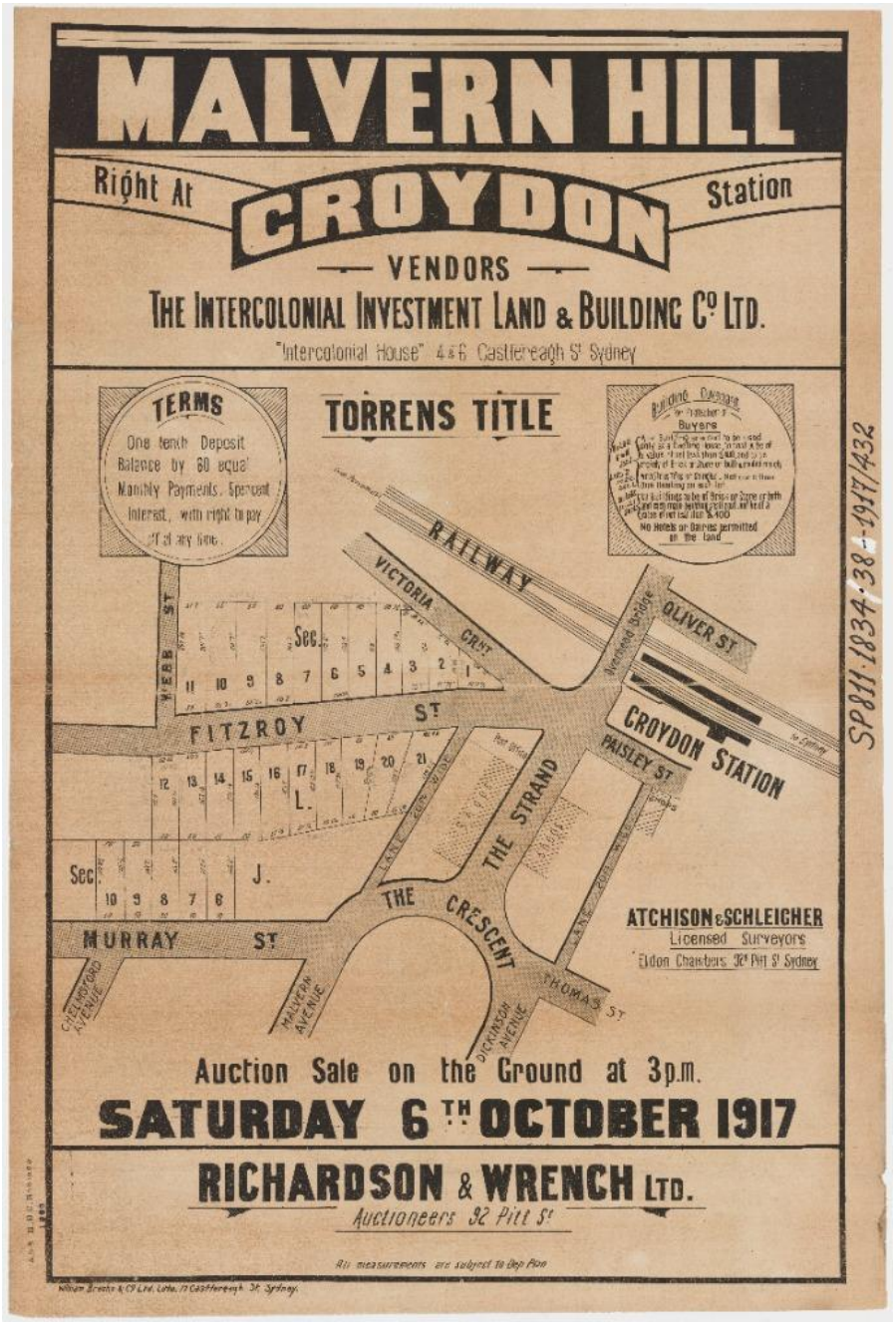


Figure 3.8 Residue of unsold allotments at Malvern Hill for auction sale on 6 October 1917. (Source: State Library of NSW)

3.4 The Strand

The Strand was developed between 1909 and the 1920s with additions in the 1930s. The street was a prominent feature of the Malvern Hill Estate. In the first subdivision of Malvern Hill (DP5613), The Strand consisted of Lots 1–20 Section C and 1–14 Section D.

According to the local historian John Johnson, The Strand 'was designed to provide a broad and elegant transition between the railway station at Croydon and the salubrious residential streets of Malvern Hill'.[13] It is possible the street was named after The Strand, London, a fashionable shopping street.[14]

Commercial activity on the Malvern Hill Estate was restricted to The Strand to preserve the exclusive residential character of the subdivision and to control the types of shops. The majority of the two-storey shops with dwellings above were designed and built by IILBC, the developer of Malvern Hill Estate.

The first block of shops, now numbered 3–7 The Strand, was erected by IILBC following lodgement of a building application to Burwood Council in May 1910. These were the first of over 30 shops built by the company in The Strand. Although a number of the shop sites had been sold at auction, the remainder were progressively built on by the company up to the early 1920s. When finished, they were the probably the most substantial group of Federation-era shops built by a single owner in Sydney. Several sites were not built on by the IILBC. These were the Croydon Post Office (1a The Strand), Geddes' Butcher Shop (2 The Strand), the Government Savings Bank (4–6 The Strand), the Malvern Hall (8–10 The Strand) and Roy Brothers workshop (27 The Strand).[15]

Periodically, the IILBC advertised shops to lease in The Strand, Malvern Hill, as in August 1911 when it promoted three additional shops 'now being erected … approved tenants are required for the two remaining [shops]'; the shops 'with commodious dwellings will be ready for occupation shortly'.[16]

In May 1912:

> To Grocers – Good opening, The Strand. Malvern Hill, right at Croydon Station, splendid business centre, new shop and commodious dwelling.[17]

In November 1913:

> Large shop and dwelling to let, splendid opening, good business centre, dentist, tailors, etc. the Strand, Malvern Hill, Croydon. Reasonable Rent. Cards to view from Intercolonial Investment Co Ltd.[18]

In January 1914:

> To let. Large shop, commodious dwelling, The Strand, Malvern Hill, right at Croydon Station, good Business Centre, suit dentist, tailor, or others, splendid opening, reasonable rent.[19]

In November 1915:

> New Shops, Malvern Hill, right at Croydon station, nearing completion. Sops 30 x 17 ½ ft with storeroom, 5 living rooms, k., w'house, b'room, good stables, Good opening for business.[20]

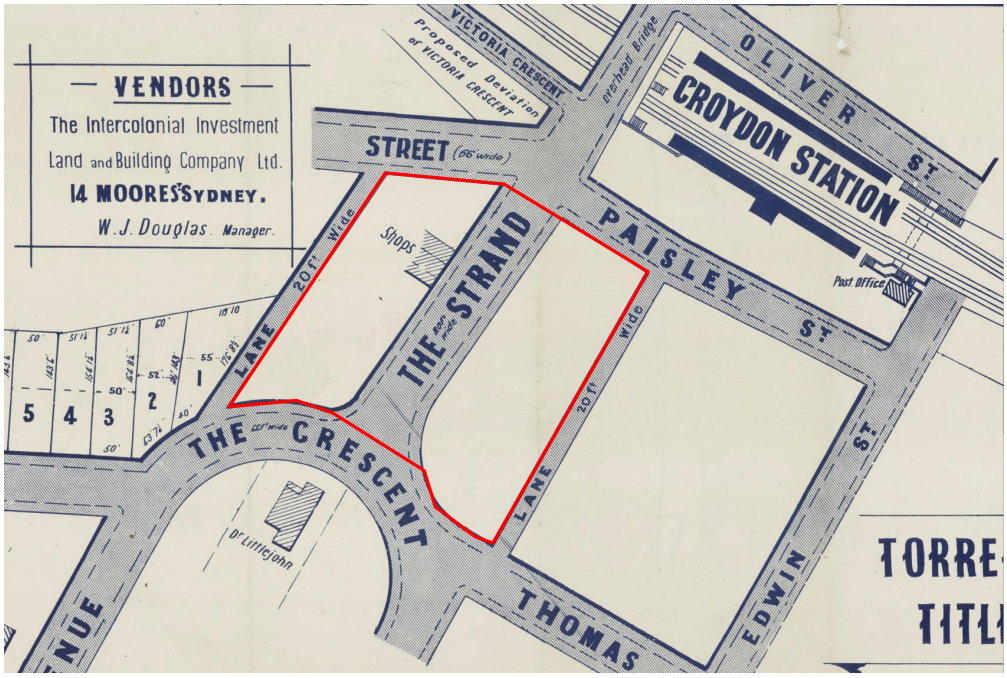


Figure 3.9 Detail from subdivision plan of Malvern Hill, 'close to Croydon Station handy to Burwood Station', May 1911. The subject precinct is outlined. (Source: State Library of NSW with GML overlay)

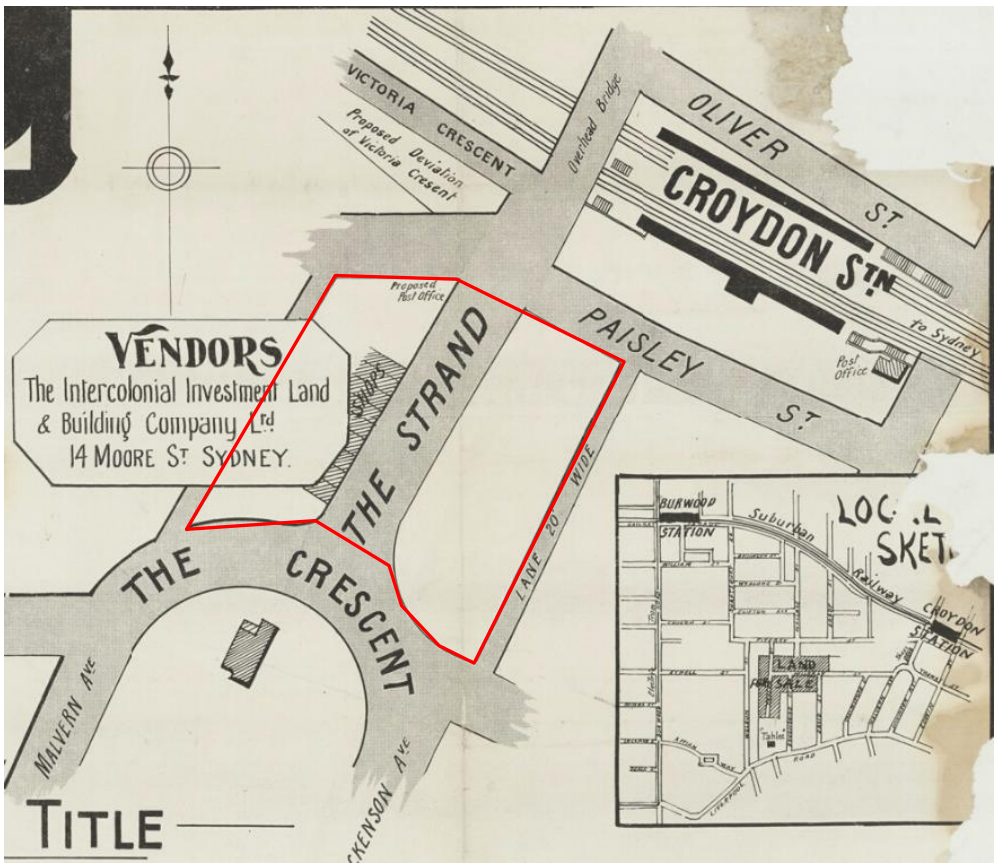


Figure 3.10 Detail from subdivision plan of the Tahlee portion of Malvern Hill, 9 March 1912. The subject precinct is outlined. (Source: State Library of NSW with GML overlay)

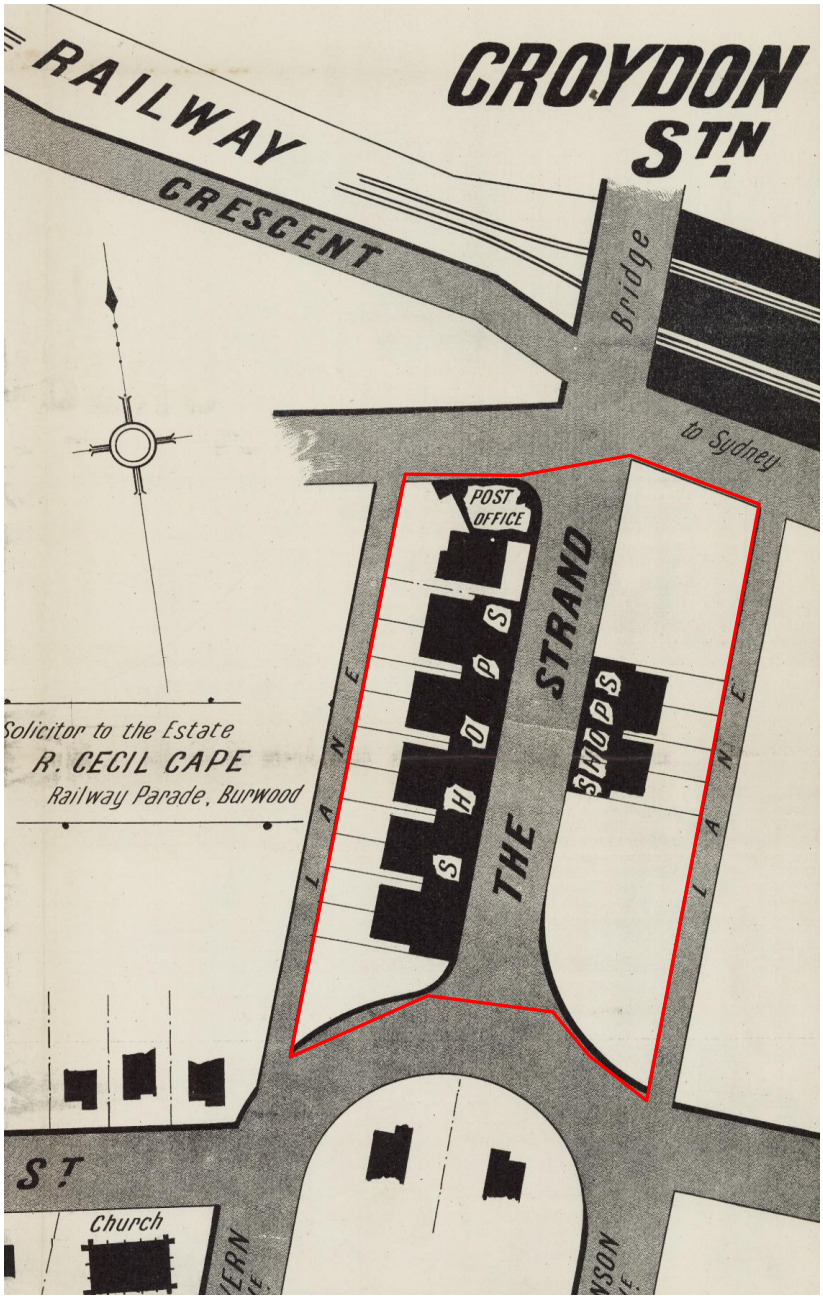


Figure 3.11 Detail from subdivision plan for the Cintra Estate between Croydon, Burwood and Malvern Hill, October 1913. The subject precinct is outlined. (Source: State Library of NSW with GML overlay)

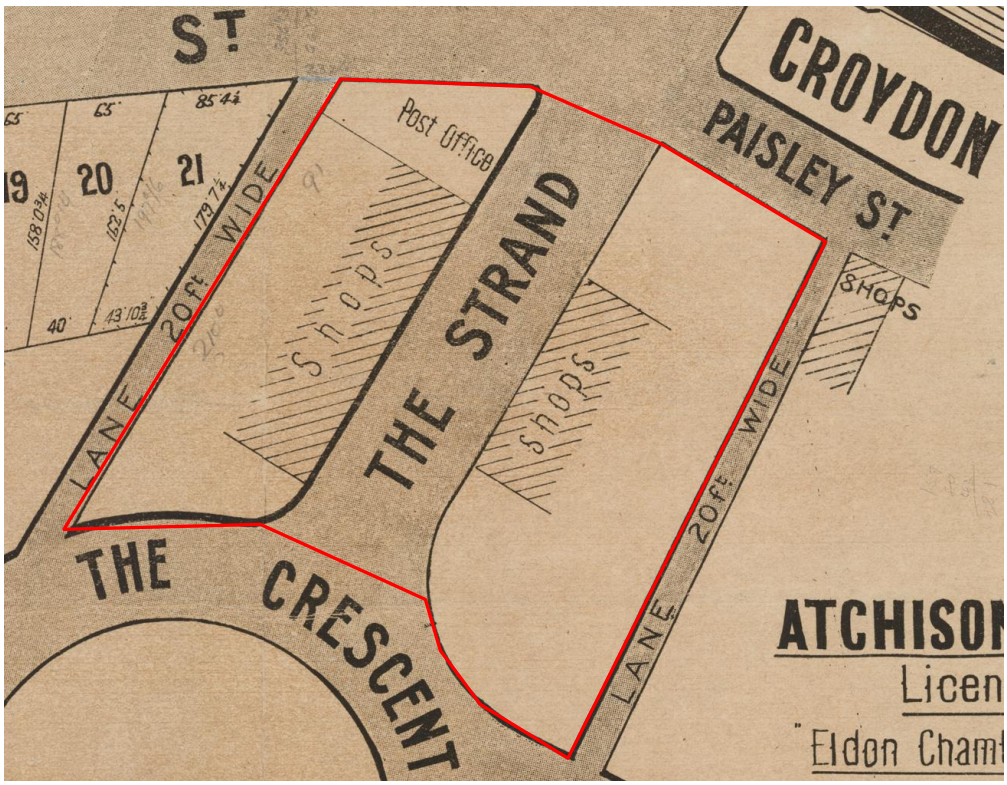


Figure 3.12 Detail from 1917 subdivision plan for Malvern Hill. The subject precinct is outlined. (Source: State Library of NSW with GML overlay)

In May 1911, two shops were erected on the western frontage of The Strand (Figure 3.9). The following year, the Malvern Hill subdivision plan (Figure 3.10) shows the site of the proposed post office and a row of nine shops on the western frontage of The Strand. By contrast, a subdivision plan for the nearby Cintra Estate in 1913 (Figure 3.11) shows the post office building and 10 shops on the western frontage of The Strand as well as four shops opposite on the eastern frontage of the street. Further development of The Strand after 1913 is depicted in the October 1917 subdivision plan of Malvern Hill (Figure 3.12), which shows shops on part of both frontages of The Strand and also the post office. In January 1915, *The Sun* reported that the IILBC had erected 19 'commodious shops and dwellings' at Malvern Hill near Croydon Station.[21] The final stage of development by the IILBC took place in 1923 when the final eight shops were erected on the eastern frontage to Dickinson Avenue.

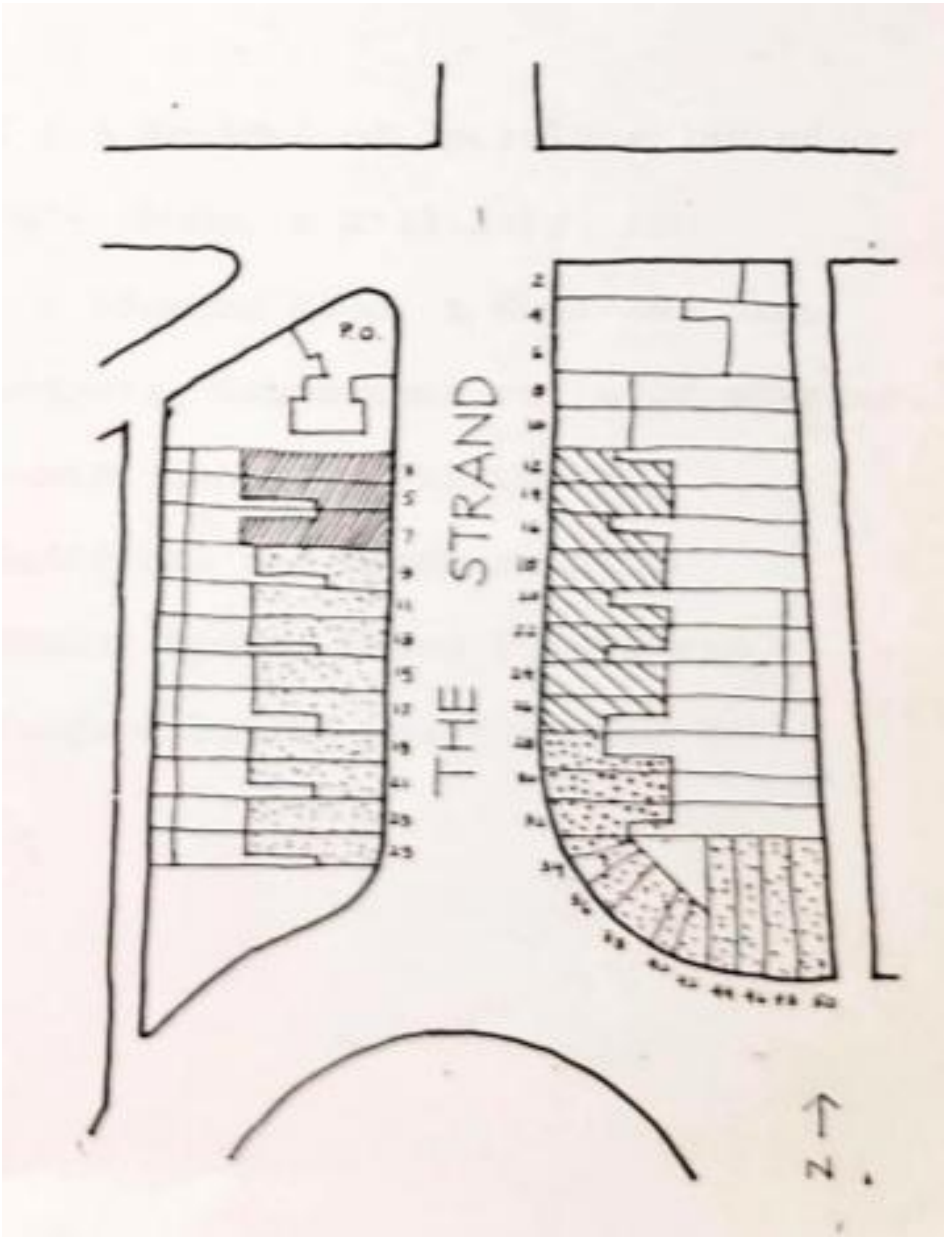


Figure 3.13 The Strand Shopping Centre (1912-1983) with stages of construction indicated. (Source: Lochhead and Togher 1983, The Strand Shopping Centre, Croydon: a conservation and restoration report, p 27)

According to Figure 3.13, 3-7 The Strand were built in 1912 with the remaining shops on the western side built the following year. On the eastern side of the road, 12-26 The Strand were completed in 1917 while 28-50 built between 1923 and 1926. The Strand was designed with narrow back lanes to accommodate outbuildings at the rear of the properties. These initially included stables which were subsequently replaced with garages with the advent of the motor car.

In 1960, the shareholders of the IILBC accepted a takeover offer by the Mercantile Mutual Insurance Company Ltd (MMI).[22]

In 1977, Mercantile Ventures Limited (a division of MMI) re-subdivided the respective property on the eastern and western frontages of The Strand as DPs 255125 and 255126. DP255125 comprised a re-subdivision of Lots 9–20 inclusive in Section C (numbers 12–50 The Strand). DP255126 comprised the re-subdivision of Lots 3–13 inclusive in Section D (numbers 3–25 The Strand).

The main assets of the company in Croydon were the shops in The Strand; Lots 9–20 inclusive in Section C had been transferred to Mercantile Ventures Limited in June 1974.[23] The shops with residences were advertised for sale in February 1978 with existing businesses including a fruit and vegetable shop, a fish and chips shop, a delicatessen and a hairdresser.[24] By August 1978 there were 'just a few shops left for sale at prices ranging from $37,500 to $48,000'.[25]

3.4.1 Historical aerial images

The following historical images, extracted from the preliminary heritage report prepared by Council, demonstrate that the subject precinct has changed little since 1930. The area is a highly intact example of the garden suburb movement of the early twentieth century.



Figure 3.14 1930 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.15 1943 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.16 1955 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.17 1971 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.18 1982 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.19 1991 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.20 1998 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.21 2005 aerial image of the subject precinct (outlined in red). (Source: NSW Land Registry Services, SIX Maps, with GML overlay)



Figure 3.22 2023 aerial image of the subject precinct (outlined in red). (Source: Nearmap with GML overlay)



Figure 3.23 April 2025 image of the subject precinct (outlined in red). (Source: Nearmap with GML overlay)

3.5 Intercolonial Investment Land and Building Company Limited

The IILBC was formed in 1885 to 'acquire by purchase, lease or otherwise, lands and other properties in each and any of the Australian colonies, the erection of houses, lending money on mortgage and the transaction of any other description of remunerative business'.[26] The capital of the company was £500,000. In 1887, it absorbed the Joint Stock Building, Land and Investment Company Limited.

Historian John Johnson has discovered that IILBC built approximately 80 houses, representing nearly one-third of the houses in the Malvern Hill Estate. The company also built the majority of the shops in The Strand.

The company became a subsidiary of the Mercantile Mutual Insurance Company Ltd in January 1960.

3.6 Endnotes

1 Bradley, Lieutenant William c1802, *A Voyage to New South Wales*, December 1786–May 1792, State Library of NSW.

2 NSW Land Registry Services, Serial 3 Page Number 235 and Serial 5 Page Number 14.

3 Johnson, J, 'Croydon', *Dictionary of Sydney*, 2008, accessed 29 April 2025 <https://dictionaryofsydney.org/entry/croydon>.

4 According to CT Vol 1972 Fol 120 the total area of the land was 60 acres 2 roods and 24 ¼ perches.

5 'Land sale at Croydon', *Evening News,* 24 April 1909, p 5, Trove, National Library of Australia, viewed 10 April 2025 <http://nla.gov.au/nla.news-article115495668>.

6 Johnson, J 2025, *Draft Malvern Hill* p 9, Burwood and District Historical Society.

7 Burwood Council Minutes, 22 March 1909, quoted in Johnson, J 2025, *Draft Malvern Hill,* p 9, Burwood and District Historical Society.

8 Johnson, John 2025, *Draft Malvern Hill,* p 9, Burwood and District Historical Society.

9 Lochhead, Helen and Togher, Stephen 1983, *The Strand Shopping Centre, Croydon: A conservation and restoration report*, a thesis submitted in partial fulfilment of the requirements for the degree of Bachelor of Architecture, University of Sydney, p 18.

10 Lochhead, Helen and Togher, Stephen 1983, *The Strand Shopping Centre, Croydon: A conservation and restoration report*, a thesis submitted in partial fulfilment of the requirements for the degree of Bachelor of Architecture, University of Sydney, p 18.

11 'Malvern Hill- £11,000 worth sold', *Sunday Times,* 2 May 1909, p 3, Trove, National Library of Australia, accessed 10 April 2025 <http://nla.gov.au/nla.news-article126580671>.

12 Johnson, J 2025, *Draft Malvern Hill*, p 10, Burwood and District Historical Society.

13 Johnson, J 2025, *Draft Malvern Hill,* p 2, Burwood and District Historical Society.

14 Johnson, J 2025, *Draft Malvern Hill,* p 10, Burwood and District Historical Society.

15 Johnson, J 2025, *Draft Malvern Hill,* p 11, Burwood and District Historical Society.

[16] 'Advertising', *Sydney Morning Herald*, 28 August 1911, p 11, Trove, National Library of Australia, accessed 9 April 2025 <http://nla.gov.au/nla.news-article15269462>.

[17] 'Advertising', *The Sydney Morning Herald,* 4 November 1913, p 13, Trove, National Library of Australia, viewed 19 June 2025 <http://nla.gov.au/nla.news-article15463020>.

[18] 'Advertising', *Sydney Morning Herald,* 6 November 1913, p 13, Trove, National Library of Australia, accessed 29 April 2025 <http://nla.gov.au/nla.news-article15463482>.

[19] 'Advertising', *Sydney Morning Herald,* 9 January 1914, p 4, Trove, National Library of Australia, accessed 29 April 2025 <http://nla.gov.au/nla.news-article15481904>.

[20] 'Advertising', *Sydney Morning Herald,* 15 November 1915, p 12, Trove, National Library of Australia, accessed 29 April 2025 <http://nla.gov.au/nla.news-article15624898>.

[21] 'Real estate notes', *The Sun,* 29 January 1915, p 4 (FINAL EXTRA), Trove, National Library of Australia, accessed 23 April 2025 <http://nla.gov.au/nla.news-article229334926>.

[22] 'Merc. Mutual bids £1½m for Intercolonial', *Sydney Morning Herald*, 7 January 1960, p 11, ProQuest Historical Newspapers: Australian Collection, State Library of NSW, accessed 24 April 2025.

[23] NSW Land Registry Services, CT Vol 2307 Fol 230.

[24] 'Advertising', *Sydney Morning Herald*, 15 February 1978, p 18, ProQuest Historical Newspapers: Australian Collection, State Library of NSW, accessed 24 April 2025.

[25] 'Advertising', *Sydney Morning Herald*, 30 August 1978, p 32, ProQuest Historical Newspapers: Australian Collection, State Library of NSW, accessed 24 April 2025.

[26] 'Commercial', *The Daily Telegraph,* 10 October 1885, p 7, Trove, National Library of Australia, accessed 10 April 2025 <http://nla.gov.au/nla.news-article237144909>.

4 Site analysis

The subject precinct is located within the suburb of Croydon, about 12 kilometres west of the centre of Sydney.

The broader area around the subject precinct contains a range of low-rise building typologies, predominantly residential properties including Federation style and early interwar buildings. Commercial development is primarily confined to the neighbourhood shopping strip concentrated mostly on the subject precinct i.e. The Strand. The subject precinct marks a transition between Croydon Station and the residential streets of the broader area.

Immediately north of the subject precinct is the Croydon Station and Presbyterian Ladies' College, Sydney. Planned streets with wide tree-lined divisions or promenades are a notable characteristic of the area. The local streets around the subject precinct generally have on-street parking.

The properties of the subject precinct extend from 2–50 The Strand on the eastern block and 1–27 The Strand on the western block. Development started on the western block before the eastern block. Primarily two-storey shops, the lots include one-storey components on the backstreets to support both commercial and residential uses. The buildings comprise mostly shoptop Federation-era terraces with awnings and some motor garages.

The immediate streetscape character of the subject precinct is that of an arterial road with a tree-lined division in a median strip and on-street parking. The streetscape and main visual elements are dominated by the two-storey buildings. The scale, style, massing, materiality and character of the area is consistent with a Federation-era garden suburb.

The buildings on the east and west sides of The Strand exhibit distinct architectural forms, giving the area a unique aesthetic character. On the eastern side, most properties are unified by a parapet, with a later row of shops curving towards the southern end. This curvature is mirrored on the western side by the southernmost property, an interwar commercial building/garage, which curves inwardly. The western side features a picturesque streetscape of individual buildings.

The streetside elevations of the buildings comprise modulated shop façades with repetition of structural bays and parapets. The shopfronts on the ground level are unified by suspended awnings at a similar height. The upper storey includes simple brick façades with recessed balconies behind semi-circular brick arches and panel windows.

The general pattern of the precinct, seen on both blocks of shops, is that the shops are in groups of three with slight variations in detailing of brickwork or parapets between each group. Originally, the shops had large display windows and timber surrounds with decorative cast glass toplights/transoms and coloured glazed-ceramic tiles, some in Art Nouveau motifs. Some of these features are still intact and legible. The entrance to each shop was generally to one side with no separate door to the street with the exception of the buildings designed with chambers above. The porches had mosaic tiling, most of which are still in place. Shops built later include brass door joinery and recessed central entries.

4.1 Site and setting

The following sections include site photographs taken by GML on 15 April 2025.



Figure 4.1 View of The Strand from in front of Croydon Station, facing southwest.



Figure 4.2 View of the old post office at the head of the western block of The Strand.



Figure 4.3 View of the café at the head of the eastern block of The Strand. Note the row of palm trees forming an avenue.



Figure 4.4 View of the eastern block streetscape featuring the Art Deco façade of the former Commonwealth Bank (now a dance academy) at the left of the image and Malvern Hall in the centre of the image.



Figure 4.5 The Strand at centre, facing east.



Figure 4.6 View of the L-shaped end of the eastern block.



Figure 4.7 View of the northern end of the western block.



Figure 4.8 The Strand at centre, facing west.



Figure 4.9 View of the western block streetscape.



Figure 4.10 View of The Strand from the roundabout at the intersection of Malvern Avenue and Thomas Street, facing north.



Figure 4.11 View from The Strand at the intersection of The Strand and Thomas Street, facing east.



Figure 4.12 View of the southern end of the western block from Malvern Avenue.



Figure 4.13 View of corner of 1 The Strand and new infill development on the property from Fitzroy Street.



Figure 4.14 View from the junction of Fitzroy Street and Post Office Lane. The former Masonic Hall is seen at the right of the image.



Figure 4.15 View of Post Office Lane, at the back of the western block, facing south.



Figure 4.16 View of Paisley Lane at the back of the eastern block, facing south.

4.2 Detailed features (selected)



Figure 4.17 Entrance to the previous post office at 1 The Strand, currently in use as a café.



Figure 4.18 Parapet featuring the year of construction of 2 The Strand.



Figure 4.19 Original sash windows and parapet of the post office building.



Figure 4.20 Fenestration of 16–18 The Strand.



Figure 4.21 Icon of former Malvern Hall 'M' and fluted ceiling of 8–10 The Strand.



Figure 4.22 Awning and footpath in front of 12 The Strand.



Figure 4.23 Decorative tiles and mosaiced entry porch of 30 The Strand. Note the intact terracotta vents.



Figure 4.24 Decorative tiles and porch of 40 The Strand.



Figure 4.25 Recessed entrance, tiled porch and tessellated tiled patterns of 21 The Strand. Note the decorative tile features are common and generally consistent across the properties of The Strand.



Figure 4.26 Painted leadlight glass features on 17 The Strand.



Figure 4.27 Entrance porch and tessellated tile patterns of 18 The Strand.

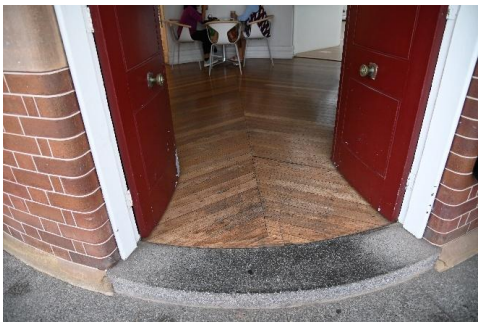


Figure 4.28 Entrance threshold of the former post office.



Figure 4.29 Entry porch of 5 The Strand, leased to Croydon Art Studio.



Figure 4.30 Porch, tessellated tiling and terracotta vent of 3 The Strand.



Figure 4.31 Glimpse of the decorative ceiling of 5 The Strand.



Figure 4.32 Decorative ceiling features of 1 The Strand.

5 Assessment of significance

An assessment of heritage significance is conducted to establish why a place is important. The Burra Charter defines cultural significance as 'aesthetic, historic, scientific, social or spiritual value for the past, present or future generations'.[1]

Significance is embodied in the physical fabric of the place, its setting and relationship to other items, the recorded associations with the place, and the response the place evokes in the community or in individuals to whom it is important. The evaluation includes consideration of the original and subsequent layering of fabric, uses, associations, and meanings of the place, and its relationship to both the immediate and wider setting.

The following sections assess the significance of The Strand, Croydon, through a comparative analysis of other listed heritage items of a similar style and period within Sydney, an assessment of the subject precinct's condition and integrity, and an assessment against the standard criteria as set out in the Assessing Heritage Significance guidelines.[2]

5.1 Integrity

The setting and context of The Strand have remained unchanged since the development of its buildings. The planned layout of the pedestrian realm and central avenue of trees is still extant and adds to the character of the precinct. The buildings vary in integrity. Most shopfronts on the northern side of the road are intact. Features including pressed metal ceilings have been retained. All of the shops have been altered at ground level with changes in use and tenancy. However, in general, most buildings retain some original features such as ceramic tiled front porches with Art Nouveau motifs, tessellated tile patterns, brass sashes around windows, leadlight glazing and terracotta vents.

The upper-storey fabric is mostly intact across all buildings. No new openings and limited infills were noted for the upper storeys of the buildings. Features such as recessed façades in arches, original sash windows, parapets and details in brickwork remain intact and legible. The buildings can be considered to have integrity consistent with original design, composition and external materiality. Overall, the planned layout of The Strand and the Federation-style character of its buildings remain highly legible.

Therefore, The Strand has moderate to high integrity.

5.2 Comparative assessment

This comparative assessment has been undertaken based on sites with buildings of similar architectural style, setting and age within the wider Sydney area. The examples have been sourced using the NSW State Heritage Inventory database.

'Town Centre Conservation Area' (C2), Manly, Northern Beaches

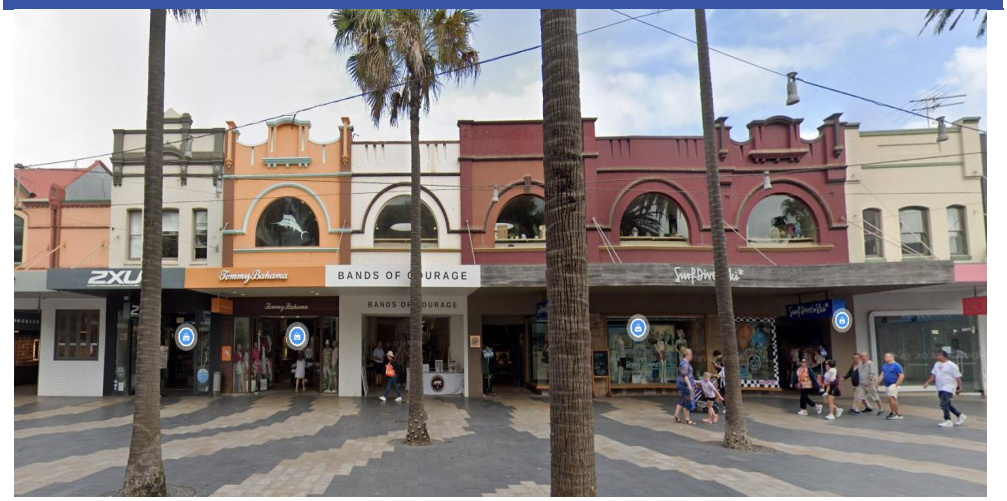


Figure 5.1 Part of the Town Centre Conservation Area, Manly. (Source: Google Street View, 2018)

Statement of Significance

The Manly Town Centre Conservation Area (TCCA) is of local heritage significance as a reflection of the early development of Manly as a peripheral harbor and beachside village in the fledgling colony of New South Wales. This significance is enhanced by its role as a day-trip and holiday destination during those early years, continuing up to the present time, and its association with H G Smith, the original designer and developer of the TCCA as it is today. The physical elements of the TCCA reflect this early development and its continued use for recreational purposes, most notably the intact promenade quality of The Corso and its turn of the century streetscape, as well as key built elements such as hotels, and remaining original commercial and small scale residential buildings.

The beautiful natural setting of the TCCA has provided a solid foundation for its picturesque qualities. The cultural landscape, including plantings, monuments and open spaces, reflects the continued enhancement of the TCCA over time, in order to attract and sustain visitors to the area, which in turn has provided great support to the local economy. The many historic vistas which remain to this day enhance the visitor experience of the TCCA and assist with providing an interpretation of the TCCA as it has changed over time.

The TCCA maintains a high level of social significance, as a popular destination for local, national and international tourists, as well as through its encapsulation of the Australian beach culture.

'Town Centre Conservation Area' (C2), Manly, Northern Beaches
Discussion • The Manly Town Centre was designed as a village by HG Smith in the mid-nineteenth century as the centre of one of Sydney's first tourism destinations. It is representative of a Victorian-era beachside tourist village and health resort as originally designed. • Designed by HG Smith, The Corso was in the original layout of Manly's commercial centre and remains in situ today. It is an open pedestrian thoroughfare and an iconic feature of the TCCA. Similarly, The Strand was the iconic commercial strip for the Malvern Hill Estate and was part of the original layout for the precinct. • The Corso, extending from Manly Wharf northeast to Ocean Beach, is lined with predominantly low-rise commercial buildings on narrow allotments. Most of the buildings were constructed from the late nineteenth century to the 1930s. In comparison, the commercial buildings of The Strand were constructed between 1913 and 1920. • Most of the original ground floor shopfronts have been altered though the first floor façades and parapets are generally intact, presenting a uniform streetscape and skyline. The street trees make a strong contribution to the character of The Corso. This is similar to The Strand—the strip of trees in its divide are a strong component of its character. • Since its inception, The Corso has provided services and facilities that support tourists visiting the area. Even today, its grand promenade attracts visitors and is an important feature contributing to the aesthetic significance of the TCCA. The Strand provides for its local community, as it has since the time of its inception. Both The Corso and Strand have retained their original use.

'Village of Homebush Retail Conservation Area' (C5), 1–49 and 4–6 Rochester Street, Homebush

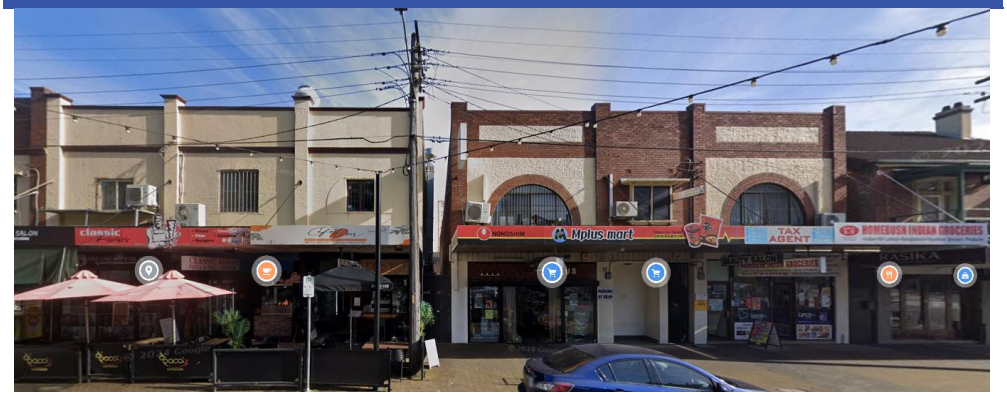


Figure 5.2 Part of the Village of Homebush Retail Conservation Area. (Source: Google Street View, 2024)

Statement of Significance

The "Village of Homebush" retail precinct has aesthetic value as a cohesive group of late Federation and Inter-War commercial buildings. There is a consistency of materials, scale and detailing through the group.

The precinct demonstrates the importance of Rochester Street in connecting Homebush and Strathfield residential areas with Homebush Railway Station and, prior to the closure of the level crossing over the railway line, with Parramatta Road. The precinct has since the nineteenth century been the location of small commercial premises.

While the incorporation of first floor cantilevered balconies on Inter-War commercial buildings was not uncommon, surviving examples such as those on 1 Rochester Street and 5–7 Rochester Street are now rare.

The present group of 1–2 storey businesses reflects the changes to the building codes of Strathfield Municipal Council to require masonry construction.

The surviving Inter-War shopfront at 37 Rochester Street is a good example of an increasingly uncommon style of retail display.

Discussion

- Developed in the late nineteenth century, the Village of Homebush became a commercial precinct in 1912, mostly comprising two-storey shoptop properties.
- Its strong aesthetic character derives from the consistency and similarity in scale, materiality and façade treatments between the buildings, e.g. arched openings, protruding pilasters, bay divisions and bold parapets. The ground floor shops have suspended awnings. This is similar to The Strand, whose buildings are consistent in scale, materiality and façade treatments.
- Retail facilities of the Village of Homebush included a variety of enterprises such as a workshop and garage, plumber, electrician, hardware shop, locksmith, surgery, butcher, chemist, photographic processing shop, grocery, restaurants, clothing stores and so on. This is a greater variety than that of The Strand.
- The buildings are Federation Free Style or early interwar. Similar to The Strand, the precinct is adjacent to a train station i.e. Homebush Station.

'Village of Homebush Retail Conservation Area' (C5), 1–49 and 4–6 Rochester Street, Homebush
• Many shopfronts have been removed, windows replaced and some infill added on first floor balconies. In comparison, the fabric at The Strand is more intact. No new openings or infills have been noted on its upper storeys. • The Village of Homebush Retail Conservation Area is representative of a typical commercial design of the late Federation and interwar era.

'Summer Hill Conservation Area' (C98), Carlton Crescent, Summer Hill



Figure 5.3 Part of the Summer Hill Conservation Area. (Source: Google Street View, 2022)

Statement of Significance

The Summer Hill Central Heritage Conservation Area is of local heritage significance.

The Summer Hill Central area is of historical significance as an area of retail streetscapes developed in the period from 1878 through to the 1940s, in response to lobbying for and the actual opening of the Summer Hill Railway Station in 1879.

The area is of aesthetic significance for its varied mix of predominantly retail buildings dating from 1878 to the 1940s, illustrating architectural styles including Victorian Italianate, Victorian Filigree, Federation Free Classical and Inter-war Functionalist, unified by building alignments to the street frontage and awnings over the street, and predominantly 2 storey building heights.

Discussion

- The Summer Hill Conservation Area holds historic significance for the development of retail streetscapes from the late nineteenth to mid-twentieth century. Like The Strand, it evolved adjacent to the local railway station (Summer Hill Station, in this case).
- The commercial strip comprises two-storey buildings of a myriad of architectural styles including Victorian, Federation and Inter-War. However, there is a consistency of building alignments to street frontage and shop awnings. The Strand, in comparison, has a consistent architectural style of all Federation-era buildings.
- Though the character of the Summer Hill commercial precinct is retained, in comparison to The Strand, the shops are in a poor condition with some in need of fabric maintenance.

'Military Road Heritage Conservation Area' (C7), Military Road and Environs, Mosman

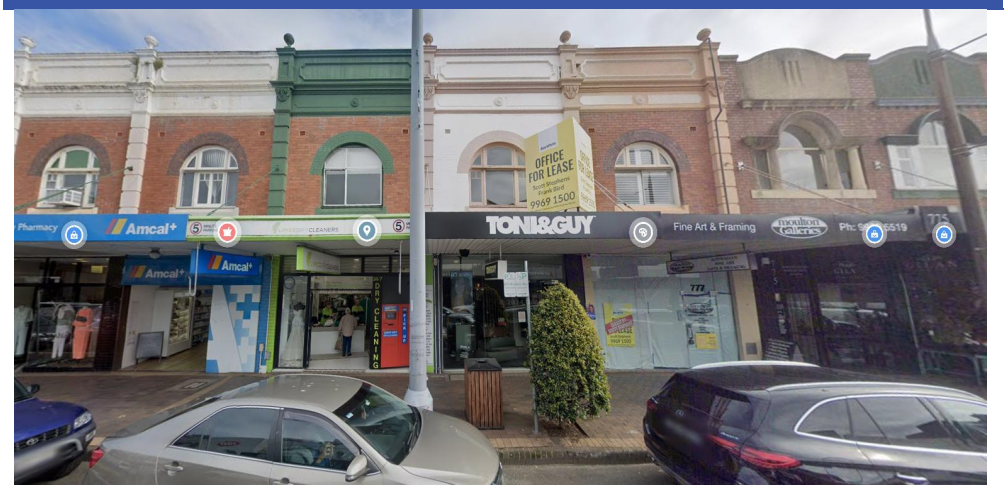


Figure 5.4 Part of the Military Road HCA. (Source: Google Street View, 2024)

Statement of Significance

The historic significance of Military Road is that it formed part of the earliest residential and military development of Mosman. It is associated with the area as a major defence post in Sydney Harbour. The road influenced the growth of the suburb because it was, and still is, the major traffic route to and from the area. It became the centre of retail and commercial activity in the suburb.

In aesthetic terms the commercial and retail area of Military Road is a marvellous microcosm of the range of architecture to be found in Mosman, distinctively combining retail and residential uses in a unified, lively and diverse linear and curvilinear streetscape. Its scale is pleasantly moderate and the variety of forms, materials, textures and colours is full of interest. The successful integration of some facades of later and very recent vintage, as can be seen here, indicates that good design is an ageless quality. The village atmosphere prevails despite some unhappy incursions. Several impressive buildings elevate the generally good aesthetic quality of the Conservation Area to a high level of value. The social significance of the area lies first in the fact that here can be seen a great many of Mosman's municipal, commercial and principal educational institutions, as well as a stretch of residential development. It is associated with prominent developers who erected speculative ensembles of shops, dwellings and commercial occupancies, and with the sequences of tenants in retail, trade and commerce activities many of them well-known past and present in Mosman.

The sandstone walls, kerbs, fences and features are key elements of the character of the Mosman Council area. They collectively contribute to the heritage and urban values of their settings. While not all features are of equal heritage value, it is the range and collective value that is most important in retaining the character of the area.

Heritage fences are a very important streetscape elements [sic.] of the conservation area. Fences vary in style and material and include stone fences, stone and iron fences, timber fences or timber and metal fences. In a number of locations fences are a continuous feature across a number of properties reflecting a common design and construction, in other areas the use of a material such as stone links a range of properties.

'Military Road Heritage Conservation Area' (C7), Military Road and Environs, Mosman

Discussion

- Similar to The Strand, Military Road was a centre of retail and commercial activity in its suburb.
- The Military Road buildings follow a curvilinear streetscape with a mix of commercial and residential uses. There is a variety of architectural styles but the streetscape is lively and diverse, giving the area a high aesthetic quality. In comparison, The Strand has a quieter environment that is suited to the Malvern Hill Estate though with an equally high aesthetic quality.
- At both the Military Road HCA and The Strand, the streetscape is consistent with the two-storey shoptop buildings similar in scale, style and materiality.
- There are landscaping elements in the Military Road HCA that add to its character. Materials of built landscape features vary from stone, iron to brick. The Strand also has a planned layout though its landscape features are minimalistic, notably the row of trees in the median.

‘Group of 8 shops, with upstairs dwellings’ (I163), 787–801 Military Road, Mosman



Figure 5.5 787–801 Military Road, Mosman. (Source: Google Street View, 2024)

Statement of Significance

This is a particularly fine group of shops and upstairs dwellings, exhibiting the Arts-and-Crafts style of architecture and forming an impressive and pleasingly-scaled component of this streetscape, despite the alterations it has had to endure.

Discussion

- The group of 8 shops is a heritage item located within the Military Road HCA. Originally comprising 9 shops in 1901, the group now includes 8 two-storey shoptops in Federation Queen Anne style.
- Retail facilities included a painter, bookshop, hairdresser, greengrocer, grocer, poulterer, chemist—similar facilities to the shops of The Strand.
- The group is listed for its unique aesthetic representation. The shops on the ground floor have undergone alterations. However, the upper-storey features are intact and include features such as bracketed gabled bays, recessed verandahs, windows with leaded toplights, terracotta tiles, and semielliptical brick arches and other decorative brickwork.
- A combination of materials has been used including stone, brick and timber. In comparison, the buildings of The Strand are constructed in brick. The Strand has a more consistent character in terms of materiality.

‘Federation shops—first floor facades’ (Item 34), 216–256 Burwood Road, Burwood



Figure 5.6 216–256 Burwood Road, Burwood. (Source: Google Street View, 2024)

Statement of Significance

Nos. 216–256 Burwood Road, Burwood has historic and aesthetic significance as part of an early subdivision and Federation period of development in the local area constructed in the early 1900’s. The first floor façades still have most of their original form and detailing such as high parapet wall with cornice and dentil detailing and classical mouldings. Most however, have lost their original windows and there are some changes to the façade details.

Discussion

- The ‘Federation shops—first floor facades’ (Item 34) is a heritage item located at 216–256 Burwood Road, Burwood. Comprising 14 properties constructed in Federation Free Style in the early 1900s, the shoptop buildings are located on one side (east) of Burwood Road. At The Strand, such properties are located at both ends (east and west) of the street.
- The group is listed for its historic and aesthetic significance and has been noted to have representative attributes for shoptops constructed in the early 1900s.
- The shops on the ground floor have undergone alterations though the first floor façades retain most of their original form and detailing including high parapet walls, pilasters, pediments, cornice and classical moulding features. Original windows and façade details have been altered. In comparison, The Strand remains more intact and its original windows and fenestration are widely legible.
- Similar to The Strand, the shoptops at 216–256 Burwood Road have a continuous awning over the footpath. For both the items, the buildings are constructed in brickwork—a mixture of exposed and rendered. However, The Strand has a more consistent character in terms of materiality and in the similarity in height across all shop awnings.

‘Federation shops—first floor facades’ (Item 021), 135–139 Burwood Road, Burwood



Figure 5.7 135–139 Burwood Road, Burwood. (Source: Google Street View, 2024)

Statement of Significance

Nos. 135–139 Burwood Road, Burwood has historic and aesthetic significance as part of an early subdivision and Federation period of development in the local area constructed in c. 1906. The first floor façades still have their original form and detailing such as rendered brick walls, round projecting piers, moulded cornices, timber framed windows with label moulds and some intricate classical moulded detailing.

Discussion

- The ‘Federation shops—first floor facades’ (Item 021) is a heritage item located at 135–139 Burwood Road, Burwood. The two-storey buildings, constructed in Federation Free Style in early 1906, are located close to Burwood Station.
- The group is listed for its historic and aesthetic significance and has been noted to have representative attributes for shoptops constructed in the early 1900s.
- The shops on the ground floor have undergone alterations though the first floor façades retain most of their original form and detailing including rendered brick walls, round projecting piers, moulded cornices, timber-framed windows and intricate moulded detailing. Similar to The Strand, many of the original architectural features of the shops on the upper storey have been retained.
- Similar to The Strand, the shoptops at 135–139 Burwood Road have a cohesive and consistent character with similar massing and height of shops with a continuous awning over the footpath. However, the group of shops at The Strand has a bigger variety, comprising over 30 properties.

5.2.1 Comparative analysis conclusion

The heritage listed items featured in the comparative analysis all feature Federation-era low-rise commercial or mixed use buildings and have been assessed as having historical, aesthetic, rare or representative attributes at a local or state level. The analysis demonstrates that the items share several similarities with The Strand, Croydon.

- The HCAs or group items were all developed around the same time as the subject precinct (excluding Summer Hill HCA, which developed in the late nineteenth century), namely in the Federation and interwar periods.
- They all include low-rise, Federation-era style buildings with interwar features and are predominantly commercial in use on the ground floor.
- They were designed with the development of the adjacent railway station or with the subdivision of the wider area and demonstrate the historical creation of allotment shapes and sizes, reflecting the historical need for local shops to support the nascent community.
- The overall setting, scale, form and fabric of all the two-storey shoptop buildings are comparable. Most have similar settings—being adjacent to a railway station or as local shops in suburban areas, in a consistent street layout with established rows of shoptop buildings.
- Retail uses for the sites across all examples include a wide variety such as butchers, tailors, bakeries, hairdressers, greengrocers, bookshops, chemists, poulterers, garages, etc. Some include or have previously included civic facilities such as a community hall and a post office.
- Physical fabric, especially on the upper storey of the buildings—including details in brickwork, parapets, pediments, face brick or part rendered walls, windows (including casement, sash and awning)—are largely intact across all examples.
- All the buildings in the comparative analysis have undergone some level of modification. Generally, ground floor commercial spaces have been modified.
- Across all examples, the setting, streetscape, and form and character of the buildings are largely intact.

5.3 Garden Suburb Movement

The Garden City and Suburb Movement in Australia was influenced by Ebenezer Howard's Garden City model, which aimed to create self-contained communities surrounded by greenbelts. This concept was introduced in Australia in the early 20th century and adapted to local conditions.

It was characterised by features including fewer houses per acre, such as cottages in a garden setting, provisions of gardens for horticulture, open spaces, parks and lawns and communal spaces at the rear of properties based on the principle of the village green, commercial and factory uses, separated from residential areas by green belts and a communal lifestyle.[3] The model suburbs lacked back lanes or pubs as a conscious effort as part of the government's agenda for social and moral reform and to improve social and hygienic conditions for a healthier and affordable housing solution. While the garden suburb design concepts were gaining popularity globally around this time, in Australia, interest was growing for such design, planning and social concepts towards the turn of the 19th century.

Daceyville is an example of Australia's first public housing experiment based on the 'garden suburb' principle and was influential to the form of 20th century suburban development. The only commercial precinct in the suburb is a small group of original shops in the Arts and Crafts style with retail spaces on the ground floor and residential accommodation above with awning style roofs.

Haberfield is another well-known exemplar of a modern garden suburb dating from the early 1900s. The suburb displays planning principles with the early use of land zoning to segregate residential and commercial properties and to exclude industrial activities and hotel. It was originally a private estate, owned by the Ramsay family that was gradually acquired by a developer.

In comparison, the Malvern Hill Estate is a residential estate of mainly Federation and early Interwar houses, with a defined shopping premises of The Strand adjacent to Croydon Railway Station. It has a 'model garden suburb' quality and was also influenced by the international Garden City movement and the nascent 'art and science' of the modern town planning movement. It evolved as a result of the 20th century subdivision of larger estates with the result of a model development on garden suburb lines.[4] Similar to Haberfield, the commercial precinct of the Malvern Hill Estate, i.e. the subject site comprising properties of The Strand, was mostly owned by the private entity IILBC. Also similar to both Daceyville and Haberfield, the clear segregation between the surrounding residential areas and the commercial vicinity is still apparent from the early planning principles of the Malvern Hill Estate.

5.4 Assessment against standard criteria

This section sets out an assessment of the heritage significance of the subject precinct in accordance with the standard criteria established in the Assessing Heritage Significance guidelines. The evaluation includes consideration of the original and subsequent layering of fabric, uses, associations and meanings of the place, as well as its relationship to both the immediate and wider setting.

The Assessing Heritage Significance guidelines provide the framework for the assessment and the Statement of Significance in this report.

These guidelines incorporate the five types of cultural heritage values identified in the Burra Charter into a specially structured framework, which is the format required by heritage authorities in New South Wales.

Under these guidelines, items (or 'places' in Burra Charter terminology) are assessed in accordance with a specific set of criteria, as set out below. An item is significant in terms of the criterion if the kinds of attributes listed in significance indicators describe it. The significance indicators are a guide only and should be used to help review and qualify conclusions reached about the item's significance.

The assessment also needs to relate the item's values to its relevant geographical and social context, usually identified as either local or state. Items may have both local and state significance for similar or different values/criteria.

5.4.1 Criterion A (historic significance)

> An item is important in the course, or pattern, of NSW's—or the local area's—cultural or natural history.

The subject precinct is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. The Strand was developed as a shopping strip between 1913 and 1920 as part of the new 'model suburb' of Malvern Hill. It was integral to the planning of Malvern Hill Estate and formed the neighbourhood shopping strip. Its location adjacent to Croydon Station was strategically planned while providing a transition to the wider area with its residential premises. Most of the two-storey shops with dwellings above were designed and built by IILBC, the developers of Malvern Hill Estate.

In addition to the shops, the subject precinct included a post office, bank, community hall and garage workshops. No pubs or hotels were included as per the commercial precinct planning principles of the garden suburb typology.

The scale of development in the immediate surrounds has respected the character of the area and the street still provides a transition between Croydon Station and the residential streets of the wider area.

The shops of The Strand are linked to the Federation and interwar development of Malvern Hill and Croydon. Developed adjacent to the railway station, The Strand has historically supported the local community and continues to do so today. Physically, the shops—particularly the upper storeys of the buildings—demonstrate an intactness in the Federation style that defines the character of the Malvern Hill Estate.

The subject precinct contributes largely to the development of the Malvern Hill Estate, which is an area of local significance within the wider Croydon area. The Strand still continues to function according to its original use and is an active commercial strip demonstrating its historical link.

The subject precinct meets the criterion for cultural significance at a local level under this criterion.

Table 5.1 Criterion A—historic significance.

Significance indicator	Local significance threshold
Association with an event, or series of events, of historical, cultural or natural significance	The site does not meet the threshold for this criterion.
Demonstration of important periods or phases in history	**The site meets the threshold for this criterion.**
Association with important cultural phases or movements	The site does not meet the threshold for this criterion.
Demonstration of important historical, natural or cultural processes or activities	The site does not meet the threshold for this criterion.
Symbolism and influence of place for its association with an important historical, natural or cultural event, period, phase or movement	The site does not meet the threshold for this criterion.

5.4.2 Criterion B (historical association)

An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's—and/or the local area's—cultural or natural history.

The subject precinct is associated with the IILBC, a company that operated from 1885 to 1960. It dealt with real estate, and operated as a bank and financial agent in the Australian colonies. IILBC owned most lots in the subject precinct and built the first three shops on 3–7 The Strand, which first accommodated a stationery shop, a pastry shop and a drapery. Until the 1920s, a majority of the shops (approximately 30) were owned and built by the company. At that time, the shops were possibly the most substantial group of Federation-era shops built by a single owner in Sydney.

The development of The Strand into a commercial precinct for the wider Malvern Hill Estate formed an integral part of the planning and advertising for the suburb. The IILBC was instrumental in recognising, developing and marketing the precinct.

The subject precinct also has historical associations with a few prominent architects. The Roy Brothers-owned garages at 27 The Strand was designed by architect Charles H Christian, known for the design of curvilinear Art Deco buildings in the interwar era.

Meanwhile, 4–6 The Strand, originally a branch of the Government Savings Bank, is associated with a few different well-known architectural firms including Ross & Rowe and Booker and Wilson. Ross & Rowe was a prominent practice in Sydney between 1911 and 1937. Examples of their buildings include the Metropolitan Hotel, the Commonwealth Bank of Australia building, and the Downing Centre.

Booker and Wilson, a post-World War II firm in operation until the 1980s, designed various banks, shops, factories and housing commission projects around Sydney.

No. 8–10 The Strand, originally designed as Malvern Hall, was designed by architect Spencer and Spencer. The subject precinct is a good example of a site that includes several architect-designed buildings from the early to mid-twentieth century.

The subject precinct meets the criterion for cultural significance at a local level under this criterion.

Table 5.2 Criterion B—historical association.

Significance indicator	Local significance threshold
A key phase(s) in the establishment or subsequent development at the place or object was undertaken by, or directly influenced by, the important person(s) or organisation	**The site meets the threshold for this criterion.**

Significance indicator	Local significance threshold
An event or series of events of historical importance occurring at the place or object were undertaken by, or directly influenced by, the important person(s) or organisation	**The site meets the threshold for this criterion.**
One or more achievements for which the person(s) or organisation are considered important are directly linked to the place or object	The site does not meet the threshold for this criterion.

5.4.3 Criterion C (aesthetic/creative/technical achievement)

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW—or the local area.

The subject precinct was designed as a broad and elegant shopping area and promenade between the railway station and the residential areas. It contributes greatly to the Federation-style character of the broader Malvern Hill Estate area. The earliest buildings of The Strand, including 3–7 The Strand and 1 The Strand (including the former post office), are legible. Located at a prominent corner position facing the railway station, the post office is a landmark building on The Strand.

The buildings to the east and west side of The Strand are different in building forms providing The Strand with a distinctive aesthetic character. Most of the properties on the eastern side are unified by a parapet and the strip of shops curve towards the southern end. This shape is reflected on the western side by the southernmost property (garage) the form of which curves inwardly. The western side provides a picturesque streetscape of individual buildings.

Generally, all buildings in the subject precinct have undergone refurbishments though the shop façades still provide a consistent aesthetic streetscape. All buildings have been altered on the ground floor but the upper storey is largely intact. For instance, some windows have been replaced on the second storey but overall the early fenestration and features are largely apparent. The additions and refurbishments are mostly sympathetic and much of the original design intent remains legible.

Based on photographic evidence, some of the buildings have a high level of integrity to the original design. Art Nouveau features including leadlight glass and tile patterns are still evident on some shopfronts. The integrity and intactness of the buildings as a whole are not compromised and the aesthetic nature of the subject precinct is retained.

The subject precinct has cultural significance at a local level under this criterion.

Table 5.3 Criterion C—aesthetic/creative/technical achievement.

Significance indicator	Local significance threshold
Recognition as a landmark or distinctive aesthetic natural environment	**The site meets the threshold for this criterion.**
Recognition of artistic or design excellence	**The site meets the threshold for this criterion.**
Represents a breakthrough or innovation in design, fabrication or construction technique, including design/technological responses to changing social conditions	The site does not meet the threshold for this criterion.
Distinctiveness as a design solution, treatment or use of technology	The site does not meet the threshold for this criterion.
Adapts technology in a creative manner or extends the limits of available technology	The site does not meet the threshold for this criterion.

5.4.4 Criterion D (social, cultural and spiritual significance)

An item has strong or special association with a particular community or cultural group in NSW—or the local area—for social, cultural or spiritual reasons.

Since its formation in 1912, the subject precinct is still in use as the commercial centre for the wider area. Though a detailed social values assessment has not been undertaken, it is likely that the precinct has social significance for the current and past local community as a whole as a place to gather, shop and socialise.

From the *Public-Exhibition of Alternative Croydon TOD Masterplan – Engagement Outcomes Report* (prepared by Burwood Council, dated January 2025) which highlighted the key issues from the October 2024 formal exhibition period, heritage was a key issue (with 43.3% of submissions mentioning the theme), and there submission with specific discussions about the Railway South Precinct, the Malvern Hill Estate HCA and The Strand in particular.

Submissions highlighted the heritage significance of the Malvern Hill HCA and supported and appreciated the intent of the Masterplan towards protecting the existing HCA.

Submissions also highlighted the heritage significance of The Strand, however, a number made reference to The Strand location and the need for revitalisation with opportunities for character sympathetic development being able to be undertaken at the location to create a more vibrant and activated town centre.

While not a formal social values assessment, this recent public exhibition process demonstrates that there is community affinity for The Strand and desire for its conservation.

The subject precinct does have cultural significance at a local level under this criterion.

Table 5.4 Criterion D—social, cultural and spiritual significance.

Significance indicator	Local significance threshold
Highly regarded by a community as a key landmark (built feature, landscape or streetscape) within the physical environment	**The site does meet the threshold for this criterion.**
Important to the community as a landmark within social and political history	**The site does meet the threshold for this criterion.**
Important as a place of symbolic meaning and community identity	**The site does meet the threshold for this criterion.**
Important as a place of public socialisation	The site does not meet the threshold for this criterion.
Important as a place of community service (including health, education, worship, pastoral care, communications, emergency services, museums)	**The site does meet the threshold for this criterion.**
Important in linking the past affectionately to the present	The site does not meet the threshold for this criterion.

5.4.5 Criterion E (research potential)

An item has potential to yield information that will contribute to an understanding of NSW's—or the local area's—cultural or natural history.

The shoptop buildings of The Strand are examples of typical construction from the Federation era and do not demonstrate innovation in design, fabrication or any particular historical process. It is unlikely that the subject precinct would provide any substantial new information or have the potential to expand knowledge of the local area beyond what is already known, or what could be obtained by alternative means.

The archaeological significance of this precinct has not been assessed in this report.

The subject precinct does not have cultural significance at a local level under this criterion.

Table 5.5 Criterion E—research potential.

Significance indicator	Local significance threshold
Comparative analysis	The site does not meet the threshold for this criterion.

Significance indicator	Local significance threshold
Potential to improve knowledge of a little-recorded aspect of an area's past or to fill gaps in our existing knowledge of the past	The site does not meet the threshold for this criterion.
Potential to inform/confirm unproven historical concepts or research questions relevant to our past	The site does not meet the threshold for this criterion.
Potential to provide information about single or multiple periods of occupation or use	The site does not meet the threshold for this criterion.
Potential to yield site-specific information that would contribute to an understanding of significance against other criteria	The site does not meet the threshold for this criterion.

5.4.6 Criterion F (rarity)

> An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area).

The 34 properties at The Strand are examples of Federation two-storey shoptop brick buildings. The comparative analysis identified numerous fine examples of this style from these periods, which are identified as heritage items either individually or within HCAs.

However, as a collective, The Strand is unique in its form and layout. Designed with rear lanes, its layout is still legible and the division of lots it comprises still evident. Designed as a street with blocks of shops on each side, The Strand has retained much of its integrity and intactness to date. The other groups of Federation-style shops, though comparable in character and architectural style, comprise a smaller group of shops limited to one side of the main road.

As a planned commercial area within a planned suburb, The Strand represents a typology of model suburb planning that was rare to its time. As the commercial portion of the Malvern Hill Estate, it was and still remains segregated from the surrounding residential areas. The Strand does not include a pub or hotel enabling the Malvern Hill Estate to be an uncommon form of suburb development in Sydney possible for the level of control executed by the estate owners by the use of building covenants and the desire for a garden suburb.

The Strand is an example of a large group of buildings developed at the same time by a single owner i.e. the IILBC. It is possibly the largest group of shops built by a single owner with none having been demolished. It is the only one of its type and is therefore distinct in the wider Burwood LGA as a distinguishable commercial precinct from the Federation era.

As a whole, the subject precinct is considered to be rare and the only example of its type.

The subject precinct does have cultural significance at a local level under this criterion.

Table 5.6 Criterion F—rarity.

Significance indicator	Local significance threshold
Rare surviving evidence of an event, phase, period, process, function, movement, custom or way of life in an area's history that continues to be practised or is no longer practised	The site does not meet the threshold for this criterion.
Evidence of a rare historical activity that was considered distinctive, uncommon or unusual at the time it occurred	The site does not meet the threshold for this criterion.
Distinctiveness in demonstrating an unusual historical, natural, architectural, archaeological, scientific, social or technical attribute(s) that is of special interest	**The site meets the threshold for this criterion.**
Demonstrates an unusual composition of historical, natural, architectural, archaeological, scientific, social or technical attributes that are of greater importance or interest as a composition/collection	The site does not meet the threshold for this criterion.

5.4.7 Criterion G (representativeness)

An item is important in demonstrating the principal characteristics of a class of NSW's (or a class of the local area's):

- cultural or natural places; or
- cultural or natural environments

The subject precinct includes a group of Federation-style shoptop buildings that collectively form a fine example of this type. The setting, condition and scale of The Strand have remained uncompromised. It can be regarded as outstanding because of its integrity and intactness.

The Strand is still a prominent feature and defining street for the original subdivision of Malvern Hill Estate. It has its own distinct characteristics—for instance, the post office and former butchers form an entrance into the promenade. The row of palm trees dividing it add to its aesthetic character. The form, scale and height of the buildings defining the streetscape remain largely legible. It is an outstanding representation of its type in the LGA, forming a transition to the nearby residential areas.

The comparative analysis has determined that in comparison to other examples The Strand is a good example of the Federation/interwar two-storey shoptop typology, especially in its intactness. It still maintains a cohesive character and retains its streetscape presence and prominence in comparison to the other examples. Its form, setting and retention of a shopfront configuration together with its current use echo its original purpose and are consistent with the variety of commercial premises it originally housed.

The subject precinct has cultural significance at a local level under this criterion.

Table 5.7 Criterion G—representativeness.

Significance indicator	Local significance threshold
A class of places or objects that demonstrate an aesthetic composition, design, architectural style, applied finish or decoration of historical importance	**The site meets the threshold for this criterion.**
Representative of a class of places that demonstrate a construction method, engineering design, technology, or use of materials, of historical importance	The site does not meet the threshold for this criterion.
Representative of a class of places that demonstrate an historical land use, environment, function, or process, of historical importance	The site does not meet the threshold for this criterion.
Representative of a class of places that demonstrates an ideology, custom or way of life of historical importance	The site does not meet the threshold for this criterion.

5.5 Statement of Significance

The Strand, Croydon, has cultural significance at the local level for its historic, associative, aesthetic, social, representative and rare attributes.

The Strand, located adjacent to Croydon Station and developed between 1910 and 1923, has historic significance to the locality of Croydon. It is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. Integral to the model suburb planning of the Malvern Hill Estate, The Strand was specifically designed as the commercial centre for the suburb. Its planning and segregation from the residential zone of the suburb demonstrate the influence of the garden suburb movement of the early 20th century. The precinct comprises two distinct blocks divided by a wide road with an avenue of palm trees.

The Strand is associated with the Intercolonial Investment Land and Building Company (IILBC). A majority of the shops were owned and constructed by the company, making The Strand possibly the most substantial group of Federation-era shops built by a single owner in Sydney. The IILBC was instrumental in recognising, developing and marketing the precinct. The Strand is also a good example of a precinct featuring buildings designed by a few different architectural firms/architects including Ross & Rowe, Booker and Wilson, Spencer and Spencer, and Charles H Christian.

The Strand is a broad, elegant shopping area that significantly enhances the Federation-style character of Malvern Hill Estate. Its aesthetic appeal is defined by varied building forms including its curvilinear shape, unified parapets, and picturesque streetscapes on both sides. Despite refurbishments, the original design intent remains clear, preserving the precinct's aesthetic significance and integrity. Notable landmarks like the former post office at 1 The Strand contribute to its distinctive character. The intactness of original Art Nouveau features, such as leadlight glass and tile patterns, contribute to its aesthetic attributes.

Designed as a distinct commercial precinct within a garden suburb, The Strand has retained its original and historic commercial function. The Strand is representative of a collection of good-quality Federation and early interwar two-storey shoptop buildings developed adjacent to a railway station. It contributes greatly to the Federation-style character of the wider suburb. The buildings comprising The Strand are highly intact and not compromised in integrity. It has maintained its aesthetic character with street planning and planting.

The Strand has social value as a community centre which has been a place to gather, shop and socialise since the 20th century.

While not a formal social values assessment, the recent public exhibition process of the Alternative Croydon TOD Masterplan demonstrates that there is community affinity for The Strand and desire for its conservation.

The Strand is a rare example of a highly intact Federation-era commercial precinct. Envisaged as a commercial strip on both sides of a main road, it has retained much of its integrity. Unlike other Federation-style shops, which are limited to one side of the main road, The Strand is a planned commercial area within the Malvern Hill Estate, segregated from residential areas and lacking pubs or hotels. This reflects the estate owners' vision for a garden suburb.

Developed by a single owner, the IILBC, The Strand is possibly the largest group of shops built by one owner, with none demolished. It stands out as a distinct commercial precinct from the Federation era in the Burwood LGA, making it a rare and unique example of its type. It is the only one of its type across the local area.

5.6 Proposed boundary of heritage item

The Strand, located adjacent to the Croydon Station, has aesthetic qualities within its setting and context. Significant views to The Strand include the southwestern view down the street from the railway station, which includes the view of the former post office building (1 The Strand) and the former butchery (2 The Strand) at the junction of The Strand. These two buildings are markers and act as a principal entry into the commercial precinct of The Strand. Views to The Strand from the south are less significant. However, the view of each streetscape facing The Strand contributes to the character of the precinct and should be retained.

The proposed boundary for the heritage item takes into consideration the setting and context of The Strand and is featured in Figure 5.8 below. The proposed boundary for The Strand heritage item has been determined to extend to the lot boundary of the allotments on each side, including the street in between the blocks.

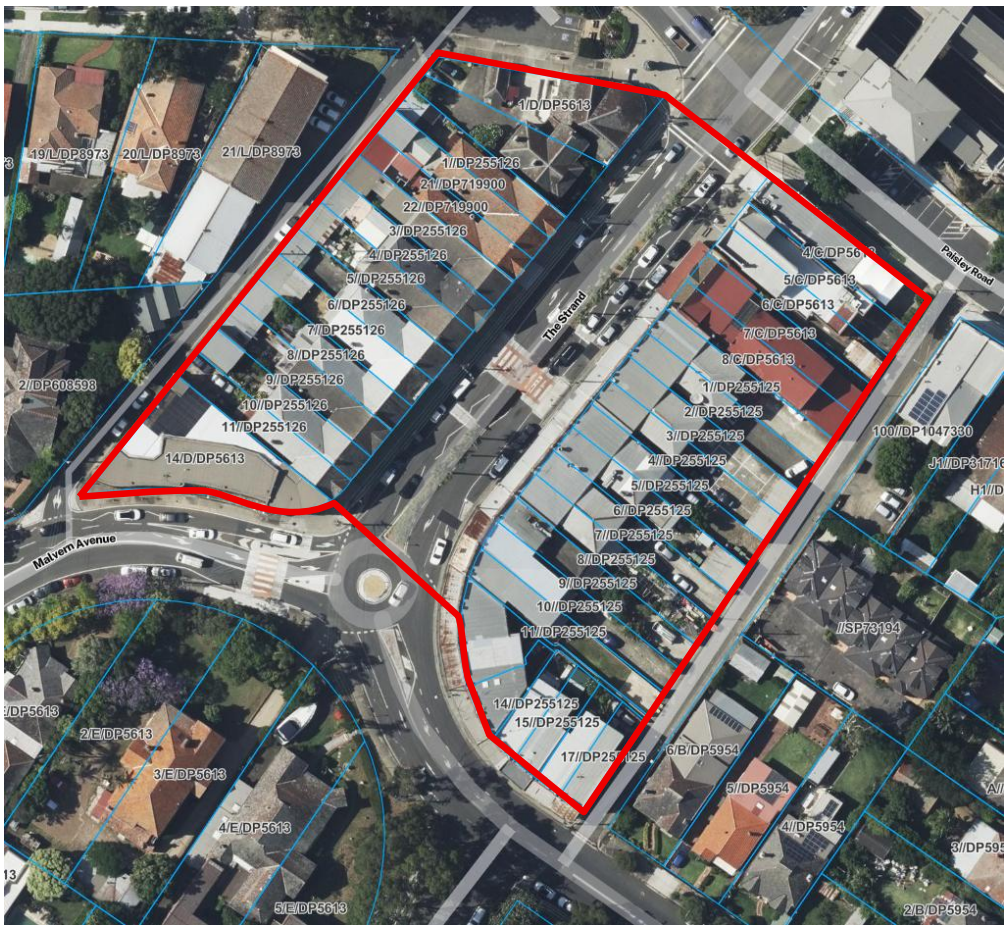


Figure 5.8 Proposed boundary of The Strand group heritage item (outlined in red). (Source: Nearmap with GML overlay)

5.7 Endnotes

1 Australia ICOMOS Inc, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013*, Australia ICOMOS Inc, Burwood, VIC, 2000.

2 Department of Planning and Environment 2023, *Assessing Heritage Significance: Guidelines for Assessing Places and Objects against the Heritage Council of NSW Criteria*, Department of Planning and Environment.

3 DCP No. 36 – Daceyville Garden Suburb (April 2005) p18.

4 "Burwood Urban Conservation Area Precinct 9 Malvern Hill extension, Croydon", National Trust listing card for Malvern Hill Estate.

6 Conclusions and recommendations

6.1 Conclusions

This report has assessed the heritage significance The Strand, Croydon, based on historical research, investigation of the subject precinct, a comparative analysis against similar (predominantly locally listed) items, and an assessment against the standard criteria established in the Assessing Heritage Significance guidelines.

The report concludes that The Strand, Croydon, meets the threshold for heritage listing under the historic, associative, aesthetic, social, representative and rare criterion of the NSW heritage assessment criteria. These attributes are contributory to, but distinct from, the values of the Malvern Hill HCA as a whole.

The Strand should be listed as a group heritage item of local significance under Schedule 5, Part 1—Heritage Items, of the Burwood LEP 2012.

GML's conclusions were formed for the following reasons:

- The Strand has retained its context around the railway station and its link to its historical setting.
- The Strand was purposely sited and designed in the early twentieth century as the commercial precinct for the Malvern Hill Estate and demonstrates the development of the suburb.
- The subject precinct holds strong historical associations with the IILBC and is a good example of a collection of Federation-era shops built by a single owner in Sydney. The collection of buildings showcases several architect-designed buildings.
- The subject buildings are good examples of their type and are relatively intact. Though all shops have been altered on the ground floor, the character of the streetscape as a whole is cohesive and consistent. The alterations have been sympathetic and the streetscape is harmonious.
- 1 The Strand, the former post office, has landmark qualities representing an entrance to the subject precinct.
- The Strand has social value to the community as a local place to gather, shop and socialise.
- The buildings are fine examples of the Federation style and collectively The Strand is considered to be unique, having retained much of its integrity. The comparative analysis demonstrates that though there are numerous examples of Federation/interwar shoptop buildings across Sydney, as a collective The Strand is the only one of its kind in its local area.

6.2 Recommendations

It is recommended that:

- The Strand, Croydon, should be added to the heritage schedule of Burwood LEP as a group heritage item of local heritage significance. This heritage listing should consist of the individual properties at 1–50 The Strand as well as the road carriageway, median and footpaths.

Though The Strand is currently included in the listing for the Malvern Hill HCA, this listing is insufficient to recognise the heritage significance of The Strand. The HCA citation is focused on the residential aspects of the area. It contains limited information on the development of the commercial strip, which was an integral part of the planning, design and function of the estate and model suburb which used building covenants to ensure prescribed standards of development were achieved.

The significance of the Malvern Hill Estate as an early planned model suburb is discussed in the Burwood DCP (2023) Section 8.4 (Assessment of Significance). Design objectives for Malvern Hill are also included in Section 4.8.2 (special residential precincts). However, both these sections focus on the residential areas of the HCA. The commercial aspects, which include The Strand, is mentioned in Section 4.8.2 which contains some provisions specific for The Strand Shopping Centre (P68 to P79). However, these are not sufficiently detailed to provide clear guidance for appropriate development and conservation of heritage values.

Regardless of whether the group heritage listing of The Strand proceeds, it is recommended that additional specific objectives and guidelines be prepared to guide any future development of The Strand whilst ensuring its heritage values are retained. The new DCP subchapter for The Strand should be developed with regard to this assessment and recommendations. The DCP should contain objectives and guidelines for

- Setbacks of rear additions
- Site amalgamation
- Height of buildings/number of storeys at rear
- Materials and colours
- Original fabric and details to be retained
- Public domain upgrade works/civic infrastructure
- Signage

6.2.1 Recommended management guidance

High level heritage management principles have been prepared which may guide more detailed DCP provisions for The Strand, as a group heritage item of local significance.

Fabric and features

- Maintain and restore the architectural character and original features (such as first floor windows, doors and doorways, shopfronts, decorative tiles, entry steps, awnings) as they convey a distinctive identity to the commercial area.
- Maintain and conserve the consistent brick parapet on the eastern block and the rhythmic grouping of roof forms on the western block.
- Maintain (and reinstate where possible) original roof cladding (terracotta tiles, slate) and features (including the chimneys and party walls) of roofs on the western block.
- Retain unpainted brick facades.
- Restore original features such as shopfronts, first floor windows, tiles, entry steps (based on original extant features and historical documented evidence) as opportunities emerge.
- Retain (and where possible reinstate) interior original/significant features such as timber floors, pressed metal ceilings.

Use

- Prioritise active commercial, retail and hospitality uses on the ground floor.
- Preference commercial uses on the first floor.
- If residential uses are to be incorporated in The Strand, they should located in the rear of the lots, with only a modest adaption of a tenancy/ies to provide entry point/lobby/access onto The Strand.

Streetscape

- Maintain the two storey, brick, street addressing appearance of The Strand.
- Maintain the geometric curve to southern end of The Strand (at Thomas Street and Malvern Avenue).
- Retain the landscaped median of The Strand.
- Maintain the road geometry and configuration of two central trafficable lanes and two kerbside parking lanes.

Lot consolidation

- Development of The Strand may be considered through lot consolidation where this would not give rise to an adverse material impact on significant heritage values or streetscape character. For The Strand, this may be considered for the rear of the lots.
- Allowances should be made to interpret the subdivision pattern/fine grain innovatively in the layout and pattern of built form and in the architectural treatment of the façades (eg modulation, vertical fenestrations).

Public domain

- Ensure a consistent approach to the public domain features (footpaths/paving, street furniture, fencing, kerbs and gutters, plantings) to enhance the significance of The Strand.

Views

- Maintain the views of fronts of The Strand buildings (including parapets and roof forms) mainly against clear sky.
- Conserve the views into and of The Strand. In particular, the northerly view from Thomas Street, the easterly view from Malvern Avenue and the southerly views from Paisley Road and from in front of Croydon Railway Station.

Appendix A—Summary histories of individual properties on The Strand

Western block (odd numbers)

1–1A The Strand

The first land in The Strand to change ownership was Lots 1 and 2 Section D, which were purchased by the Commonwealth of Australia in March 1912 [1] for the sum of £806.[2] Instructions were issued in June the same year for plans and specifications to be prepared for a post office to be erected on this site (1A The Strand) by the Department of Public Works.[3] The tender was awarded in February 1913 to J Frezelle of The Boulevarde, Strathfield, for erection of a new post office and residence at Croydon.[4] The new building was completed and occupied on 1 December 1913. In the intervening period, a temporary post office was occupied on land leased from the Railway Department on the southern side of Edwin Street.



Figure A.1 Croydon Post Office, The Strand, erected 1913. (Source: National Archives of Australia, B5919, 4/36)



Figure A.2 The Strand and Fitzroy Street intersection, 1927. The concrete ventilation stack is at far right. The post office and residence are in the centre of the photograph. (Source: Burwood Council)

3–7 The Strand

3–7 The Strand were most likely the three shops referred to in a report in the *Daily Telegraph* in September 1909 indicating that plans were being prepared for six villa residences and three large shops to be erected by the Intercolonial Investment Land and Building Company (IILBC) at Malvern Hill, Croydon.[5] As noted above, a building application was submitted in May 1910 for three shops on Lots 3–5 Section D. The shops were built by October 1909 as they are depicted on the plan of the third subdivision of Malvern Hill.

According to the *Sands Directory,* the first occupants in 1911 were Andrew Pickett's stationery shop at 3 The Strand, George West's pastry shop at 5 The Strand and Mrs Ellen Mcnally's drapery shop at 7 The Strand.

9–15 The Strand

This group of four shops were built by IILBC on Lots 5–8 in Section D of the Malvern Hill Estate following a building application submitted in April 1911. The respective shops are listed for the first time in the 1913 *Sands Directory*, occupied respectively by William Thomas (fruiterer), Miss Evelyn Slade (teacher of music), Daniel Slade (unknown) and lastly Riordan and Spencer (butchers) in what was later numbered 15 The Strand.

17–19 The Strand

Two shops on Lots 9 and 10 Section C of the Malvern Hill Estate were erected by the IILBC before October 1913. No building application has been located for these two shops.

According to the 1913 *Sands Directory*, the as-yet-unnumbered 17 and 19 The Strand are respectively occupied by Ernest Phill (tobacconist) and C Trubody (boot and shoe warehouse). Ernest Phill was a longtime tenant of 17 The Strand, listed at this address until 1931; in later editions of the *Sands Directory* he is described as a hairdresser. Trubody appears to have sold his business in about 1920 to CC Charker, who continued to operate a boot shop at 21 The Strand to 1932–1933 when the *Sands Directory* ceased publication. In the intervening period Charker had attempted to sell the business according to the following notice from October 1929: 'boot store, stock, about £600, at valuation, 19 The Strand, Croydon'.[6]

21–25 The Strand

Three shops were built by IILBC on Lots 11–13 Section D (21–25 The Strand) after Burwood Council approved the building application lodged in early 1912.

The 1913 *Sands Directory* lists John Preen (grocer) and WM Winning, MPS (chemist), in the as-yet-unnumbered 21 and 25 The Strand. The following year, Preen and Winning are listed again with Errol E Phill (mercer) in what was later known as 23 The Strand.

In the late 1930s, the United Australia Party (UAP) had its Croydon branch committee rooms at 23 The Strand.[7]

Leslie Roy Dunbar took over the pharmacy business at 25 The Strand by 1920 and operated the shop until at least 1950.

27 The Strand

William Augustus Little of Sydney, auctioneer, purchased Lot 14 in Section D of the Malvern Hill Estate from the IILBC in mid-1914.[8] The land remained undeveloped in December 1919 when it was conveyed back to the IILBC.

'By 1938, Roy Brothers were one of five official General Motors distributors in Sydney, selling Chevrolet and Pontiac cars.'[9] In late 1940, the IILBC sold the site to Croydon motor garage proprietors Leslie Hulford Roy and John (Jack) Maxwell Roy.

The Roy Brothers commissioned architect Charles H Christian to design garage and showrooms to be erected on this prominent corner block for their growing business needs as they had outgrown their premises at 30 The Strand. According to Jack Roy, his brother Les was involved in the detailed planning of the proposed new building. The building application was approved by Burwood Council at the beginning of 1941. Christian invited tenders to erect the new building in January 1941; the tender was awarded to G Rush and Sons of Randwick in May that year.[10]

Jack Roy and his wife Edna lived in a flat upstairs from the workshop at 27 The Strand. In 1971 Roy Brothers ceased to sell new vehicles and the business gradually declined.

They sold the garage at 1A Fitzroy Street in 1979, whilst the workshop at 27 The Strand was largely disused by 1992 when Les forced a sale under Section 66G of the Conveyancing Act. Les died in 1992, but Jack continued a legal campaign against the executors of Les Roy's estate, culminating in a futile appeal to the High Court in 1997.[11]

Eastern block (even numbers)

2 The Strand

2 The Strand is located on Lot 4 Section C of the Malvern Hill Estate.

The IILBC sold the allotment in September 1913 (registered December 1913) to George Frederick Brown.[12] In May 1917, he transferred the property to Harold Geddes of Burwood, butcher. The following year Geddes lodged a building application to Burwood Council to erect a butcher shop on the site, to cost £950. The shop was built by A Brown.

Harold Geddes is listed in The Strand in the 1919 *Sands Directory*. Geddes, a wealthy butcher with several shops, leased the shop in late 1921 to Croydon butcher Samuel Smyth. When that lease expired in January 1928 the shop was leased to another local butcher, Buswell Thomas Fletcher.

By this time Harold Geddes reportedly owned butcher shops at Burwood and Croydon, land at Newport, Burwood and Croydon, and a motor garage on Parramatta Road.[13]

Fletcher and Evans, butchers, were listed at 2 The Strand in the *Sands Directory* until it ceased publication in 1932–1933.

In 1937, the business at 2 The Strand was advertised for sale as follows: 'Butchery, well fitted, best position, good suburb, trade £50, could be improved. Quick sale.'[14] Later the same year Harold Geddes sold the property to Albert James Graham of Braidwood, a retired tailor. On his death the property passed by transmission to the Perpetual Trustee Company (Limited) in mid-1940.

2 The Strand changed ownership at the end of 1948 to Kevin James Lloyd of Croydon, a taxi proprietor. The following year Sylvester Beckett of Croydon, an estate agent, and June Mary Beckett purchased the property. They owned the site until 1989 when it changed hands to Maria Constantinidis. In the intervening period, the former butcher shop was converted to the estate agency of JS Beckett & Co and the Croydon Building Company office.

In more recent years, the Café on Strand has been operating in the building.

4–6 The Strand

In 1919, the Government Services Bank (GSB) purchased Lots 5–6 Section C from the IILBC for the sum of £1,200. Architects HW Ross and Rowe invited tenders in January 1920 for the erection of banking premises at Croydon for the GSB.[15]

The architects accepted the tender of P Donlan for a 'bank residence'[16] for the sum of £3,762/2/5. According to the approved building application the particulars of the proposed building were concrete foundations and main walls, an iron roof, five rooms, bank and offices. Internal alterations were undertaken to the building in 1928; further internal and external alterations were completed in 1930.

In December 1931, the GSB merged with the Commonwealth Savings Bank. By 1934, with the increased branch business and a staff quota of five employees, the need for more public and working space was acute and plans were drawn up for extensions and renovations to the premises and the manager's residence. This was achieved by extending the building 12' sideways to facilitate addition of a manager's office, extending the counter and providing extra public and working space as well as an extra bedroom to the manager's residence. The whole premises and residence were also renovated and repainted. The alterations and additions were completed in 1936 by James Leckie for £1,297/11/1.[17]

By 1950, the counter space was inadequate for the increase in bank business. Simultaneously there was a need to provide a staff room and a raft of minor alterations. A staff luncheon room was built at the rear of the building and the counter extended in 1951 by RH Donalson & Co for £741/7/-.

The following year various maintenance works were required including painting of exterior woodwork, repairs to the fence and verandah boards. The kitchen, laundry, dining room and passageway in the manager's residence also required renovation. Donnelly & Waites undertook these works for £532/19/-.

Major alterations and additions were planned in about 1973 to accommodate increased branch business and development in the area; the staff quota was now 10.

Rearward extensions of the banking chambers took place, absorbing part of the manager's residence on the ground floor and the whole of the residence on the first floor. Air conditioning was installed on the ground floor and the public and work areas were expanded. The building works were completed in 1976 by MH Farrow Pty Ltd under the supervision of architects Booker & Wilson. During the major alterations the branch moved into temporary leased premises in August 1976. The entire works cost $133,687.

Bullet resistant barriers were installed in 1980.

In 1986, the branch was fully refurnished, which included lowering the ceilings, painting, adding new furniture and carpet. Three years later the property was sold at public auction but the Commonwealth Bank retained the occupancy on lease for five years. The branch was closed in June 1998.[18]

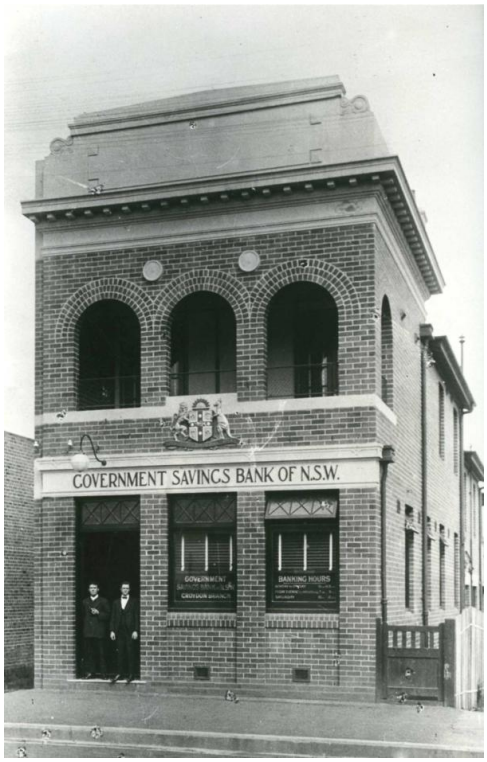


Figure A.3 Government Savings Bank erected in 1919. (Source: CommBank Group Archives)

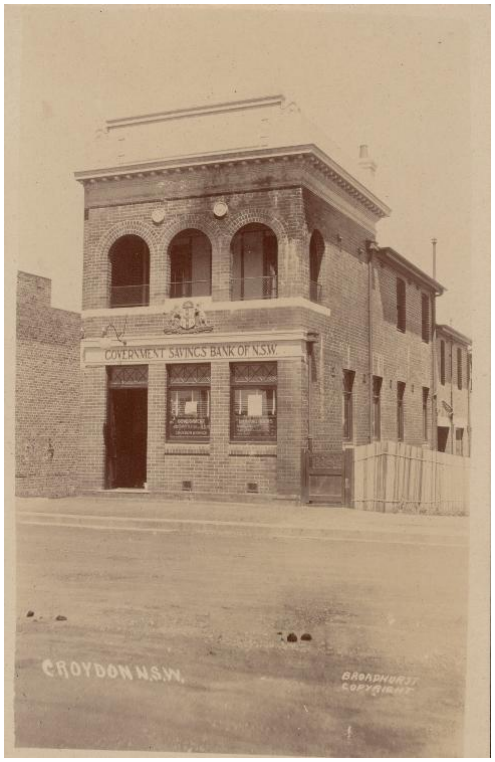


Figure A.4 Government Savings Bank, 4–6 The Strand, early 1920s. (Source: State Library of New South Wales, PXA 635/216 William Broadhurst Postcards)

8–10 The Strand

8–10 The Strand is located on Lots 7 and 8 in Section C of the Malvern Hill Estate. The vacant lot was the site of a mini golf course until about 1931.

In September 1934, the IILBC sold the pair of allotments to a consortium/family group comprising Walter Dickson, William Mann, John Raymond Spencer, Marjorie Spencer, Mabel Frances Spencer and Clara Louisa Spencer as tenants in common.[19]

The following month Spencer & Spencer architects (John Raymond Spencer's architectural practice) accepted the tender of Brice Mutton of 40 Victoria Avenue, Croydon, for the construction of a 'shop, dwelling and hall, also garage' at The Strand, Croydon.[20]

When completed:

> Part of the building was leased as a motor garage to Charles Spurgeon. Spurgeon was actively building speedway racers on the other side of the lane to the rear of the Malvern Hall where the motor garage appears to have been built. The hall also supplemented the nearby Croydon Masonic Hall as a venue for dances.[21]

Several leases are recorded on the certificate title to the various tenancies on the site, namely the motor garage, the shop and dwelling at 8 The Strand and the shop at 10 The Strand. In December 1954 the property changed ownership to John Francis Eric Stephenson.[22]

12–18 The Strand

12–18 The Strand is located on Lots 9–11 and part Lot 12 in Section C of the Malvern Hill Estate. The IILBC lodged a successful building application to Burwood Council in January 1913 to erect four shops.

The shops are first listed in the *Sands Directory* in 1917, respectively occupied by Thomas Semmens (fruiterer), John Graham (ironmonger), Jesse Chambers (cabinet maker) and Mrs F White (dressmaker). The shops with residences above are variously occupied thereafter.

20–22 The Strand

20 and 22 The Strand are located on part Lot 12, Lot 13 and part Lot 14 in Section C of the Malvern Hill Estate. The IILBC lodged a successful building application to Burwood Council in January 1913 to erect two shops at a cost of £1,700.

The shops are first listed in the 1917 *Sands Directory* in the occupation of Lewis Hart (milk vendor) and James Maxwell (tailor). They are variously occupied thereafter.

24–26 The Strand

24 and 26 The Strand are located on part Lot 14, Lot 15 and part Lot 16 in Section C of the Malvern Hill Estate. The IILBC lodged a successful building application in August 1914 to erect:

> two shops and stables … similar to those already erected on the adjoining land. They will occupy the same space and have the same dimensions. The only alteration is that the door will be in the centre instead of to one side. The estimated cost is about £1800.[23]

The application was approved on 10 August. The shops are first listed in the 1917 *Sands Directory* in the occupation of James Kreeler (fish shop) and Miss M Thomas (drapery). They are variously occupied thereafter.

In February 1926, the business at 24 The Strand was advertised as a going concern as follows:

> Ironmongery, paints, oils, crockery, main shopping centre, established 8 years, telephone, beautiful dwelling, 7 rooms, genuine business. Owner taken hotel, so is prepared to sell at a very reduced figure. Big chance for man with little capital to enter going concern.[24]

The business at 24 The Strand was again advertised for sale in 1940 as 'fish shop, extra large, airy dwelling, unopposed, near station, fittings cost over £125, accept any price'.[25]

28–30 The Strand

28–30 The Strand are located on Lots 16 and 17 Section C Malvern Hill. The IILBC lodged an amended application on 24 September 1918 to erect a shop and dentist surgery estimated to cost £600. The Building Inspector approved the application the same day it was submitted (BA 18/185).

By 1920, 28 The Strand was occupied by dentist Cecil Robert Walton and he operated the dental practice here until his death in 1928. He was succeeded at this address by dentist WN Benson in the 1930s. Alan Perry joined Benson in the business and took over the practice by the early 1940s. In the same period, 30 The Strand was occupied briefly by Miss A Pickett (costumiere) in 1924, Miss Hilda Jenkins (costumiere) from 1925 to 1927, and from 1928 by AE Roy.

32–50 The Strand

32–50 The Strand are located on Lots 18–20 Section C Malvern Hill. The IILBC lodged an amended building application in April 1923 to erect '6 shops & dwellings & 2 lock up chambers over sames'.[26] The estimated cost of the shops was £8,000.

Some of the shops were completed and occupied in 1923, although they are not listed in the *Sands Directory* until 1924. In that edition, Heath Marlow & Plekett (estate agents), EA Comer (refreshment rooms), and EA Comer and SO Comer (motor garage) are listed in this part of The Strand (though unnumbered). The following year, 32–50 The Strand are all listed with their respective occupants, which included an upholsterer, a bootmaker, a draper, the Standard Dyeing & Cleaning Works, a fruiterer and a grocer.

In June 1923, Mrs Comer was named as the builder of a garage in The Strand, presumably at No 34.[27] In September the same year Comer's Motor Garage at The Strand, Croydon, was registered as a new business (commenced operation on 31 July) operated by Emily A and Stanley O Comer.[28]

In 1925, Comer's Garage was an agent for Waratah Motor Spirit.[29] In April the same year, Emily A Comer retired from the business.[30]

A new business, 'Roy Bros Motor Garage, The Strand, Croydon' was registered as a motor garage and motorcycle agency in June 1928, having commenced operation on 1 June 1928.[31]

Jack (John) Maxwell and his brother Leslie Hulford Roy took over the site of Comer's Garage at 34–36 The Strand. Roy's business quickly expanded and according to the *Sands Directory*, AE Roy was listed at both 30 and 34–36 The Strand.[32] His sons Leslie (Les) Hulford Roy and John (Jack) Maxwell Roy had registered the firm of Roy Brothers Motor Garage in 1928 and were probably operating at 34–36 The Strand.[33] As well as being motor mechanics, Les and Jack were speedway motorbike riders.[34]



Figure A.5 Comer's Garage and Car Hire, 34 The Strand, 1923–1925. (Source: Johnson, J 2025, *Draft Malvern Hill*, Burwood and District Historical Society, p 44)



Figure A.6 Roy Brothers Car Showroom and Workshop, 34–36 The Strand, after 1960. (Source: Burwood and District Historical Society)



Figure A.7 Section of panorama taken from the front yard of 1 Dickinson Avenue showing 34–50 The Strand, 1961. (Source: Burwood and District Historical Society)

Builders and architects

Table A.1 Table of builders and architects at The Strand, partly sourced by John Johnson (Burwood and District Historical Society).

Sec	Lot	St No.	Building	Builder	Date	Owner	Architect	Cost
Western frontage								
D	1–2	1a	Post Office	Public Works	1912–1913	Commonwealth of Australia	Government Architect	
D	3–5	3–7	Shops	IILBC	25 May 1910	Spec		
D	6–8	9–15	Shops	IILBC	29 Apr 1911	Spec		
D	9–10	17–19	Shops	IILBC		Spec		
D	11–13	21–25	Shops	IILBC	24 Feb 1912	Spec		
D	14	27	Garage and Showroom	G Rush and Sons	May 1941	Roy Brothers	Charles H Christian	
Eastern frontage								
C	4	2	Butchers Shop	A Brown	25 Mar 1918	H Geddes		£950
C	5–6	4–6	Bank	Peter Donlan	12 Feb 1920	Government Savings Bank	Ross & Rowe	£3775
C	7–8	8–10	Malvern Hall	Brice Mutton	Oct 1935	Spencer and others	Spencer and Spencer	
C	9	12	Shop	IILBC	25 Jan 1913	Spec		

Sec	Lot	St No.	Building	Builder	Date	Owner	Architect	Cost
C	10	14	Shop	IILBC	25 Jan 1913	Spec		
C	11	16	Shop	IILBC	25 Jan 1913	Spec		
C	Pt 12	18	Shop	IILBC	25 Jan 1913	Spec		
C	Pt 12, Lot 13 & pt 14	20–22	2 Shops	IILBC	26 May 1914	Spec		£1700
C	Pt 14, Lot 15 & pt 16	24–26	2 Shops and stables Similar to those already erected on the adj. land	IILBC	8 Aug 1914	Spec		£1800
C	Lot	34–50	8 shops (6 shops & dwellings + 2 lock-up & chambers over same)	IILBC	17 Apr 1923	Spec		£8000

Endnotes

1 NSW Land Registry Services, CT Vol 2232 Fol 201.

2 National Archives of Australia, D11/3007, 28 June 1911, Sp32/1, Croydon part 4, p 7 of 70.

3 'Commonwealth works', *Sunday Times,* 9 June 1912, p 9, Trove, National Library of Australia, accessed 10 April 2025 <http://nla.gov.au/nla.news-article126062611>.

4 'Advertising', *Construction: Weekly Supplement to Building,* 24 February 1913, p 2, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article234763924>.

5 'Building & construction', *The Daily Telegraph*, 28 September 1909, p 10, Trove, National Library of Australia, accessed 9 April 2025 <http://nla.gov.au/nla.news-article238324205>.

6 'Advertising', *The Sydney Morning Herald,* 17 October 1929, p 16, Trove, National Library of Australia, accessed 24 April 2025 <http://nla.gov.au/nla.news-article16593772>.

[7] 'Mr Steven's policy speech', *The Sydney Morning Herald,* 10 March 1938, p 17, Trove, National Library of Australia, accessed 24 April 2025 <http://nla.gov.au/nla.news-article27979273>.

[8] NSW Land Registry Services, CT Vol 2479 Fol 94.

[9] Johnson, J 2025, *Draft Malvern Hill*, Burwood and District Historical Society, p 45.

[10] 'Contracts to let', *The Sydney Morning Herald,* 13 May 1941, p 5, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article17746018>.

[11] Johnson, J 2025, *Draft Malvern Hill*, Burwood and District Historical Society, p 55.

[12] NSW Land Registry Services, CT Vol 2427 Fol 226.

[13] 'Were they sweethearts?', *Truth,* 20 March 1927, p 13, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article168682047>.

[14] 'Advertising', *The Daily Telegraph,* 17 February 1937, p 13, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article247378631>.

[15] Advertising', *The Daily Telegraph,* 10 January 1920, p 5, Trove, National Library of Australia, accessed 11 April 2025 <http://nla.gov.au/nla.news-article239667548>.

[16] 'General notes', *The Sydney Morning Herald,* 11 February 1920, p 9, Trove, National Library of Australia, accessed 11 April 2025 <http://nla.gov.au/nla.news-article15867936>.

[17] CommBank Archives, 'Commonwealth Bank of Australia representation at Croydon NSW'.

[18] CommBank Archives, 'Commonwealth Bank of Australia representation at Croydon NSW'.

[19] NSW Land Registry Services, CT Volume 4656 Folio 151.

[20] *Construction and Real Estate Journal*, 24 October 1934, p 10, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article222914801>.

[21] Johnson, J 2025, *Draft Malvern Hill*, Burwood and District Historical Society, p 47.

[22] NSW Land Registry Services, CT Volume 4656 Folio 151.

[23] Intercolonial Investment Land and Building Company corres. 8 August 1914, Building Application No. 780, Application for Council's Approval, Burwood Council.

[24] 'Advertising', *Sydney Morning Herald,* 18 February 1926, p 4, Trove, National Library of Australia, accessed 24 April 2025 <http://nla.gov.au/nla.news-article16264709>.

[25] 'Advertising', *Sydney Morning Herald,* 23 May 1940, p 3, Trove, National Library of Australia, accessed 24 April 2025 <http://nla.gov.au/nla.news-article17679354>.

[26] Burwood Council, Building Application No 96/23, Application for Council's Approval.

[27] 'Advertising', *Construction and Local Government Journal,* 20 June 1923, p 1, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article109763009>.

[28] 'Registered companies', *Dun's gazette for New South Wales,* 1909, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.obj-766891185>.

[29] 'Advertising', *The Sydney Morning Herald,* 28 March 1925, p 11, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.news-article16187996>.

[30] 'Registered firms', *Dun's gazette for New South Wales,* 1909, Trove, National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.obj-765057059>.

[31] 'Registered firms', *Dun's gazette for New South Wales,* 1909, Trove National Library of Australia, accessed 22 April 2025 <http://nla.gov.au/nla.obj-839315589>.

[32] *Sands Directory*, 1926–1930.

[33] *Dun's Gazette for New South Wales*, Vol. 40 No. 1, 2 July 1928, p 13, Trove, National Library of Australia, accessed April 2025.

[34] *The Cumberland Argus and Fruitgrowers Advocate*, Thursday 15 October 1931, p 13, Trove, National Library of Australia, accessed April 2025.

Heritage Data Form

ITEM DETAILS	
Name of Item	The Strand, Croydon (original shop buildings at 1–50 The Strand as well as the road carriageway, median and footpaths)
Other Name/s Former Name/s	
Item type (if known)	Built
Item group (if known)	
Item category (if known)	
Area, Group, or Collection Name	Group
Street number	Properties on the eastern block

Address	Lot/Deposited Plan (DP)	Name/Original Use
2 The Strand 2A The Strand	4/C/DP5613	Butcher
4–6 The Strand	5/C/DP5613 6/C/DP5613	Government Services Bank
8-10 The Strand	7/C/DP5613 8/C/DP5613	'shop, dwelling and hall, also garage'
12 The Strand	1//DP255125	Fruitier
14 The Strand	2//DP255125	Ironmonger
16 The Strand	3//DP255125	Cabinet Maker
18 The Strand	4//DP255125	Dressmaker
20 The Strand	5//DP255125	Milk Vendor
22 The Strand	6//DP255125	Tailor
24 The Strand	7//DP255125	Milk Vendor
26 The Strand	8//DP255125	Tailor
28 The Strand	9//DP255125	Shop
30 The Strand	10//DP255125	Dentist Surgery
32 The Strand	11//DP255125	8 shops ('6 shops & dwellings & 2 lock up chambers over')
34–36 The Strand 38 The Strand	12//DP255125	
40–42 The Strand	13//DP255125	
44 The Strand	14//DP255125	
46 The Strand	15//DP255125	
48 The Strand	16//DP255125	
50 The Strand	17//DP255125	

Properties on the western block

Address	Lot/Deposited Plan (DP)	Name/Original Use
1–1A The Strand	1/D/DP5613 2/D/DP5613	Former Post Office (1913) Former Post Masters Residence
3 The Strand	1//DP255126	Stationary Shop
5 The Strand	21//DP719900	Pastry Shop
7 The Strand	22//DP719900	Drapery Shop
9 The Strand	3//DP255126	Fruiterer
11 The Strand	4//DP255126	Music Shop
13 The Strand	5//DP255126	Unknown
15 The Strand	6//DP255126	Butchers
17 The Strand	7//DP255126	Tobacconist
19 The Strand	8//DP255126	Boot and Shoe Warehouse
21 The Strand	9//DP255126	Grocer
23 The Strand	10//DP255126	Chemist
25 The Strand	11//DP255126	Chemist
27 The Strand	14/D/DP5613	General Motors distributors

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	Road Lot and DP: <to be advised>					
Street name	The Strand					
Suburb/town	Croydon				**Postcode**	2132
Local Government Area/s	Burwood					
Property description	Refer to Street Number above					
Location - Lat/long	**Latitude**	-33.88354		**Longitude**	151.11449	
Location - AMG (if no street address)	**Zone**		**Easting**		**Northing**	
Owner	Various private entities					
Current use	Commercial precinct					
Former Use	Commercial precinct					
Statement of significance	The Strand, Croydon, has cultural significance at the local level for its historic, associative, aesthetic, representative and rare attributes. The Strand, located adjacent to Croydon Station and developed between 1910 and 1923, has historic significance to the locality of Croydon. It is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. Integral to the model suburb planning of the Malvern Hill Estate, The Strand was specifically designed as the commercial centre for the suburb. Its planning and segregation from the residential zone of the suburb demonstrate the influence of the garden suburb movement of the early 20th century. The precinct comprises two distinct blocks divided by a wide road with an avenue of palm trees. The Strand is associated with the Intercolonial Investment Land and Building Company (IILBC). A majority of the shops were owned and constructed by the company, making The Strand possibly the most substantial group of Federation-era shops built by a single owner in Sydney. The IILBC was instrumental in recognising, developing and marketing the precinct. The Strand is also a good example of a precinct featuring buildings designed by a few different architectural firms/architects including Ross & Rowe, Booker and Wilson, Spencer and Spencer, and Charles H Christian. The Strand is a broad, elegant shopping area that significantly enhances the Federation-style character of Malvern Hill Estate. Its aesthetic appeal is defined by varied building forms including its curvilinear shape, unified parapets, and picturesque streetscapes on both sides. Despite refurbishments, the original design intent remains clear, preserving the precinct's aesthetic significance and integrity. Notable landmarks like the former post office at 1 The Strand contribute to its distinctive character. The intactness of original Art Nouveau features, such as leadlight glass and tile patterns, contribute to its aesthetic attributes. Designed as a distinct commercial precinct within a garden suburb, the Strand has retained its original and historic commercial function. The Strand is representative of a collection of good-quality Federation and early interwar two-storey shoptop buildings developed adjacent to a railway station. It contributes greatly to the Federation-style character of the wider suburb. The buildings comprising The Strand are highly intact and not compromised in integrity. It has maintained its aesthetic character with street planning and planting.					

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	The Strand is a rare example of a highly intact Federation-era commercial precinct. Envisaged as a commercial strip on both sides of a main road, it has retained much of its integrity. Unlike other Federation-style shops, which are limited to one side of the main road, The Strand is a planned commercial area within the Malvern Hill Estate, segregated from residential areas and lacking pubs or hotels. This reflects the estate owners' vision for a garden suburb. Developed by a single owner, the IILBC, The Strand is possibly the largest group of shops built by one owner, with none demolished. It stands out as a distinct commercial precinct from the Federation era in the Burwood LGA, making it a rare and unique example of its type. It is the only one of its type across the local area.	
Level of Significance	State ☐	Local ☒

DESCRIPTION	
Designer	Various
Builder/ maker	Various
Physical Description	The Strand is a commercial precinct. It marks a transition between Croydon Station and the residential streets of the broader area. The properties of the Strand extend from 2–50 The Strand on the eastern block and 1–27 The Strand on the western block. Primarily two-storey shops, the lots include one-storey components on the backstreets to support both commercial and residential uses. The buildings comprise mostly shoptop Federation-era terraces with awnings and some motor garages. The immediate streetscape character of the subject precinct is that of an arterial road with a tree-lined division in a median strip and on-street parking. The streetscape and main visual elements are dominated by the two-storey buildings. The scale, style, massing, materiality and character of the area is consistent with a Federation-era garden suburb. The buildings on the east and west sides of the Strand exhibit distinct architectural forms, giving the area a unique aesthetic character. On the eastern side, most properties are unified by a parapet, with a row of shops curving towards the southern end. This curvature is mirrored on the western side by the southernmost property, a garage, which curves inwardly. The western side features a picturesque streetscape of individual buildings. The streetside elevations of the buildings comprise modulated shop façades with repetition of structural bays and parapets. The shopfronts on the ground level are unified by suspended awnings at a similar height. The upper storey includes simple brick façades with recessed balconies behind semi-circular brick arches and panel windows. The general pattern of the precinct, seen on both blocks, is that the shops are in groups of three with slight variations in detailing of brickwork or parapets between each group. Originally, the shops had large display windows and timber surrounds with decorative glass toplights and coloured glazed-ceramic tiles, some in Art Nouveau motifs. Some of these features are still intact and legible. The entrance to each shop was generally to one side. The porches had mosaic tiling, most of which are still in place. Shops built later include brass door joinery and recessed central entries.
Physical condition and	

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Archaeological potential						
Construction years	**Start year**	1909	**Finish year**	1920s	**Circa**	
Modifications and dates						
Further comments	3-7 the Stand include the first block of shops to be constructed (completed in 1912). 12-26 The Strand were completed in 1917. 28-50 The Strand built between 1923 and 1926. Gradually over 30 shops were constructed until 1920s.					

HISTORY	
Historical notes	The Strand was developed between 1909 and the 1920s. The street was a prominent feature of the Malvern Hill Estate. In the first subdivision of Malvern Hill (DP5613), The Strand consisted of Lots 1–20 Section C and 1–14 Section D. According to John Johnson, The Strand was designed to provide a broad and elegant transition between the railway station at Croydon and the salubrious residential streets of Malvern Hill. It is possible the street was named after The Strand, London, a fashionable shopping street. Commercial activity on the Malvern Hill Estate was restricted to The Strand to preserve the exclusive residential character of the subdivision. The majority of the two-storey shops with dwellings above were designed and built by IILBC, the developer of Malvern Hill Estate. The first block of shops, now numbered 3–7 The Strand, was erected by IILBC following lodgement of a building application to Burwood Council in May 1910. These were the first of over 30 shops built by the company in The Strand. Although a number of the shop sites had been sold at auction, the remainder were progressively built on by the company up to the early 1920s. When finished, they were the probably the most substantial group of Federation-era shops built by a single owner in Sydney. Several sites were not built on by the IILBC. These were the Croydon Post Office (1a The Strand), Geddes' Butcher Shop (2 The Strand), the Government Savings Bank (4–6 The Strand), the Malvern Hall (8–10 The Strand) and Roy Brothers workshop (27 The Strand). 3-7 The Strand were built in 1912 with the remaining shops on the western side built the following year. On the eastern side of the road 12-26 The Strand were completed in 1917 while 28-50 built between 1923 and 1926. The Strand was designed with narrow back lanes to accommodate outbuildings at the rear of the properties. These included stables which were subsequently replaced with garages with the advent of the motor car. In 1960, the shareholders of the IILBC accepted a takeover offer by the Mercantile Mutual Insurance Company Ltd (MMI). In 1977, Mercantile Ventures Limited (a division of MMI) re-subdivided the respective property on the eastern and western frontages of The Strand as DPs 255125 and 255126. DP255125 comprised a re-subdivision of Lots 9–20 inclusive in Section C (numbers 12–50 The Strand). DP255126 comprised the re-subdivision of Lots 3–13 inclusive in Section D (numbers 3–25 The Strand). The main assets of the company in Croydon were the shops in The Strand; Lots 9–20 inclusive in Section C had been transferred to Mercantile Ventures Limited in June 1974. The shops with residences were advertised for sale in February 1978 with existing businesses including a fruit and vegetable shop, a fish and chips shop, a delicatessen and a hairdresser.

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APPLICATION OF CRITERIA	
Historical significance SHR criteria (a)	The subject precinct is associated with the 1909 Malvern Hill subdivision and early twentieth-century settlement of Croydon. The Strand was developed as a shopping strip between 1913 and 1920 as part of the new 'model suburb' of Malvern Hill. It was integral to the planning of Malvern Hill Estate and formed the neighbourhood shopping strip. Its location adjacent to Croydon Station was strategically planned while providing a transition to the wider area with its residential premises. Most of the two-storey shops with dwellings above were designed and built by IILBC, the developers of Malvern Hill Estate. In addition to the shops, the subject precinct included a post office, bank, community hall and garage workshops. No pubs or hotels were included as per the commercial precinct planning principles of the garden suburb typology. The scale of development in the immediate surrounds has respected the character of the area and the street still provides a transition between Croydon Station and the residential streets of the wider area. The shops of The Strand are linked to the Federation and interwar development of Malvern Hill and Croydon. Developed adjacent to the railway station, The Strand has historically supported the local community and continues to do so today. Physically, the shops—particularly the upper storeys of the buildings—demonstrate an intactness in the Federation style that defines the character of the Malvern Hill Estate. The subject precinct contributes largely to the development of the Malvern Hill Estate, which is an area of local significance within the wider Croydon area. The Strand still continues to function according to its original use and is an active commercial strip demonstrating its historical link.
Historical association significance SHR criteria (b)	The subject precinct is associated with the IILBC, a company that operated from 1885 to 1960. It dealt with real estate, and operated as a bank and financial agent in the Australian colonies. IILBC owned most lots in the subject precinct and built the first three shops on 3–7 The Strand, which first accommodated a stationery shop, a pastry shop and a drapery. Until the 1920s a majority of the shops (approximately 30) were owned and built by the company. At that time, the shops were possibly the most substantial group of Federation-era shops built by a single owner in Sydney. The development of The Strand into a commercial precinct for the wider Malvern Hill Estate formed an integral part of the planning and advertising for the suburb. The IILBC was instrumental in recognising, developing and marketing the precinct. The subject precinct also has historical associations with a few prominent architects. The Roy Brothers-owned garages at 27 The Strand was designed by architect Charles H Christian, known for the design of curvilinear Art Deco buildings in the interwar era. Meanwhile 4–6 The Strand, originally a branch of the Government Savings Bank, is associated with a few different well-known architectural firms including Ross & Rowe and Booker and Wilson. Ross & Rowe was a prominent practice in Sydney between 1911 and 1937. Examples of their buildings include the Metropolitan Hotel, the Commonwealth Bank of Australia building, and the Downing Centre. Booker and Wilson, a post-World War II firm in operation until the 1980s, designed various banks, shops, factories and housing commission projects around Sydney. No. 8–10 The Strand, originally designed as Malvern Hall, was designed by architect Spencer and Spencer. The subject precinct is a good example of a site that includes several architect-designed buildings from the early to mid-twentieth century.
Aesthetic significance SHR criteria (c)	The subject precinct was designed as a broad and elegant shopping area and promenade between the railway station and the residential areas. It contributes greatly to the Federation-style character of the broader Malvern Hill Estate area. The earliest buildings of The Strand, including 3–7 The Strand and 1 The Strand (including the former post office), are legible. Located at a prominent corner position facing the railway station, the post office is a landmark building on The Strand. The buildings to the east and west side of the Strand are different in building forms providing the Strand with a distinctive aesthetic character. Most of the properties on the eastern side are unified by a parapet and the strip of shops curve towards the southern end. This shape is reflected on the western side by the southernmost property (garage) the form of which curves inwardly. The western side provides a picturesque streetscape of individual buildings. Generally, all buildings in the subject precinct have undergone refurbishments though the shop façades still provide a consistent aesthetic streetscape. All buildings have been altered on the ground floor but the upper storey is largely intact. For instance, some windows have been replaced on the second storey but overall the early fenestration and features are largely apparent. The additions and refurbishments are mostly sympathetic and much of the original design intent remains legible. Based on photographic evidence, some of the buildings have a high level of integrity to the original design. Art Nouveau features including leadlight glass and tile patterns are still evident on some shop

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	façades. The integrity and intactness of the buildings as a whole are not compromised and the aesthetic nature of the subject precinct is retained.
Social significance SHR criteria (d)	Since its formation in 1912, the subject precinct is still in use as the commercial centre for the wider area. Though a detailed social values assessment has not been undertaken, it is likely that the precinct has social significance for the current and past local community as a whole as a place to gather, shop and socialise. From the *Public-Exhibition of Alternative Croydon TOD Masterplan – Engagement Outcomes Report* (prepared by Burwood Council, dated January 2025) which highlighted the key issues from the October 2024 formal exhibition period, heritage was a key issue (with 43.3% of submissions mentioning the theme), and there submission with specific discussions about the Railway South Precinct, the Malvern Hill Estate HCA and The Strand in particular. Submissions highlighted the heritage significance of the Malvern Hill HCA and supported and appreciated the intent of the Masterplan towards protecting the existing HCA. Submissions also highlighted the heritage significance of The Strand, however, a number made reference to The Strand location and the need for revitalisation with opportunities for character sympathetic development being able to be undertaken at the location to create a more vibrant and activated town centre. While not a formal social values assessment, this recent public exhibition process demonstrates that there is community affinity for The Strand and desire for its conservation.
Technical/Research significance SHR criteria (e)	The shoptop buildings of The Strand are examples of typical construction from the Federation era and do not demonstrate innovation in design, fabrication or any particular historical process. It is unlikely that the subject precinct would provide any substantial new information or have the potential to expand knowledge of the local area beyond what is already known, or what could be obtained by alternative means.
Rarity SHR criteria (f)	The 34 properties at The Strand are examples of Federation two-storey shoptop brick buildings. The comparative analysis identified numerous fine examples of this style from these periods, which are identified as heritage items either individually or within HCAs. However, as a collective, The Strand is unique in its form and layout. Designed with rear lanes, its layout is still legible and the division of lots it comprises still evident. Designed as a street with blocks of shops on each side, The Strand has retained much of its integrity and intactness to date. The other groups of Federation-style shops, though comparable in character and architectural style, comprise a smaller group of shops limited to one side of the main road. As a planned commercial area within a planned suburb, the Strand represents a typology of model suburb planning that was rare to its time. As the commercial portion of the Malvern Hill Estate, it was and still remains to be segregated from the surrounding residential areas. The Strand does not include a pub or hotel enabling the Malvern Hill Estate to be an uncommon form of suburb development in Sydney possible for the level of control executed by the estate owners by the use of building covenants and the desire for a garden suburb. The Strand is an example of a large group of buildings developed at the same time by a single owner i.e. the IILBC. It is possibly the largest group of shops built by a single owner with none having been demolished. It is the only one of its type and is therefore distinct in the wider Burwood LGA as a distinguishable commercial precinct from the Federation era. As a whole, the subject precinct is considered to be rare and the only example of its type.
Representativeness SHR criteria (g)	The subject precinct includes a group of Federation-style shoptop buildings that collectively form a fine example of this type. The setting, condition and scale of The Strand have remained uncompromised. It can be regarded as outstanding because of its integrity and intactness. The Strand is still a prominent feature and defining street for the original subdivision of Malvern Hill Estate. It has its own distinct characteristics—for instance, the post office and former butchers form an entrance into the promenade. The row of palm trees dividing it add to its aesthetic character. The form, scale and height of the buildings defining the streetscape remain largely legible. It is an outstanding representation of its type in the LGA, forming a transition to the nearby residential areas. The comparative analysis has determined that in comparison to other examples The Strand is a good example of the Federation/interwar two-storey shoptop typology, especially in its intactness. It still maintains a cohesive character and retains its streetscape presence and prominence in comparison to the other examples. Its form, setting and retention of a shopfront configuration together with its current use echo its original purpose and are consistent with the variety of commercial premises it originally housed.
Integrity	The setting and context of The Strand have remained unchanged since the development of its buildings. The planned layout of the pedestrian realm and central avenue of trees is still extant and adds to the character of the precinct. The buildings vary in integrity. Most shopfronts on the northern

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	side of the road are intact. Features including pressed metal ceilings have been retained. All of the shops have been altered at ground level with changes in use and tenancy. However, in general, most buildings retain some original features such as ceramic tiled front porches with Art Nouveau motifs, tessellated tile patterns, brass sashes around windows, leadlight glazing and terracotta vents. The upper-storey fabric is mostly intact across all buildings. No new openings and limited infills were noted for the upper storeys of the buildings. Features such as recessed façades in arches, original sash windows, parapets and details in brickwork remain intact and legible. The buildings can be considered to have integrity consistent with original design, composition and external materiality. Overall, the planned layout of The Strand and the Federation-style character of its buildings remain highly legible. Therefore, The Strand has moderate to high integrity.

HERITAGE LISTINGS	
Heritage listing/s	Malvern Hill Heritage Conservation Area (C13) in the Burwood Local Environmental Plan 2012.

INFORMATION SOURCES				
Include conservation and/or management plans and other heritage studies.				
Type	**Author/Client**	**Title**	**Year**	**Repository**
Listing Report	GML Heritage Pty Ltd	The Strand, Croydon – Precinct-Specific Heritage Assessment	2025	Burwood Council

RECOMMENDATIONS	
Recommendations	The Strand, as a group, should be retained and conserved with recognition of the individual and sub-block character that make up The Strand as a whole. It would be preferable to prepare a Conservation Management Plan (CMP) for the whole group. More detailed analysis of exterior and interior fabric and features is required for this task. A Statement of Heritage Impact (SOHI) should be prepared for the building(s)/group prior to any major development works being undertaken. Generally, there should be no vertical additions to the building and no alterations to the facade of the building(s)/group other than to conserve or reinstate original features. Any major additions should be confined to the rear of the lots, in areas of lesser significance, and should maintain the visual prominence of the front/primary form/original shopfronts of the buildings (not just the facades) along The Strand.

SOURCE OF THIS INFORMATION			
Name of study or report	The Strand, Croydon – Precinct-Specific Heritage Assessment prepared for Ethos Urban on behalf of Burwood Council	**Year of study or report**	2025
Item number in study or report	N/A		
Author of study or report	GML Heritage Pty Ltd		
Inspected by	GML Heritage Pty Ltd		
NSW Heritage Manual guidelines used?		Yes ☒	No ☐
This form completed by	GML Heritage Pty Ltd	**Date**	July 2025

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IMAGES - 1 per page

Image caption	View of the Strand from Croydon Station				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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Image caption	View of part of the western block of the Strand				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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Image caption	View of part of the eastern block of the Strand				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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Image caption	1-1A The Strand (former post office building)				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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IMAGES - 1 per page

Image caption	View of the Strand facing north				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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IMAGES - 1 per page

Image caption	21 The Strand – tiled porch and tessellated tiled patterns of recessed entrance				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



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Image caption	5 The Strand – entry porch				
Image year	2025	**Image by**	GML Heritage	**Image copyright holder**	GML Heritage



Attachment 3– List of Submissions received during Pre Engagement of Heritage Assessment on The Strand

Submissions	Support (Y/N)	Summary of Submission received	Council response
Submission 1	Y	The submission strongly supports the proposal for group heritage listing of the Strand.	Noted
Submission 2	Y	The submission supports the independent and comprehensive assessment of The Strand and the proposed group heritage listing. The submission emphasises that the current status of The Strand as a Heritage Conservation Area is unable to provide legal protection the precinct deserves and that only formal heritage listing can ensure long-term protection and integrity of The Strand. The submission also recommends that Council explore support measures for property owners, such as reduced development fees, a central contact point, and access to grant opportunities.	Noted. Matters relating to heritage development applications and relevant fees are reviewed on a case-by-case basis. All development application related queries are taken by Council's duty planning officer. Any specific queries regarding heritage Development Applications (DAs) can be further discussed with Council's Senior Heritage Planner. Recommendation in relation to grant funding will be further explored by Council as part of future heritage conservation initiatives.
Submission 3	Y	The submission supports the proposed group heritage listing of The Strand. Concern is raised in relation to future maintenance of the heritage value of The Strand and that it should not put significant burden on rate payers.	Council’s Local Environmental Plan contains provisions that enable the sustainable redevelopment of heritage items through adaptive reuse, supporting their ongoing maintenance and long-term viability. Any future development applications proposing adaptive reuse will be considered and assessed on a case-by-case basis, guided by Council’s heritage advisor.

Submission 4	Y	The submission strongly supports the proposal for group heritage listing of The Strand.	Noted
Submission 5	Y	The submission strongly supports the proposal for group heritage listing of The Strand.	Noted
Submission 6	Y	The submission supports the assessment undertaken by GML, the extent of the heritage boundary and the proposed group heritage listing of The Strand. It supports the recommendation that a conservation management plan be prepared for the ongoing protection of the Strand. The submission commends Council for initiating the heritage listing of The Strand.	The preparation of a Conservation Management Plan is a recognised approach to protecting and maintaining heritage items. Council's Local Environmental Plan also provides for the sustainable redevelopment of heritage items through adaptive reuse, helping to ensure their ongoing upkeep and long-term viability. As part of any future development, a Conservation Management Plan or Strategy will be required to accompany a Development Application. In addition to the heritage assessment, Council will undertake further specialist studies in accordance with Council's resolution to undertake a precinct-specific study of The Strand. Future Conservation Management Plans or Strategies will be guided by the recommendations of this further work and the community will be consulted accordingly.
Submission 7	Y	The submission supports the proposal for group heritage listing of The Strand.	Noted
Submission 8	Y	The submission supports the proposal for group heritage listing of The Strand.	Noted
Submission 9	Y	The submission supports the proposal for group heritage listing of The Strand.	Noted

Submission 10	Y	The submission supports the proposal for group heritage listing of The Strand and commends Council on this initiative.	Noted
Submission 11	Y	The submission commends Council's initiative on protecting The Strand via a group heritage listing. It recommends that individual heritage listing would assist with a reduced land tax for individual property owner.	The proposed group heritage listing aligns with the recommendations of the 2025 GML Heritage Assessment. Its purpose is not to limit future redevelopment opportunities along The Strand, and as such, the listing is not expected to affect land value or associated land tax. Council's Local Environmental Plan includes provisions that encourage the sustainable redevelopment of heritage items through adaptive reuse, ensuring their ongoing maintenance and long-term viability. Development applications seeking adaptive reuse will continue to be reviewed and assessed on a case-by-case basis.

Submission 12 (Burwood and District Historical Society)	Y	The Burwood & District Historical Society strongly supports the proposed heritage listing of The Strand, Croydon and the proposed boundary for the listing. The Historical Society supports the findings of GML Heritage Assessment which states: "*that The Strand, Croydon meets the threshold for heritage listing under the historic, associative, aesthetic, social, representative and rare criterion of the NSW Heritage Assessment Criteria. These attributes are contributory to, but distinct from, the values of the Malvern Hill HCA as a whole*." The report highlights The Strand's rarity as a retail precinct predominantly developed by a single developer in the early 20th century, giving it a unique and cohesive character. In addition to supporting the listing, the Society recommends the preparation of a Conservation Management Plan to guide future development and ensure the long-term protection, maintenance, and integrity of The Strand's heritage significance.	Council acknowledges and appreciates the support of the Burwood & District Historical Society for the proposed heritage listing of The Strand. Council also notes the recommendation for the preparation of a Conservation Management Plan (CMP) to guide future development. The preparation of a CMP is a recognised mechanism to protect and maintain heritage items and will form an important part of the ongoing management of The Strand. Council's Local Environmental Plan includes provisions that enable sustainable redevelopment of heritage items through adaptive reuse, ensuring their ongoing maintenance and long-term viability. As such, any future development applications involving The Strand will be required to include a Conservation Management Plan or Strategy for assessment. Further, Council has also commissioned additional studies on the Character Area, Built Form Testing, and a Public Domain Plan for The Strand. These specialist reports will inform the preparation and assessment of future CMPs to ensure that redevelopment is balanced with the protection and enhancement of The Strand's heritage significance.

Submission 13 (The National Trust of Australia)	Y	The National Trust of Australia (NSW) commends Council on the proposed listing of The Strand on the Local Environmental Plan and supports the proposed listing. The National Trust agrees with the Heritage Assessment undertaken by GML Heritage that states: *"The Strand, Croydon meets the threshold for heritage listing under the historic, associative, aesthetic, social, representative and rare criterion of the NSW Heritage Assessment Criteria. These attributes are contributory to, but distinct from, the values of the Malvern Hill HCA as a whole."*	Noted
Submission 14	Y	The submission supports the proposal for group heritage listing of the Strand. It was developed by a single owner and continues in place unchanged and together with the adjoining Malvern Heritage Estate presents a model suburb layout which was unusual at the time.	Noted
Submission 15	Y	The submission supports the proposal for group heritage listing of the Strand.	Noted
Submission 16	Y	The submission supports the proposal for group heritage listing of the Strand due to its unique character and rarity.	Noted
Submission 17	Y	The submission supports the proposal for group heritage listing of the Strand due to its unique character and suburban charm.	Noted

Submission 18	Y	The submission strongly supports the proposal for group heritage listing of the Strand, an area of historic significance that is well used by the local community and visitors equally.	Noted
Submission 19 (Burwood and District Historical Society)	Y	The author of “The Model Suburb: A History of the Malvern Hill Estate, Croydon NSW” has expressed strong support for Council’s proposal to group list The Strand shops as a heritage item, noting this will further strengthen protections of the Strand. The submission emphasises that the detailed studies underpinning Council’s proposal provide clear evidence of The Strand’s heritage significance and its contribution to the integrity of the Malvern Hill Estate. The submission commends Council’s initiative and advises that the Burwood Historical Society intends to propose State heritage listing for the entire Malvern Hill Estate.	Council notes that the process for State heritage listing is the responsibility of the NSW Heritage Office. While Council does not have the authority to initiate or determine State heritage listings, it is more than willing to review and consider any proposal prepared by a qualified heritage consultant.

Submission 20	Y	The submission supports the proposal for group heritage listing of the Strand which is unique to the Inner West and important to the community's wellbeing as a gathering place. It proposes that allowing development within and around will change the character of the place.	Council acknowledges community concerns that allowing new development within and around The Strand may adversely affect the character of this important precinct. Council's adopted Croydon Masterplan provides for a maximum height of four storeys, a scale that has been deliberately set to facilitate sustainable change while not detracting significantly from the existing heritage character and village atmosphere. The current heritage assessment represents the first step in formally identifying and acknowledging the elements of The Strand that are of greatest importance to the community. In line with Council's resolution of 29 January 2025, further detailed planning work is underway, including the preparation of a Local Area Study and built form controls for The Strand. These measures will ensure that any future redevelopment occurs in a manner that is sympathetic to the precinct's heritage significance, while also supporting its long-term vitality and liveability. Through this approach, Council seeks to balance the need for managed renewal with the protection of the cultural and historic values that make The Strand a distinctive and valued place.
Submission 21	Y	The submission supports the proposal for group heritage listing of the Strand	Noted
Submission 22	Y	The submission supports the proposal.	Noted

Submission 23	Y	The submission supports the proposal and commends Council for its initiative.	Noted

4 August 2025

Burwood Council
2 Conder Street
Burwood NSW 2134

ATTN: Jai Reid – Manager City Development

Dear Jai,

SECTION 4.55(1A) MODIFICATION APPLICATION TO DEVELOPMENT CONSENT NO. 2022.44

This letter has been prepared by Mecone Group Pty Ltd (**Mecone**) on behalf of Burwood Council to support a modification application to Burwood Council, pursuant to Section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**).

The application proposes to modify development consent no. **2022.44** approved on 27 February 2023 for the Burwood Urban Park and Cultural Centre at 2-4 Conder Street (Lot 15 DP 832440), 52-60 Railway Parade (Lot 16 DP 832440), Part Railway Parade Road Reserve and Part Conder Street Road Reserve (**the site**).

Specifically, the application seeks to amend the Green star rating for the development from 5 star to 4 star due to budgetary limitations for the public works project.

BACKGROUND

A summary of the relevant development history for DA 2022.44, including modifications, is provided as follows:

DA 2022.44.1
Development Application 2022.44.1 was approved by the Sydney Eastern Planning Panel on 27 February 2023 for the *demolition of an existing car park and construction of the Burwood Urban Park and Cultural Centre. This includes the construction of a community and cultural centre, public plaza, café, landscaping and public domain upgrades, basement car parking and other associated works*.

DA 2022.44.2
Section 4.55(2) Modification 2022.44.2 was approved by the Sydney Eastern Planning Panel on 14 November 2024 for *amendments to finished floor levels, internal reconfiguration to floor plans, relocation of studio, change of use from café to food and drink premises, amendments to 'Marker' structure and modifications to landscaping plan.*

DA 2022.44.3
Section 4.55(1) Modification 2022.44.3 was approved by the Council on 10 December 2024 for amendment *to drawing and plan details to correct error on the Condition of Consent 2022.44.2.*

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PROPOSED MODIFICATION

This modification application seeks to amend the Green Star Buildings v1 Benchmark rating for the development from 5 stars to 4 stars (self-assessed). Due to budgetary constraints, achieving a 5 star Green star rating is no longer feasible for the project as originally considered.

As a public authority, Council has a responsibility to manage public funds and act in the best interest of the community. Noting the budgetary constraints of the project and higher costs associated with a 5 star Green star rating, a decision from Council has been made to revise the sustainability strategy for the project.

The revised approach will continue to target a 4 Star Self-Certified Green Star Buildings rating for the project while still incorporating key sustainability initiatives consistent with the Green Star principles. As such, the project remains committed to sustainable design and construction practices.

The amendment is a pragmatic response to budgetary limitations and ensures the project remains a sustainable form of development, balanced with still being financially viable – so that it can be delivered to the community.

To reflect the revised sustainability target, a revised ESD Report (**Appendix** 1) and Section J Statement (**Appendix** 2) have been prepared and are appended to this report.

The proposed amendments to conditions of consent identified by this Section 4.55(1A) modification are outlined in **Table 1** below (new in ***bold/italic***, deletions in ~~strikethrough~~):

TABLE 1 – PROPOSED MODIFICATION TO CONDITION OF CONSENT

Condition Number	Wording Changes
(1)	The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow:

SHEET NO.	SHEET NAME	REVISION
DA-001	Site Analysis	D
DA-002	Site Plan	D
DA-102	Ground Floor Plan	E
DA-103	Lower Ground Floor Plan	D
DA-104	Basement 1	D
DA-105	Basement 2	D
DA-201	Elevations – Sheet 1	E
DA-202	Elevations – Sheet 2	E
DA-203	Elevations – Sheet 3	D
DA-301	Sections – Sheet 1	D
DA-302	Sections – Sheet 2	D
DA-303	Sections – Sheet 3	D
DA-401	GFA Diagrams	D
DA-402	Signage Design Intent	B
DA-403	Materials and Finishes	D
DA-404	Shadow Diagrams	D
DA-900	3D Visualisation	D
DA-901	3D Visualisation	D
DA-902	3D Visualisation	D
DA-903	3D Visualisation	D
A-DA-904	3D Visualisation	D
A-DA-905	3D Visualisation	D
A-DA-906	3D Visualisation	D
CS-L002	Legend	C
CS-L101	Demolition Plan	C
CS-L102	Tree Management Plan	E
CS-L110	Illustrated Landscape Plan	D

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TABLE 1 – PROPOSED MODIFICATION TO CONDITION OF CONSENT

Condition Number	Wording Changes

The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow:

CS-L111	General Arrangement Plan	D
CS-L120	Grading Plan	D
CS-L130	Planting Schedule	E
CS-L201	Site Sections	E
CS-L202	Site Sections	D
CS-L203	Site Sections	D
CS-L204	Site Sections	A
CS-L300	Paving and Furniture Palette	A
CS-L301	Materials and Finishes Palette	B
CS-L302	Typical Planting Details	C
CS-L303	Typical Planting, Wall, Stair Details	B
CS-L304	Indicative Views	B
CS-L305	Indicative Views	B

- Landscape Plans prepared by Tyrrell
- Survey Plan prepared by Higgins Surveyors
- Statement of Environmental Effects prepared by Mecone
- Response to RFIs letter prepared by Mecone
- Access Review prepared by Morris Goding Access Consulting
- Access Report prepared by Philip Chun dated 27 September 2024
- Plan of Management (undated),
- Acoustic Report prepared by RWDI
- Acoustic Addendum Report prepared by RWDI Australia Pty Ltd dated 25 June 2024
- Arboricultural Impact Assessment prepared by Australis Tree Management
- BCA Regulatory Compliance Report prepared by McKenzie Group
- Carparking Compliance Assessment prepared by ptc
- Carparking Letter and Plan prepared by ptc
- Civil Stormwater Report and Civil Works Plans prepared by TTW
- Construction and Demolition Waste Management Plan prepared by Elephants Foot
- Conder St Flood Impact Assessment by TTW
- CPTED Report prepared by Mecone
- DCP Compliance Table prepared by Mecone
- Design Excellence Responses prepared by CHROFI and Tyrrell Studio
- Design Statement prepared by CHROFI and Tyrrell Studio
- Detailed Site (Contamination) Investigation by Douglas Partners
- Ecological Assessment prepared by SIA
- ~~ESD Report by Cundall~~
- ***ESD Master Specification by JHA Consulting Engineers 16/08/24***
- Fire Engineer's letter by Stantec
- ~~Green Star Strategy Report by Cundall~~
- Heritage Impact Statement by Jackson-Stepowski
- Interim Audit Advice #01 by Ian Swane & Associates
- NABERS Energy Guide by Cundall
- Operational Management Plan by Burwood Council
- Operational Waste Management Plan by Elephant's Foot
- Pre-DA Response by CHROFI and Tyrrell Studio
- Preliminary (Site) Contamination Investigation BY Douglas Partners
- Public Art Plan by Artscape
- Remediation Action Plan by Douglas Partners
- ~~Section J Report by Cundall~~
- ***Section J Report by JHA Consulting Engineers 16/06/25***
- Services and Utilities Report by IGS
- Structural DA Report by TTW

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TABLE 1 – PROPOSED MODIFICATION TO CONDITION OF CONSENT

Condition Number	Wording Changes
	The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow: • Transport, Traffic and Parking Impact Assessment prepared by Road Delay Solutions • Traffic Addendum Report prepared by ptc. dated 17 April 2024 • Wind Impact Statement prepared by RWDI • Operational Waste Management Plan prepared by Elephants Foot dated 12 May 2024 • Heritage Impact Statement prepared by Jackson-Stepowski dated 20 February 2024 • Fire Engineering Compliance Letter prepared by E-LAB Consulting, dated 23 February 2024 • BCA Compliance Letter prepared by Philip Chun dated 23 February 2024.

Condition Number	Wording Changes
(53)	The building must be designed to achieve a minimum ~~5~~ ***4*** Star Green ***self-certified*** Star rating under the ~~Design & As Built~~ ***Buildings v1*** Green Building Council of Australia Rating Tool. Prior to the issue of the relevant Construction Certificate, the Applicant shall submit details to the Certifying Authority demonstrating compliance with this requirement. Minor amendments to the detailed design required to adapt the building to achieve ~~5~~ ***4*** Star Green Star ***self-***certification may be submitted to and approved by the Council prior to the issue of a Construction Certificate. Any minor amendments to the detailed design must be demonstrably associated with the green star ***self-***certification process

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ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

An assessment of the proposed modification against the matters for consideration listed under Sections 4.55(1A) and 4.15(1) of the EP&A Act are provided in **Table 2** and **Table 3** below.

TABLE 2 - SECTION 4.55 ASSESSMENT

Section No.	Section	Assessment
(1A)	A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if—	
(a)	it is satisfied that the proposed modification is of **minimal environmental impact**, and	The modification seeks to amend the relevant consent conditions relating to the green star rating for DA.2022.44. No physical changes to the approved design as shown on the stamped DA drawings are proposed by this modification. As noted above, the revised approach will target a 4 Star Self-Certified Green Star Buildings rating for the project while still incorporating key sustainability initiatives consistent with the Green Star principles. The proposed amendment is therefore considered to be of minimal environmental impact.
(b)	it is satisfied that the development to which the consent as modified relates is **substantially the same development** as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and	The development as proposed to be modified remains substantially the same as the development as originally granted, with no physical changes proposed by this modification. The proposal remains for the purpose of the Burwood Urban Park and Cultural Centre. In quantitative and qualitative terms it is substantially the same development as originally approved.
(c)	it has **notified the application** in accordance with— (i) the regulations, if the regulations so require, or (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and	Notification (if required) will be in accordance with Council's Community Participation Plan.
(d)	it has considered any **submissions** made concerning the proposed modification within	Any submissions received will be addressed as necessary/ appropriate.

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TABLE 2 - SECTION 4.55 ASSESSMENT

Section No.	Section	Assessment
	the period prescribed by the regulations or provided by the development control plan, as the case may be.	
(3)	In determining an application for modification of a consent under this section, the consent authority must take into consideration such of the matters referred to in **section 4.15(1)** as are of relevance to the development the subject of the application. The consent authority must also take into consideration the reasons given by the consent authority for the grant of the consent that is sought to be modified.	Consideration of the relevant s4.15(1) matters is provided below. It is concluded that the proposal as modified complies with relevant statutory considerations and will be of no overall environmental impact.
(4)	The modification of a development consent in accordance with this section is taken not to be the granting of development consent under this Part, but a reference in this or any other Act to a development consent includes a reference to a development consent as so modified.	Noted
(5)	To avoid doubt, a consent authority is not prevented from modifying a consent under subsection (1A) or (2) merely because the modification only modifies a condition of consent and would not result in a change to the development the subject of the consent.	Noted

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TABLE 3 - SECTION 4.15 SUMMARY ASSESSMENT

Section No.	Section	Assessment
(1)	Matters for consideration—general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:	
(a)(i)	The provision of: Any **environmental planning instrument**, and	This modification seeks to amend the Green Star rating for the project to ensure the project remains financially feasible and can be delivered in a timely manner. The proposed modification remains consistent with the relevant SEPPs and LEP as approved under the original DA.
(ii)	Any **proposed instrument** that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	None applicable.
(iii)	Any **development control plan,** and	An assessment against the provisions of the Burwood Development Control Plan (DCP) was undertaken in respect of DA.2022.44. and as modified. The relevant matters, findings and conclusions are relevant and remain applicable to this assessment. Section 6.7 of the DCP relates to energy efficiency and sustainability and identifies a minimum requirement for 4.5 star Nabers rating. Given the proposed use as a public building, it is not possible to target a Nabers rating for the development, and as such, a Green star rating was identified for the project. Whilst the proposal reduces the Green star target for the project, the proposal remains consistent with the aims and provisions of Section 6.7 of the DCP. Furthermore, Green star establishes targets across a multitude of aspects including building management, construction management, indoor environment amenity, etc., and is not just limited to energy efficiency. As such, the proposal is able to consider a more holistic approach to building sustainability than would otherwise be required under the Nabers rating tool. As such, the modification remains compliant with the DCP as previously approved.
(iiia)	Any planning agreement that has been entered into under Section 7.4, or any draft planning agreement that a developer has offered to enter into under Section 7.4, and	None applicable.

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(iv)	The regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	The proposed modification is consistent with the regulations applying to this type of development.
(b)	The **likely impacts** of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The revised approach will target a 4 Star Self-Certified Green Star Buildings rating for the project while still incorporating key sustainability initiatives consistent with the Green Star principles. Whilst the sustainability performance of the building may not be as high under a 5 star Green star rating, the amendment is a pragmatic response to budgetary limitations and ensures the project remains a sustainable form of development, balanced with still being financially viable. As such, the likely impact of the modification is considered minimal and acceptable in this instance.
(c)	The **suitability of the site** for the development,	The development remains consistent with the relevant SEPPs, LEP, Guidelines and DCP controls as previously approved. As such, the site remains suitable for the proposed development.
(d)	Any submissions made in accordance with this Act or the regulations,	This is a matter to be addressed following the notification of the application.
(e)	The **public interest**	The proposal is in the public interest as it will ensure the community facility project remains feasible and can be delivered in a timely timeframe.

CONCLUSION

This assessment has been prepared to support a Section 4.55(1A) modification application to DA.2022.44 to amend the Green Star Buildings rating for the development due to budgetary constraints.

The revised approach will continue to target a 4 Star Self-Certified Green Star Buildings rating for the project while still incorporating key sustainability initiatives consistent with the Green Star principles. As such, the project remains committed to sustainable design and construction practices.

As a public authority, Council has a responsibility to manage public funds and projects in the best interests of the community. The amendment is a pragmatic response to budgetary limitations and ensures the project remains a sustainable form of development, balanced with still being financially viable – so that it can be delivered to the community.

This statement describes the proposed modifications to consent DA.2022.44 and includes assessment of the relevant heads of consideration pursuant to section 4.55(1A) and 4.15(1) of the EP&A Act.

As demonstrated in this report, the proposed modifications are of minimal environmental impact. The proposal will remain substantially the same development as originally approved under DA.2022.44.

We therefore request that Council modify the consent as proposed. We trust that the information provided is sufficient for Council to approve the Section 4.55(1A) modification in a timely manner.

Should you wish to discuss the modification application further, please do not hesitate to contact myself on 02 8667 8668 or at jrixon@mecone.com.au.

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info@mecone.com.au
02 8667 8668

Kind regards,



Jack Rixon
Associate

Enclosure:

Appendix 1 – ESD Master Specification

Appendix 2 – Revised Section J Statement

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ENGINEERING SPECIFICATION FOR ESD SERVICES

BURWOOD URBAN PARK, AND COMMUNITY CENTRE

ESD MASTER SPECIFICATION

ISSUE	COMMENT	DATE	AUTHOR	CHECKED	AUTHORISED	JOB NO.
P1	FOR TENDER	16/08/2024	GL	BB	GL	230089
P2	TENDER ISSUE	16/06/2025	GL	BB	GL	230089

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TABLE OF CONTENTS

TABLE OF CONTENTS 2
SECTION 1 - PROJECT INFORMATION 3
1.1 DEFINITIONS 3
1.2 THE PROJECT 3
1.3 SELF CERTIFIED GREEN STAR BUILDINGS V1 BENCHMARK RATING 3
1.4 HEAD CONTRACTOR ROLES AND RESPONSIBILITIES 4
1.5 ESD TENDER RETURN SCHEDULE 6
1.6 CLIMATE POSITIVE PATHWAY 7
1.7 DISTINCT BOUNDARY 7
1.8 PRECEDENT OF DOCUMENTS 7
1.9 TARGETED CREDITS 8
SECTION 2 - SELF CERTIFIED GREEN STAR BENCHMARKING REQUIREMENTS 9
CREDIT 1 – INDUSTRY DEVELOPMENT 9
CREDIT 2 – RESPONSIBLE CONSTRUCTION 11
CREDIT 3 – VERIFICATION AND HANDOVER 13
CREDIT 4 – RESPONSIBLE RESOURCE MANAGEMENT 18
CREDIT 10 – CLEAN AIR 20
CREDIT 11 – LIGHT QUALITY 22
CREDIT 12 – ACOUSTIC COMFORT 24
CREDIT 13 – EXPOSURE TO TOXINS 25
CREDIT 16 – CLIMATE CHANGE RESILIENCE 29
CREDIT 19 – HEAT RESILIENCE 30
CREDIT 21 – UPFRONT CARBON EMISSIONS 31
CREDIT 22 – ENERGY USE 33
CREDIT 23 – ENERGY SOURCE 35
CREDIT 24 – OTHER CARBON EMISSIONS 37
CREDIT 25 – WATER USE 38
CREDIT 27 – MOVEMENT AND PLACE 39
CREDIT 28 – ENJOYABLE PLACES 42
CREDIT 29 – CONTRIBUTION TO PLACE 44
CREDIT 30 – CULTURE, HERITAGE, AND IDENTITY 45
CREDIT 31 – INCLUSIVE CONSTRUCTION PRACTICES 46
CREDIT 32 – INDIGENOUS INCLUSION 47
CREDIT 33 – PROCUREMENT AND WORKFORCE INCLUSION 49
CREDIT 35 – IMPACTS TO NATURE 51
CREDIT 41 – LEADERSHIP CHALLENGES: CLIMATE POSITIVE PATHWAY 54
2.1 APPENDIX A – SELF-CERTIFIED GREEN STAR BUILDINGS SCORECARD 55
2.2 APPENDIX B – AREA DEFINITION PLAN 56
2.3 APPENDIX C - CLIMATE CHANGE RISK AND ADAPTATION REGISTER 57
APPENDIX D - 58
2.4 UPFRONT CARBON EMISSIONS DEFAULT REFERENCE MATERIALS 58

SECTION 1 - PROJECT INFORMATION

1.1 DEFINITIONS

Principal	-	Burwood Council
Architect	-	CHROFI
ESD Consultant	-	JHA Consulting Engineers
Head Contractor	-	Successful Head Contractor
Sub-Contractors:	-	Successful Sub-Contractors

1.2 THE PROJECT

The proposed Burwood Urban Park and Community Centre (BUPACC) development includes the construction of an Urban Park including Community Building, Café and Multipurpose rooms, Theatrette, and carpark. The proposed building is to be connected to proposed Holdmark Development of the adjacent site and an existing Library Building to the South.

1.3 SELF CERTIFIED GREEN STAR BUILDINGS V1 BENCHMARK RATING

The project is targeting a **4 Star** Self-certified Green Star Buildings v1 Benchmark rating for the proposed New Community Centre. A self-certified rating is not a formal Green Star certified rating.

The project has not been registered with the GBCA for a certification under the Green Star Buildings V1 rating scheme. Burwood City Council have instructed the design team that the project will not pursue a formal Green Star rating for the project.

The specifications herein detail the requirements of the Self-Certified Green Star initiatives targeted by the project.

1.4 HEAD CONTRACTOR ROLES AND RESPONSIBILITIES

Meeting the targeted Self-certified Green Star Buildings V1 Benchmark rating is a joint effort between the Head Contractor, ESD Consultant, Sub-Contractors, Architect and Principal. This section outlines the roles and responsibilities of the Head Contractor, and in working with the ESD Consultant (JHA Engineers) in delivering the rating.

It is the responsibility of the Head Contractor and Sub-Contractors to adhere to the list of responsibilities below:

- All materials supplied, delivered and installed in the project must comply with the Green Star performance requirements set out in this specification.
- If the Head Contractor, Sub-Contractor and/or Supplier believe that any component of the building design or materials described elsewhere in the project drawings and/or specifications will not achieve the minimum performance requirements as stated in this specification, they are to notify the Green Star Accredited Professional immediately to ensure that a suitable, conforming replacement can be found.
- Under no circumstances shall any nominated or approved product (only products applicable to the rating) be substituted without the prior approval of the ESD consultant. It is a requirement that any proposed material substitution is accompanied by documentation confirming whether the proposed product complies with the relevant Green Star performance requirements as stated in this specification.
- The Head Contractor must ensure that all Sub-Contractors work to meet the requirements of this ESD specification.
- The Head Contractor, all Sub-Contractors and Suppliers must comply with environmental management and waste minimisation practices and requirements established for this project.
- The Head Contractor shall collate all the specified compliance documentation and submit to the Green Star Accredited Professional for review at the following stages:
    - A minimum of 4 weeks prior to excavation
    - A minimum of 4 weeks prior to construction
    - A maximum of 4 weeks after Practical Completion
    - Note the above stages shall be further discussed with the ESD Consultant to align evidence documentation with the construction programme.
- Compliance documentation must be submitted must be in the format requested by the ESD Consultant.
- Should the Sub-Contractor fail to comply with any of the specified Green Star requirements, they must at their own cost nominate suitable replacement point(s) to maintain the targeted Green Star rating. Any alternatives must be reviewed and approved by the Green Star Accredited Professional.
- Following the receipt of comments from the ESD Consultant submission of evidence, the Head Contractor must review and respond within 2 weeks.

- The Sub-Contractor shall be responsible for providing paperwork to satisfy Green Star submission for sign-off by the Head Contractor and Consulting Engineer.
- For details of the documentation requirements, the Sub-Contractor should refer to the required evidence for each credit under Section 2.

The ESD Consultant's (JHA's) responsibilities as listed below:

- Provide initial workshop/guidance to the Head Contractor.
- Provide templates to assist with material tracking/pre-assessment of Subcontractor evidence
- Review material submissions relevant to the ESD compliance requirements
  - The ESD consultant will provide 1 review of each material type in assisting the head contractor with their reviews of all other relevant materials and products. The ESD Consultant is not responsible for material and product workflow reviews.
- Attend Contractor Presentations/Status updates at key miles stones
- Undertake Section J J4 Building Fabric Modelling
  - Includes 2 iterations during construction phase of the J1V3 Model to allow for any updates related to the building fabric thermal performance.
  - Total construction R-value calculations to be undertaken by the Head Contractor.
  - Provide a Completion Checklist for the contractor to ensure relevant trade/supplier certificates are obtained
  - Respond to Section J Building Fabric RFIs during construction
  - Provide Section J Building Fabric and Glazing As-built Review Report
- Undertake Energy Modelling for credit 22 Minimum Expectation and Credit Achievement
  - Includes 2 iterations during construction phase of the Energy Model to allow for updates of the building services equipment performance.
- Review compiled evidence provided by the Head contractor and award points for the Self Certified Green Star Buildings V1 Benchmark Rating.
- Submit final package of ESD Evidence to the Principal upon completion of the project.

1.5 ESD TENDER RETURN SCHEDULE

The Tenderer shall complete the following Tender Return Schedule.

Item No.	Tender Return Schedule	Tender Response
1	Provide a description of the procurement strategy and processes the Tendered will implement in managing ESD material compliance during sub-contractor pre-assessment, letting, and construction phases.	
2	Provide a description of how the Head Contractor will manage material tracking and compliance during the construction phase to ensure all relevant material quantities and evidence will be recorded and summarised against the overall credit target (e.g. low VOC materials, low formaldehyde materials etc).	
3	The project is targeting a Credit Achievement level (3 points) for Credit 21 Upfront Carbon Emissions (i.e. Embodied Emissions). Provide a list of materials, potential suppliers and type of 3rd party verified data (i.e. Carbon Neutral or EPD's) that will be investigated in achieving the minimum 20% reduction in upfront carbon.	
4	Confirm whether the Tenderer has an organisational Reconciliation Action Plan. If yes, what are the construction measures/practices the Tenderer will employ on the BUPACC project that contributes towards achievement of the RAP?	
5	The project is targeting Credit Achievement and Exceptional Performance Level for credit 33 Procurement and Workforce Inclusion. Please provide a description/list of social procurement employment opportunities the Tenderer will target in achieving the 2% and 4% contract value as required by the credit.	

1.6 CLIMATE POSITIVE PATHWAY

The Greenstar Climate Positive Pathway presents a visionary approach to addressing climate change by outlining a comprehensive framework to strive for carbon neutrality. This transformative plan encompasses a range of strategies and actions, including emission reduction measures, renewable energy promotion, and sustainable practices implementation, all aimed at generating a net-positive impact on the global climate.

The BUPACC project is targeting the Climate Positive Pathway as part of the Self-Certified Green Star Buildings v1 Benchmark rating.

The Climate Positive Pathway criteria, these include;

- 100% of the building's electricity comes from renewable electricity.
- 100% of the building's energy comes from renewables.
- The building's energy use is at least 20% less than a reference building.
- The building's upfront carbon emissions are at least 20% less than those of a reference building.
- Demolition works are offset.
- The building owner eliminates or offsets emissions from refrigerants.

1.7 DISTINCT BOUNDARY

To ensure a meaningful and accurate representation of the buildings sustainability attributes, Green Star – Buildings rates the whole building, and project components are not eligible. The distinct boundary generally only covers a single building.

1.8 PRECEDENT OF DOCUMENTS

Where conflicts exist, this document will be given precedence over all other documentation and specifications in relation to required ESD performance, unless the conflicting provisions are more onerous in which case the more onerous provisions apply.

The most up-to-date Green Building Council of Australia (GBCA) Technical Clarifications and Credit Interpretations take precedence over this ESD Specification.

1.9 TARGETED CREDITS

The project is targeting the following Green Star credits:

Credit	Credit	Points Available	Points Targeted
1.0	**Industry Development**	1	1
2.0	**Responsible Construction**	Mandatory Requirement	
3.0	**Verification and Handover**	Mandatory Requirement	
4.0	**Responsible Resource Management**	Mandatory Requirement	
10	**Clean Air**	Mandatory Requirement	
11	**Light Quality**	Mandatory Requirement	
12	**Acoustic Comfort**	Mandatory Requirement	
13	**Exposure to Toxins**	Mandatory Requirement	
16	**Climate Change Resilience**	Mandatory Requirement	
16.C	**Climate Change Resilience**	1	1
19	**Heat Resilience**	1	0.5
21	**Upfront Carbon Emissions**	Mandatory Requirement	
21.C	**Upfront Carbon Emissions (CPP Requirement)**	3	3
22	**Energy Use**	Mandatory Requirement	
22.C	**Energy Use (CPP Requirement)**	3	3
23	**Energy Source (CPP Requirement)**	Mandatory Requirement	
23.C	**Energy Source (CPP Requirement)**	3	3
23.E	**Energy Source (CPP Requirement)**	3	3
24.C	**Other Carbon Emissions (CPP Requirement)**	2	2
25	**Water Use**	Mandatory Requirement	
27	**Movement and Place**	Mandatory Requirement	
27.C	**Movement and Place**	3	3
28.C	**Enjoyable Places**	2	2
29.C	**Contribution to Place**	2	2
30.C	**Culture, Heritage and Identity**	1	1
31	**Inclusive Construction Practices**	Mandatory Requirement	
32.C	**Indigenous Inclusion**	2	2
33.C	**Procurement and Workforce Inclusion**	2	2
33.E	**Procurement and Workforce Inclusion**	1	1
35	**Impacts to Nature**	Mandatory Requirement	
41	**Leadership Challenges: Climate Positive Pathway**	1	1
		Total Points Targeted	**30.5**

SECTION 2 - SELF CERTIFIED GREEN STAR BENCHMARKING REQUIREMENTS

CREDIT 1 – INDUSTRY DEVELOPMENT

Credit Achievement:

- Points Available: 1
- Points Targeted: 1

Compliance Requirements

The project must comply with all three of the following criteria:

- Green Star Accredited Professional
- Financial Transparency
- Marketing Sustainability Achievements

Green Star Accredited Professional (AP) – Burwood Council Requirement

JHA Engineers are the appointee Green Star AP. The Head Contractor shall work with JHA (as outlined in Section 1.7 Head Contractors Responsibilities) in demonstrating ESD initiatives have been incorporated in the project.

Financial Transparency

The project team and Head Contractor must complete, and include in the submission, the Green Star Financial Transparency disclosure template. The template requires and enables the project team to submit the cost of sustainable building practices of the project including design, construction, and documentation to Burwood Council.

The project team must provide the disclosure template in Excel format with the project's submission, not as a PDF.

Marketing Sustainability Achievements – Burwood Council Requirement

Burwood Council must:

- Detail how the building will detail its sustainability achievements to its stakeholders. The stakeholders are defined as the typical building occupants and visitors
- Demonstrate the ESD attributes achieved for the project are communicated to the public or visitors.

Required Supporting Evidence

Green Star Accredited Professional

- **Letter of appointment** from the client or head contractor confirming the appointment of a Green Star AP in the project, including the scope of works
- Sample **Meeting minutes** demonstrating input from the Green Star AP
- **Letter from the Client** confirming that the Green Star AP satisfactorily fulfilled their engagement responsibilities as per the scope of works and requirements of this credit

Financial Transparency

- Completed **Green Star Financial Transparency disclosure template** submitted in excel format

- **Statement or report from quantity surveyor**, project manager or Green Star AP from the project, supporting the costs outlined in the disclosure template

Marketing sustainability achievements

- **Professional photos** of the finished project and information for a Case Study
- Developed **samples** of the marketing material
- **Samples** of information on the benefits of sustainability in a public and prominent way

CREDIT 2 – RESPONSIBLE CONSTRUCTION

Minimum Expectation: Mandatory Requirement

Compliance Requirements

The project must comply with the following criteria:

- Environmental Management System
- Environmental Management Plan
- Construction and Demolition Waste
- Sustainability Training

Environmental Management System

The Head Contractor must have a formalised systematic and methodical approach to planning, implementing, and auditing in place during construction.

- For contracts valued at less than $10 million, the responsible party must have an Environmental Management System (EMS) that complies with either the NSW Environmental Management System Guidelines or another recognised framework.
- For contracts valued at over $10 million, the responsible party must have an Environmental Management System (EMS) certified to a recognised standard such as AS/NZS ISO 14001, BS 7750 or the European Community's EMAS.

The EMS can be stand-alone or part of an integrated management system and must be valid for the duration of construction activities.

Environmental Management Plan

A project specific Environmental Management Plan (EMP) must be developed to cover the scope of construction activities to assist the Head Contractor and its service providers to manage environmental performance conditions and impacts arising from demolition, excavation, and construction.

It must be implemented from the start of construction and include all works within the project scope.

Construction and Demolition Waste

The Head Contractor must divert at least 80% of construction and demolition waste from landfill.

A Disclosure Statement is required from waste contractors and processing facilities outlining how the company and their reporting aligns with the Green Star Construction and Demolition Waste Reporting Criteria.

Special waste and excavation waste are excluded from this requirement. However, soil generated from site clean-up works which incorporates soil leaving the site mixed with general construction and demolition waste must be included in the waste-to-landfill calculations, as it forms part of the building site's general waste profile.

Sustainability Training

The Head Contractor must provide the following training to 95% of all contractors and subcontractors present on site for at least three days:

Information on the sustainable building certification(s) sought, including:

- the sustainability attributes of the building and their benefits
- the value of certification
- the role site worker(s) play in delivering a sustainable building

Required Supporting Evidence

Environmental Management System

- An **auditor report** showing compliance with the EMS. An auditor report for the organisation, rather than the site, can suffice. If it is for the organisation, the builder or head contractor must confirm effective use of the EMS on the particular site

Environmental Management Plan

- **Demolition or Site Drawings** indicating the structures on site at time of purchase, extent of demolition and retained structure and façade

Construction and Demolition Waste

- **Cumulative waste report** generated from the monthly waste reports provided by the waste contractor over the entire duration of construction and demolition works
- **Disclosure statement** outlining how the contractor or facility aligns with the Green Star Construction and Demolition Waste Reporting Criteria

Sustainability Training

- **Evidence of training materials** and register of attendance

CREDIT 3 – VERIFICATION AND HANDOVER

Minimum Expectation: Mandatory Requirement (Min. 3 of 4 requirements)

Compliance Requirements

The project must comply with the following criteria:

- Requirement 1: Metering and Monitoring
- Requirement 2: Commissioning and Tuning (Services)
- Requirement 3: Commissioning and Tuning (Air Tightness) – not targeting
- Requirement 4: Building Information

Metering and Monitoring

Metering

The building must have accessible energy and water metering for all common uses, major uses, and major sources.

The meters must be connected to a monitoring system capable of capturing and processing the data produced by the meters.

The meters and automatic monitoring systems must:

- Provide continual information (up to 1-hour interval readings)
- Be commissioned and validated per the most current 'Validating Non-Utility Meters for NABERS Ratings' protocol to support future achievement of a NABERS rating, irrespective of the current viability of a NABERS rating for the building or building type
- Ensure all meters including utility meters and sub-meters to have accuracy declarations and/or certificates (for an example Utility Meters will have certificates issued by the National Measurement Institute)
- Sub-meters that are not to be used as utility (billing) meters should either have Certificates for accuracy issued by NMI or a test certificate from the European Measuring Instruments Directive - 2004/22/CE
- Where the building's Gross Floor Area (excluding car parking areas) is smaller than 1000m2, unless specialist equipment with an annual power consumption of 100kwh/annum, is present in the building, a single meter for energy and a single meter for water will comply with this minimum requirement. If accessible to the building manager, the utility meter is acceptable provided it meets accuracy and data collection requirements above.

Monitoring strategy

The monitoring system must accurately and clearly present the metered data and include reports on consumption trends for the automatic monitoring system. The monitoring strategy must be developed in accordance with a recognised Standard, such as CIBSE TM39 Building Energy Metering. The monitoring strategy must include a metering schedule and identify the location and types of meters.

The monitoring system must raise an alarm when the energy or water use increases beyond certain parameters and automatically issue an instant alert to the facilities manager. The process to assess, correct and validate alerts or faults must be detailed and contained in an accessible location.

The Head Contractor must demonstrate the reporting and alarm functionality has been designed, installed, commissioned, and tested at practical completion to be awarded this credit. System capability for future implementation is not sufficient.

Commissioning and Tuning

The Head Contractor must perform the following:

Prior to construction:
- Set environmental performance targets
- Perform a services and maintainability review
- Design for airtightness

During construction and practical completion:
- Commission the building
- Engage building tuning service provider
- Test for airtightness

After practical completion:
- Tune the building over the next 12 months

Environmental performance targets and information

Achievement of the following credits contribute to the achievement of the Environmental Performance Targets.

- Energy Use
- Water Use
- Clean Air
- Light Quality
- Metering and Monitoring

Services and maintainability review

The contractor must conduct a services and maintainability review of the building prior to construction. The review must include all subcontractor roles involved i.e. Owner's Representative, relevant services, Architect, Facilities Manager, Head Contractor and the Independent Commissioning Agent (where nominated).

The review must address the following:

- Commissionability
- Controllability
- Maintainability
- Operability
- Safety of all systems.

The services and maintainability review and its outcomes must be summarised in a 'Service and Maintainability Report or Register'. All items must be addressed, closed-out and documented within the final Services and Maintainability Report and signed off by all involved parties prior to construction. The Head Contractor is responsible for ensuring the 'Service and Maintainability Report' is compliant with Green Star requirements.

Building commissioning

During construction and before practical completion, all building systems must be commissioned per a recognised commissioning standard (CIBSE or ASHRAE commissioning guides). A commissioning specification must be included in the construction documentation listing requirements for each system.

A commissioning plan must be developed prior to practical completion.

The contractual tender or construction documentation must list the commissioning requirements for each system. It is not enough to state that systems must be commissioned to the relevant standard. The person responsible for the commissioning of the nominated services must have specific and demonstrable knowledge of the types of systems to be commissioned.

Building systems tuning

The Head Contractor must contractually commit to a tuning process that includes quarterly adjustments and measurements for at least the first 12 months after occupation.

The commitment must include:

- A building tuning manual or plan
- A description of the building tuning team
- Confirmation the owner has engaged parties to tune the nominated systems
- Roles & responsibilities of each party within the tuning team, including deliverables
- The building tuning plan can be detailed within the commissioning plan. Where the tuning plan or manual is separate to the commissioning plan, it must refer to using the commissioning plan and the commissioning records & results as the baseline data.

The building tuning team must include:

- The facilities manager
- The Independent Commissioning Agent (ICA) or other building owner's representative
- The head contractor
- The services design professionals

These individuals must be available to address specific tuning issues where required.

Commissioning and Tuning – Airtightness (not targeting)

The Head Contractor must include Airtightness as part of the commissioning process during the following stages:

- Pre-Construction: review for tightness including air barrier continuity on building plans, sections, and details. Scope of work and necessary coordination between trades and responsibilities must be demonstrated
- Pre-Construction: A plan for stages of commissioning for air tightness must be defined and included in the project timeline
- Construction: The building must undertake airtightness testing in accordance with the pre-construction phase air-tightness testing plan. Testing must be carried out by a suitably qualified practitioner. If a quantitative test to determine an air permeability rate is used, it must be conducted on the whole building system according to AS/NZS ISO 9972:2015 Thermal performance of buildings determination of air permeability of buildings - Fan pressurisation method. On sections smaller than the whole building qualitative procedures such as ASTM E1186-17 may be used.

Building Information

Operations and maintenance information

The Head Contractor must provide operations and maintenance information for all nominated building systems to the building owner (or designated representative). This means:

- Appropriate content for all nominated building systems has been developed and provided
- The appropriate user group has access to the information they require to deliver best practice environmental outcomes
- Guidance on keeping information up to date is provided to the facilities management team in these documents

Building logbook

The Head Contractor must develop a building logbook to present to the building owner (or designated representative) before practical completion of the project. The building logbook must:

- Be developed in line with CIBSE TM31: Building Logbook Toolkit
- Cover all nominated building systems
- Include links or references to all relevant operations and maintenance information

Building user information

Building user information is a source of up-to-date, relevant information for the building user.

Building user information must be able to be updated and edited by the facilities management team, or other appropriate stakeholder groups, to ensure it remains current and relevant to users throughout the life of the building.

The Head Contractor must make all building user information available to the building owner and facilities management team at the time of practical completion.

Required Supporting Evidence

Metering and Monitoring

- **Drawings** showing the location of all energy and water meters in the project and the associated energy and water uses
- **Drawings**, which are clearly coordinated with the plan drawings and the metering plan, demonstrating adequate meter coverage and appropriate calculations or check mechanisms to allow provision of reporting and error detection as per the credit compliance requirements
- **Letter of confirmation** from the contractor/metering provider/manager demonstrating that the metering systems are continually and automatically monitored by a system that is able to produce alerts if any inaccuracies are found
- **Commissioning reports** demonstrating correct operation of meter reading, reporting and alarm generation
- Copy of **Monitoring Strategy document** specific to the building, including calculations demonstrating that all significant water and energy sources and uses are adequately covered in terms of both usage and accuracy verification
- **Accuracy certificates** for meters
- Completed **Metering Validation sheets/documents** to demonstrate metering system meets the NABERS Protocol for validation of non-utility meters

Commissioning and Tuning

- **Service and Maintainability Report**, where the service and maintainability review is summarised
- Extract(s) from the **Commissioning Report** demonstrating that comprehensive pre-commissioning activities and commissioning activities have been performed
- **Building Tuning Commitment** or contract demonstrating that there is a requirement for a building tuning process

- **Building airtightness testing report** detailing of test methodology, air flow rates, details of airtightness considerations from schematic design through to construction and statement that the target air permeability from Environmental Performance Targets has been achieved
- **Signed confirmation** from the testing practitioner and main contractor that the results have been sighted.

Building Information

- **Owner's project requirements document**, or an equivalent document, defining the nominated building systems
- **Operations and maintenance information**
- **Building logbook**
- **Building user information**.

CREDIT 4 – RESPONSIBLE RESOURCE MANAGEMENT

Minimum Expectation: Mandatory Requirement

Compliance Requirements

The project must comply with the following criteria:

- Collection of Waste Streams
- Dedicated Waste Storage Area
- Sign-off by Waste Specialist and/or Contractor

Collection of Waste Streams

The building must provide bins or storage containers to building occupants to enable them to separate their waste. These bins must be labelled and easy to access, and evenly distributed throughout the building. They must also allow for separating the following as a minimum:

- General waste going to landfill
- Recycling streams to be collected by the building's waste collection service, including:
  - paper and cardboard
  - glass
  - plastic
- One additional waste stream identified by the project team. This may include collecting any of the following waste types: organics, e-waste, batteries etc.

Any other single waste stream (except food waste) that is expected to represent more than 5% of total annual operational waste and resources (by volume) must also be included.

Dedicated Waste Storage Area

A dedicated area, or areas, for the storage and collection of the applicable waste streams must be provided. The storage area must be sized to accommodate all bins or containers, for all applicable waste streams, for at least one collection cycle. The calculations used to demonstrate that the area provided is adequately sized to handle the recyclable waste streams specified must be based on:

- Forecasted waste generated by occupants
- Collection frequency for each waste stream

The calculations for waste generation rates must be based on figures outlined within third-party best practice guidelines.

The storage area(s) must have efficient and safe access by collection vehicles. This includes driveway access to the building, appropriate height clearances, any onsite roads and loading docks, and the storage areas themselves providing safe and easy access for bins to be emptied into collection vehicles.

Required Supporting Evidence

- **Site Plan and/or architectural plans** highlighting the location of relevant waste facility areas, demonstrating:
  - Collection of waste streams
  - Dedicated waste storage area
  - Access to waste storage area
  - Layout of equipment and bin storage

- **Calculations** used to demonstrate that the dedicated waste storage area provided is adequately sized
- **Details** on how the dedicated waste collection areas meet best practice guidelines, in line with third-party best practice guidelines

CREDIT 10 – CLEAN AIR

Minimum Expectation: Mandatory

Compliance Requirements

The project must comply with the following criteria:

Minimum Expectation (achieve a minimum of 2 or 3 requirements):

- Ventilation System Attributes (Minimum Expectation) – Separation from pollutants and cleaning ductwork
- Provision of Outdoor Air (Minimum Expectation)
- Exhaust or Elimination of Pollutants (Minimum Expectation)

Credit Achievement:

- Ventilation System Attributes (Credit Achievement) – 1 Point
- Provision of Outdoor Air (Credit Achievement) – 1 Point

Ventilation System Attributes (Minimum Expectation)

Separation from pollutants

Non-residential building ventilation systems must be designed to comply with ASHRAE Standard 62.1:2013 or AS 1668:2012 (whichever is greater) regarding minimum separation distances between pollution sources and outdoor air intakes.

If using ASHRAE Standard 62.1:2013, compliance is to be demonstrated in accordance with the distances specified in Table 5.5.1 of the Standard. Analytical solutions are also acceptable by following the example provided within Appendix F of ASHRAE Standard 62.1: 2013.

Diversity factors cannot be applied in meeting this credit.

Cleaning ductwork

All new and existing ductwork that serves the building must be cleaned prior to occupation in accordance with a recognised Standard. This includes all ductwork in the base building that serves the building from the air handling unit(s) to the supply vents. If no ductwork exists, these requirements are deemed to be met.

Provision of Outdoor Air (Minimum Expectation)

There are three pathways projects can pursue to demonstrate compliance, as described below:

Comparison to Industry Standards – non-residential buildings

The building must provide a 50% improvement of outdoor air required by AS 1668.2:2012 to each space in the regularly occupied areas.

To demonstrate compliance, the HVAC system must be clearly sized to accommodate the increased outdoor air rates. The project must use the design occupancy, where known, rather than the default occupancy when calculating the required rates.

The default occupancy is to be determined by the project team – any assumptions made must be justified within the Submission. Where the occupant density is unknown, projects must utilise the occupancy rates prescribed within Table A1 Appendix A of AS 1668.2:2012.

Demand controlled ventilation is acceptable for energy efficiency performance.

Performance based approach

For this option, the system must be capable of providing enough outdoor air to maintain carbon dioxide (CO2) levels at or less than 800ppm within each space in the regularly occupied areas at all times in the default occupancy period.

The system must continuously measure the concentration of CO2 within the breathing zone of each space during occupancy hours. The system must then adjust the amount of outdoor air to each space (up to the maximum design outdoor air quantity) to ensure that CO2 levels are maintained below the stipulated ppm threshold.

- **Zoning the system**
  CO2 sensors shall be located so that they provide accurate representative readings of the CO2 concentrations in occupied spaces. Project teams must provide detailed drawings and justification for the chosen locations of the CO2 monitoring systems. CO2 sensors must be located in each individually controlled supply air zone so that they provide accurate representative readings of the CO2 concentrations in occupied spaces.
- **Modifying the air quality threshold**
  If appropriate, the project may nominate alternative thresholds from ASHRAE 62.1:2013. The justification must be accompanied with documentation from a recognised Standard or peer reviewed research.

Exhaust or Elimination of Pollutants (Minimum Expectation)

It must be demonstrated that pollutants from printing and photocopying equipment, cooking processes and equipment are limited from the regularly occupied areas by either:

- Removing the source of pollutants
- Exhausting the pollutants directly to the outside.

For the first option, sources of pollutants, such as printing or photocopy equipment, kitchen stoves or vehicles, must be compliant with minimum emissions standards or not be present within the regularly occupied areas.

For the second option, specified sources of pollutants shall be exhausted directly to the outside of the project in accordance with a recognised Standard, and/or physically separated from occupants.

CREDIT 11 – LIGHT QUALITY

Minimum Expectation: Mandatory

Compliance Requirements

The project must comply with the following criteria:

- Lighting Comfort
- Glare from Light Sources
- Daylight

Lighting Comfort

Lighting within the building must meet the following requirements:

- All LED lighting installed across the whole project has no observable effect as per the standard IEEE 1789-2015 - IEEE Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers
- Light sources must have a minimum Colour Rendering Index (CRI) 85 or higher, in all internal and external applications
- Light sources must meet best practice illuminance levels for each task within each space type with a maintained illuminance that meets the levels recommended in AS/NZS 1680.1:2006 series applicable to the project type and including maintenance
- The maintained Illuminance values must achieve a uniformity of no less than that specified in Table 3.2 of AS/NZS 1680.1:2006, with a maintenance factor method as defined in AS/NZS 1680.4
- All light sources must have a MacAdam Ellipse or a Standard Deviation Colour Matching (SDCM) of 3 or lower.

Glare from Light Sources

Glare from light sources must be limited within the regularly occupied areas. A combination of methods can be used to demonstrate compliance to suit different spaces.

Prescriptive method 1

- Bare light sources must be fitted with baffles, louvers, translucent diffusers, ceiling design, or other means that obscures the direct light source from all viewing angles of occupants, including occupants looking directly upwards.
- For LED luminaires the Unified Glare Rating (UGR), as estimated from the manufacturers data sheets for a standard room, must not exceed the maximum values listed in Table 8.2 of AS/NZS 1680.1:2006.

Prescriptive method 2

- The Unified Glare Rating (UGR) calculated for the lighting on a representative floor must not exceed the maximum values listed in Table 8.2 of AS/NZS 1680.1:2006.

Performance method

- The UGR must be calculated in accordance with the procedure outlined in Clause 8.3.3 of AS/NZS 1680.1:2006. The project team may nominate a grid for the calculation based on the specific requirements of the project.

Daylight

This *Minimum Expectation* aims to ensure the building is providing daylight access to building occupants through solutions that exceed the typical relevant federal, state, or local regulations.

The project team is required to show how the building's design:

- Maximises the number of occupants that are in or near daylit areas during their daily activities for all building types
- Ensures regularly occupied areas are in reasonable proximity to glazed façades, windows, or skylights
- Controls or mitigates external glare in the daylit spaces
- Maximises daylight to spaces that prioritise learning, healing, and living:
    - For schools, how all classrooms have access to a view and daylight
    - For hospitals, how all areas where patients are expected to remain for longer than two hours have access to a view and daylight
    - For apartments, how in 95% of all apartments, the living rooms and all bedrooms have access to a view and daylight.
- Provides building occupants with unrestricted access to daylit indoor public common spaces

As part of the submission, the project team is required to submit:

- A narrative describing the building's daylight, view, and external glare control strategy
- A simple calculation of the amount of space that has adequate daylight as a proportion of the total regularly occupied areas of the building
- An assessment against the five requirements above

Where the above requirements are unable to be met, the project team must:

Outline the barriers to achieving the requirements and the measures taken to mitigate loss of daylight quality for occupants

Required Supporting Evidence

- **Daylight modelling report or manual calculations**
- **Lighting Drawings**
- **Architectural Drawings**
- **Lighting Specifications/Schedules**
- **Product Data Sheets**
- **Isolux Plot Drawings**

CREDIT 12 – ACOUSTIC COMFORT

Minimum Expectation: Mandatory Requirement

Compliance Requirements

The project must comply with all of the following criteria:

- Acoustic Comfort Strategy (Minimum Expectations)

Acoustic Comfort Strategy

An Acoustic Comfort Strategy must be prepared describing how the building design will deliver acoustic comfort to the building occupants.

The following requirements are to be addressed:

- Quiet enjoyment of space
- Functional use of space
- Control of intrusive or high levels of noise
- Privacy
- Noise transfer
- Speech intelligibility

The Acoustic Comfort Strategy is to include:

A summary of the Standards, legislation, guidelines, and other requirements that apply to the project
The proposed performance metrics for each of the Acoustic Comfort criteria relevant to the different uses within the building and whether this exceeds minimum legislative or best practice guidelines
Description of how the design solution is intended to achieve the proposed performance metrics

The strategy must be prepared by a qualified acoustic consultant during the design stage and the design solutions described in the strategy must be incorporated into the Contract Documents.

Required Supporting Evidence

- **Acoustic Comfort strategy**
- **Detailed Drawings** detailing the acoustic design features relevant to this credit.
- **Report by a qualified acoustics consultant** confirming credit compliance.
- **Extracts from the commissioning report** detailing relevant measured noise levels and target noise levels.

CREDIT 13 – Exposure to Toxins

Minimum Expectation: Mandatory

Compliance Requirements

The project must comply with all of the following criteria:

- Paints, Adhesives, Sealants, and Carpets
- Engineered Wood Products
- Banned or Highly Toxic Materials

Paints, Adhesives, Sealants, and Carpets

At least 95% of internally applied paints, adhesives, sealants (by volume) and carpets (by area) must meet stipulated 'Total Volatile Organic Compounds (TVOC) Limits' below.

Compliance can be demonstrated in the following ways:

- The product(s) are certified under a Recognised Product Certification Scheme listed in the 'Exposure to Toxins Product Certifications Schemes Index'. The certificate must be current at the time of purchase
- The product(s) are tested in a laboratory
- There are no paints, adhesives, sealants, and carpets in the building at practical completion

Total VOC limits

Paints, Adhesives and Sealants	
Product category	**Max. Total Volatile Organic Compounds (TVOC) content in grams per litre (g/L) of ready to use product**
General purpose adhesives and sealants	50
Interior wall and ceiling paint, all sheen levels	16
Trim, varnishes, and wood stains	75
Primers, sealers, and prep coats One and two pack performance coatings for floors	65
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	140
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	250

Carpets		
Compliance option	**Test protocol**	**Limit**
ASTM D5116	ASTM D5116 - Total VOC limit* ASTM D5116 - 4-PC (4-Phenylcyclohexene)*	limit* 0.5mg/m2 per hour 0.05mg/m2 per hour
ISO 16000 / EN 13419	ISO 16000 / EN 13419 - TVOC at three days	0.05mg/m2 per hour
ISO 10580 / ISO/TC 219 (Document N238)	ISO 10580 / ISO/TC 219 (Document N238) - TVOC at 24 hours	0.05mg/m2 per hour
* mg/m²hr may also be represented as mg/m²/hr		

Engineered Wood Products

Either no new engineered wood products are used in the building, or at least 95% (by area) of all engineered wood products meet specified formaldehyde emission limits, as per the following page.

Where there are engineered wood products, compliance to emission limits can be demonstrated in two ways:

- The product(s) are certified under a recognised Product Certification Scheme. The certificate must be current at the time of purchase
- The product(s) are tested in a laboratory.

Formwork, car parking applications, and non-engineered wood products (such as milled timber) are excluded from the credit.

Test protocol	Emissions Limit / Unit of Measurement
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	≤1mg/L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1mg/L
AS/NZS 4357.4 - Laminated Veneer Lumber (LVL)	≤1mg/L
Japanese Agricultural Standard MAFF Notification No.701 Appendix Clause 3 (11) - LVL	≤1mg/L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	≤1mg/L

Test protocol	Emissions Limit / Unit of Measurement
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤1mg/L
JIS A1901 (not applicable to Plywood, applicable to high pressure laminates and compact laminates)	≤0.1 mg/m²hr*
ASTM D5116 (applicable to high pressure laminates and compact laminates)	≤0.1 mg/m²hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419), applicable to high pressure laminates and compact laminates	≤0.1 mg/m²hr (at 3 days)
ASTM D6007	≤0.12mg/m³**
ASTM E1333	≤0.12mg/m³***
EN 717-1 (also known as DIN EN 717-1)	≤0.12mg/m
EN 717-2 (also known as DIN EN 717-2)	≤3.5mg/m²hr
** The test report must confirm that the conditions of Table above comply for the particular wood product type, the final results must be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio of 0.98. *** The final results must be presented in EN 717-1 equivalent (as presented in the table), using the correlation ratio of 0.98.	

Banned or Highly Toxic Materials

A comprehensive hazardous materials survey must be carried out on any existing buildings or structures on the project site, in accordance with the relevant Environmental and Work Health and Safety (WHS) legislation.

Where the survey identified asbestos, lead, or PCBs in any existing buildings or structures, the materials must be stabilised or removed and disposed of in accordance with best practice guidelines.

Required Supporting Evidence

- **Extracts from contract specifications** for adhesives and sealants
- **Specifications** that demonstrate emission levels or formaldehyde contents
- **Safety Data Sheets** that demonstrate the compliant emission levels or formaldehyde content
- **Product VOC test certificates** that demonstrate emission levels or formaldehyde contents
- **Product certificates** that demonstrate certification under a recognised product certification scheme or recognised standard
- **Invoices and proof of purchase** to demonstrate costs of compliant materials
- **Bill of Quantities** from Quantity Surveyor or Cost planner, demonstrating material costs
- **Hazardous materials survey**

CREDIT 16 – CLIMATE CHANGE RESILIENCE

Minimum Expectation: Mandatory

Credit Achievement:

- Points Available: 1
- Points Targeted: 1

Compliance Requirements

The project must comply with all of the following criteria:

- Climate Change Pre-screening Checklist (Minimum Expectation)
- Climate Change Risk and Adaptation Assessment (Credit Achievement)
- Managing Risks (Credit Achievement)

Climate Change Pre-screening Checklist (Minimum Expectation)

If the Credit Achievement for this credit is met, requirements of this assessment are considered to have been met.

Climate Change Risk and Adaptation Assessment (Credit Achievement)

A climate change risk and adaptation assessment has been undertaken by JHA. The Climate Change Risk and Adaptation register is included in Appendix C.

Managing Risks (Credit Achievement)

The Head Contractor must ensure risks within the Climate Change Risk and Adaptation Plan (Appendix C) are addressed as follows:

- All risks rated as 'Extreme' must be addressed through specific design responses
- All risks rated as 'High' must be addressed through design or future operational responses
- Regardless of risk rating, at least two risks identified in the assessment must be addressed by specific design responses.

Required Supporting Evidence

- **Climate change risk assessment**
- **Risk assessment criteria**, including the likelihood and consequence tables, risk matrix, RCP and timescale, and any assumptions significant in the development of the assessment
- **Details of the adaptation responses**
- **Evidence** the assessment was communicated to design leads
- **Project risk register**, highlighting the ‘high’ or ‘extreme’ identified climate change risks

CREDIT 19 – HEAT RESILIENCE

Credit Achievement:

- Points Available: 1
- Points Targeted: 0.5

Point(s) are awarded on a sliding scale, up to a maximum of 1 point.

Compliance Requirements

The project must comply with the following criteria:

- Heat Island Reduction

Heat Island Reduction

The strategies that can be used to reduce the heat island are:

- Vegetation
- Green roofs
- Roofing materials, including shading structures, having the following:
  - For roof pitched <15°– a three-year SRI of minimum 64
  - For roof pitched >15°– a three-year SRI of minimum 34
- Unshaded hard-scaping elements with a three-year SRI of minimum 34 or an initial SRI of minimum 39
- Hardscaping elements shaded by overhanging vegetation
- Water bodies and/or water courses

The area of the site that is shaded by permanent structures (e.g., part of a car park to the south of a tall building) at noon local time at the summer solstice are also deemed compliant.

Required Supporting Evidence

- **Site Plan** highlighting all relevant areas as referenced within the area schedule
- **Area Schedule** listing the areas of each of the relevant site elements and where relevant, the SRI values and referencing plan drawings for the site
- **Supplier Documentation** material data sheet for compliant roofing and hardscape materials. Where no material data sheets are available for materials, supporting evidence from industry data for SRI values can be provided.

CREDIT 21 – UPFRONT CARBON EMISSIONS

Minimum Expectation: Mandatory Requirement

Credit Achievement:

- Points Available: 3
- Points Targeted: 3

Compliance Requirements

The project must comply with all of the following criteria:

- Reducing Upfront Carbon Emissions (Minimum Expectation)
- Reducing Upfront Carbon Emissions (Credit Achievement)
- Offsetting Demolition Works (Credit Achievement)

Reducing Upfront Carbon Emissions (Minimum Expectation)

The building's upfront carbon emissions are at least 10% less than those of a reference building. The building's upfront carbon emissions reductions must occur through good design and material selection.

The reduction targets do not include demolition works.

Calculating upfront carbon emission reductions

To demonstrate compliance, project teams can either:

- Model the proposed and reference buildings following the methodology of the Life Cycle Impacts credit for modules A1 to A5; OR
- Complete the Upfront Carbon Emissions calculator. The GBCA's Upfront Carbon Emissions calculator uses Modules A1 to A3 to calculate compliance. Refer to Appendix D for Upfront Carbon Emissions Default Reference Materials.

Projects must document a reduction in upfront carbon according to the materials and products in the scope.

Module D is excluded. Materials with a GWPT of less than zero (bio-based materials) are treated as having a GWPT of zero.

Reducing Upfront Carbon Emissions (Credit Achievement)

The building's upfront carbon emissions are at least 20% less than those of a reference building. The building's upfront carbon emissions reductions must occur through good design and material selection.

The reduction targets do not include demolition works (i.e., demolition works are not included in the reference or proposed building).

Carbon offsets purchased against the building's upfront carbon emissions from construction cannot be used to show compliance against the 20% reduction.

See *Minimum Expectation* requirements for further information on calculating upfront carbon emission reductions.

Offsetting Demolition Works (Credit Achievement)

Offsetting Demolition Works is Not Applicable (N/A) to the project as the site is currently an external on-grade carpark. Only minor demolition is required to the existing Library.

Required Supporting Evidence

- **Bill of quantities showing materials used.**
- **Standard practice reference building documentation**

- Signed declarations from the principal architect and engineer for the project, confirming that the reference building was constructed in accordance with the specific requirements and guidance of this credit.
- Also confirming the reference building design, technologies and construction are true representation of contemporary practice for the type and function of the project.

Actual reference building documentation

- Signed declarations from the principal architect and engineer for the project, confirming and demonstrating how the reference building meets the specific guidance above.

Other documentation as per Life Cycle Impacts credit (if pathway used).

CREDIT 22 – ENERGY USE

Minimum Expectation: Mandatory Requirement

Credit Achievement:

- Points Available: 3
- Points Targeted: 3

Compliance Requirements

- Reference building pathway

Reducing Energy Use

The building uses **20%** less energy compared to a reference building.

Modelling requirements

This credit defines the reference building as a building modelled to Section J requirements of the National Construction Code 2019 or later. If the building's approval is subject to a later code, the building must use that version.

The results from the energy model must include all energy consumed by base building systems. Consumption from commercial tenant systems such as plug loads, domestic appliances, and manufacturing or process loads are excluded from the calculation.

Refer to the Energy Use calculation guide for more information.

It must be demonstrated that for the Proposed Project each of the following building system complies with the relevant DTS requirements of NCC Section J:

- The performance of wall-glazing constructions and display windows (J1.5) must comply with the total system R value, total system U value and system SHGC requirements, inclusive of thermal bridging effects
- The performance of fan systems (J5.4), pump systems (J5.7), refrigerant chillers (J5.10) and heat rejection equipment (J5.12) must comply with the applicable efficiency requirements
- The performance of artificial lighting systems (J6.2) must comply with the overall lighting efficiency requirements

On-site renewables

The Minimum Expectation addresses the energy use from the building's systems and the effect of the building's façade. Therefore, on-site renewable energy generation systems connected behind the meter cannot be used to calculate reductions in energy use of the building for the Minimum Expectation.

On-site renewable energy generation systems connected behind the meter can be used to calculate reductions in energy use of the building for Credit Achievement and Exceptional Performance, however electricity exported to the grid cannot be counted.

Required Supporting Evidence

- **Energy modelling report**
- **Extracts from specifications**
- **Extracts from commissioning reports**
- **As built drawings** of the façade
- **Evidence** of renewable energy generation on-site (e.g., contracts, as built drawings)
- **Schedule** identifying all on-site storage systems installed in the building

CREDIT 23 – ENERGY SOURCE

Credit Achievement

- Points Available: 3
- Points Targeted: 3

Exceptional Performance

- Points Available: 3
- Points Targeted: 3

Compliance Requirements

The project must comply with all of the following criteria:

- Renewable Electricity
- Renewable Energy

Renewable Electricity – Burwood Council Requirement

All electricity under the control of the building owner or operator must be accounted for and sourced from renewables.

Electricity use for tenant loads is excluded from this credit.

Both on-site and off-site renewables are acceptable.

Where the project team claims the credit through off-site renewables, the building owner must sign a renewable energy contract. The shortest contract length is:

- Five years
- Where the building is owned and managed by an entity that has signed to the Global Commitment for Net Zero Carbon Buildings managed by WorldGBC, the shortest contract length is three years. Other commitments may be acceptable through a Technical Question.

The contract can be part of a corporate power purchasing agreement for a building portfolio.

Refer to the Climate positive buildings and our net zero ambitions document for more information on suitable options recognised by Green Star.

Renewable Energy – Burwood Council Requirement

All energy under the control of the building owner/operator and all non-electricity energy provided for uses that are not under the building owner's control must be sourced from renewables.

Fossil fuels cannot be used on site for any domestic hot water, space heating or cooking under any circumstances regardless of base build or tenant use. Fossil fuels for industrial processes are excluded from the assessment.

Any fossil fuels used for emergency power or laboratory equipment must be less than 1% of the total building energy consumption and be offset for the first five years of operation.

Both on-site and off-site renewables are acceptable.

Where the project team claims the credit through off-site renewables, the building owner must sign a renewable energy contract. The shortest contract length is:

- Five years
- Where the building is owned and managed by an entity that has signed to the Global Commitment for Net Zero Carbon Buildings managed by WorldGBC, the shortest contract length is three years. Other commitments may be acceptable through a Technical Question.

The contract can be part of a corporate power purchasing agreement for a building portfolio.

Refer to the Climate positive buildings and our net zero ambitions document for more information on suitable options recognised by Green Star.

Required Supporting Evidence

- **Zero Carbon Action Plan** with supporting evidence
- **Signed PPA** including extracts on the length of contract
- **Evidence that the PPA or on-site generation covers 100% of electricity or energy**
- **Public commitment to the Global Commitment for Net Zero Carbon Buildings managed by WorldGBC**

CREDIT 24 – OTHER CARBON EMISSIONS

Credit Achievement:

- Points Available: 2
- Points Targeted: 2

Compliance Requirements

The project must comply with one of the following criteria:

- Eliminating Refrigerants
- Offsetting Refrigerants

Eliminating refrigerants

High-GWP refrigerants must be eliminated from the building. The use of refrigerants with a GWP of 10 or less is considered to comply with the credit. Natural refrigerants in most cases comply with this criterion.

Offsetting Refrigerants – Burwood Council Requirement

100% of carbon emissions from refrigerants must be offset.

Carbon emissions are calculated by multiplying the initial refrigerant charge by its Global Warming Potential (GWP) for each type of refrigerant present in the building and adding the emissions together.

See Climate positive buildings and our net zero ambitions document available from Green Star resources for more information on acceptable offsets.

Required Supporting Evidence

- **Confirmation** that refrigerants have been eliminated from the building along with supporting documentation (e.g., mechanical as built drawings)
- **Calculations** showing the total refrigerant charge to be offset
- **Evidence** of purchase of offsets (e.g., contract) clearly showing the length of offset

CREDIT 25 – WATER USE

Minimum Expectation: Mandatory Requirement

Compliance Requirements

The project must comply with one of the following criteria:

- Sanitary Fixture and Appliance Efficiency; OR
- Reducing Water Use

Sanitary Fixture and Appliance Efficiency

All fixtures and water-using appliances installed within the project's scope must, at a minimum, meet the following WELS ratings:

Fixture type	WELS rating
Taps	5 star
Urinals	5 star
Toilets	4 star
Showers	3 star
Clothes washing machine	4 star
Dishwashers	5 star

Reducing Water Use

The building uses 15% less potable water compared to a reference building.

Class 2 and Class 3 buildings use 10% less potable water compared to a reference building.

The GBCA's *Water Use calculator* assists in calculating how much more efficient a building is compared to a reference building. It considers fixtures, appliances, and water reuse systems. The *Water Use calculator* must be used alongside the *Water Use calculation guide*.

Required Supporting Evidence

- **WELS certificates**
- **Manufacturer's data**
- **Drawing(s)** for each typical floor showing isolation valves for floor-by-floor testing of the fire sprinkler system, and drawings of the water storage and re-use system(s)
- **Drawing(s)** clearly showing the location of all heat rejection equipment installed on the project
- **Drawings** showing the landscape design and the irrigation system, listing the name, location, and plant species zone as it appears in the calculator
- **Manufacturer's information** showing that the application efficiency for the landscape irrigation system
- **Manufacturer's information** including backwash volume and frequency of filter cleaning
- **Drawing(s)** of process cooling water usage loops
- **Drawings and specifications** of grey water infrastructure

CREDIT 27 – MOVEMENT AND PLACE

Minimum Expectation: Mandatory

Credit Achievement:

- Points Available: 3
- Points Targeted: 3

Compliance Requirements

The project must comply with all of the following criteria:

- Changing Facilities (Minimum Expectation)
- Accessible, Inclusive, and Located in a Safe and Protected Place (Minimum Expectation)
  - Classes 2 and 4 are exempt from these requirements.
  - Classes 3 and 9 are required to comply for staff only, not for short or long-term residents, visitors, or patients.
  - Classes 5, 6, 7b and 8 are required to comply for regular occupants, not for visitors.
- Bicycle Parking Facilities (Credit Achievement)
- Sustainable Transport (Credit Achievement)
- Reducing Private Vehicle Use (Credit Achievement)
- Encouraging Walkability (Credit Achievement)

Changing Facilities (Minimum Expectation)

Showers

The design of the shower facilities must be appropriate to encourage their use. The project team is expected to justify how their location, locker sizes, privacy requirements, and size meet this aim.

The building must install showers based on the regular occupancy of the building:

Occupants	Showers
0 - 49	1 Unisex
50-99	2
100 - 200	4
200+	Additional 1 per 200 occupants above 200

All showers must be at least 900 mm x 900 mm to enhance usability. Showers and bathrooms provided to meet statutory accessibility requirements do not count towards the minimum showers required to meet this Minimum Expectation.

Facilities should be located within easy access of the building and close to cycle parking (where provided).

Lockers

One locker must be provided for every eight regular building occupants or staff. The lockers must be secure and located in the changing rooms.

Lockers provided within tenancies, not in changing rooms, do not count toward this credit.

Accessible, Inclusive, and Located in a Safe and Protected Place (Minimum Expectation)

Upon accessing, pedestrians and cyclists must be protected from the elements and other vehicles. Access must be safe, with consideration given to avoiding steep gradients, surface grip levels, and visibility around tight corners.

Access to the facilities must be well lit between entryway to bike parking, all amenities and lift lobbies and main access points to the building.

All regular building occupants or staff must have easy access to lockers, showers, and building entry. Occupants must be able to find the facilities thanks to clear signage throughout the building and access points.

Bicycle Parking Facilities (Credit Achievement)

The building's access must prioritise walking and cycling options. This means the building's access must be well lit, weather protected, and separated from vehicles. The building must also include access to bicycle parking facilities that are separated from the primary vehicle entrance to ensure safety.

Bicycle parking facilities must have signposted access to the changing rooms amenities as per the Minimum Expectation. The bicycle parking facilities must ensure the cycling equipment is safely secured. The amount of bicycle parking facilities is to be informed by the Sustainable Transport Plan.

In a residential building, the access points must connect to the relevant bicycle storage facilities. If these are at a unit level, the project team must show how the access won't be blocked by strata at a later date.

Sustainable Transport (Credit Achievement)

Sustainable Transport Plan

The project team must prepare and implement a Sustainable Transport Plan. The requirements or recommendations made in the Sustainable Transport Plan must then be reflected in the design of the building's facilities and ongoing operational processes.

As a minimum, the Sustainable Transport Plan must include all the following:

- A definition of the typical mode share of the development location and development type
- A target mode share for the development that prioritises active and public transport modes, and recommendations on how to achieve them
- Outline of how other modes of transport (carpooling, electric vehicles, and drop-off points) will be encouraged over private vehicle use
- Identification of future projects which may change or influence mode share (such as planned, or under construction infrastructure) and the year of completion for the new infrastructure
- Roles and responsibilities for implementing, monitoring, and auditing the Sustainable Transport Plan in the building's operational phase

The transport plan must be prepared by a suitably qualified Transport Planner or Engineer.

Electric vehicle charging

As a minimum, if the project scope includes parking, the building must provide:

- Ready to charge EV charging points to at least 5% of all car parking spaces.
- Connections for car sharing parking spaces, regardless of whether the vehicles are electric at the time of practical completion (in addition to the 5% provided)
- Electrical infrastructure and a load management plan prepared to allow for future installation of EV charging to 25% of all car parking spaces (including the minimum 5% and car share spaces already provided). The mix of EV chargers assumed (e.g., 7kW v 22 kW) must be stated.
- A dedicated, safe, unobstructed route from the electrical supply point which allows for the future provision of all necessary electrical cabling without the need for substantial builders work in connection to the electrical cabling installation.

As part of the Sustainable Transport Plan, the project team must outline how spatial and electrical barriers to the roll out of future provisions have been considered and addressed.

Encouraging Walkability (Credit Achievement)

The building's design and location must encourage walking to and from a number of amenities. This means designing roads within the site boundary to prioritise pedestrians, and either providing within, or being located close to, a number of amenities.

Roads

If there are roads within the site boundary, the design must prioritise pedestrians over vehicles. Roads should be designed to be low speed (10km/hr). Pedestrians must have the right of way, and road design must encourage this.

Amenity diversity

Occupants should have access to a diversity of amenities across the below ten categories. There must be at least 10 amenities across five categories within 400m of the building, as determined by the *Movement and Place calculator* or *Manual Calculations.*

- Grocery: e.g., Convenience stores, supermarkets
- Health and wellbeing e.g., dentist, doctor, psychologist
- Food and Beverage: e.g., cafes, restaurants, bars
- Retail: e.g., clothing, homeware, hardware, book, gift stores
- Bank Services: e.g., banks, credit unions
- Education and Childcare: e.g., Primary, secondary, tertiary, or childcare facilities
- Recreation: e.g., movie theatres, fitness centres, swimming pools
- Public facilities: e.g., Libraries, local or state government service centres, post office
- Outdoor facilities: e.g., Playgrounds, parks
- Banking Services: e.g., ATM, bank branch

<u>Required Supporting Evidence</u>

- **Transport Drawings** showing the provision and location of changing facilities
- **As built drawings** showing the number and size of showers, and of lockers
- **Site drawings** or as built drawings showing how the changing facilities are safe and protected
- **Sustainable transport Plan** including a site-specific transport assessment
- **Site plans** showing how pedestrian access has been prioritised
- **As built drawings** showing the number and location of bicycle parking facilities
- **Manual calculations** showing proximity to amenities

CREDIT 28 – ENJOYABLE PLACES

Credit Achievement:

- Points Available: 2
- Points Targeted: 2

Compliance Requirements

The project must comply with both of the following criteria:

- Publicly Accessible Places
- Activation Strategy

Publicly Accessible Spaces

The project provides new, publicly accessible spaces that are enjoyable and support community activity and interaction to the following extent:

Building type	Building size (m^2)	Communal space requirements (m^2)
All building types except Class 2 and Class 3	≥ 1,000	0.25 m^2/ occupant or 2.5% of GFA, whichever is greater

The communal or public space must:

- Accommodate community-based activities
- Have capacity and flexibility to operate in multiple modes of usage
- Demonstrate relevance of the space for local people (demographics, social profile, current needs)
- Demonstrate the space has been designed for enjoyment (refer guidance below)
- Be available to the community to use for free. It must be clearly demonstrated that the spaces are publicly accessible

Activation Strategy – Burwood Council Requirement

An activation strategy must be provided to ensure placemaking continues after practical completion. The strategy must demonstrate how the future occupants and the wider community can contribute to the place activation, addressing the following:

- The target of the activation activities
- How the activation will be funded and managed for the first 12 months of operation, and be sustained beyond those months
- Estimated timing of activation
- Potential suppliers, facilitators, or initiators of placemaking activation activity commencement
- How the building occupants and the wider community will be encouraged to initiate activations e.g., communication channels and support network
- Demonstrate how the strategy can be further implemented by the future tenants and occupants
- Assign roles and responsibilities for implementation of the strategy, including evaluation and monitoring

The strategy must be included as part of the building's handover to ensure implementation in operation.

Required Supporting Evidence

- **Site plans** showing the size of public or communal spaces

- **Letter from the building owner** confirming the space is publicly accessible and may be used for free
- An **overview** of how the public or communal spaces comply with the requirements (e.g., flexible)
- A **narrative** of how the spaces have been designed for enjoyment
- **Activation strategy**

CREDIT 29 – CONTRIBUTION TO PLACE

Credit Achievement:

- Points Available: 2
- Points Targeted: 2

Compliance Requirements

The project must comply with the following criteria:

- Urban Context Report

Urban Context Report

The project team must provide an urban context report and public realm interface design that outlines the urban context of the development and the design responses. The report must include:

Urban context analysis:
- Assessment and analysis of the local setting and wider urban context. This must include physical, social, cultural, and economic factors
- Outline any planned changes to the local area (for example if located in a growth zone) and the project's design response to those changes. This may include Local or State Government's vision for the area
- Identify any local challenges which the building can help to address

Design responses:
- Demonstration of the design responses to the urban context analysis
- Demonstration that the public space is contributing positively to the proposed urban context

Required Supporting Evidence

Urban Context Report

- **Extracts** from the urban context analysis, or various relevant reports that address requirements from this credit
- **As built or site drawings** showing how the building responds to the urban context report
- **Architectural drawings** showing the public realm interface design

CREDIT 30 – CULTURE, HERITAGE, AND IDENTITY

Credit Achievement:

- Points Available: 1
- Points Targeted: 1

Compliance Requirements

The project must comply with one of the following criteria:

- Community Led Design Responses

Community Led Design Response

The project team must show that they have undertaken local analysis to identify culture, heritage, and identity unique to the project site and area. The project team must undertake community engagement as part of this local analysis. As a result of community engagement, the project must reflect local identity, culture, and heritage in the design of the building in a publicly demonstrable way.

This can be achieved through:

- Community art or placemaking projects
- Selection of suppliers/designers of artwork or cultural elements
- Building elements that tell stories of the past and heritage
- Spaces and uses that reflect the local identities

Where this pathway is being pursued, it must be demonstrated that the International Association for Public Participation Australasia (IAP2) core values for public participation were used and that the project achieved the 'Collaborate' status.

The project must produce a report detailing the community engagement activities undertaken and resultant design responses.

Required Supporting Evidence

Community Led Design Response

- **Culture, Heritage, and Identity Report** outlining key findings of the local analysis and how community engagement activities influenced the design
- **As built drawings, site drawings, architectural drawings** showing how the culture, heritage, and identity is incorporated into the building's designs.
- **Evidence** to demonstrate that a design review process has been undertaken
- **Details** of the panel members and their experience relevant to this credit's requirements
- A **declaration** from the project application confirming that the design review panel meets the independency requirements

CREDIT 31 – INCLUSIVE CONSTRUCTION PRACTICES

Minimum Expectation: Mandatory Requirement

Compliance Requirements

The project must comply with all of the following criteria:

- On-site Facilities, Policies, and Training

On-site Facilities, Policies, and Training

The head contractor must ensure the following is provided or available on-site:

- Separate gender inclusive bathroom facilities and changing amenities with a high degree of privacy
- Diverse gender-specific fit-for-purpose personal protective equipment (PPE) for diverse body sizes and types

The head contractor must:

- Implement policies to address issues of discrimination, racism, and bullying on-site
- Introduce on-site redress procedures for any relevant breaches and corrective measures to be put in place should any incident be identified
- Empower a diverse lead team to manage these policies on-site
- Provide training to all contractors and subcontractors on these policies (as per below)
    - Training must be provided to 95% of all contractors and subcontractors present on site for at least three days for:
        - Information on drug and alcohol awareness and mental health
        - Information on policies implemented on discrimination, racism, bullying on site, and safe ways to report poor behaviour

Required Supporting Evidence

- **Description** of the types of PPE available to construction workers
- **Evidence of purchase** of appropriate PPE
- **Extracts from relevant policies** that address discriminating, racism, and bullying
- **Drawings** of gender inclusive facilities
- **Evidence** of lead team diversity

CREDIT 32 – INDIGENOUS INCLUSION

Credit Achievement:

- Points Available: 2
- Points Targeted: 2

Compliance Requirements

The project must comply with one of the following criteria:

- Reconciliation Action Plan
- Inclusion of Indigenous Design

Reconciliation Action Plan

To meet this Credit Achievement, the project team must demonstrate that:

- A key member of the Project Team is part of the organisational RAP Working Group
- At least 90% of the RAP targets have been met on the project
- All implemented actions related to the RAP are publicly reported on the project's website

Any design element must be informed by consultation undertaken with the local Aboriginal and Torres Strait Islander community or through nominated representatives.

Where an organisational RAP has already been developed and endorsed, the project is required to adapt this to the project under certification. The project must provide an outcomes document detailing specific engagement, implementation and actions that have positively influenced the outcomes of the project.

Inclusion of Indigenous Design

The project team must demonstrate that the Australian Indigenous Design Charter guiding principles are incorporated in the design of the building including:

- How local Aboriginal and Torres Strait Islander communities have been engaged throughout the design development
- How the project has been designed to acknowledge and recognise the Indigenous culture of the site
- How information on the reconciliation and cultural values of the project will be made available to the public, visitors, and building tenants in the operational phase of the project's life

At a minimum, the following four principles from the Australian Indigenous Design Charter are to be addressed:

- *Indigenous Led:* Ensure Aboriginal and Torres Strait Islander representation in the creation of the design
- *Community Specific:* Ensure respect for the diversity of Aboriginal and Torres Strait Islander culture by following community specific cultural protocols
- *Impact of Design:* Always consider the reception and implications of all designs so that they are respectful to Indigenous culture
- *Shared Knowledge (collaboration, co-creation, procurement):* Develop and implement respectful methods for all levels of engagement and sharing of Indigenous knowledge (collaboration, co-creation, procurement)

The project team must demonstrate engagement has happened from concept design and continues through to operational handover.

Required Supporting Evidence

Reconciliation Action Plan (RAP)

- **Extract** from the Reconciliation Australia website demonstrating that the project's RAP is endorsed by Reconciliation Australia
- **Extracts** from the organisation's Annual Report or website (or similar) demonstrating that the RAP is publicly reported upon
- **Reconciliation Action Plan Report** (or similar) on the outcomes from the project's RAP demonstrating that at least 90% of the RAP targets have been met in the first reporting cycle
- **Evidence** that a key member of the project team is also on the RAP working group
- **Outcomes document** linking the project to an organisational RAP

Inclusion of Indigenous Design

- **Extract** from indigenous engagement strategy
- **Evidence** of Aboriginal and Torres Strait Islander engagement from concept design throughout the project's life cycle
- **As built drawings** or photographic evidence of incorporated designs
- **Evidence** of information being made available to public (e.g., website)
- **Comparison** against the four principles from the Australian Indigenous Design Charter

CREDIT 33 – PROCUREMENT AND WORKFORCE INCLUSION

Credit Achievement:

- Points Available: 2
- Points Targeted: 2

Compliance Requirements

The project must comply with all of the following criteria:

- Social Procurement Strategy (Credit Achievement)
- Employment Opportunities (Credit Achievement)

Exceptional Performance:

- Points Available: 1
- Points Targeted: 1

Compliance Requirements

- Social Procurement Strategy (Exceptional Performance)
- Employment Opportunities (Exceptional Performance)

Social Procurement Strategy (Credit Achievement)

The project team must develop and implement a social procurement strategy or plan (this can be part of an overall project procurement plan/strategy) that directs at least 2% of the building's total contract value to generate employment opportunities for disadvantaged and under-represented groups.

The project team must also include targets and annual reporting requirements in the strategy.

The plan must include all the following:

- A description of the project's social procurement and workforce objectives, needs, and targets
- A demographic study of the local region to inform identification of target workforce groups and their skills
- Descriptions of the roles and responsibilities in the implementation and monitoring of social procurement and workforce targets and contracts
- Data collection and reporting templates / tools, including how data from head contractors will be collected
- Monitoring and reporting requirements
- Reporting requirements for the project director

Projects must report the following at the time of practical completion:

- Dollar spent and as a proportion of building contract value
- Supplier(s) engaged
- Where workforce targets are in place, the number of jobs created per target group expressed as Full Time Equivalent
- Jobs supported

Employment Opportunities (Credit Achievement)

Generation of employment opportunities for disadvantaged and under-represented groups can be achieved either:

- Directly, through workforce targets
- Indirectly, through social procurement

A combination of these strategies can be used to achieve the credit, as long as the total dollar spend on the above activities is equal to or greater than the required 2% value of the building's total contract value.

The building's design and construction can contribute to generating employment opportunities for disadvantaged and under-represented groups through the procurement of goods, services, and construction by any of the following means:

- Aboriginal and/or Torres Strait Islander businesses
- Social enterprises
- Disability enterprises

Enterprise providers must be independently certified by third party organisations such as Supply Nation, Social Traders, BuyAbility and government chamber of commerce.

Social Procurement Strategy (Exceptional Performance)

The project team must develop and implement a social procurement strategy or plan (this can be part of an overall project procurement plan/strategy) that directs at least 4% of the building's total contract value to generate employment opportunities for disadvantaged and under-represented groups.

See Credit Achievement requirements for further information.

Employment Opportunities (Exceptional Performance)

Generation of employment opportunities for disadvantaged and under-represented groups can be achieved either:

- Directly, through workforce targets
- Indirectly, through social procurement

A combination of these strategies can be used to achieve the credit, as long as the total dollar spend on the above activities is equal to or greater than the required 4% value of the building's total contract value.

See Credit Achievement requirements for further information.

Required Supporting Evidence

- **Social Procurement Plan**
- **Evidence** of workforce targets in main contracts and sub-contracts
- **Evidence** of social procurement targets in main contracts and sub-contracts
- **Evidence** that enterprises are independently certified by third party organisation

CREDIT 35 – IMPACTS TO NATURE

Minimum Requirement: Mandatory Requirement

Compliance Requirements

The project must comply with all of the following criteria:

- Site Ecological Value (Minimum Expectation)
- Managing Light Pollution Impacts (Minimum Expectation)
- Wetland Management Plan (Minimum Expectation)

Site Ecological Value (Minimum Expectation)

This requirement is met where:

At the date of purchase or option contract, land clearing does not occur on the site as a result of the building, infrastructure, or construction works on the following:

- Old-growth forest
- Prime agricultural land
- Any wetland listed as being of 'High National Importance'
- Aspects considered 'Matters of National Environmental Significance' listed under the Environmental Protection and Biodiversity Conservation Act (1999) regardless of whether they have been referred to the Federal Environmental Minister for consideration and assessed as a 'controlled action' or not

If the project site is adjacent, within 100 meters, or contains the above and these are being protected, the construction and future operations of the site takes measures to reduce their impact to the above as follows:

- Both the Waterway Protection Credit Achievement and the Credit Achievement for this credit (Impacts to Nature) is met
- The light pollution impacts are managed
- Where the site is next to a wetland (as above), by also putting in place Wetland Protection Measures

This requirement applies to the condition of the site that existed at the date of site purchase or option contract (previous condition of the site).

In cases where the site has been owned by the current owner for more than five years (from the project's Green Star registration date), the requirements are applied to the state of the site that existed at least five (but not more than ten years) prior to the project's Green Star registration date.

Where the previous condition of the site is unclear, a qualified Ecologist shall assess the site and decide of its ecological value at the approximate time of purchase.

Managing Light Pollution Impacts (Minimum Expectation)

Light pollution to neighbouring bodies

The Head Contractor must demonstrate that all outdoor lighting on the project complies with AS/NZS 4282:2019 Control of the obtrusive effects of outdoor lighting.

The conditions apply to all boundaries, apart from boundaries with roads. The boundary shall be taken as the site boundary, with no setback and no consideration of the location of adjacent buildings (i.e., worst-case scenario).

The following values from Table 2.1 of AS/NZS 4282:2019 must be applied:

- For Class 2 buildings (residential), the compliance is for columns 4 and 5 as per Table 2.1 of AS/NZS 4282:2019
- For Class 3 to 9 buildings (non-residential), the compliance is as per column 3 as per Table 2.1 of AS/NZS 4282:2019

The system must comply with both pre- and post-curfew requirements.

Light Pollution to Night Sky (Minimum Expectation)

It must be demonstrated that one of the following specified reductions in light pollution has been achieved by the project:

- Control of upward light output ratio (ULOR)
- Control of direct illuminance

This covers all external lighting of a project. In addition to other types of external lighting, for the purposes of this credit, luminaires inside glazed atria and those on the uppermost (uncovered) deck of an outdoor car park are considered external.

Control of Upward Light Output Ratio (ULOR)

For this option, the Head Contractor must demonstrate that no external luminaire on the project has a ULOR that exceeds 5%, relative to its actual mounted orientation. The Head Contractor must demonstrate that the ULOR provided or calculated in the documentation, is relevant to the as-installed orientation of the luminaire.

Control of Direct Illuminance

For this option, the Head Contractor must demonstrate that direct illuminance from external luminaires on the project produces a maximum initial point illuminance value no greater than:

- 0.5 Lux to the site boundary
- Lux to 4.5 metres beyond the site into the night sky, when modelled using a calculation plane set at the highest point of the building

Calculations shall be in accordance with AS/NZS 4282:2019.

The calculation plane must cover the area between the site boundary and building façade or vertical service to be illuminated. The horizontal calculation plane shall be set at the top of the building fabric, excluding spires. Calculation plane grid points shall have a 0.5m spacing. All illumination results shall be reported to within 2 decimal places.

Wetland Management Plan (Minimum Expectation)

The site-specific Wetland Management Plan must be prepared by a qualified Ecologist or other qualified professional and include requirements for ongoing quarterly monitoring, annual reporting, and

management of the wetland ecosystem for a minimum of five years. The plan must be exhibited to the public on the applicant's website or the local council's offices or library for a minimum of 24 months.

Required Supporting Evidence

- **Extracts** from the Development Application
- **Zoning Plans**
- **Light Pollution**
  - **As Built drawings** indicating the location of all external luminaires and showing the aiming point and mounting orientation of all external luminaires
  - **Luminaire schedule** for all external lighting, nominating the type, lighting distribution and quantity of each luminaire and including the relevant photometric data such as ULOR
  - **Calculation Plots** for all external lighting, showing that all grid points on the calculation plane return compliant Lux values
  - **Excerpt from lighting control system**, or similar, demonstrating automatic deactivation of lights, based on external lux levels, where deactivation is required to achieve compliance
    If triggering the wetland requirements:
  - **Wetland Management Plan**
  - **Evidence** as per Waterway Protection credit
- **Ecological assessment report**
- **Evidence that 50% of the site has been retained:**
  - **Narrative from Ecologist**
  - **As built drawings**

CREDIT 41 – LEADERSHIP CHALLENGES: CLIMATE POSITIVE PATHWAY

Credit Achievement:

- Points Available: 1
- Points Targeted: 1

Compliance Requirements

The Climate Positive Pathway is contained within four credits:

- Energy Use
- Energy Source
- Upfront Carbon Emissions
- Other Carbon Emissions

When the pathway is achieved, a Leadership Challenge point is awarded to the building.

Required Supporting Evidence

As per the following credits:

- Energy Use
- Energy Source
- Upfront Carbon Emissions
- Other Carbon Emissions

2.1 APPENDIX A – SELF-CERTIFIED GREEN STAR BUILDINGS SCORECARD

ESD Report (Excluded from agenda)

greenstar Buildings

Project:	Bupacc	**Revision**	1
Prepared by	GL	**Date**	16/08/2024
Registering from	2023 onwards	**Targeted Green Star rating**	4 Star
Climate Positive Pathway	Yes	**Points targeted**	30.5
Minimum expectations	Yes	**Buffer points**	15.5

Note: (minimum 15 for 4 star)

JHA

	Credit	Criteria Type	Points Available	Targeted	Credit Status	Green Star Compliance Requirements	Team Comments	Lead	Responsible Parties: Burwood Council	Contractor	Architect	ESD	ICA	Acoustic	Structural	Mechanical	Electrical	Hydraulic	Fire	Civil	Lift	Landscape
Responsible			**17**							.	.	.	.	.	.	.	.	.	.	.	.	.
1	Industry Development	Credit Achievement	1	**1**	**Achievable**	• Letter of appointment and scope of works for GSAP covering duration of project. Sample meeting minutes demonstrated GSAP Input. Letter from client confirming GSAP fulfilled their responsibilities. • Disclose costs of sustainability to GBCA by completing the '*Green Star Financial Transparency disclosure template*' and provide a statement in support. • Market building achievements by providing professional photos and information to GBCA for a case study; copies of marketing material; samples of information to be displayed prominently to the public/users; plans/photos of where the certification will be displayed.	An **ESD consultant** has been been appointed throughout each design phase. JHA will be the appointed ESD consultant throughout construction phase. **Burwood Council** to provide a letter confirming JHA has fulfilled their responsibilities. **Contractor** to disclose costs of sustainability by completing the 'Green Star Financial Transparency disclosure template' and provide a statement in support. **Burwood Council** to orghanise Marketing of building achievements via professional photos and information.	Contractor	X	X		X									
2	Responsible Construction	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	• Builder has EMS certified to AS/NZS ISO14001, BS7750 or EU EMAS. • Site specific EMP is developed to cover all project works including demolition, excavation & construction and implemented from start of works. • 80% of construction waste is diverted from landfill. Waste contractor and processing facility to provide '*Disclosure Statements*' demonstrating compliance with '*Green Star Construction and Demolition Waste Reporting Criteria*' (target increased to 90% for an additional point). • Builder to provide sustainability training to all contractors/subcontractors onsite >3 days.	**Contractor** to comply with the all requirements.	Contractor		X											
2	Responsible Construction	Credit Achievement	1	-		90% of construction waste diverted from landfill in lieu of 80% minimum.		Contractor		X												
3	Verification and Handover	Minimum Expectation	Mandatory	**Mandatory (Min. 3 of 4 requirements)**	**Achievable**	**<u>Requirement 1:</u>** **Metering and Monitoring** (energy and water) must comply with NABERS and CIBSE TM39 (or equivalent) respectively, provide: • Plan & schematic drawings showing all meters and energy/water uses • Letter from metering contractor demonstrating continual automatic monitoring and automatic alerts. • Commissioning reports of meter reading/reporting/alarms. • **Monitoring Strategy** document (to TM39) including calculations showing all uses covered for usage & accuracy verification. • Accuracy Certificates for meters (NMI or EU directive - 2004/22/CE) • Completed **Metering Validation** demonstrating compliance to NABERS.	LUCID ELEC COMMENTS: **Electrical Energy and Water metering** to plant and equipment to comply with TM39 achievable. **Contractor** to comply with the all requirements.	Contractor		X			X			X	X	X			X
					Achievable	**<u>Requirement 2:</u>** **Commissioning and Tuning (services):** 1. submit **Service and Maintainability Report** demonstrating all design project team roles i.e. Developer, Services design professionals, Architect, ESD, FM, Builder & ICA have review Commissionability; Controllability; Maintainability; Operability; Safety of all systems. All involved parties must sign off Report prior to construction. 2. Construction stage **Commissioning Report** demonstrating comprehensive pre-commissioning and commissioning to CIBSE or ASHRAE standard. 3. Provide **Building tuning contract** demonstrating a minimum 12 month post-occupancy tuning with quarterly measure/adjustment, and: 3a - A **building tuning manual/plan** (within commissioning plan or separate based on commissioning plan/records/results) to include: description of the building tuning team (must include: FM; ICA or owner's representative; Builder; Services design professionals; relevant trade contractors; . 3b - Confirmation the owner has engaged parties to tune the nominated systems 3c - Roles/responsibilities/deliverables of each party within the tuning team (individuals must be available to address specific tuning issues where required).	**Contractor** to comply with the all requirements.	Contractor /	X	X		X		X	X	X	X		X	
					Not Targeted	**<u>Requirement 3:</u>** **Commissioning and Tuning (building fabric airtightness)** Airtightness must be included as part of the commissioning, including: • Schematic design: review of design including an **air barrier system schematic** • Design Development: review for tightness including air barrier continuity on building plans, sections, and details. Scope of work and necessary coordination between trades and responsibilities must be demonstrated. • Pre-Construction: generate **air tightness commissioning plan** and included project program. • Construction: suitably qualified practitioner tests in accordance with air-tightness testing plan. Quantitative testing of air permeability rate for whole building to AS/NZS ISO 9972:2015 '*Thermal performance of buildings determination of air permeability of buildings - Fan pressurisation method*'. On sections smaller than the whole building qualitative procedures such as ASTM E1186-17 may be used.	Not Targeted by the design team. Contractor to consider Air tightness testing.	Contractor	X	X	X	X	X		X						
					Achievable	**<u>Requirement 4:</u>** **Building Information including:** • Design stage **Owners Project Requirements** document defining building systems; operations and maintenance requirements (in general terms) and guidance to FM team on keeping information up to date. • Construction stage **As-installed drawings** and **Operation and Maintenance** manuals providing detailed information for all building systems • **Building logbook** • **Building Users Guide** as a source of up-to-date, relevant information for the building user and must be able to be updated and edited by the FM team and other appropriate stakeholders to ensure it remains current and relevant. All building user information must be available to the building owner and facilities management team at the time of practical completion.	**Contractor** to comply with the all requirements.	Contractor	X	X	X	X	X		X	X	X			X
3.C	Verification and Handover	Credit Achievement	1	-		• comply CIBSE (ANZ) '*The Soft Landings Framework Australia and New Zealand*' including: Briefing (Stage 1); Design development (Stage 2); Pre-handover (Stage 3) & Initial after care (Stage 4). Stage 5 recommend not required. • engage Independent Commissioning Agent (ICA) to advise/monitor/verify commissioning/tuning of nominated systems throughout design/ tender/ construction/ commissioning/ tuning phases. ICA to demonstrate experience and implementation of BSRIA framework. ICA to be engaged separately from the construction team to support independence.		Contractor		X			X			X	X	X	X	X	X	
4	Responsible Resource Management	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	• Minimum separation of waste to: general waste; co-mix recycling; one project specific waste stream (organic/e-waste/batteries) PLUS any waste stream >5% total annual volume. • Dedicated waste storage area sized for forecast waste & collection frequency, calculation based on *City of Sydney's Guidelines for Waste Management in New Developments* (or equivalent).	The project has a waste area in the basement developed in cordination with a waste consultant.	Architect	X	X	X											
5.C	Responsible Procurement	Credit Achievement	1	-		Prior to appointment of Builder: • Complete a '**Supply Chain Risk/Opportunity Assessment**' of ≥10 key supply chain items (include: services/ plant & equipment/ materials). Assessment must identify environmental/social/health risk/opportunity to ISO 20400 Sustainable Procurement – Guidance • Based on assessment complete a '**Responsible Procurement Plan**' that identifies: trade packages; objectives; mitigation; roles & responsibilities to implement; data collection/monitoring/reporting; incentives to achieve. • Embed Plan in tender documents. • Demonstrate implementation (provide minutes/process documents) • Provide reporting data from construction demonstrating trade involvement.		-													
6.C	Responsible Structure	Credit Achievement	3	-		Structural component cost (load bearing and stability) ≥30% to have Responsible Product Value (RVP) ≥10. RVP based on: FSC/ GECA/ GreenRate/ Industry EPD/ product EPD/ Best Practice PVC/ Climate Active Carbon Neutral. - 1 Point: ≥15% to have Responsible Product Value (RVP) ≥10 - 2 Points: ≥30% to have Responsible Product Value (RVP) ≥10		Structural		X				X				X			
6.E	Responsible Structure	Exceptional Performance	2	-		Structural component cost ≥50% to have Responsible Product Value (RVP) ≥10 (including 10% with RPV≥15) <u>OR</u>: Structural component cost ≥80% to have Responsible Product Value (RVP) ≥10		Structural		X				X				X			
7.C	Responsible Envelope	Credit Achievement	2	-		Envelope component cost (weather envelope façade/roof/suspended slabs) ≥30% to have Responsible Product Value (RVP) ≥10. RVP based on: FSC/ GECA/ GreenRate/ Industry EPD/ product EPD/ Best Practice PVC/ Climate Active Carbon Neutral.		Contractor	X	X	X											

greenstar Buildings

Note:

JHA

Project:	Bupacc	**Revision**	1
Prepared by	GL	**Date**	16/08/2024
Registering from	2023 onwards	**Targeted Green Star rating**	4 Star
Climate Positive Pathway	Yes	**Points targeted**	30.5 (minimum 15 for 4 star)
Minimum expectations	Yes	**Buffer points**	15.5

	Credit	Criteria Type	Points Available	Targeted	Credit Status	Green Star Compliance Requirements	Team Comments	Lead	Responsible Parties: Burwood Council	Contractor	Architect	ESD	ICA	Acoustic	Structural	Mechanical	Electrical	Hydraulic	Fire	Civil	Lift	Landscape
7.E	Responsible Envelope	Exceptional Performance	2	-		Envelope component cost ≥30% to have Responsible Product Value (RVP) ≥10 (including 10% with RPV≥15) OR: Envelope component cost ≥60% to have Responsible Product Value (RVP) ≥10		Contractor		X	X	X										
8.C	Responsible Systems	Credit Achievement	1	-		Active building system cost ≥20% to have Responsible Product Value (RVP) ≥6. RVP based on: FSC/ ECNZ/ GreenRate/ Industry EPD/ product EPD/ Best Practice PVC/ Climate Active Carbon Neutral.		Contractor		X						X	X	X	X		X	
8.E	Responsible Systems	Exceptional Performance	1	-		Active building system cost ≥20% to have Responsible Product Value (RVP) ≥6 (including 5% with RPV≥11) OR: Active building systems ≥35% to have Responsible Product Value (RVP) ≥6		Contractor		X						X	X	X	X		X	
9.C	Responsible Finishes	Credit Achievement	1	-		Building finishes cost ≥40% to have Responsible Product Value (RVP) ≥7. RVP based on: FSC/ GECA/ ECNZ/ GreenRate/ Industry EPD/ product EPD/ Best Practice PVC/ Climate Active Carbon Neutral.		Architect	X	X	X												
9.E	Responsible Finishes	Exceptional Performance	1	-		Building finishes cost ≥40% to have Responsible Product Value (RVP) ≥7 (including 10% with RPV≥12) OR: Building finishes cost ≥60% to have Responsible Product Value (RVP) ≥7		Architect	X	X	X												
			Total	1																		
	Healthy		14						.	.	.	.	.	.	.	.	.	.	.	.	.	.
10	Clean Air	Minimum Expectation	Mandatory	Mandatory	Achievable	• Separation distances between pollution sources and outdoor air intakes comply with more onerous of ASHRAE 62.1:2013 (table 5.5.1) or AS1668.2:2012, and new/existing ductwork to be cleaned to an AIRAH, ASHRAE, ACR, SMACNA. • 50% improvement to AS1668.2:2012 outside air rates with DCV for efficiency. • Pollutant sources (printing/cooking/process) to be eliminated (low emission) or directly exhausted.	50% over minimum AS1668.2:2012 requirements have been provided to all spaces. Mechanical O/A has been designed for 11.25 L/s (+50% over minimum 7.5 L/s), energy-recovery ventilator units have been included to AHUs accordance with the NCC when outside air rates exceed 20% greater than minimum requirements. AHUs are recirculating units which operate according to a time schedule. AHUs have a varied amount of outdoor air, with CO2 control.	Mechanical		X					X						
10.C	Clean Air	Credit Achievement	2	-	Not Achievable	• Provide access to both sides of moisture generating or debris catching components in ventilation systems (i.e. coils/filters/dampers), and safe access to ducts. • Target a 100% improvement to AS1668.2:2012 outside air rates.		Mechanical		X						X						
11	Light Quality	Minimum Expectation	Mandatory	Mandatory	Achievable	• All LED lighting has 'no observable effect' per IEEE 1798-2015 • CRI to be 85 or higher for all internal/external lighting • Design to achieve 'best practice' maintained illuminance per AS1680.1:2006 • Design maintained illuminance uniformity to comply with table 3.2 of AS1680.1:2006 when using 'maintenance factor method' per AS1680.4 • Light sources must have MacAdam Eclipse or SDCM of 3 or lower.	Luminaire technical parameters based on (IEEE 1798/flicker, CRI and MAcAdam Ellipse/SDCM). Uniformity and maintained illuminance will generally be achieved throughout, noting in some areas that lower uniformity and maintained illuminance will be employed specifically to highlight architectural elements. Lighting will be compliant to the minimum requirements of 1680.0 (safe movement) for all areas.	Electrical		X						X					
					Achievable	• Demonstrate glare control with baffles/louvres/diffusers/etc. OR: achieve UGR compliance with table 8.2 of AS1680.1:2006 (LED's) OR: comply clause 8.3.4 of AS1680.1:2006 OR: demonstrate UGR compliance with Table 8.2 per Clause 8.3.3 of AS1680.1:2006	Glare control will be achieved in accordance with as1680.1 clause 8.3.4 (Luminaire selection system).	Electrical		X						X					
					Achievable	Provide daylighting summary to show how design: • Maximises occupants in/near daylit areas during their daily activities • Ensures regularly occupied areas in reasonable proximity to daylight • Controls or mitigates external glare in the daylit spaces • Maximises daylight to spaces that prioritise learning, healing, and living: – For schools, how all classrooms have view & daylight – For hospitals, areas with patients occupancy >2hrs have view & daylight – For 95% of apartments, living rooms & bedrooms have view & daylight. • Provides occupants unrestricted access to daylit indoor public common spaces As part of the submission, the project team is required to submit: • Narrative describing the building's daylight/view/external glare strategy • Calculation of proportion regularly occupied areas with adequate daylight • An assessment against the five requirements above If above unable to be met, the project team must: • Outline barriers and mitigation measures undertaken taken	Refer to Daylighting summary.	Architect	X			X	X							
11.C	Light Quality	Credit Achievement	2	-		Achieve Artificial lighting: 1a. Horizontal illuminance comply AS1680 for tasks over 90% GFA. 1b. At least one wall in the field of view of a regularly occupied area is to be illuminated to create demonstrable contrast and visual interest. The total area of the illuminated wall must represent at least 20% of the area of the walls in the field of view. 1c. Vertical illuminance shall ensure 50% horizontal task illuminance reaches average eye height for 90% of regularly occupied workspaces.		Architect	X			X	X					X			
11.E	Light Quality	Exceptional Performance	2	-		Achieve Daylight: 2a. 40% of regularly occupied areas receive >20% (must be calculated using 'Daylight Autonomy') 2b. viewing facade and skylights to be shading from direct sunlight 80% of daylight hours for each equinox & solstice OR: locally controlled blinds/screens (VLT<10%) provided to 95% of viewing facades & skylight OR: use modelling to demonstrate equivalent performance.		Architect	X			X	X					X			
12	Acoustic Comfort	Minimum Expectation	Mandatory	Mandatory	Achievable	Acoustician to provide **Acoustic Comfort Strategy** document addressing: quiet enjoyment; functional use; intrusion control; privacy; noise transfer; speech intelligibility. Document to include: standards/legislation/guidelines; performance metrics for acoustic criteria relative to legislation/best practice and a description of how design is intended to achieve proposed metrics.	The theatre, studio and multipurpose rooms have been designed with optimised acoustics in mind.	Acoustic	X		X			X							
12.C	Acoustic Comfort	Credit Achievement	2	-		Acoustic report addressing credit criteria and confirming compliance, including: • Maximum - internal ambient noise levels ≤ AS2107:2016 • Minimum - noise levels of regularly occupied fitout areas ≤ 5 dB below the lower range AS 2107 value (relevant to activity type) • Separation achieves: insulation: Dw + LAeqT > X (typically X=75, walls with door X=60 & X=80 when privacy required (meeting/private offices/education)); OR: partitions achieve dB Rw of: 45 between rooms(no door); 40 open plan to room; 35 where door; 50 between floors. • Impact noise transfer through floors complies with ISO 16283-2 where: floors above regularly occupied areas or different tenancies share a floor (dB L'nT,w • Adjacent spaces belonging to different tenancies which share a floor must not exceed dB L'nT,w ≤ 60 (55 above class 2 &3) • Regularly occupied area reverberation time ≤ max. (Table 1 AS2107:2016) Commissioning reports detailing internal noise test results and partition sound reduction levels (or design & construction documentation review).		Acoustic	X	X	X			X		X					
13	Exposure to Toxins	Minimum Expectation	Mandatory	Mandatory	Achievable	• 95% paints/adhesives/sealants volume & carpet area is low TVOC or nontoxic. • 95% engineered wood area is low in TVOC or non-toxic. Provide: specifications; invoice/proof of purchase; product certification	**Contractor** to comply with the all requirements.	Contractor	X	X	X					X	X	X	X		X	
					Achievable	Comprehensive **hazardous materials survey** carried out on existing buildings or structures on the site (to Environmental & WHS legislation). Banned or highly toxic materials to be remediated.	**Contractor** to comply with the all requirements.	Contractor		X												
13.C	Exposure to Toxins	Credit Achievement	2	-		Test certificate of completed building showing: TVOC ≤ 0.27ppm; Formaldehyde ≤ 0.02ppm		Contractor	X	X	X												
14	Amenity and Comfort	Credit Achievement	2	-		Provide dedicated parent, relaxation/meditation/prayer or exercise rooms with total area of $1m^2$/10 staff (minimum $10m^2$). Rooms must meeting Daylight and Acoustic requirements listed for credit achievement		Architect	X	X	X	X		X								
15.C	Connection to Nature	Credit Achievement	1	-		Achieve items 1 and 3 as listed below: 1 - 60% regularly occupied areas ≤ 8m of quality internal/external view, and 3 - 5% of occupied area or land inside boundary planted and accessible for interaction by occupants (i.e. paths, bench, water, tools, herbs, compost).		Architect	X	X	X												X

greenstar Buildings

Note:

JHA

Project:	Bupacc	**Revision**	1
Prepared by	GL	**Date**	16/08/2024
Registering from	2023 onwards	**Targeted Green Star rating**	4 Star
Climate Positive Pati	Yes	**Points targeted**	30.5 (minimum 15 for 4 star)
Minimum expectatio	Yes	**Buffer points**	15.5

	Credit	Criteria Type	Points Available	Targeted	Credit Status	Green Star Compliance Requirements	Team Comments	Lead	Responsible Parties: Burwood Council	Contractor	Architect	ESD	ICA	Acoustic	Structural	Mechanical	Electrical	Hydraulic	Fire	Civil	Lift	Landscape
15	Connection to Nature	Exceptional Performance	1	-		Achieve items 2 (in addition to above) as listed below: 2a - Pot plants with soil surface ≥ 500cm² per 15m² of regularly occupied area. Plants must have management contract in place. 2b - 5 nature-inspired design interventions that: provide multiple natural sensory experiences; reflect natural and cultural patterns and forms; use natural materials; or large scale & holistically incorporated natural motifs/art.		Architect	X	X	X										X
E			**Total**																			
	Resilient		**8**						.	.	.	.	.	.	.	.	.	.	.	.	.	.
16	Climate Change Resilience	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Complete **Climate Change Pre-screening Checklist**. Checklist to be signed off by project team leader and be shared with key project stakeholders.	Achieved inherently as the project is targeting Credit Achievement.	ESD	X	X	X	X			X	X	X	X	X	X	X	X
16.C	Climate Change Resilience	Credit Achievement	1	**1**	**Achievable**	Suitably qualified professional to complete assessment and **Climate Change Risk Assessment and Adaptation Report.** • All 'extreme' and 'high' risks must be addressed by design team (minimum 2). 'High' risk response may include future actions.	Refer to Climate Change Risk and Adaptation Register prepared by JHA for risks and mitigation actions.	ESD	X	X	X	X			X	X	X	X	X	X	X	X	X
17	Operations Resilience	Credit Achievement	2	-		Suitably qualified professional to complete **Operations Resilience Assessment** • Details of how shocks (infrastructure failure& security/pandemic/geological hazards/ cyber & direct attack) and stresses (ageing infrastructure/cyber dependency/energy cost/transport cost/availability) have been assessed • Risk assessment criteria, assumption & likelihood/consequence table • Details of the adaptation responses • Assess building's survivability during a blackout with design mitigation.																	
18	Community Resilience	Credit Achievement	1	-		Suitably qualified professional to complete **Community Resilience Plan**: • Defines local community & groups relying on building directly/indirectly (must identify vulnerable communities). • Identifies resilience objectives/goals associated with servicing the community • Identifies social considerations affecting the community • Identifies acute shocks and chronic stresses that impact the project's function and ability to service the community (including climate-related shocks and stresses if the Climate Change Resilience credit is not targeted) • Demonstrates how the development of actions (physical and non-physical responses) to manage the impact from shocks and stresses is in response to the outcomes of community engagement • Shows how the two most significant impacts identified are dealt with specifically through the building's design • Identifies how material shocks and stresses identified for the building may impact on these stakeholders by considering a clear set of social indicators (see Guidance section) The project team must undertake at least one community capacity building activity prior to or during construction.		-															
19	Heat Resilience	Credit Achievement	1	**0.5**	**Achievable**	75% of site area (excluding PV & translucent polycarbonate) addresses heat island effect through: • Vegetation • Green roofs • Roofing materials, including shading structures, having the following: – For roof pitched <15°– a three-year SRI ≥ 64 or initial ≥ 84 – For roof pitched >15°– a three-year SRI ≥ 34 or initial ≥39 • Unshaded hard-scaping elements with a three-year SRI of minimum 34 or an initial SRI of minimum 39 • Hardscaping elements shaded by overhanging vegetation • Water bodies and/or water courses • Permanent shade at noon on summer solstice Points are awarded on a sliding scale, up to a maximum of 1 point for 75%.	Tree canopy and green roof consists of approximately 40%. An additional 35% of compliant SRI pavers can be targeted to achieve the full point. Points are awarded on a sliding scale, up to a maximum of 1 point for 75%. Hence at completion of design, the project can achieve 0.5 Points.	Architect		X	X	X										X
20	Grid Resilience	Credit Achievement	3	-		Achieve 1 or 2 or 3: 1 - Active Generation & Storage. 10% reduction to peak demand through active measures (CHW tank/batteries) or renewables. Site renewables must include parallel/export/island mode, export must be ≤ 30% peak load. 2 - Demand Response. 10% peak reduction through demand response/load shedding (4hrs minimum duration) without impacting lighting or comfort. 3a - Building mostly (80%) natural ventilation 3b - facade achieves 10% improvement to NCC2019 reference building. 3c - occupied area <3000sqm		Electrical	X	X	X					X					
			Total	**1.5**																		
	Positive		**30**						.	.	.	.	.	.	.	.	.	.	.	.	.	.
21	Upfront Carbon Emissions	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Building upfront carbon (embodied) 10% less than reference building. Use GBCA '*upfront carbon'* (modules A1-A3) or '*Life Cycle'* (modules A1-A5) calculators.	To project is seeking achievement of the minimum expectation (The building's upfront carbon emissions are at least 10% less than those of a reference building) through specification of concrete and steel. The Head Contractor to investigate the concrete achievement of the minimum requirement.	Architect		X	X	X			X				X		
21.C	Upfront Carbon Emissions	Credit Achievement	3 (CPP Requirement)	**3**	**Achievable**	• Building upfront carbon 20% less than reference building via GBCA calculators • Demolished structure < 30-50years old to be offset (Not Applicable to BUPACC)	**Contractor** to comply with the all requirements.	Architect		X	X	X			X				X		
21.E	Upfront Carbon Emissions	Exceptional Performance	3	-		• Building upfront carbon 40% less than reference building via GBCA calculators • Demolition excluded.		Architect														
22	Energy Use	Minimum Expectation	Mandatory	**Mandatory**	**To be confirmed during construction phase**	Building energy ≥10% better than reference building NCC Section J, Calculations must exclude onsite renewables	Minimum 10% better than section J6 requirements for energy use will be achieved for luminaires. **JHA** will undertake energy modelling during construction phase.	ESD	X	X	X	X				X	X				X	
22.C	Energy Use	Credit Achievement	3 (CPP Requirement)	**3**	**To be confirmed during construction phase**	Building energy ≥20% better than reference building NCC2019 Section J Onsite renewables behind the meter can contribute to reduction, export cannot be used to offset.	20% reduction will be a bit challenge For mech: opt for systems with higher efficiency ratings. Electrical: Review Section J lighting density, aim for 20% energy savings between proposed lighting system and reference system. **JHA** will undertake energy modelling during construction phase.	ESD	X	X	X	X				X	X				X	
22.E	Energy Use	Exceptional Performance	3	-		Building energy ≥30% better than reference building NCC2019 Section J, and/or: NABERS commitment agreement 6 star energy Onsite renewables behind the meter can contribute to reduction, export cannot be used to offset.		ESD	X	X	X	X				X	X				X	
23	Energy Source	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Develop a **Zero Carbon Action Plan** quantifying: - scope 1 (inc. refrigerants) and 2 emissions to 2050 with & without interventions. - spatial impacts to achieve carbon positive and replace fossil fuels - cost assessments	Achieved inherently as the project is targeting Exceptional Performance.		X	X	X	X				X	X	X				
23.C	Energy Source	Credit Achievement	3 (CPP Requirement)	**3**	**Achievable - Requires client commitment in construction phase**	All electricity (excluding tenant loads) to be sourced from renewables. Off-site renewables are acceptable with 5 year contract.	Burwood Council Requirement	Burwood Council	X													
23.E	Energy Source	Exceptional Performance	3 (CPP requirement)	**3**	**Achievable - Requires client commitment in construction phase**	All energy under owner/operator control and all non-electricity energy provided for uses not under owner's control must be sourced from renewables. Fossil fuels cannot be used on site (except industrial processes). Emergency power or laboratory equipment must be less than 1% of the total building energy consumption and be offset for the first five years of operation. Off-site renewables are acceptable with 5 year contract.	No Fossil Fuels burned onsite. DHW and Cooking use electric systems. No diesel back-up generator. Off-site renewables to be sourced by Burwood Council.	Burwood Council	X											
24.C	Other Carbon Emissions	Credit Achievement	2 (CPP Requirement)	**2**	**Achievable - Requires client commitment in construction phase**	Building owner eliminates (GWP<10) or offsets emissions from refrigerants. Offset total CO2(e) impact of refrigerant assuming all lost.	Burwood Council Requirement	Burwood Council	X	X					X							

ESD Report (Excluded from agenda)

greenstar Buildings

Project:	Bupacc	**Revision**	1
Prepared by	GL	**Date**	16/08/2024
Registering from	2023 onwards	**Targeted Green Star rating**	4 Star
Climate Positive Pathway	Yes	**Points targeted**	30.5
Minimum expectations	Yes	**Buffer points**	15.5

Note:

(minimum 15 for 4 star)

JHA

	Credit	Criteria Type	Points Available	Targeted	Credit Status	Green Star Compliance Requirements	Team Comments	Lead	Responsible Parties: Burwood Council	Contractor	Architect	ESD	ICA	Acoustic	Structural	Mechanical	Electrical	Hydraulic	Fire	Civil	Lift	Landscape
24.E	Other Carbon Emissions	Exceptional Performance	2	-		Offset all embodies energy (modules A1-A5), all operational energy, any other emission (>1% total).																
25	Water Use	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Achieve Sanitary Fixture and Appliance (1) OR: Reducing Water Use (2) 1 - fixtures to be rated: WELS 5 (taps/urinals/dishwashers), WELS 4 (toilets/clothes wash), WELS 3 (showers) 2 - building uses 15% less potable water than reference building per GBCA's *Water Use calculator*	Incorporated in Architectural design.	Architect		X	X						X				
25.C	Water Use	Credit Achievement	3	-		Achieve 1 AND 2 as above but where: 2 - building uses 45% less potable water than reference building per GBCA's Water Use calculator		Hydraulics	X	X	X							X		X		X
25.E	Water Use	Exceptional Performance	3	-		Achieve 1 AND 2 as above but where: 2 - building uses 75% less potable water than reference building per GBCA's Water Use calculator		Hydraulics														
26.C	Life Cycle Impacts	Credit Achievement	2	-		The project demonstrates a 30% reduction in life cycle impacts when compared to standard practice. Whole-of-building, whole-of-life (cradle to grave) comparative Life Cycle Assessment (LCA) per EN 15978 using modules (A to D).		LCA														
			Total	**14**																		
	Places		**8**						.	.	.	.	.	.	.	.	.	.	.	.	.	.
27	Movement and Place	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Provide changing facilities (accessible, inclusive, safe & protected). - Showers: 0-49p=1 unisex; 50-99p=2; 100-200p=4; 200p+=4+1/200p >200p - Locker: 1 per 8 people (regular occupants/staff)	6 showers have been provided. Lockers have been provided in the UNISEX EOT.	Architect	X		X											
27.C	Movement and Place	Credit Achievement	3	**3**	**Achievable**	Provide: • Bicycle parking per Sustainable Transport Plan • **Sustainable Transport Plan** plus EV charging for 5% of parking spaces. • *N/A for Equivalency Rating - Demonstrate 40% emission reduction, 90% active encouragement, 20% reduction kms travelled by private vehicles via GBCA Movement and Place calculator* • *N/A for Equivalency Rating - Encouraging Walkability - max10km/h roads, prioritise pedestrians, 10 amenities from 5 categories <400m*	Current proposed provision for a minimum of 10% of parking spaces to be equipped with EV charging to be allowed for in accordance with section J9 of the NCC 2022. NOTE: this will be subject to the requirements of Fire and Rescue NSW and any fire engineering solutions required to achieve this benchmark. - 7 Bike Parking spaces have been included in the design. - 3 EV Car spaces have been included as proposed in the Sustainable Transport Plan (5% of 50 Car Spaces is 2.5 spaces).	Architect		X	X						X				
28.C	Enjoyable Places	Credit Achievement	2	**2**	**Achievable**	• Provide: memorable/beautiful/vibrant communal or public places (greater of 0.25m^2/ occupant or 2.5% GFA). • produce **Activation Strategy and** ensuring spaces are inclusive, safe, flexible, and enjoyable	Publicly Accessible spaces is achieved (2.5% of the GFA). The GFA is 5212.88m2, requiring a minimum of 130.3m2. The external site area far exceeds this requirement i.e. Green Roof and surrounding outdoor plaza. Activation strategy has been prepared by **Burwood Council**. The external plaza area will be used for markets and other community activities (tbc) by Burwood Council.	Burwood Council	X	X	X										
29.C	Contribution to Place	Credit Achievement	2	**2**	**Achievable**	Provide **Urban Context and Public Realm Interface design report,** including: • Urban context analysis, planned changes, govt. vision, local challenges & design response demonstrating positive contribution. OR: documentation demonstrating a minimum of 3 Independent Design Review Panel reviews	Achieved through "Burwood Urban Park and Cultural Centre Design Statement".	Architect			X	X										
30.C	Culture, Heritage and Identity	Credit Achievement	1	**1**	**Achievable**	• The building's design reflects and celebrates local demographics and identities, the history of the place, and any hidden or minority entities. OR: • This outcome was arrived through meaningful engagement with community groups early in the design process	Achieved through "Community Engagement Program for the Development for the Urban Park and Cultural Centre for Burwood"	Architect			X	X										
			Total	**8**																		
	People		**9**						.	.	.	.	.	.	.	.	.	.	.	.	.	.
31	Inclusive Construction Practices	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	Builder must: • Provide separate gender inclusive amenities with a high degree of privacy • Provide gender-specific fit-for-purpose PPE for diverse body sizes/types • Implement policies to address discrimination/racism/bullying on-site • Introduce on-site redress procedures and corrective measures for incidents • Empower a diverse lead team to manage these policies on-site • Provide training to any contractors/subcontractors onsite >3 days on site policies (as above), drug & alcohol, and mental health	**Contractor** to comply with the all requirements.	Contractor		X										
31.C	Inclusive Construction Practices	Credit Achievement	1	-		• Prior to Tender complete **Needs Analysis** of potential workers/contractors • Demonstrate introduction of Physical/Mental Health Programs >80% workforce • Provide evaluation report to contractor & Developer of Program Effectiveness		Contractor		X											
32.C	Indigenous Inclusion	Credit Achievement	2	**2**	**Requires Contractor Confirmation**	Reconciliation Action Plan (RAP) OR Indigenous Design Charter	**Contractor** to comply with the all requirements.	Contractor	X	X	X											
33.C	Procurement and Workforce Inclusion	Credit Achievement	2	**2**	**Requires Contractor Confirmation**	• Develop and implement a social procurement strategy (can be part of overall project procurement plan/strategy) that directs at least 2% of total contract value to employment opportunities for disadvantaged and under-represented groups. • Demonstrate 2% of total contract value spent on social procurement via direct workforce or spend to: Aboriginal & Torres Strait Islander Businesses/ Social enterprises or Disability enterprises.	To be confirmed during construction.	Contractor		X										
33.E	Procurement and Workforce Inclusion	Exceptional Performance	1	**1**	**Requires Contractor Confirmation**	As above but 4% of contract value.	To be confirmed during construction.	Contractor		X												
34.C	Design for Inclusion	Credit Achievement	2	-	**Achievable**	Building is designed and constructed to be inclusive to diverse group of people, include: equal access; diverse wayfinding & inclusive spaces. Deliverables include drawings and photos		Architect	X		X											
34.E	Design for Inclusion	Exceptional Performance	1	-	**Achievable**	Needs analysis including incorporation of principles identified in consultation with disability community and through consideration of '*Design for Dignity: Principles beyond Compliance Accessibility*',		Architect	X		X											
			Total	**5**																		
	Nature		**14**						.	.	.	.	.	.	.	.	.	.	.	.	.	.
35	Impacts to Nature	Minimum Expectation	Mandatory	**Mandatory**	**Achievable**	• No clearing for project on: old-growth forest; prime agricultural land; wetland of High 'National Importance'; aspects considered 'Matters of National Environmental Significance' listed under the Environmental Protection and Biodiversity Conservation Act (1999). • Outdoor lighting complies with column 3, Table 2.1 of AS4282:2019 • Demonstrate light pollution control via: upward light output ratio (ULOR) OR: direct illuminance	External lighting to comply with AS/NZS 4282 with emphasis on minimising the provision of uplighting to achieve compliance.	Contractor	X	X	X						X				
35.C	Impacts to Nature	Credit Achievement	2	-		Show how ecological values are protected AND: retain high biodiversity values identified by ecologist.		Ecologist	X		X											
36.C	Biodiversity Enhancement	Credit Achievement	2	-		• Landscape area > 15% of site or 0.2% GFA • Demonstrate landscape diversity, 60% indigenous planting & 1 significant nesting tree per 500m^2 • Qualified ecologist or landscape architect must prepare a Biodiversity Management Plan		Landscape Architect	X	X	X											X
36.E	Biodiversity Enhancement	Exceptional Performance	2	-		As above except: • Landscape area > 30% of site or 0.333% GFA • 80% indigenous planting & 1 significant nesting tree per 250m^2																

ESD Report (Excluded from agenda)

greenstar Buildings

Note:

JHA

Project:	Bupacc	**Revision**	1
Prepared by	GL	**Date**	16/08/2024
Registering from	2023 onwards	**Targeted Green Star rating**	4 Star
Climate Positive Pati	Yes	**Points targeted**	30.5 (minimum 15 for 4 star)
Minimum expectatio	Yes	**Buffer points**	15.5

	Credit	Criteria Type	Points Available	Targeted	Credit Status	Green Star Compliance Requirements	Team Comments	Lead	Responsible Parties: Burwood Council	Contractor	Architect	ESD	ICA	Acoustic	Structural	Mechanical	Electrical	Hydraulic	Fire	Civil	Lift	Landscape
37.C	Nature Connectivity	Credit Achievement	2	-		Report demonstrating species connectivity achieved via: • Landscaping contiguous with existing, restored, & new habitats, OR: • Canopy bridges, wildlife tunnels, green roofs, amphibian tunnels and green infrastructure used to connect site with existing, restored, & new habitats If the project in blue or green grid strategy, demonstrate contribution to strategy.																
38.C	Nature Stewardship	Credit Achievement	2	-		Comply 'credit achievement' for #35 'Impacts to Nature' AND: • protect or restore area outside project boundary (but within Australia) > both site and GFA. Area must be in excess of any legislated requirements.																	
39.C	Waterway Protection	Credit Achievement	2	-		• The project demonstrates a reduction in average annual stormwater discharge (ML/yr) of 40% across the whole site. • Stormwater discharge achieves reduction targets of: 85% (TSS); 90% (gross pollutants); 45% (total Nitrogen); 65% total Phosphorus. • Chemical store/loading/fuelling/work areas provided with bunding, drained to trade waste/treatment devices & provided with roofs • if > 200m2 uncovered transit/parking areas (excluding electric) provide >98% efficient hydrocarbon treatment sized at 1-in-3 month ARI (4EY).		Civil	X	X	X							X		X		X
39.E	Waterway Protection	Exceptional Performance	2	-		As above but • reduction in average annual stormwater discharge (ML/yr) of 80% across site. • discharge reduction targets are: 90% - TSS; 95% - gross pollutants; 60% - total Nitrogen; 70% - total Phosphorus.																	
			Total																			
	Leadership		**5**						-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	Market Transformation	Credit Achievement	5	-		Up to 5 innovative initiatives. GBCA's scoring metrics consider: • Control of outcome: the initiative delivers a guaranteed outcome • Length of impact: the initiative delivers long-lasting impacts • Scale of impact: the scale of impact is significant. For example, the outcome may satisfy multiple UN Sustainable Development Goals • Transformation potential: the initiative has the potential to transform an industry or sector • Value generation: the initiative can deliver benefits to both stakeholders (e.g., building owner or occupants) as well as the general public		Architect	X		X													
41	Leadership Challenges: Climate Positive Pathway	Credit Achievement		**1**	**Achievable**	Climate Positive Pathway Bonus Leadership point	Achievement of CPP credits.															
			Total	**1**																		

2.2 APPENDIX B – AREA DEFINITION PLAN

JHA
MARKUP / SKETCH

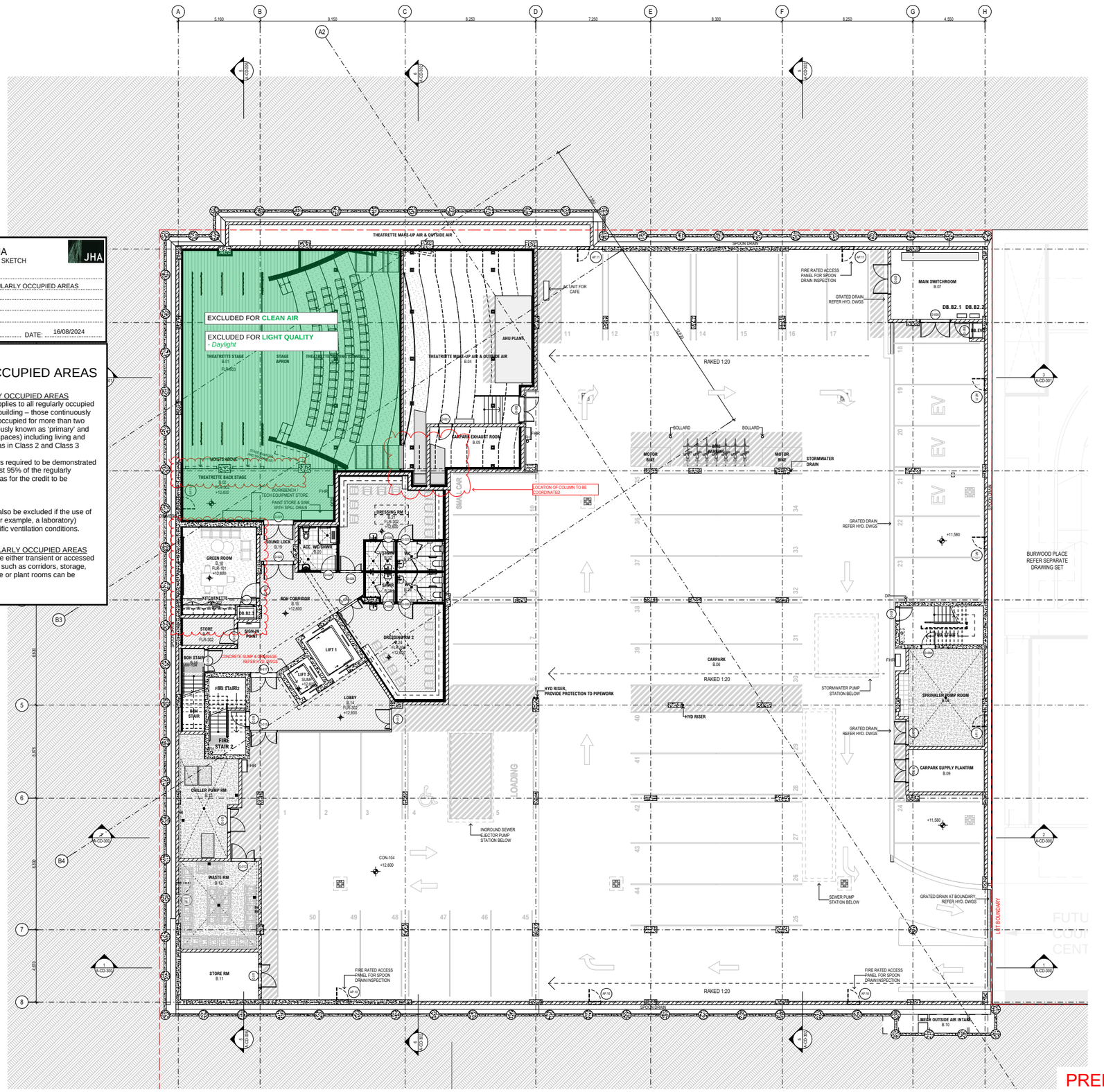
DOCUMENT No.: 230089
DOCUMENT TITLE: BUPACC REGULARLY OCCUPIED AREAS
DOCUMENT REV: P1
DOCUMENT BY: G.L DATE: 16/08/2024

KEY
REGULARLY OCCUPIED AREAS

REGULARLY OCCUPIED AREAS
This credit applies to all regularly occupied areas in the building – those continuously occupied or occupied for more than two hours (previously known as 'primary' and 'secondary' spaces) including living and sleeping areas in Class 2 and Class 3 units.
Compliance is required to be demonstrated across at least 95% of the regularly occupied areas for the credit to be achieved.

Exclusions
Spaces can also be excluded if the use of the space (for example, a laboratory) justifies specific ventilation conditions.

NON-REGULARLY OCCUPIED AREAS
Areas that are either transient or accessed intermittently such as corridors, storage, back of house or plant rooms can be excluded.



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CLIENT
Burwood Est.1874

LANDSCAPE ARCHITECT
TYRRELLSTUDIO

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NOTE: BUILDER TO REVIEW CONSTRUCTION TOLERANCES AROUND CARPARK SPACES TO ENSURE COMPLIANCE

NORTH

REV	DATE	ISSUE
A	01/03/24	50% CO-ORDINATION ISSUE
B	06/03/24	50% CO-ORDINATION ISSUE - REVISED
C	25/03/24	FOR INFORMATION
D	28/03/24	70% CO-ORDINATION ISSUE
E	17/06/24	CO-ORDINATION ISSUE
F	18/07/24	95% CO-ORDINATION ISSUE

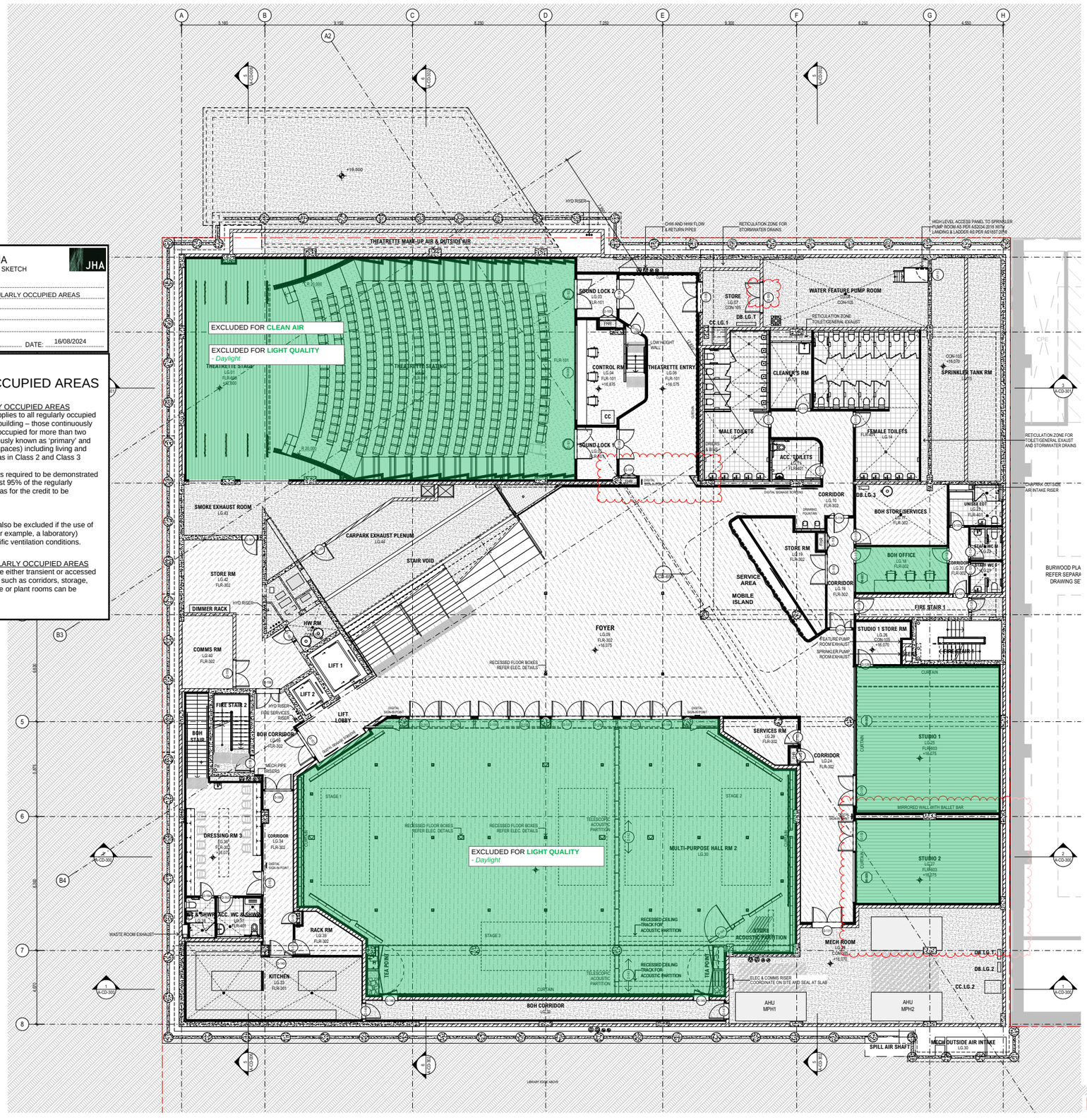
PROJECT
BURWOOD URBAN PARK & CULTURAL CENTRE
4 CONDER ST, BURWOOD NSW 2134

PROJECT NUMBER	PLOT DATE	DRAWN
20014	18/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE
BASEMENT 1 PLAN

DRAWING NUMBER	REVISION
A-CD-100	F

PRELIMINARY - NOT FOR CONSTRUCTION



JHA
MARKUP / SKETCH

DOCUMENT No.: 230089
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Compliance is required to be demonstrated across at least 95% of the regularly occupied areas for the credit to be achieved.

Exclusions
Spaces can also be excluded if the use of the space (for example, a laboratory) justifies specific ventilation conditions.

NON-REGULARLY OCCUPIED AREAS
Areas that are either transient or accessed intermittently such as corridors, storage, back of house or plant rooms can be excluded.

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CLIENT
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LANDSCAPE ARCHITECT
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E	18/07/24	95% CO-ORDINATION ISSUE

PROJECT
BURWOOD URBAN PARK & CULTURAL CENTRE
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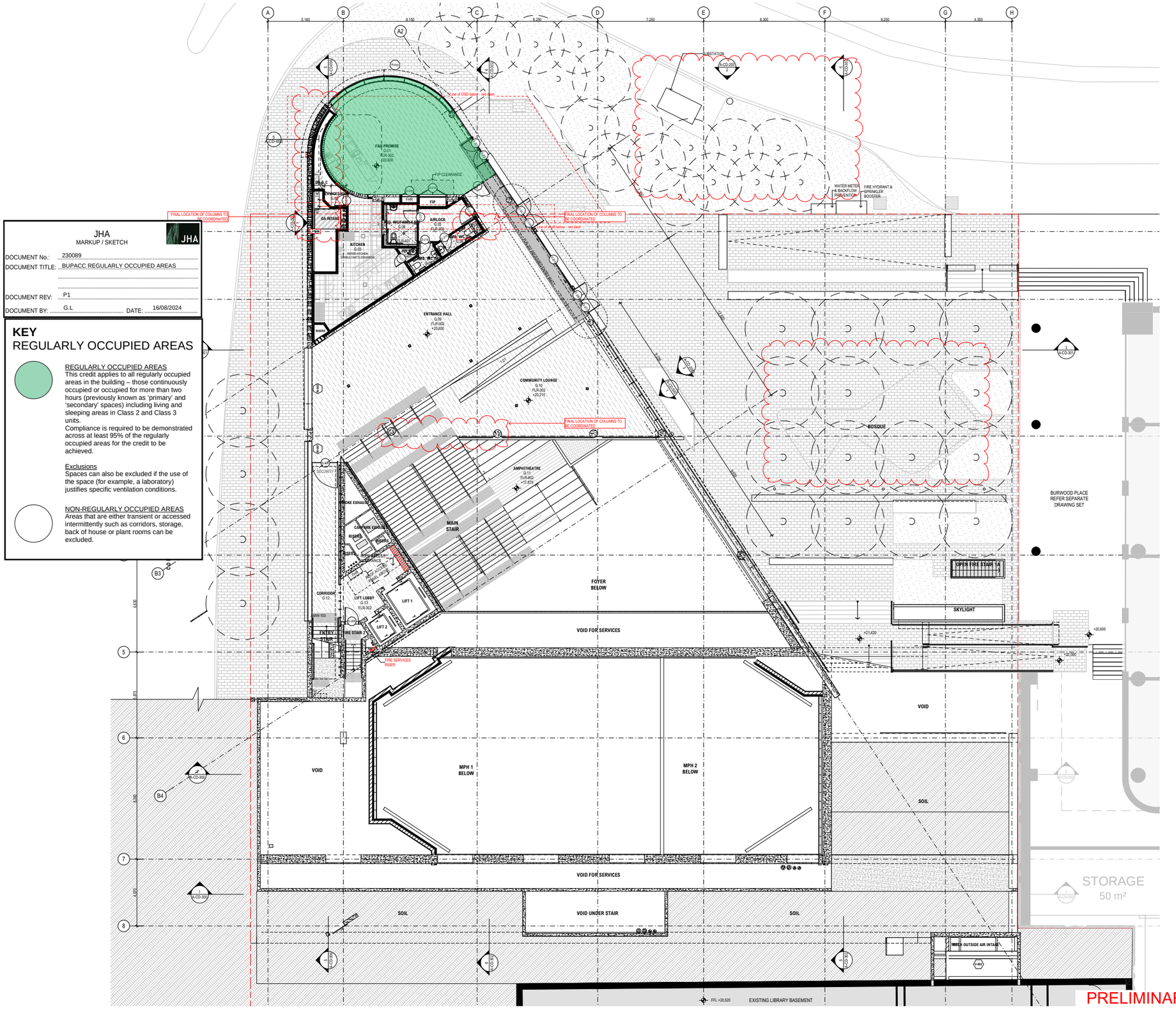
PROJECT NUMBER	PLOT DATE	DRAWN
20014	18/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE
LOWER GROUND FLOOR PLAN

DRAWING NUMBER	REVISION
A-CD-101	E

PRELIMINARY - NOT FOR CONSTRUCTION

ESD Report (Excluded from agenda)



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E	18/07/24	95% CO-ORDINATION ISSUE

PROJECT

BURWOOD URBAN PARK & CULTURAL CENTRE

4 CONDER ST, BURWOOD NSW 2134

PROJECT NUMBER	PLOT DATE	DRAWN
20014	18/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE

GROUND FLOOR PLAN

DRAWING NUMBER	REVISION
A-CD-102	E

PRELIMINARY - NOT FOR CONSTRUCTION

2.3 APPENDIX C - CLIMATE CHANGE RISK AND ADAPTATION REGISTER

BUPACC Climate Change Risk and Adaptation Register

L	3		L	0						L	6		L	3								
M	10		M	11						M	7		M	10								
H	0		H	2						H	0		H	0								

Climate Variables & Hazards	Climate Projections	Risk Code	Potential Climate Impacts	Pre-adaptation Actions						Responsible Parties	Adaptation Measures	Post-adaptation						Summary of how measures reduce risks
				2040			2070					2040			2070			
				Consequence	Likelihood	Risk	Consequence	Likelihood	Risk			Consequence	Likelihood	Risk	Consequence	Likelihood	Risk	
Hotter and dryer conditions resulting in higher frequency and/or severity of bushfire events	On balance, the projected climate scenarios indicate summers that will be warmer in the near future and becoming hotter and drier later. Under these projected scenarios, the likelihood and severity of bushfire events will be increased.	T1	DIRECT: Increased bushfires risk due to warmer to hotter conditions may increase exposure to smoke and particulate for staff and visitors, impacting health.	Moderate	Possible	Medium	Moderate	Likely	High	Bushfire Burwood Council Architect Mechanical	Ensure building is well sealed to minimise risks of smoke infiltration. Put in place smoke hazard management strategies. Consider providing mechanical outside air system with high quality filters that can remove smoke particulates from the air.	Minor	Possible	Medium	Minor	Likely	Medium	Architect: - New building standards ensure buildings are well sealed. Burwood Council: - Avoid shows or events during periods of bushfire smoke. - It is recommended as part of the facility management to provide an inventory of replacement air filters for each AHU, readily available on-site should immediate replacement of air filters are required.
		T2	DIRECT: Increased bushfires risk due to warmer to hotter conditions may cause direct damage to the facilities.	Major	Unlikely	Medium	Major	Unlikely	Medium	Bushfire Architect	Investigate locations of vulnerability, remove potential fuel sources surrounding the building such as removing dead vegetation as part of ongoing landscaping/ maintenance works. Use of non-combustible construction materials as per regulation. Put in place evacuation plan in case of fire threatening building.	Major	Rare	Low	Major	Rare	Low	Burwood Council: - An evacuation plan will be developed to minimise the risks to occupants of the building.
		T3	INDIRECT: Increased bushfires risk may damage power infrastructure, disrupting operation of facility.	Moderate	Possible	Medium	Moderate	Possible	Medium	Burwood Council Electrical	Ensure critical data and information (such as evacuation plan) can be accessed offline. Consider providing backup power supply through installation of back-up generator connection point at the site MSB.	Minor	Possible	Medium	Minor	Possible	Medium	Burwood Council: - Keep hard copies of critical data and information in a readily accessible location. Note: - LUCID: There is no essential or life safety services that are sustained by the MSB in an outage event.
	On balance, the	T4	DIRECT: Heatwaves/Extreme heat will accelerate deterioration to the building fabric and structure.	Moderate	Possible	Medium	Moderate	Possible	Medium	Architect Structural Façade Landscape	All of materials in the building envelope are durable and can be designed with thermal expansion in mind.	Moderate	Unlikely	Medium	Moderate	Possible	Medium	Architect: - Concrete crown, façade and hardscaping consist of durable materials.
		T5	DIRECT: Heatwaves/Extreme heat will increase demand on HVAC system and accelerate deterioration to equipment.	Minor	Likely	Medium	Minor	Likely	Medium	Architect ESD Landscape Hydraulics	Incorporate passive thermal design principles in the design and construction of the building such as appropriate levels of shading devices thermal insulation. Provide light coloured roofs to reduce heat gains via the roof and help mitigate urban heat island effect. Consider dedicated "Cool outdoor areas" where visitors can take shelter during extreme hot days when the power fails should be explored by the design team. This cool area should utilise passive design principals to moderate temperature during extreme days. Secondly, this cool area should consider ways to harness the cooling power of water to provide additional cooling. For example, provide shaded outdoor areas with drinking fountains as cool shelters during extreme heat event.	Minor	Possible	Medium	Minor	Likely	Medium	The incorporation of passive thermal design principles will help mitigate extreme heat risks, including the appropriate level of insulation, external shades and roof material colour. Architect: - Majority of the Cultural Centre is sunken into the site, taking advantage of stable gorund conditions in regulating space conditions, thus reducing the environmental loads on the building and HVAC. - A green roof has been incorporated and will assist with reducing heat gain through the roof. Landscape: - Large trees surround the Cultural Centre, and offer solar shading to the site/public plaza and building. - A green roof and trees (canopy cover) has been incorporated, to reduce Urban Heat Island effect with an aim to create a cooler microclimate. Hydraulics: - Water play areas have been included in the public plaza.

BUPACC Climate Change Risk and Adaptation Register

	L	M	H
	3	10	0
	0	11	2
	6	7	0
	3	10	0

Climate Variables & Hazards	Climate Projections	Risk Code	Potential Climate Impacts	Pre-adaptation Actions 2040 Consequence	2040 Likelihood	2040 Risk	2070 Consequence	2070 Likelihood	2070 Risk	Responsible Parties	Adaptation Measures	Post-adaptation 2040 Consequence	2040 Likelihood	2040 Risk	2070 Consequence	2070 Likelihood	2070 Risk	Summary of how measures reduce risks
Hotter and dryer conditions resulting in higher frequency and/or duration of heatwaves/ extreme heat-days (over 35 degree Celsius)	projected climate scenarios indicate a summer that will be warmer in the near future and becoming hotter and drier later. Under these projected scenarios, the likelihood and severity of heatwaves will be increased.	T6	DIRECT: Heatwaves/Extreme heat may impact the ability of HVAC system to maintain thermal comfort of occupants due to capacity constraints.	Minor	Possible	Medium	Moderate	Likely	High	Architect ESD Mechanical	Incorporate passive thermal design principles in the design and construction of the building such as appropriate levels of shading devices thermal insulation. When replacing HVAC units at the end of service life, consider upsizing capacity of units in line with change in climatic conditions. Consider the inclusion of an ERV system to lower demand on HVAC use as temperatures increase.	Minor	Unlikely	Low	Moderate	Possible	Medium	The incorporation of passive thermal design principles will help mitigate extreme heat risks, including the appropriate level of insulation, external shades and roof material colour. Appropriate upgrade of HVAC equipment at their end of their service life will help ensure system will be capable of handling more extreme temperatures in the far future. Architect: - See T4 response regarding Green Roof and Sunken Building. Mechanical: - See T4 response regarding reduced environmental heat loads/gains. - HVAC plant has been sized with consideration for extrem ambient conditions of 45°C Dry Bulb, 27.0°C Wet Bulb maximum, and full solar load. - ERV has been proposed in the design to recover coolth in assisting to reduce cooling demand. Energy recovery thru Heat wheels have been allowed for on large AHUs. Regarding provision for future equipment replacement with increased capacity, the current size of plant rooms do not meet requirements for future expansion and will require input from the architect & mechanical consultant.
		T7	DIRECT: Heatwaves/Extreme heat may impact the operation of electrical equipment and infrastructures as temperature exceeds design limits.	Minor	Unlikely	Low	Moderate	Possible	Medium	Electrical	In the near future, current temperature ratings for electrical equipment should be able to cope with projected temperature increase relevant to the components design life. In the far future, equipment should be gradually upgraded as required to cope with more extreme conditions.	Minor	Rare	Low	Moderate	Unlikely	Medium	Burwood Council: Appropriate upgrade of electrical equipment at their end of their service life will help ensure system will be capable of handling more extreme temperatures in the far future.
		T8	DIRECT: Heatwaves/Extreme heat may increase peak electricity demand and exceed capacity.	Minor	Unlikely	Low	Minor	Possible	Medium	Electrical	Provide on-site renewable energy, such as photovoltaic (PV) panels, to provide renewable electricity to help offset the additional HVAC electricity demand.	Minor	Rare	Low	Minor	Unlikely	Low	Electrical: - See responses for T6 in reducing HVAC Energy. - PV system can be installed at a later date (with the replacement and upsize of the HVAC units) if required. Noting that currently there is no roof where to mount PV panels.
		T9	INDIRECT: Electricity grid may be overloaded leading to loss of power site-wide.	Moderate	Possible	Medium	Moderate	Possible	Medium	Electrical	Consider onsite backup power, such as generators and/or batteries, to ensure essential services can continue to operate in the event of a power outage.	Minor	Possible	Medium	Minor	Possible	Medium	Electrical/Burwood Council: Portable backup generators can be provided in the case of emergency. It is important to note that whislst the building can be backed up by a generator, the building is not considered critical. There are no essential and life safety services. As such, a temporary backup generator is not necessary.
Hotter and wetter conditions increasing severity of extreme storm/wind events (by providing more fuel to increase the wind speeds of storms)	There is no strong consensus whether it will become wetter or drier in the near future but hotter temperature may impact on the severity of storm and wind events.	S1	DIRECT: Extreme weather damaging building structure.	Major	Unlikely	Medium	Major	Unlikely	Medium	Architect Structural Façade	Structural design to take possible extreme weather into consideration and be capable to tolerate more extreme events.	Major	Unlikely	Medium	Major	Unlikely	Medium	Structural & Facade: Structural design to meet building code requirements.
		S2	DIRECT: Extreme weather causing disruption in building services	Minor	Unlikely	Low	Minor	Possible	Medium	Electrical Mechanical Hydraulics	Services design to take possible extreme weather into consideration and have management strategies for extreme weather condition.	Minor	Rare	Low	Minor	Unlikely	Low	Services design to meet building code requirements.
		S3	DIRECT: Extreme weather (Hail) causing impact damage to building	Minor	Possible	Medium	Minor	Possible	Medium	Architectural Facades Electrical	Consider durable products and materials to resist impact damage from hail.	Minor	Unlikely	Low	Minor	Possible	Medium	Architect: - The concrete crown, green roof, and skylights (laminated) are quite impact resistant to hail. Expanded Mesh to the marker building is flexible. Facade: - Low risk, façade glazing is typically quite resistant to hail impact. Electrical: - No PV system is proposed to be installed.
		S4	INDIRECT: Extreme weather causing disruption to utilities such as electricity.	Moderate	Possible	Medium	Moderate	Possible	Medium	Electrical	Consider onsite backup power, such as generators and/or batteries, to ensure essential services can continue to operate in the event of a power outage.	Minor	Possible	Medium	Minor	Possible	Medium	Electrical/Burwood Council: Portable backup generators can be provided in the case of emergency. There are no essential and life safety services. As such, a temporary backup generator is not necessary.

BUPACC Climate Change Risk and Adaptation Register

| | | |

2.4 APPENDIX D - UPFRONT CARBON EMISSIONS DEFAULT REFERENCE MATERIALS

The following default specifications shall be used in defining the reference case for credit 21 Upfront Carbon Emissions.

Default specifications for low-rise buildings

Category 1	Category 2	Building element	Default reference materials
Substructure	Substructure	Foundations	Concrete: 40MPa with 20% cement replacement Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 70kg/m^3 for pad footings, 115kg/m3 for pile caps and 230kg/m^3 for ground beams Design should align with recommendations provided by the project geotechnical engineer
		Ground-bearing slab	Concrete: Slab thickness of 175 mm at 32 MPa with 20% cement replacement. Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 50kg/m3 for slab on grade and 150kg/m3 for suspended ground slab
		Basement retaining walls	Concrete: 40 MPa with 20% cement replacement Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 110kg/m^3
Superstructure	Frame	Columns Beams	Concrete: 40 MPa with 20% cement replacement for columns and beams Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 200 - 250kg/m^3 for columns and 200kg/m^3 for beams
	Suspended Floors	Banded Slab Flat Slab Composite Slab	**Banded Slab generally for Commercial Offices, Retail or Healthcare** Concrete: 40MPa with 20% cement replacement Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 90-110kg/m^3 OR Post tensioning with virgin steel tendons at 6kg/m2 and reinforcing bar/mesh made from conventional recycled steel at 50kg/m^3 **Flat Slab generally for Residential** Concrete: 40MPa with 20% cement replacement Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 80-100kg/m^3 OR Post tensioning with virgin steel tendons at 5kg/m$_2$ and reinforcing bar/mesh made from conventional recycled steel at 35kg/m^3 **Composite Slab** Concrete: 40MPa with 30% cement replacement. Composite Slab: Steel deck made from 1mm thick virgin steel sheet, conventional recycled steel reinforcing mesh at 100-120kg/m^3
	Roof	Banded Slab	**Banded Slab**

Category 1	Category 2	Building element	Default reference materials
		Flat Slab Steel Roof	Concrete: 40MPa with 20% cement replacement for banded slabs Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 90-110kg/m^3 OR Post tensioning with virgin steel tendons at 7kg/m^2 and reinforcing bar/mesh made from conventional recycled steel at 55kg/m^3 **Flat Slab** Concrete: 40MPa with 20% cement replacement Reinforcing: Reinforcing bar/mesh made from conventional recycled steel at 80-100kg/m^3 OR Post tensioning with virgin steel tendons at 6kg/m^2 and reinforcing bar/mesh made from conventional recycled steel at 40kg/m^3 **Steel Roof** Framing: Cold-formed steel purlins made from grade 450 virgin steel Cladding: Long-run virgin steel cladding with a base metal thickness of 0.42mm or 0.48mm, pre-painted over a zinc-aluminium metal coating.
	Stairs and Ramps	Stairs and Ramps	Concrete: 40 MPa with 20% cement replacement Reinforcing: Conventional recycled steel reinforcing at 125 kg/m^3
	External structural walls	Structural external walls	Concrete: 50MPa with 30% cement replacement for walls Reinforcing: Reinforcing bar made from conventional recycled steel at 180kg/m^3 for gravity walls and 250 – 300kg/m^3 for shear walls If precast, lifting lugs and dowel connectors to be included. Blockwork: 190mm concrete blocks, core-filled with 20MPa grout and conventional recycled steel reinforcing bar at 30kg/m^3 Finish: Cement render
		Non-structural external walls	Blockwork: 190mm thick concrete block, core-filled with 20MPa grout and conventional recycled steel reinforcing bar at 15kg/m^3 Cold-formed steel frame made from grade 450 virgin steel Cladding: Aluminium cladding made from pre-painted virgin aluminium sheet with a base metal thickness of 0.5mm.
	Windows and external doors	Windows and external doors	Curtain wall: double-glazed with a powder coated virgin aluminium frame. Shading system: virgin aluminium extrusions mounted externally to a virgin aluminium frame Steel roller shutter door(s).
	Internal walls and partitions	Non-structural internal walls	Wall partitions: 13 mm plasterboard over cold-formed steel frame with steel furring channels made from grade 450 virgin steel. Internal wall insulation: stone or glass wool.

Category 1	Category 2	Building element	Default reference materials
			Paint: one coat water-based primer + two coats water-based top-coat.
	Internal doors	Internal doors	Hollow core timber with steel jamb, painted. Steel fire door, painted.
Finishes	Wall finishes	Wall feature finishes	**Office area:** Wall tiles in bathrooms (5 mm and 10 mm)
	Floor finishes	Floor finishes	**Open-plan / warehouse areas:** n/a (polished concrete) **Office area:** Nylon carpet tiles with rubber underlay ~80% of area, vinyl flooring ~20% of area
	Ceiling finishes	Ceiling finishes	**Open-plan / warehouse areas:** n/a (exposed ceiling) **Office area:** Choose the most appropriate ceiling system: • Suspended metal panels (aluminium 0.6 mm) • Mineral fibre tiles • Plasterboard ceiling tiles (10 mm thick) • Set plasterboard (13mm thick)
Fittings, furnishings and equipment (FF&E)	Fittings, furnishings and equipment	Office joinery	Communal kitchens, lockers, storage units
Building services/MEP	Services	Plumbing	• Building plumbing • Hot water system (e.g., gas boiler) • Showers • Electric pump (if needed) • Water tank (if needed)
		Mechanical	As per existing GBCA Energy Use Calculation Guide – Table 62 (September 2021)
		Fire	Fire services
		Electrical	• Cables (communication and network) • Lighting • BMS and energy monitoring • Site power and electrical connection

Category 1	Category 2	Building element	Default reference materials
		Solar PV	Panel: 350W monocrystalline panel made from virgin materials with 20% efficiency Framing: Mounting frame made from virgin aluminium

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16 June 2025

Burwood Council

2 Conder Street

Burwood NSW 2134

Attention: G. Prasad

Dear Gaanesh,

RE: National Construction Code (NCC) 2022 Volume One Section J Part J4 Statement of Compliance

JOB NO.: 230089

REVISION NO.: [P3]

SUBJECT PREMISE: Burwood Urban Park Arts and Cultural Centre I 4 Conder Street, Burwood NSW 2143

This NCC Section J Part J4 statement has been prepared to demonstrate design compliance for the new development of Burwood Urban Park Arts and Cultural Centre located at 4 Conder Street, Burwood.

The proposed development is located in climate Zone 5 as defined by the NCC 2022 Building Code of Australia – Volume One.

In accordance with A2G1, compliance with the NCC is achieved by complying with the Governing Requirements of the NCC and the Performance Requirements. The Performance Requirements are satisfied by Performance Solution, Deemed-to-Satisfy Solution or a combination of both.

The table below shows the areas assessed, NCC 2022 Building Classification the Performance Requirements, the Method of Compliance, and the DTS Provisions subjected to Performance Solution.

Building Area Description	NCC Classification	Performance Requirements	Method of Compliance	DTS Provisions subjected to Performance Solution
Urban Park Arts and Cultural Centre	9b	J1P1	J1V3	J1.3 – J1.6

Compliance with Performance Requirement JP1 will be achieved subject to this report and compliance with J4D3 (1-5), J3, J5, J6, J7, J8 & J9 being met by the relevant designers / contractors.

The assessment is based on the architectural drawings listed below.

Architectural Drawings CHROFI
Project no. 20014
Issued 19/07/2024

Building	Title	Drawing No	Revision
Burwood Urban Park Arts and Cultural Centre	BASEMENT 1 PLAN	A-CD-100	F
	LOWER GROUND FLOOR PLAN	A-CD-101	E
	GROUND FLOOR PLAN	A-CD-102	E
	UPPER GROUND FLOOR PLAN	A-CD-103	E
	ROOF PLAN	A-CD-104	E
	ELEVATIONS	A-CD-200	E
	SECTIONS 1	A-CD-300	E
	SECTIONS 2	A-CD-301	E
	SECTIONS 3	A-CD-302	E
	SECTIONS 4	A-CD-303	E

A JV Verification Method can be used to show compliance in areas where the proposed building fabric is not complying with the minimum DTS requirements.

The J1V3 energy modelling simulation results were obtained using energy modelling software, IESVE. The results demonstrating design compliance are attached in Attachment A for J1V3 (1)(a)(ii) and Attachment B for J1V3 (1)(b).

As per J1V3 Verification Method Provisions of **NCC 2022 Volume One**, design compliance with Part J4 can be met subject to the following specifications:

Part J4 Building Fabric

Required **Total R-value** including allowance for **thermal bridging**.

Elements	Total Construction R-value (m^2.K/W)	Notes
All Roof	R_T4.4 (Downwards, SA < 0.45)	1. It is a total system performance value and **NOT** the insulation. 2. The impact of **Thermal Bridging** must be included in the building envelope total system R-value calculations. 3. As per J4D7 a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.0. 4. R_T1.68 has been proposed for all opaque envelope walls. Refer to Appendix C for the actual proposed thermal line, including areas where insulation has been reduced.
Envelope Walls	R_T1.68	
Envelope Floors	R_T0.3	

Note: Mark-ups of above construction thermal requirements are attached in Attachment C.

Required **Total System U-value** and **SHGC**.

Location/Type	Window Assembly (Glass & Frame)		Description
	U-Value ($W.m^2/K$)	SHGC (0-1)	
Eastern Façade and Curved Café Glass	3.8	0.6	Refer to Façade Specification
Entry Portal Doors	3.8	0.50	Refer to Façade Specification
West	3.7	0.35	Double Glazed Low-e Tinted or the like
West	4.5	0.35	Double Glazed Low-e Tinted or the like

Additional Section J Compliance Notes

Note project needs to adhere to the following NCC 2022 Section J construction requirements as applicable:

- *J4D3 (1-4) Thermal Construction – general* installation requirements for insulations
- *J4D3 (5)* The required total R-value and total system U-value, including thermal bridging calculation.

JHA recommend the following general construction requirements from Section J of the NCC 2022 be included in the architectural specification and drawings to ensure compliance.

- *Part J5 – Building Sealing*
  - *J5D3 Chimneys and flues*
  - *J5D4 Roof lights*
  - *J5D5 Windows and doors*
  - *J5D6 Exhaust fans*
  - *J5D7 Construction of ceilings, walls and floors*
  - *J5D8 Evaporative coolers*

Full Name of Designer: Felisa Garcia
Qualifications: BLArch
Address of Designer: JHA
Level 20, 2 Market Street
SYDNEY NSW 2000
Business Telephone No: (02) 9437 1000
Name of Employer: JHA

Yours sincerely,



Felisa Garcia

ESD Consultant



Garry Luu

Senior Associate - ESD

Disclaimer

This statement is prepared for the nominated recipient only and relates to the specific scope of work and agreement between JHA and the client (the recipient). It is not to be used or relied upon by any third party for any purpose.

Revision History

REV	DATE	Amendment
P1	29/02/2024	J1V3 Assessment
P2	16/08/2024	100% Tender Documentation
P3	16/06/2025	TENDER ISSUE

Attachment A – J1V3 (1)(a)(ii) Modelling Results:

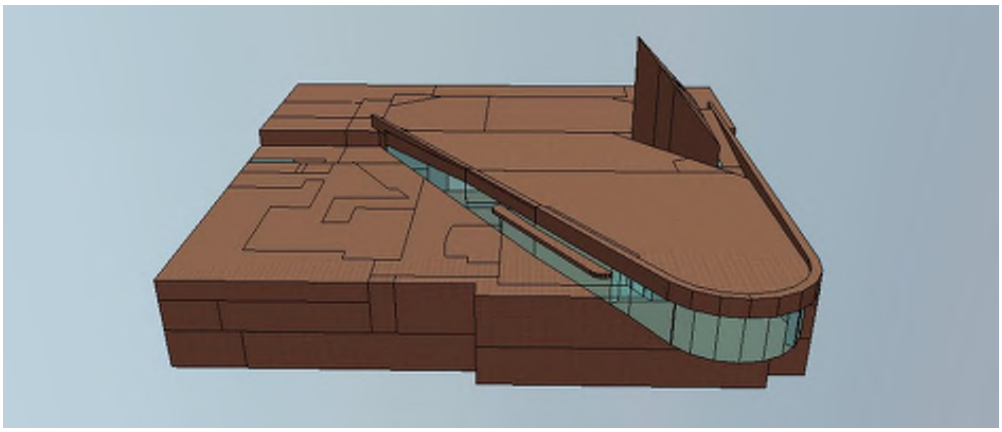
Thermal modelling was undertaken to demonstrate Building Fabric compliance with the Performance Requirement for JP1 of Section J, NCC 2022, Volume One. Energy simulation was conducted in accordance with NCC 2022, Volume One J1V3 requirements, including *Specification 33 Additional requirements*, *Specification 34 Modelling parameters for J1V3* & *Specification 35 Modelling profiles for J1V3*.

For a Class 3, 5, 6, 7, 8 or 9 building or common area of a Class 2 building, compliance with J1P1 is verified when it is determined that the annual greenhouse gas emissions of the proposed building are not more than the annual greenhouse gas emissions of a reference building.

Results

Building	Calculated Annual Greenhouse Gas Emission [$kgCO_2$-e/m^2/annum]	
	Reference Building	Proposed Building
Burwood Urban Park Arts and Cultural Centre	271,884.4	271,029.5

The Annual Greenhouse Gas Emission of the Proposed Building is less than Annual Greenhouse Gas Emission of Reference Building. Therefore, the proposed Building Fabric including Glazing is compliant with Section J1P1 requirements.



IES Energy Simulation Model of the Proposed Building

Model Inputs

Building Fabric Total R-Value.

Building Fabric Parameter Summary			
Elements	DTS Reference Building (m^2.K/W)	Proposed Building (m^2.K/W)	Notes:
Envelope Roof	RT3.70 (SA < 0.45)	RT4.40	Refer to Appendix for the proposed insulation constructions.
Envelope Walls	RT1.40	RT1.68	
Envelope Slab on Ground	RT2.0	RT0.30	

Building Fabric Total System (Glass & Frame) U-Value and SHGC.

The following table shows the glazing assemblies assessed in the DTS reference Building and Proposed Building. Three (3) options have been assess in the proposed model with varying U-values and SHGC values to understand the impact and sensitivity of adjusting either the insulation or solar heat gain characteristics on heating and cooling energy. The options provided are included for further discussion with the design team.

Window Assembly (Glass & Frame)				
Location/Type	DTS Reference Building		Proposed Building	
	U-Value ($W/m^2.K$)	SHGC (0-1)	U-Value ($W/m^2.K$)	SHGC (0-1)
All	6.70	0.53	3.8	0.50
			3.8	0.60
			3.7	0.35
			4.5	0.35

Skylight Assembly (Glass & Frame)				
Location/Type	DTS Reference Building		Proposed Building	
	U-Value ($W/m^2.K$)	SHGC (0-1)	U-Value ($W/m^2.K$)	SHGC (0-1)
All	3.9	0.29	3.9	0.29

The following diagram shows the location of the proposed glazing performance.

Key

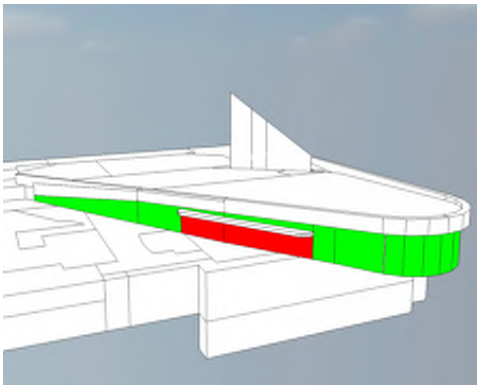
East Entry Portal Doors: U3.8 SHGC 0.5

Eastern Façade and Curved Café Glass: U3.8 SHGC 0.6

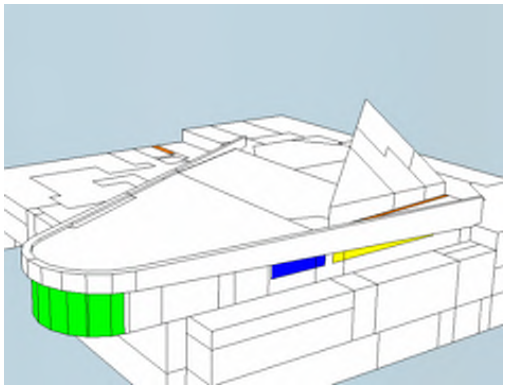
West: U3.7 SHGC 0.35

West: U4.5 SHGC 0.35

Skylights: U3.9 SHGC 0.29



View from northeast



View from northwest

Modelling Results

The following table provides the GHG emissions results of the J1V3 assessment. The table below demonstrates that all proposed building options are not more than the annual greenhouse gas emissions of the DTS reference building.

Energy Use		DTS Reference Building	Proposed Building
		Electricity [MWhr]	Electricity [MWhr]
Interior Lighting		72.7	72.7
Equipment		63.1	63.1
Space Heating		11.4	14.9
Space Cooling		145.4	140.9
Interior Central Fans		13.7	13.7
Pumps		13.7	13.7
Total [GJ/annum]		1152.1	1148.4
Greenhouse Gas Emissions factor for Electricity [kgCO2-e/GJ]	NSW	236	236
Greenhouse Gas Emission [tCO2-e/annum]		271.9	271.0
Total Conditioned Areas [m2]		2754.6	
Greenhouse Gas Emission [$kgCO_2$-e/m^2/annum]		98.7	98.4

Attachment B – J1V3 (1)(b) PMV Modelling Results

For NCC 2022, J1V3 additionally requires that the proposed building achieve a thermal comfort level of between a Predicted Mean Vote (PMV) of -1 to +1 is across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building.

PMV Model Inputs

Space Operative Temperature Set Points and Comfort Parameters

Parameters	Values	Description
Operative Temperature (ºC)	21 – 24	As per NCC 2022 Specification 34
Clothing Level (CLO)	0.60 – 0.95	Light Clothing (Summer) & Warm Clothing (Winter)
Activity Level (MET)	1.2	Filing, seated
Nominal Air Velocity (m/s)	0.15	As per ASHRAE Standard 55-2017
Infiltration (ACH)	0.70 when AC plant is not operating, 0.35 at all other times	As per NCC 2022 Specification 34

Internal Heat Gains

Locations	Lighting [W/m^2]	Internal Sensible Heat Gain Rate [W]	Heat Gains per Person	
			Sensible	Latent
All conditioned areas	8	150	75 W	55 W

Note:

- *All comfort parameters in accordance with "ASHRAE Standard 55-2017".*
- *Modelling profiles are as per NCC 2022 Specification 35.*

PMV Modelling Results

Locations	Area (m2)	PMV (% hours in range)			Meets J1V3 (1)(b) criteria	Compliant Areas (m2)
		<-1.0	≥-1.0 & ≤1.0	> 1.0		
C_B_Acc WC & Shower	7.9	0	100%	0	Y	7.9
C_B_Carpark Exhaust Room / Carpark Exhaust Riser	325.9	0	100%	0	Y	325.9
C_B_Carpark Exhaust Room / Carpark Exhaust Riser	25.8	0	100%	0	Y	25.8
C_B_Corridor	41.7	0	100%	0	Y	41.7
C_B_Corridor	5.8	0	100%	0	Y	5.8
C_B_Dressing Room 1	34.6	0	100%	0	Y	34.6
C_B_Dressing Room 2	33.3	0	100%	0	Y	33.3
C_B_Green Room	39.6	0	100%	0	Y	39.6
C_B_Laundry	4.5	0	100%	0	Y	4.5
C_B_Lifts	14.1	0	100%	0	Y	14.1
C_B_Lobby	34.8	0	100%	0	Y	34.8

Locations	Area (m2)	PMV (% hours in range)			Meets J1V3 (1)(b) criteria	Compliant Areas (m2)
		<-1.0	≥-1.0 & ≤1.0	> 1.0		
C_B_WC & Shower	5.3	0	100%	0	Y	5.3
C_B_WC & Shower	5.2	0	100%	0	Y	5.2
C_LG_Acc. WC & Shower	7.2	0	100%	0	Y	7.2
C_LG_BOH Corridor	23.8	0	100%	0	Y	23.8
C_LG_Control Room	30.2	0	100%	0	Y	30.2
C_LG_Corridor	18.4	0	100%	0	Y	18.4
C_LG_Corridor	36.2	0	100%	0	Y	36.2
C_LG_Corridor / Bar/ Tea Point	148.8	0	100%	0	Y	148.8
C_LG_Curtain Store	2.2	0	100%	0	Y	2.2
C_LG_DB	1	0	100%	0	Y	1
C_LG_Dinner Room	11.6	0	100%	0	Y	11.6
C_LG_Dressing Room 3	42.9	0	100%	0	Y	42.9
C_LG_Foyer	330.2	0	100%	0	Y	330.2
C_LG_Kitchen	50.4	0	100%	0	Y	50.4
C_LG_Lift Lobby	14.6	0	100%	0	Y	14.6
C_LG_Multipurose Room 1	305.9	0	100%	0	Y	305.9
C_LG_Multipurose Room 2	159.8	0	100%	0	Y	159.8
C_LG_Rack Room	9.3	0	100%	0	Y	9.3
C_LG_Sound Lock Corridor	72.1	0	100%	0	Y	72.1
C_LG_Store	14.3	0	100%	0	Y	14.3
C_LG_Studio 1	88.3	0	100%	0	Y	88.3
C_LG_Studio 2	51.3	0	100%	0	Y	51.3
C_LG_Theatrette	349.6	0	100%	0	Y	349.6
C_LG_WC & Shower	4.9	0	100%	0	Y	4.9
C_G_Cafe	68.8	0	100%	0	Y	68.8
C_G_Community Lounge	240.3	0	100%	0	Y	240.3
C_G_Riser	5.9	0	100%	0	Y	5.9
C_G_WC	2.7	0	100%	0	Y	2.7
C_G_Riser / Air Intake	11.5	0	100%	0	Y	11.5
C_G_Cafe Kitchen	27.8	0	100%	0	Y	27.8
C_G_HW	2.9	0	100%	0	Y	2.9
C_G_Ambulant WC	3.4	0	100%	0	Y	3.4

Locations	Area (m2)	PMV (% hours in range)			Meets J1V3 (1)(b) criteria	Compliant Areas (m2)
		<-1.0	≥-1.0 & ≤1.0	> 1.0		
C_G_Accessible WC	7.4	0	100%	0	Y	7.4
C_G_Public Amenities	8.8	0	100%	0	Y	8.8
C_G_Ambulant Family WC	6.1	0	100%	0	Y	6.1
C_LG_Foyer	14.1	0	100%	0	Y	14.1
C_G_Entry	3.4	0	100%	0	Y	3.4
Total	2754.6					2754.6 (100%)

The results show **100%** of floor areas achieve a thermal comfort level of between a Predicted Mean Vote (PMV) of -1 to +1 for not less than 98% of the annual hours of operation of the building.

Therefore, PMV modelling results demonstrate that the proposed building **meets** the J1V3 Verification Method thermal comfort level requirements.

Attachment C – Building Fabric Requirements Markups

Section J Statement

JHA
MARKUP / SKETCH

DOCUMENT No.: 230089
DOCUMENT TITLE: BUPACC NCC 2022 Section J Part J4 Building Fabric Requirement
DOCUMENT REV: [P3]
DOCUMENT BY: G.L DATE: 16/08/2024

KEY
PROPOSED CONSTRUCTIONS

ENVELOPE ROOF/EXPOSED CEILING -
TOTAL R4.4 m².K/W
(DOWNWARDS, SOLAR ABSORPTANCE OF THE UPPER SURFACE OF A ROOF MUST BE NOT MORE THAN 0.45)

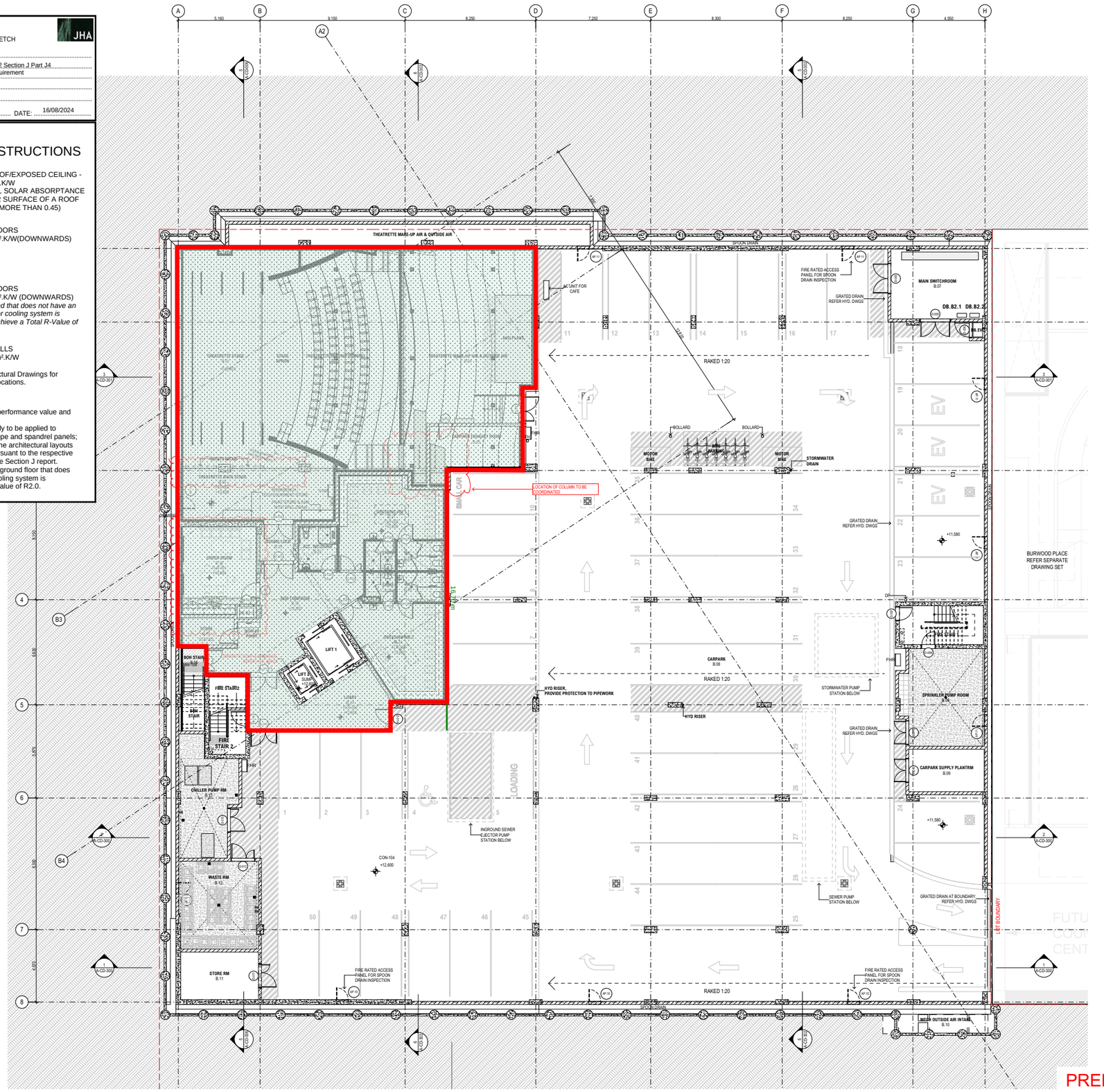
ENVELOPE FLOORS
TOTAL R0.3 m².K/W(DOWNWARDS)

ENVELOPE FLOORS
TOTAL R0.3 m².K/W (DOWNWARDS)
(a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.00)

ENVELOPE WALLS
TOTAL R1.68 m².K/W

Refer to Architectural Drawings for wall types and locations.

Note:
1) The R-value is a total system performance value and NOT insulation.
2) The above construction are only to be applied to non-glazed portions of the envelope and spandrel panels; glazing must be installed as per the architectural layouts with its thermal performances pursuant to the respective glazing specifications stated in the Section J report.
3) For Climate Zone 5, a slab-on-ground floor that does not have an in-slab heating or cooling system is considered to achieve a total R-Value of R2.0.



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NOTE: BUILDER TO REVIEW CONSTRUCTION TOLERANCES AROUND CARPARK SPACES TO ENSURE COMPLIANCE

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REV	DATE	ISSUE
A	01/03/24	50% CO-ORDINATION ISSUE
B	06/03/24	50% CO-ORDINATION ISSUE - REVISED
C	25/03/24	FOR INFORMATION
D	28/03/24	70% CO-ORDINATION ISSUE
E	17/06/24	CO-ORDINATION ISSUE
F	18/07/24	95% CO-ORDINATION ISSUE

PROJECT
BURWOOD URBAN PARK & CULTURAL CENTRE
4 CONDER ST, BURWOOD NSW 2134

PROJECT NUMBER	PLOT DATE	DRAWN
20014	18/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE
BASEMENT 1 PLAN

DRAWING NUMBER	REVISION
A-CD-100	F

PRELIMINARY - NOT FOR CONSTRUCTION

Section J Statement

JHA
MARKUP / SKETCH

DOCUMENT No.: 230089
DOCUMENT TITLE: BUPACC NCC 2022 Section J Part J4 Building Fabric Requirement
DOCUMENT REV: [P3]
DOCUMENT BY: G.L DATE: 16/08/2024

KEY
PROPOSED CONSTRUCTIONS

ENVELOPE ROOF/EXPOSED CEILING - **TOTAL R4.4** m².K/W (DOWNWARDS, SOLAR ABSORPTANCE OF THE UPPER SURFACE OF A ROOF MUST BE NOT MORE THAN 0.45)

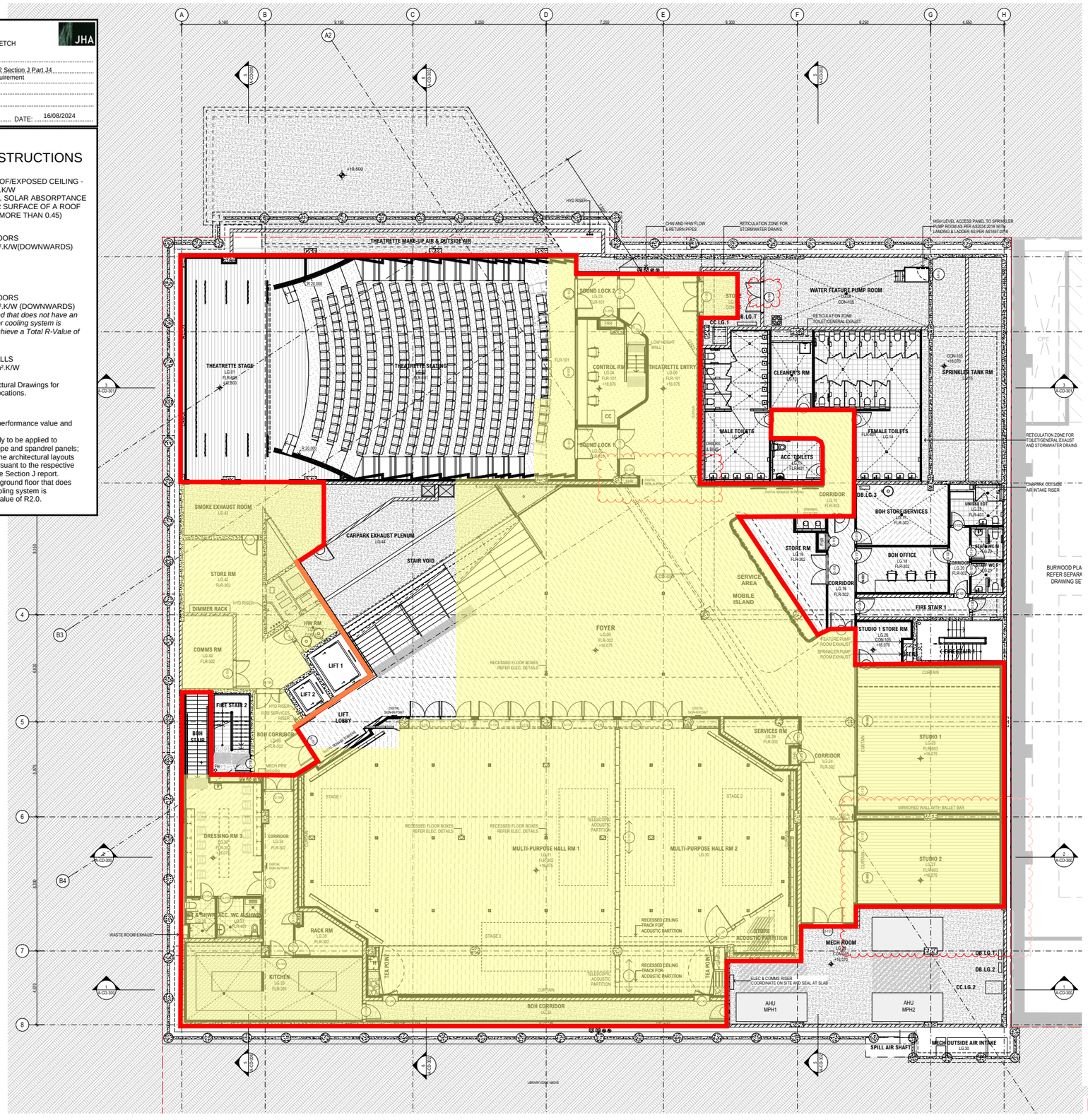
ENVELOPE FLOORS **TOTAL R0.3** m².K/W(DOWNWARDS)

ENVELOPE FLOORS **TOTAL R0.3** m².K/W (DOWNWARDS) *(a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.00)*

ENVELOPE WALLS **TOTAL R1.68** m².K/W

Refer to Architectural Drawings for wall types and locations.

Note:
1) The R-value is a total system performance value and NOT insulation.
2) The above construction are only to be applied to non-glazed portions of the envelope and spandrel panels; glazing must be installed as per the architectural layouts with its thermal performances pursuant to the respective glazing specifications stated in the Section J report.
3) For Climate Zone 5, a slab-on-ground floor that does not have an in-slab heating or cooling system is considered to achieve a total R-Value of R2.0.



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4 CONDER ST, BURWOOD NSW 2134

PROJECT NUMBER	PLOT DATE	DRAWN
20014	18/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE
LOWER GROUND FLOOR PLAN

DRAWING NUMBER	REVISION
A-CD-101	E

PRELIMINARY - NOT FOR CONSTRUCTION

Section J Statement

JHA
MARKUP / SKETCH

DOCUMENT No.: 230089
DOCUMENT TITLE: BUPACC NCC 2022 Section J Part J4 Building Fabric Requirement
DOCUMENT REV: [P3]
DOCUMENT BY: G.L DATE: 16/08/2024

KEY
PROPOSED CONSTRUCTIONS

ENVELOPE ROOF/EXPOSED CEILING -
TOTAL R4.4 m².K/W
(DOWNWARDS, SOLAR ABSORPTANCE OF THE UPPER SURFACE OF A ROOF MUST BE NOT MORE THAN 0.45)

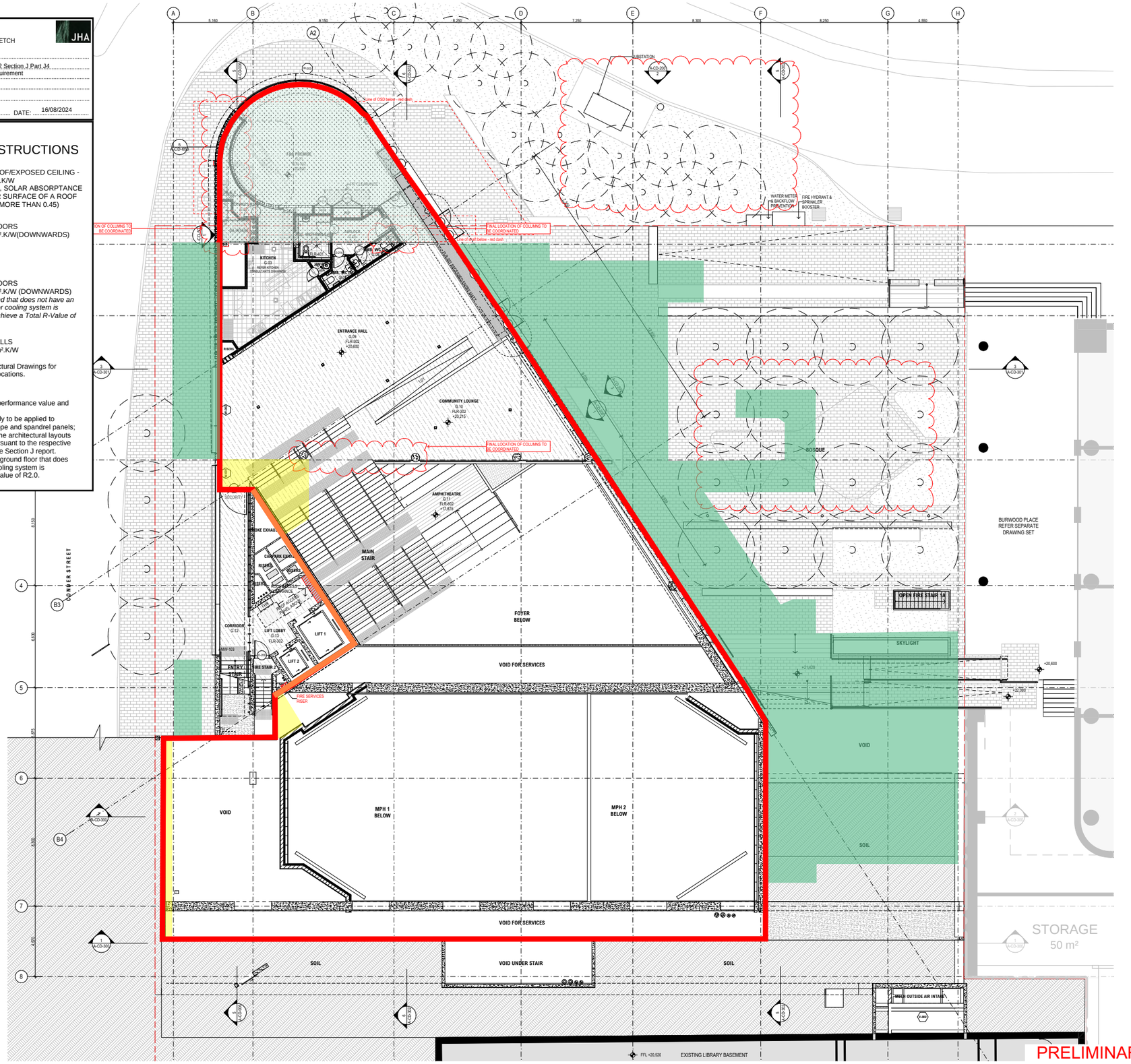
ENVELOPE FLOORS
TOTAL R0.3 m².K/W(DOWNWARDS)

ENVELOPE FLOORS
TOTAL R0.3 m².K/W (DOWNWARDS)
(a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.00)

ENVELOPE WALLS
TOTAL R1.68 m².K/W

Refer to Architectural Drawings for wall types and locations.

Note:
1) The R-value is a total system performance value and NOT insulation.
2) The above construction are only to be applied to non-glazed portions of the envelope and spandrel panels; glazing must be installed as per the architectural layouts with its thermal performances pursuant to the respective glazing specifications stated in the Section J report.
3) For Climate Zone 5, a slab-on-ground floor that does not have an in-slab heating or cooling system is considered to achieve a total R-Value of R2.0.



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20014	18/07/24	
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DRAWING TITLE
GROUND FLOOR PLAN

DRAWING NUMBER	REVISION
A-CD-102	E

PRELIMINARY - NOT FOR CONSTRUCTION

Section J Statement

JHA
MARKUP / SKETCH

DOCUMENT No.: 230089
DOCUMENT TITLE: BUPACC NCC 2022 Section J Part J4 Building Fabric Requirement
DOCUMENT REV: [P3]
DOCUMENT BY: G.L DATE: 16/08/2024

KEY
PROPOSED CONSTRUCTIONS

ENVELOPE ROOF/EXPOSED CEILING -
TOTAL R4.4 m².K/W
(DOWNWARDS, SOLAR ABSORPTANCE OF THE UPPER SURFACE OF A ROOF MUST BE NOT MORE THAN 0.45)

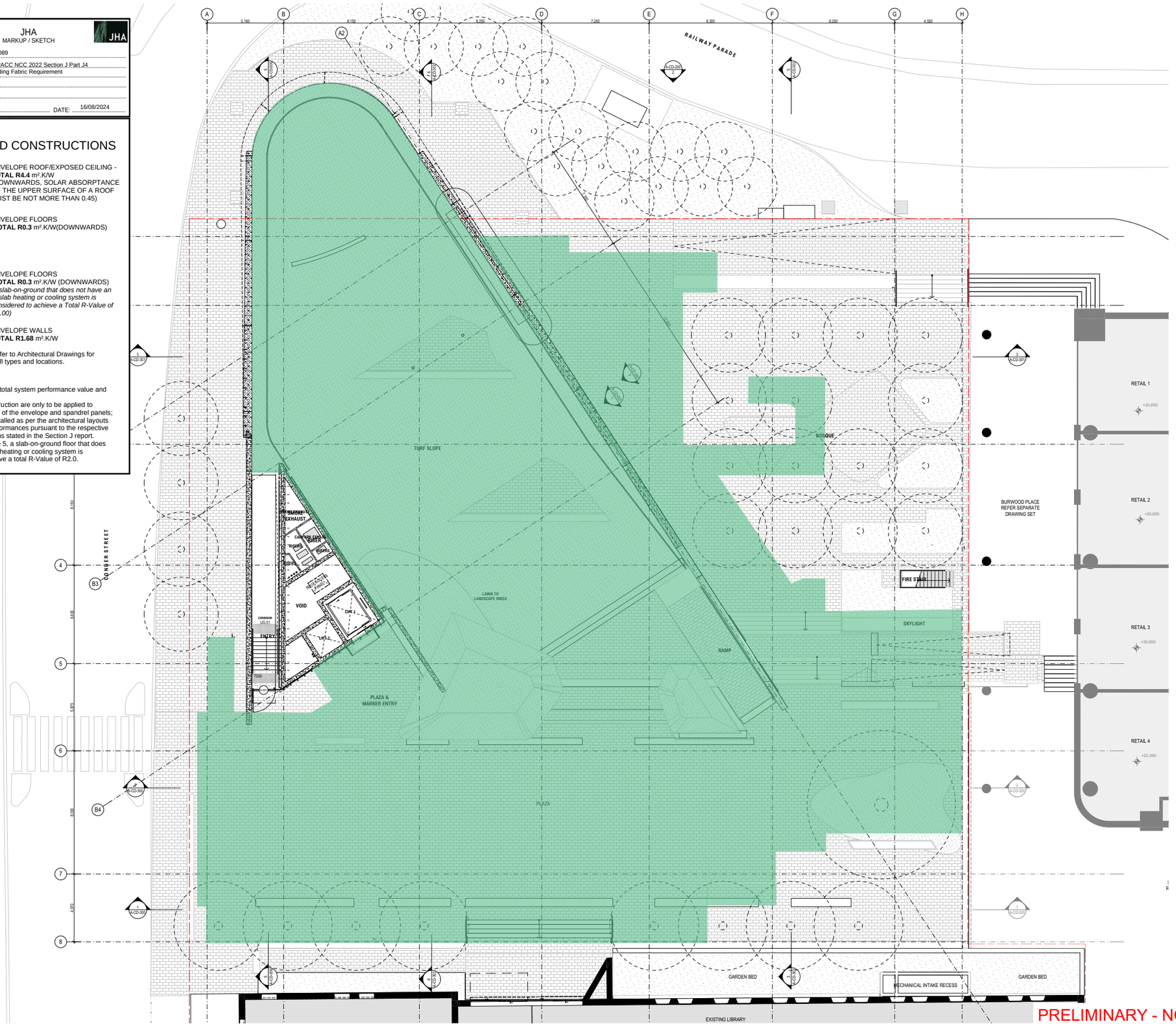
ENVELOPE FLOORS
TOTAL R0.3 m².K/W(DOWNWARDS)

ENVELOPE FLOORS
TOTAL R0.3 m².K/W (DOWNWARDS)
(a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.00)

ENVELOPE WALLS
TOTAL R1.68 m².K/W

Refer to Architectural Drawings for wall types and locations.

Note:
1) The R-value is a total system performance value and NOT insulation.
2) The above construction are only to be applied to non-glazed portions of the envelope and spandrel panels; glazing must be installed as per the architectural layouts with its thermal performances pursuant to the respective glazing specifications stated in the Section J report.
3) For Climate Zone 5, a slab-on-ground floor that does not have an in-slab heating or cooling system is considered to achieve a total R-Value of R2.0.



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D	17/06/24	CO-ORDINATION ISSUE
E	18/07/24	95% CO-ORDINATION ISSUE

PROJECT
BURWOOD URBAN PARK & CULTURAL CENTRE
4 CONDER ST, BURWOOD NSW 2134

PROJECT NUMBER	PLOT DATE	DRAWN
20014	19/07/24	
CHECKED	SHEET SCALE	SHEET SIZE
	1:100	B1

DRAWING TITLE
UPPER GROUND FLOOR PLAN

DRAWING NUMBER	REVISION
A-CD-103	E

PRELIMINARY - NOT FOR CONSTRUCTION

16/03/2023

Mecone NSW Pty Ltd
Level 12
179 Elizabeth Street
SYDNEY NSW 2000

Notice of determination of a development application

issued under the *Environmental Planning & Assessment Act 1979* Section 4.18 (1) (a)

development application no.	**44.2022**
development application	
applicant name	Mecone NSW Pty Ltd
applicant address	Level 12
	179 Elizabeth Street
	SYDNEY NSW 2000
land to be developed: address	**2-4 Conder Street BURWOOD 2134**
proposed development	Burwood Urban Park and Cultural Centre including public plaza, café, landscaping and public domain upgrades, basement car parking and other associated works
determination	
made on (date)	27/02/2023
determination	~~☐ consent granted unconditionally~~
	☐ consent granted subject to conditions described below
consent to operate from (date)	*27/02/2023* *see note 1*
consent to lapse on (date)	27/02/2028
details of conditions (including section 7.11 and 7.12 conditions)	*see note 2*
reasons for conditions/~~refusal~~	*These conditions have been imposed after consideration of all the points listed under Section 4.15 and 4.17 of the Environmental Planning & Assessment Act 1979.*
Signed	**on behalf of the consent authority**
signature	
name	**Brian Olsen**
Position	Manager City Development

other approvals
list *Local Government Act 1993*
approvals granted under S 4.12(5)
general terms of other approvals
(list approvals)

_____
_____
_____
_____

right of appeal

If you are dissatisfied with this decision Section 8.7 and 8.10 of the *Environmental Planning & Assessment Act 1979* gives you the right to appeal to the Court within 6 months after receipt of this notice by you.

Section 8.3 of the Environmental Planning & Assessment Act 1979, allows that an applicant may request the council to review a determination of an application. The process for this review is set out in Sections 8.3, 8.4 and 8.5 of the Act.

A request for a review may be made at any time, subject to Section 8.3 (2), or as prescribed by the regulations.

section 8.3 review

Note 1

Where the consent is subject to a condition that the consent is not to operate until the applicant satisfies a particular condition the date should not be endorsed until that condition has been satisfied.

Note 2

Clause 101 of the Regulation contains additional particulars to be included in a notice of determination where a condition under Section 7.11 & 7.12 of the Environmental Planning & Assessment Act 1979 has been imposed.

Conditions of Approval

1. The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow.

SHEET NO.	SHEET NAME	REVISION
Architectural Plans by CHROFI		
DA-001	Site Analysis	B
DA-002	Site Plan	B
DA-102	Ground Floor Plan	B
DA-103	Lower Ground Floor Plan	B

DA-104	Basement 1	B
DA-105	Basement 2	B
DA-201	Elevations – Sheet 1	B
DA-202	Elevations – Sheet 2	B
DA-203	Elevations – Sheet 3	B
DA-301	Sections – Sheet 1	B
DA-302	Sections – Sheet 2	B
DA-303	Sections – Sheet 3	B
DA-401	GFA Diagrams	B
DA-402	Signage Design Intent	B
DA-403	Materials and Finishes	B
DA-404	Shadow Diagrams	A
DA-900	3D Visualisation	B
DA-901	3D Visualisation	B
DA-902	3D Visualisation	B
DA-903	3D Visualisation	B
Landscape Plans by Tyrrell Studio		
CS-L002	Legend	C
CS-L101	Demolition Plan	C
CS-L102	Tree Management Plan	C
CS-L110	Illustrated Landscape Plan	C
CS-L111	General Arrangement Plan	C
CS-L120	Grading Plan	C
CS-L130	Planting Schedule	C
CS-L201	Site Sections	B
CS-L202	Site Sections	A
CS-L203	Site Sections	A
CS-L204	Site Sections	A
CS-L300	Paving and Furniture Palette	A
CS-L301	Materials and Finishes Palette	B
CS-L302	Typical Planting Details	B
CS-L303	Typical Planting, Wall, Stair Details	B

CS-L304	Indicative Views	A
CS-L305	Indicative Views	A
	• Landscape Plans prepared by Tyrrell • Survey Plan prepared by Higgins Surveyors • Statement of Environmental Effects prepared by Mecone • Response to RFIs letter prepared by Mecone • Access Review prepared by Morris Goding Access Consulting • Acoustic Report prepared by RWDI • Arboricultural Impact Assessment prepared by Australis Tree Management • BCA Regulatory Compliance Report prepared by McKenzie Group • Carparking Compliance Assessment prepared by ptc • Carparking Letter and Plan prepared by ptc • Civil Stormwater Report and Civil Works Plans prepared by TTW • Construction and Demolition Waste Management Plan prepared by Elephants Foot • Conder St Flood Impact Assessment by TTW • CPTED Report prepared by Mecone • DCP Compliance Table prepared by Mecone • Design Excellence Responses prepared by CHROFI and Tyrrell Studio • Design Statement prepared by CHROFI and Tyrrell Studio • Detailed Site (Contamination) Investigation by Douglas Partners • Ecological Assessment prepared by SIA • ESD Report by Cundall • Fire Engineer's letter by Stantec • Green Star Strategy Report by Cundall • Heritage Impact Statement by Jackson-Stepowski • Interim Audit Advice #01 by Ian Swane & Associates • NABERS Energy Guide by Cundall • Operational Management Plan by Burwood Council • Operational Waste Management Plan by Elephant's Foot • Pre-DA Response by CHROFI and Tyrrell Studio • Preliminary (Site) Contamination Investigation BY Douglas Partners • Public Art Plan by Artscape • Remediation Action Plan by Douglas Partners • Section J Report by Cundall • Services and Utilities Report by IGS • Structural DA Report by TTW • Transport, Traffic and Parking Impact Assessment prepared by Road Delay Solutions • Wind Impact Statement prepared by RWDI	

Burwood
Inc.1874

2 Conder Street, Burwood, NSW 2134
PO Box 240, Burwood NSW 1805
E: council@burwood.nsw.gov.au
P: 9911 9911 www.burwood.nsw.gov.au

1. In the event of any inconsistency between the conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

Development Not Approved

2. This development consent does not approve the following development, for which separate development consent or Complying Development Certificate (as appropriate) is to be obtained:

    a. Construction of building identification signage / business identification signage;
    b. Temporary events that require development consent (i.e. that are not exempt development or permitted without consent).

Fees

3. The fees and/or bonds shown in the Table of Fees, are to be paid to Council or another approved collection agency (the Long Service Levy Corporation and its agents and an approved insurer under the *Home Building Act 1989*) and suitable evidence of payment is to be provided to the Accredited Certifier prior to the issuing of a Construction Certificate.

TABLE OF FEES

FEES/BONDS TO BE PAID TO COUNCIL OR TO THE NOMINATED BODY PRIOR TO ISSUING A CONSTRUCTION CERTIFICATE

4. Stormwater Works bond for construction by the Applicant/Council the stormwater drainage works **$83,315** (Payment to be made to Council as a bond) to be refunded upon satisfactory completion of works.

5. Building and Construction Industry Long Service Corporation levy **$62,424** (Payment to be made to Council, the Corporation or its Agent). This is based on 0.25% of the CIV of $24,969,612.

6. Damage Deposit - security deposit against damage occurring to Council's assets (footpath, road, stormwater drainage system, kerb and gutter etc) during building work **$8,000** (Payment to be made to Council as a bond **prior to issue of a Construction Certificate and/or commencement of demolition/bulk excavation).**

    NOTE: This deposit is refundable if no damage occurs.

PRIOR TO RELEASE OF CONSTRUCTION CERTIFICATE

7. A Heritage Interpretation Plan shall be submitted to Council for approval **prior to the issue of a Construction Certificate**. The Plan shall include the content of the interpretation panels/media (including written text, historic images and graphic design), dimensions of the interpretation panels, materials of all components, and their location or placement. The Plan shall be prepared having regard to relevant NSW Heritage Office guidelines. Satisfaction of this condition shall be confirmed upon written advice by Council. Council acknowledges that approved changes to the Plan may occur post the issue of the Construction Certificate.

8. A Wayfinding Strategy shall be submitted to Council's Manager City Development for approval **prior to the issue of a Construction Certificate**. The Wayfinding Strategy shall address wayfinding for both pedestrians and vehicles.

9. The recommendations of the Crime Prevention Through Environmental Design Report prepared by Mecone (undated) and submitted with DA.2021.44 must be implemented during detailed design development and construction. The applicant shall submit evidence to Council that the recommendations have been implemented **prior to the issue of an Occupation Certificate**. If, prior to the commencement of construction, amendments to the development are required, the applicant shall submit these details to Council for approval **prior to the issue of a Construction Certificate**.

10. CCTV cameras shall be installed at the building so that they can survey the pedestrian entrances and walkways, entrance to the parking levels, waste rooms, lift lobbies, retail areas, public spaces, and lifts/elevators. The CCTV system shall provide a quality image that can assist with the detection of crime and be used by the NSW Police in any investigation (preferably a quality digital system). CCTV system footage shall be retained for a period of no less than 30 days and be available upon request by the NSW Police when required. Details are to be submitted and approved **prior to the issue of a Construction Certificate**.

11. A detailed Construction Management Plan shall be submitted to and approved by the Council's Manager, City Development **prior to the issue of a Construction Certificate**. The Construction Management Plan must include the control and management methods to be implemented in addressing the following issues during the demolition, excavation and construction phases of the project:

    a. Noise and vibration control;
    b. Dust and odour suppression and control;
    c. Storm water control and discharge;
    d. Erosion control;

e. Waste storage and recycling control;
f. Litter control
g. Construction material storage;
h. Truck cleaning methods on site so as to prevent spread of soil and like materials onto Council's roadways; and
i. Community Information program, communication procedures and feedback hotline.

12. A Construction Traffic Management Plan must be submitted to and approved by Council's Manager, City Development **prior to the commencement of demolition and excavation or issuing of any relevant Construction Certificate (whichever occurs first).** The Construction Traffic Management Plan must be complied with at all times. The following matters should be addressed in the plan (where applicable):

a) A plan view of the entire site and frontage roadways indicating:

i) Dedicated construction truck routes to and from the site;
ii) Dedicated construction site entrances and exits, controlled by a certified traffic controller, to safely manage pedestrians and all vehicles in the frontage roadways;
iii) Turning areas within the site for construction and spoil removal vehicles, allowing a forward egress for all vehicles on the site;
iv) The proposed locations of work zones where it is not possible for loading/unloading to occur on the site in the frontage roadways (which will require separate approval by Council);
v) Location of any proposed crane and concrete pump and truck standing areas on and off the site (which will require separate approval by Council);
vi) A dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries; and
vii) Traffic routes to and from the site from the closest arterial road in all directions.

b) Traffic control plan(s) for the site must be in accordance with the Roads and Maritime Services publication "Traffic Control Worksite Manual" and prepared by a suitably qualified person. The main stages of the development requiring specific construction management measures are to be identified and specific traffic control measures identified for each stage.

c) The Traffic Management Plan shall include consideration of minimizing potential traffic safety impacts on school children and

parents using the nearby public school during pick up and drop off times

13. All works carried out in conjunction with the development including during the course of demolition, excavation and construction must be implemented in accordance with the approved Construction Traffic Management Plan (CTMP) and/or approved permits from Council or any other Road authority.

14. Heavy vehicles approaching, entering and exiting the site must approach, enter and exit the site in accordance with the approved route(s) as set out in the Construction Traffic Management Plan (CTMP).

15. All heavy vehicles must comply with the approved CTMP, once heavy vehicles have exited the Burwood LGA via the approved routes stated in the CTMP, only State Roads (Parramatta Road, The Boulevarde, Coronation Parade, Liverpool Road and Georges River Road) are permitted to be used on re-entry into Burwood LGA.

16. All hydrant booster pump and fire service equipment shall be provided in accordance with the Building Code of Australia and housed within an enclosed cupboard of a design and finish that enhances the streetscape. Details of these areas and the enclosures are to be assessed by an Accredited Fire Safety Engineer and shall comply with the performance requirements of the Building Code of Australia; shown on plans and submitted to the Principal Certifying Authority for approval **prior to release of a Construction Certificate**.

17. Noise transmission and insulation ratings for building elements being in accordance with Part F5 of the Building Code of Australia. A wall in a building required to have an impact sound insulation rating to be of discontinuous construction in accordance with BCA Clause F5.3.

    Details of the method of satisfying this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

18. Detailed materials and finishes shall be submitted for approval by Council in relation to the treatment of mechanical and fire equipment where visible from a public place. The details shall demonstrate that the equipment is aesthetically treated and well-integrated into the architectural features of the building.

19. **Basement Engineering Design – Structural adequacy:**

    a. Engineering details shall be submitted to the Accredited Certifier for approval **prior to the issuing of the relevant Construction Certificate**:

    b. A report shall be prepared by a professional engineer **prior to the issuing of the relevant Construction Certificate**, detailing the proposed methods of excavation, shoring or pile construction including details of vibration emissions and detailing any possible damage which may occur to adjoining or nearby premises due to building and excavation works. Any practices or procedures specified in the Engineer's Report in relation to the avoidance or minimisation of structural damage to nearby premises, are to be fully complied with and incorporated into the plans and specifications for the Construction Certificate; and

    c. A copy of the Engineer's Report is to be submitted to Council for noting only, even if the Council is not the Principal Certifying Authority.

20. **Public Art: Prior to the issue of a Construction Certificate**, a Detailed Public Art Plan for the site must be prepared by an appropriately qualified art curator/advisor/coordinator and approved by Council's Manager City Development. It must be based on the Public Art Plan prepared by Artscape dated May 2022, and must incorporate the following:

    a. The provision of multiple art pieces across the site;
    b. The new location for the existing public artwork within the Railway Parade road reserve, titled 'Awakenings' (if this artwork is to be relocated within the subject site);
    c. The provision of public art by a range of artists including indigenous, European and more recent migrants, with specific artists selected and a rationale for selecting those artists;
    d. The proposed artworks, including their form, dimensions, materials, value, placement within the site, and timing for installation, and engineers' drawings;
    e. Ongoing management and maintenance requirements; and
    f. Deaccessioning agreements.

    Public artwork must be installed to the Council's satisfaction **prior to the issue of any Occupation Certificate.**

21. Mechanical ventilation/air conditioning details are to be submitted to the Accredited Certifier for approval **prior to the issuing of a Construction Certificate** and must include the following:

a. The location and size of proposed ductwork;
b. The location of equipment;
c. The performance characteristics of the proposed motor/s and fan/s; and
d. The air flow characteristics of the system.
e. The operation of the plant shall satisfy Australian Standard AS 1668 "SAA Mechanical Ventilation and Air Conditioning Code", Part 1 and Part 2, Australian Standard AS 3666-1989 and the *Noise Control Act 1975* and any other relevant Australian Acoustic Standard.

At the completion of work a Certificate from an Accredited Certifier, Mechanical Engineer or other suitably qualified person, to the effect that the ventilation system has been installed and performs in accordance with the provisions of Part F4 of the Building Code of Australia, Australian Standard AS 1668 "SAA Mechanical Ventilation and Air Conditioning Code", Part 1 and Part 2, Australian Standard AS 3666-1989 and the *Noise Control Act 1975*, must be submitted to the Principal Certifying Authority **prior to the issue of an Occupation Certificate**.

22. A detailed drainage design and calculations shall be prepared by a competent practicing Hydraulic/Civil Engineer and shall provide the following:

a. The design and calculations shall indicate the details of the proposed method of stormwater disposal and shall be prepared by a competent practicing hydraulic/civil engineer in accordance with Council's Stormwater Management Code;
b. Reasonable allowance shall be made for surface runoff from adjacent properties, and to retain existing surface flow path systems through the site. Any redirection or treatment of these flows shall not adversely affect any other property;
c. Overflow paths shall be provided to allow for flows in excess of the capacity of the pipe/drainage system draining the site, as well as from any on-site stormwater detention storage;
d. plans showing proposed and existing floor, ground and pavement levels to Australian Height Datum (AHD);
e. details of pipelines/channels showing calculated flows, velocity, size, materials, grade, invert and surface levels;
f. details and dimensions of pits and drainage structures;
g. hydrologic and hydraulic calculations;
h. details of any services near to or affected by any proposed drainage line;
i. any calculations necessary to demonstrate the functioning of any proposed drainage facility is in accordance with Council's

requirements; and

j. the depth and location of any existing stormwater pipeline and/or channel being connected to shall be confirmed by the applicant on site. Certification of such is to be provided to Council prior to the release of the construction certificate.

The design calculations and detailed drawings are to be approved by an Accredited Certifier - Civil Engineering **prior to the issuing of a Construction Certificate.**

23. The on-site detention (OSD) design shall address the following:

j. The storage volume (SSR) and site discharge (PSD) shall be calculated in accordance with Burwood Council Stormwater Management Code, Clause 4.7;
k. The discharge control pit (DCP) shall be provided with designed orifices to control outflows for 2, 10 and 100 year ARI. Overflow weir/pipe shall be designed and provided to cater for emergency overflow situation;
l. Adequate open grates and access shall be provided to the storage tank for cleaning and ventilation purposes. Step ladder shall be provided to the tank wall;
m. The storage shall be relatively self-cleansing; the base has to have minimum 2% fall to the outlet;
n. The invert level IL of the connecting stormwater pit shall be documented on the plan. Should the existing pit render unsuitable for pipe connection, new pit and lintel shall be built; and
o. The invert level of the tank outlet shall be above hydraulic grade line of downstream drainage system.

The revised drawing shall be approved by an Accredited Certifier - Civil Engineering, **prior to the issuing of a Construction Certificate.**

24. A flood risk management and flood emergency evacuation report together with a flood evacuation plan shall be prepared by a suitably qualified hydraulic/ civil engineer and submitted to the Accredited Certifier. Such documentation shall be submitted to the Accredited Certifier for **approval prior to release of a Construction Certificate.**

25. The basement levels of the proposed building shall be further protected considering PMF level inundation with the help of flood gate or similar devices or other mitigation measures. Detailed design of flood protection barriers/gates/mitigation measures shall be approved by the Accredited Certifier **prior to release of a Construction**

Certificate. Additional sump with designed pump out system shall be provided to cater for emergency intrusion of flood water in the basement.

27. The proposed development shall not impede the natural flow path of floodwater with the use of solid wall or similar obstructing devices and shall allow overland flow to pass through. In this regard a Flood Impact Assessment Report shall be prepared by suitably qualified practicing engineer to establish the increase in 1%AEP flood level caused by the proposed development and submitted to the Accredited Certifier for approval **prior to release of a Construction Certificate.**

28. The applicant shall submit an updated Flood Impact Assessment that demonstrates compliance with Council's Stormwater Management Code, particularly clause 3.4 which states that development activities must not cause any adverse impact on adjoining or any other properties. The updated report must be submitted to and approved by the Accredited Certifier **prior to the issuing of a Construction Certificate**.

29. Structural engineer's details prepared and certified by a practicing Structural Engineer for all reinforced concrete and structural members being submitted to the Accredited Certifier for approval **prior to the issuing of a Construction Certificate**.

30. Detailed landscape plans, drawn to scale, by a landscape architect, must be submitted to and approved by the Accredited Certifier **prior to the issue of a Construction Certificate**. The plans must include:

    a. Location of proposed structures on the site including existing trees;
    b. Details of planting on slab, earthworks including mounding and retaining walls and planter boxes (if applicable);
    c. Details of soil depths and specification for landscape soil;
    d. Details of proposed tree pits/bases, including grates;
    e. Location, numbers and type of plant species, having regard to wind conditions and shade effects;
    f. Details of planting procedure and maintenance;
    g. Details of drainage and watering systems; and
    h. Details of balustrades and wind protection measures (where applicable).

31. A site-specific Landscape Management/Maintenance Plan must be submitted to and approved by the Accredited Certifier **prior to the issue of a Construction Certificate**. The Landscape Management/Maintenance Plan shall detail how all landscaped areas including turf will be maintained, particularly before, during and after high-usage events, and replaced in the event of failure.

32. **Water feature:**

    a. The water feature is to be designed in accordance with all relevant Australian Standards, and such that water shall not become stagnant. Water quality must be of a standard appropriate for its use, in accordance with the ANZECC Guidelines for Fresh and Marine Water Quality and relevant Australian Standards.

    b. Details of the water feature construction are to be submitted to the Accredited Certifier for review and approval **prior to the issue of a Construction Certificate**.

    c. **Prior to the issue of a Construction Certificate**, a management and maintenance plan for the water feature is to be submitted to Council for approval. The management and maintenance plan must include details of the operation and management of the water feature to manage noise impacts, proposed treatments for hardscape and water elements, and must clearly address maintenance, operational and cost responsibilities for the feature.as well as . The maintenance plan shall be submitted for the approval of the Manager City Development.

    d. The approved management and maintenance plan must be complied with for as long as the water feature is in place.

33. The recommendations contained in the Acoustic Assessment, by RWDI (#2203505), 30 May 2022, Version B, shall be implemented within the development and all such recommendations shall be clearly **detailed on the Construction Certificate Plans.**

34. As recommended in the Acoustic Assessment referred to above, a detailed acoustic assessment of the mechanical equipment must be undertaken **prior to the issue of a Construction Certificate** and be designed to comply with the requirements of the Noise Policy for Industry. The assessment must include mitigation measures to minimize the impacts of noise on sensitive receivers.

35. Continuous balustrades shall be provided along the side/s of any stairway or ramp, any corridor, hallway, balcony, access bridge or the like, any path of access to a building if:-

    a. It is not bounded by a wall; and
    b. The change in level is more than one (1) metre, or five (5) risers in the case of a stairway, from the floor or ground surface beneath;

    except where specific exemptions are provided in the Building Code of Australia.

    Balustrades shall prevent as far as practicable:

    a. Children climbing over or through it; and
    b. Persons accidentally falling from the floor; and
    c. Objects which might strike a person at a lower level falling from the floor surface.

    Balustrade heights and designs shall comply with Part D2.16 of the Building Code of Australia and Australian Standard/New Zealand Standard AS/NZS 1170 Part 1 – Structural design actions.

    Details of the method of satisfying these requirements must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

36. Balcony balustrades being a minimum height of 1m. Details of the method of achieving this must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

37. Framed panels or doors enclosing or partially enclosing a shower or bath shall be glazed with "A" or "B" grade safety glazing material in accordance with Australian Standard AS 1288-2006, Table 4.5 SAA Glass Installation Code (Human Impact Considerations) and B1.4 of the Building Code of Australia. Details of the method of complying with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

38. Details of outdoor lighting must be provided to and approved by the Council's Manager, City Development **prior to the issue of a Construction Certificate**. Outdoor lighting must be in accordance with the Burwood Development Control Plan and the relevant Australian Standards. Spill light shall be minimized and shall not create a nuisance to surrounding properties.

PRIOR TO RELEASE OF AN OCCUPATION CERTIFICATE

39. **Heritage Interpretation Plan:** The installation and completion of the heritage interpretation in accordance with the approved Heritage Interpretation Plan required to be submitted prior to the release of a Construction Certificate, shall be verified by an inspection by the Principal Certifier prior to the issue of any Occupation Certificate or Interim Occupation Certificate.

40. Installation of the approved Public Art (in accordance with the Public Art Plan) shall be completed for each stage of the development in accordance with the approved PAP and verified by an inspection by the Accredited Certifier **prior to the issue of an Occupation Certificate.**

41. The building shall be sited by survey and a registered surveyor's certificate being submitted to the Accredited Certifier, **prior to the issue of an Occupation Certificate,** on completion of the building to indicate the height of the finished floor levels, the height of the roof ridge/parapet and to show boundary clearances and areas of the site occupied by the building.

42. **Wayfinding Strategy:** A vehicular wayfinding strategy (external and internal) shall be prepared in consultation with, and endorsed by Manager City Development **prior to the issue of an Occupation Certificate.**

43. **Vehicular and pedestrian access: Prior to the issue of any Occupation Certificate**, the following requirements must be met:

    a. A physical connection must be provided between the basement level 1 car park of the subject development, and the basement level 1 car park of the Burwood Place development approved under DA.2021.44.

    b. A “Right of Carriage Way” in the form of Schedule 8 of the Conveyancing Act 1919 must be registered over the site being land contained in Lot 16 DP832440 known as 52-60 Railway Parade, Burwood (servient tenement) in favour of Lot 15 DP 832440 known as 2-4 Conder Street, Burwood (dominant tenement). Such easement shall provide for members of the public generally to access by vehicle or on foot over such part or parts of the servient tenement to enable vehicles and persons on foot to have access through the car park, the aisles of the car park and access ramps to access to and from the car park on the dominant land generally as shown on the following architectural plans prepared by CHROFI and forming part of this consent: A-DA-104 Revision B (Basement 1), A-

DA-105 Revision B (Basement 2), and A-DA-303 Revision B (Sections – Sheet 3).

c. A "Right of foot way" in the form of Schedule 8 of the Conveyancing Act must be registered over the development site being land contained in Lot 16 DP832440 known as 52-60 Railway Parade, Burwood (servient tenement) in favour of Lot 15 DP 832440 known as 2-4 Conder Street, Burwood (dominant tenement). Such easement shall provide for members of the public generally to go, pass and repass on foot over the servient tenement; and

d. Evidence of registration of both of the said easements in subclause (a) and (b) must be provided to the Council and the private certifying authority confirming registration of such easements on title to the land being the servient tenement and the dominant tenement prior to the issue of an occupation certificate on either site (whichever comes first); and

e. Council provides to the private certifying authority for the development written confirmation of its satisfaction with the evidence substantiating the registration of such easements on title to the dominant and servient tenements.

f. Prior to registering such easements on title drafts of the proposed easements and plans forming part of such easements must be provided to the Council for its confirmation.

44. A "Section 73 Compliance Certificate" under the *Sydney Water Act 1994* must be obtained from Sydney Water Corporation. Make early application for the certificate, as there may be water and sewer pipes to be built and this can take some time. This can also impact on other services and building, driveway or landscape design.

    Application must be made through an authorised Water Servicing Coordinator. For assistance either visit www.sydneywater.com.au > Building and developing > Developing your Land > Water Servicing Coordinator or telephone 13 20 92.

    The Section 73 Certificate must be submitted to the Principal Certifying Authority **prior to the issuing of the relevant Occupation Certificate**.

45. **Prior to release of the relevant Occupation Certificate for the development** the Applicant must submit a Validation Report following completion of remediation. The Validation Report must:
    (a) be prepared by a Certified Contaminated Land Consultant who is certified under one of the schemes endorsed by the NSW EPA;

(b) be submitted to the Principal Certifying Authority for information within three months of the completion of remediation works; and
(c) be prepared in accordance with the RAP, the NSW EPA Consultants Reporting on Contaminated Land (2020) guidelines, National Environmental Protection Measure (NEPM) 2013 and other guidelines made under the Contaminated Land Management Act 1997.

46. **Prior to release of an Occupation Certificate for the development** a NSW EPA accredited Site Auditor must be engaged to review the Validation Report, prepare Site Audit Report (SAR) and prepare Section A Site Audit Statement (SAS). The SAR and SAS must verify that the site is suitable for the intended land use and be provided to Principal Certifying Authority prior to issue of the Occupation Certificate. A copy of the SAS must also be provided to Council.

GENERAL PLANNING CONDITIONS

47. The development shall be operated in accordance with the Operational Management Plan for the Burwood Urban Park Arts and Cultural Centre prepared by Burwood Council and submitted with DA.2022.44, except as modified by these conditions of consent.

48. The hours of operation of the café are restricted to:

    a. 7am-10pm Monday to Saturday; and
    b. 8am to 10pm Sunday and public holidays.

49. All landscaping must be completed prior to the issue of an Occupation Certificate.

50. Landscaping within the site must be maintained at all times following installation, including the replacement of any plants that are dead, damaged, diseased or stolen, with like for like.

51. The recommendations of the Ecological Assessment prepared by SIA Ecological & Environmental Planning Pty Ltd dated 21 September 2022 shall be implemented in the development to minimize the impacts of removing Tree No. 3 on the Sulphur-crested cockatoo. Those recommendations state as follows:

    c. Remove Tree No.3 outside of the breeding season for this species (i.e. August to January).
    d. Engage an appropriately qualified and experienced fauna handler to be present at the time the tree is removed.

e. Before felling the tree, tap along trunk using an excavator or loader or similar equipment to scare any birds out of the tree hollow and away from the tree. Repeat several times over an approximately 5 min period.

f. If removing the tree in stages, branches distant from the tree hollow should be removed first. This would further scare any birds present within the hollow and give them the opportunity to vacate the tree.

g. After the tree has been felled the fauna handler should check the tree hollow to ensure no birds are trapped or have become injured. Any birds found should be taken to WIRES for care if injured or if uninjured safely relocated to nearby habitat.

h. Install at least 3 artificial nest boxes containing a hollow and entrance of similar size to that in Tree No.3. These should be mounted at a similar height and orientation as the existing tree hollow. Ideally, one of the artificial hollows mounted would be the existing tree hollow with a minimum of 200mm of the tree trunk above and below. The artificial nest boxes should be mounted on large established trees (e.g. at Burwood Park or similar).

52. The building must be designed to achieve a minimum 5 Star Green Star rating under the Design & As Built Green Building Council of Australia Rating Tool. Prior to the issue of the relevant Construction Certificate, the Applicant shall submit details to the Certifying Authority demonstrating compliance with this requirement. Minor amendments to the detailed design required to adapt the building to achieve 5 Star Green Star certification may be submitted to and approved by the Council prior to the issue of a Construction Certificate. Any minor amendments to the detailed design must be demonstrably associated with the green star certification process.

53. Prior to the commencement of excavation, the proposed data gap investigation outlined in Remediation Action Plan (RAP), dated 2 December 2022, prepared by Douglas Partners, must be conducted to determine the full nature and extent of the contamination and suitability of the proposed remediation approach. The results of the data gap closure investigation must be presented in a report prepared in accordance with the NSW EPA Consultants Reporting on Contaminated Land (2020) guidelines, National Environmental Protection Measure (NEPM) 2013 and other guidelines made under the Contaminated Land Management Act 1997.

54. The Remediation Action Plan (RAP), dated 2 December 2022,

prepared by Douglas Partners, must be updated following results of the data gap investigation. Prior notice of Category 2 remediation work must be provided to Council at least 30 days prior to the commencement of remediation. The notice must be in accordance with Chapter 4, Clause 4.13 of State Environmental Planning Policy (Resilience and Hazards) 2021. Should any alternate remediation approach include the preparation of a Long-Term Management Plan (LTEMP), Council must be consulted as soon as possible and prior to issue of the Construction Certificate. Implementation of a strategy to 'cap and contain' contamination and implement a LTEMP will require modification of the development consent via a 4.55 Application under the EP&A Act.

55. The RAP Review Findings made by the Site Auditor Ian Swane & Associates P/L in the Interim Audit Advice #01 dated 17 December 2022 must be implemented in all new/updated documentation and/or during remediation.

56. An NSW EPA-accredited Site Auditor must be engaged to review the data gap investigation report and updated RAP. The Site Auditor must prepare an Interim Audit Advice (IAA) letter, or a Section B Site Audit Statement (SAS) confirming the remedial strategy documented in the updated RAP is acceptable, and the site can be made suitable for the proposed development by successful implementation of the updated RAP. The IAA/SAS must be submitted to the Principal Certifying Authority for approval prior to the issuing of a Construction Certificate.

57. **Unidentified Contamination**: Any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination and remediation must be immediately notified to Council and the Principal Certifying Authority in writing. A Section 4.55 Application under the EP&A Act shall be made for any proposed works outside the scope of the approved development consent.

58. **Imported Fill Material:** Filling material must be limited to the following: 1. Virgin excavated natural material (VENM) 2. Excavated natural material (ENM) certified as such in accordance with Protection of the Environment Operations (Waste) Regulation 2014; and/or 3. Material subject to a Waste Exemption under Clause 91 and 92 Protection of the Environment Operations (Waste) Regulation 2014 and recognised by the NSW Environment Protection Authority as being "fit for purpose" with respect to the development subject of this application. Certificates proving that the material imported is ENM or VENM must be provided to the Principal Certifying Authority prior to filling. Certificates are to be provided to Council officers if and when requested. Fill imported on to the site must be compatible with the existing soil characteristic for site drainage purposes.

59. All publicly accessible elements of the development including paving, street furniture, planting, fences, kerbs and drainage must be provided to a standard not less than would be required in Council's Public Works Elements Manual (Final Draft June 2006).

60. The use of any premises within the development that is food related shall be registered with Council and all required fees paid prior to such use commencing.

61. Natural Turf shall be used on the park areas with appropriate species selection to be used in high use areas. The natural turf shall not be replaced with artificial turf.

DEMOLITION

62. Demolition of existing structures are to be carried out in accordance with the requirements of Australian Standard AS 2601 – 2001, where applicable.

63. Hours of demolition work shall be from 7:00am to 7:00pm Mondays to Fridays inclusive (during daylight savings period), 7:00am to 6:00pm Mondays to Fridays inclusive (outside daylight savings period) and from 7:00am to 4:00pm on Saturdays. No demolition work shall be carried out on Sundays or Public Holidays. The owner/builder shall be responsible for the compliance of this condition by all sub-contractors, including demolishers.

64. Access to the site is to be restricted and the site is to be secured when demolition work is not in progress or the site is otherwise occupied.

65. The demolition site is to be provided with measures to mitigate against dust nuisances arising on adjoining sites and roadways. To achieve this, a fence or barrier is to be erected around the site. The construction may be steel mesh which is covered with a suitable filtering medium or such other construction acceptable to Council. An effective program of watering the site is also required to be maintained.

66. Dilapidation surveys are to be carried out by a Practicing Structural Engineer, which is to include a full photographic record of the exterior and interior of the buildings at the applicant's/owners expense on all premises adjoining the site and the survey is to be submitted to Council and the adjoining land owners prior to the commencement of any works. A further dilapidation survey is also to be carried out and submitted to Council and the adjoining owners prior to the issuing of an Occupation Certificate. The dilapidation surveys shall be dated accordingly.

67. Prior to any demolition commencing on site a detailed demolition plan shall be submitted to Council for approval clearly indicating the method of demolition, details of protection of the public in relation to dust control, noise mitigation, sedimentation, traffic control, removal of hazardous building waste on the site, truck access and details of proposed hoardings and site fencing.

Asbestos Removal

68. A WorkCover licensed contractor must undertake removal of more than 10 square metres of any bonded asbestos. Removal of any friable asbestos must only be undertaken by a contractor that holds a current friable asbestos removal licence.

69. Removal of any asbestos must be undertaken in compliance with the requirements of SafeWork NSW. Refer to their Code of Practice "How to Safely Remove Asbestos" dated December 2022.

70. Demolition sites that involve the removal of any asbestos must display a standard commercially manufactured sign containing the words "DANGER ASBESTOS REMOVAL IN PROGRESS" measuring not less than 400mm x 300mm erected in a prominent visible location at the site to the satisfaction of Council Officers. The sign is to be erected **prior to the commencement of demolition works** and is to remain in place until such time as all asbestos has been removed from the site to an approved waste facility. This will ensure compliance with Clause 469 of the *Work Health and Safety Regulation 2011*.

71. All asbestos waste must be stored, transported and disposed of in compliance with the Protection of the Environment Operations (Waste) Regulation 2005.

72. All asbestos laden waste must be disposed of at an approved waste disposal depot (Refer to the Office of Environment and Heritage or Waste Service NSW for details of sites).

73. All asbestos cement sheeting must be removed prior to the commencement of:

    a. Brick veneering or re-cladding of any building where the existing walls to be covered are clad with asbestos cement; OR
    b. Construction work where the new work abuts existing asbestos cement sheeting and/or where existing asbestos cement sheeting is to be altered or demolished.

BUILDING

74. Toilet facilities are to be provided, at or in the vicinity of the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided:

    c. must be a standard flushing toilet, and
    d. must be connected:
        i. to a public sewer, or
        ii. an approved chemical closet facility.

    The toilet facilities are to be completed before any other work is commenced.

75. The development must be designed and constructed to provide access to and facilities for people with a disability in accordance with the provisions of the Building Code of Australia, Disability (Access to Premises – Buildings) Standards 2010 and Australian Standards AS 1428.1:2021. If, in complying with this condition, amendments to the development are required, the design changes must be submitted to and approved by Council prior to a Construction Certificate being issued.

76. Any excavations and backfilling associated with the erection or demolition of a building shall be carried out in a safe and careful manner and in accordance with appropriate professional standards. All necessary planking and strutting shall be of sufficient strength to retain the sides of excavations. A Certificate verifying the suitability of structural details for any proposed shoring is to be submitted to the Principal Certifying Authority before excavating.

77. All excavations associated with the erection or demolition of the building are to be properly guarded and protected to prevent them from being dangerous to life or property. The perimeter of the subject site shall be adequately fenced at all times from the commencement of any work on the site (including demolition/excavation). **All site fencing shall be subject to Council's Public Art Policy and shall be provided with Public Art in accordance with Council's Policy.**

78. If the work involved in the erection or demolition of a building:

    a. is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient;

b. building involves the enclosure of a public place; and
c. Work (either demolition or erection of a building) is proposed adjacent to a public foot way or area and public safety is at risk.

A hoarding or fence must be erected between the work site and the public place. Where the height of the work is 2 storeys or greater above ground an overhead "B" Class hoarding must be provided. An application for such fencing or Hoarding shall be lodged to Council and the application approved and all necessary fees paid prior to the erection of any such hoarding or fence.

Any site fence or hoarding shall be subject to Council's Public Art Policy and public art shall be provided to the Hoarding or Fence as required under Council's relevant policy. Any hoarding or Fence located on Councils property will require a "Works on Council's Property application to be lodged, fees paid and approved prior to the installation of any such structures.

79. Your attention is directed to the following:

WARNING

Utility Services

Before Construction – apply early as building of water and sewer services can be time consuming or may impact on other parts of your development.

Building Plan Approval

The plans approved by Council or the Principal Certifying Authority as part of the Construction Certificate for the development must also be approved by Sydney Water **prior to excavation or construction works commencing**. This allows Sydney Water to determine if sewer, water or stormwater mains or easements will be affected by any part of your development. Please go to http://www.sydneywater.com.au/tapin to apply.

80. The builder is to take all precautions to ensure footpaths and roads are kept in a safe condition and to prevent damage to Council's property. Pedestrian access across the footpath must be maintained at all times. Any damage caused will be made good by Council at Council's restoration rates, at the builder's expense.

81. No materials are to be stored on Council's roads, footpaths or parks.

82. No opening is to be made in any road or footpath, nor is any hoarding to be erected without the prior consent of Council. The builder is to obtain the relevant permit for which fees will be charged in accordance with Council's current Schedule of Fees and Charges.

83. The builder shall erect and maintain in good order all necessary hoardings, barricades and warning signs required to provide adequate public safety. Night warning lamps are to be provided where necessary. A Principal Certifying Authority sign should also be displayed in a prominent position at the front of the development site.

84. Hours of work shall be from 7:00am to 7:00pm Mondays to Fridays inclusive (during daylight savings period), 7:00am to 6:00pm Mondays to Fridays inclusive (outside daylight savings period) and from 7:00am to 4:00pm on Saturdays. No work shall be carried out on Sundays or Public Holidays. The owner/builder shall be responsible for the compliance of this condition by all sub-contractors, including demolishers.

85. When demolition of any existing building is involved, burning of any demolition materials on the site is prohibited. All waste materials to be removed from the site.

86. The approved structure shall not be used or occupied unless an Occupation Certificate (being a Final Certificate or an Interim Certificate) as referred to in section 6.4 of the *Environmental Planning & Assessment Act 1979* has been issued.

87. The building works are to be inspected **during construction** by the Accredited Certifier at the stages of construction listed in the following schedule. The Accredited Certifier must be satisfied that the construction satisfies the standards specified in the Building Code of Australia or in this approval before proceeding beyond the relevant stage of construction.

SCHEDULE OF CONSTRUCTION STAGES
REQUIRING INSPECTION

- After the commencement of the excavation for, and before the placement of, the first footing;
- Prior to covering waterproofing in any wet areas, for a minimum of 10% of rooms with wet areas within a building;
- Prior to covering any stormwater drainage connections; and

- After the building work has been completed and **prior to any Occupation Certificate** being issued in relation to the building.

88. An application for a Construction Certificate is to be made to an Accredited Certifier. Council's "Construction Certificate Application" form is to be used where application is made to Council. Copies are available upon request. A Construction Certificate must be obtained **prior to the commencement of any building work**.

89. Dial Before You Dig is a free national community service designed to prevent damage and disruption to the vast pipe and cable networks which provides Australia with the essential services we use every day – electricity, gas, communications and water.

    Before you dig call "Dial Before You Dig" on 1100 (listen to the prompts) or register on line at www.1100.com.au for underground utility services information for any excavation areas.

    The Dial Before You Dig service is also designed to protect Australia's excavators. Whether you are a backyard renovator, an individual tradesman or a professional excavator, the potential for injury, personal liability and even death exists every day. Obtaining accurate information about your work site significantly minimises these risks.

90. All building works being erected wholly within the boundaries of the property.

91. All sanitary plumbing being concealed in suitably enclosed ducts. Such ducts are to be constructed internally (i.e. not on the outside face of an external wall) and are to be adequately sound-proofed.

92. All plumbing and drainage work being carried out by licensed tradesmen and in accordance with the requirements of the Plumbing Code of Australia and regulations of Sydney Water.

93. The noise emitted by any air-conditioning equipment being (no greater than 5 dBA above background in your neighbours' homes between 10:00pm and 7:00am weekdays and 10:00pm and 8:00am on weekends and public holidays.

94. Safety glazing complying with B1.4 of the Building Code of Australia used in every glazed door or panel that is capable of being mistaken for a doorway or unimpeded path of travel. The glazing must comply with Australian Standard AS 1288–2006: Glass in Buildings - Selection and Installation.

Details of the method of complying with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate.**

95. **Prior to the commencement of building work**, the following is to be carried out:

    a. Submit to Council a "Notice of Intention to Commence Building Work and Appointment of a Principal Certifying Authority" form. Council's "Notice of Intention to Commence Building Work and Appointment of a Principal Certifying Authority" form is to be used where application is made to Council.
    b. Ensure detailed plans and specifications of the building are endorsed with a Construction Certificate by Council or an Accredited Certifier. Council's "Construction Certificate Application" form is to be used where application is made to Council. Copies are available on request.

96. The Principal Certifying Authority or Structural Engineer is to also supervise the construction. All Certificates from the supervising Structural Engineer are to be submitted to the Principal Certifying Authority before an Occupation Certificate is issued stating that all reinforced concrete and/or structural members have been erected in accordance with his/her requirements and the relevant SAA Codes.

97. All activities and works external to the site, or that affect public roads, are to be carried out in accordance with Council's Policies including but not limited to the Works on Council's Road Reserve Assets Policy, Rubbish Skips Policy, Work Zone Policy and Temporary Road Closure (Including Standing Plant) Policy.

98. A road-opening permit shall be obtained for all works carried out on public or Council controlled lands. Restoration of landscaping, roads and paths shall be carried out by Council at the applicant's expense in accordance with Council's **Schedule of Fees and Charges**. The applicant or any contractors carrying out works in public or Council controlled lands shall have public liability insurance cover to the value of $20 million, and shall provide proof of such cover to the Principal Certifier prior to carrying out the works. Please see **Burwood Council's web site** **www.burwood.nsw.gov.au** - Go to Rates and Payments/ Works on Council Property/ Application for Works on Council Property

99. Spoil and building materials shall not be placed, stored, thrown or caused to fall on any public roadway or footpath. Waste containers shall be placed in accordance with Council's Rubbish Skips Policy. Contact Council for a list of approved skip bin suppliers.

100. The builder is to ensure footpaths and roads affected by construction works are kept safe and prevent any damage to Council property. The builder shall erect and maintain where necessary approved hoardings, barricades, warning signs and night warning lamps to ensure public safety. Pedestrian access across the footpath must be maintained at all times.

101. The builder must ensure that the proposed building materials are suitable to resist flood water inundation. All electrical services and mechanical sensitive equipment etc. that can be damaged by flood water, shall be adequately flood proofed and/or placed above the flood planning level.

102. Temporary measures shall be provided prior to the commencement of any demolition, excavation or construction works on the site to prevent sediment and polluted waters discharging from the site. In this regard an Erosion and Sediment Control Plan (ESCP) is to be prepared by a competent practicing hydraulic/civil engineer in accordance with the publication “Managing Urban Stormwater: Soils & Construction” (Landcom, 2004) and Supplement 10 of Council's Stormwater Management Code.

103. All relevant erosion and sediment control measures identified in the ESCP must be implemented and maintained throughout the entire works period till completion. A qualified engineer shall be engaged for regular inspection, monitoring and reporting to the Principal Certifier in regard to satisfactorily functioning of sediment and erosion control system. Corrective actions must be undertaken immediately where and when necessary.

104. All demolition and excavation materials are to be removed from the site or disposed off-site using methods that comply with relevant environmental protection legislation.

105. A Fire Safety Certificate (copies available from Council) is to be given to the Principal Certifier prior to applying for an Occupation Certificate and thereafter once in every 12 month period an Annual Fire Safety Statement is to be given to Council. The certificate and statement attest to both the inspection of all essential fire safety measures by a suitably qualified person and to the regular maintenance of the fire safety measures. A copy of the Fire Safety Certificate and the Fire Safety Schedule are to be given to the Commissioner of Fire and Rescue NSW **by the building owner** and copies of these documents are to be prominently displayed in the building. Similarly copies of Annual Fire Safety Statements are also to be given to the Commissioner and displayed in the building.

(Vide clause 84 and Part 11& Division 3 of the *Environmental Planning & Assessment (Development Certification & Fire Safety Regulation 2021*)

106. Treatment for the protection of the building from subterranean termites must be carried out in accordance with Australian Standard AS 3660.1-2014 "Termite management - New building work."

If the method of protection is to be by way of a chemical barrier, it becomes the responsibility of the owner to maintain a suitable maintenance procedure in accordance with the manufacturer's requirements. Such responsibility is placed solely upon the owner.

Details showing compliance with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

After treatment the following is to be carried out:

a. A durable notice must be permanently fixed to the building in a prominent location, such as the meter box, indicating:

(i) The method of protection.
(ii) The date of installation of the system.
(iii) Where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label.
(iv) The installer's or manufacturer's recommendation for the scope and frequency of future inspection for termite activity.

b. Provide the Principal Certifier with a Certificate which verifies that termite protection has been provided in accordance with Australian Standard AS 3660.1-2014. In the case of Reinforced Concrete Slab construction the Certificate is to verify that the protection incorporates both beneath slab (Part A) and slab penetrations (Part B) treatment.

107. All building work must be carried out in accordance with the provisions of the Building Code of Australia.

108. **Bulk Earthworks & Shoring**

a) No opening is to be made in any road or footpath, nor is any hoarding to be erected without the prior consent of Council. The builder is to obtain the relevant permit for which fees will be charged in accordance with Council's Schedule of Fees and Charges.

b) The builder shall erect and maintain in good order all necessary hoardings, barricades and warning signs required to provide adequate public safety. Night warning lamps are to be provided where necessary.

c) Public roads to be kept clean and free of any material which may fall from vehicles or plant. Waste containers shall be placed in accordance with Council's Code for Activities Affecting Roads and are subject to the payment of appropriate fees.

d) Heavy vehicles entering and leaving the site must only cross the footpath where it is adequately timbered and strapped. Pedestrian access across this footpath must be maintained in good order at all times during the excavation work ensuring public safety at all times.

e) The contractor shall strictly implement all erosion and sediment control (ESCP) measures prior to the commencement of excavation. Such measures shall be inspected at site by a competent practicing hydraulic/civil engineer and the PCA shall be provided with a compliance certificate that all the ESCP measures have been implemented.

f) The Applicant shall prepare detailed survey reports of all existing service authority assets in and around the site of the proposed development that may be affected in any way by the proposed excavation. Surveys should include, but not be limited to, high and low voltage electricity, water, stormwater, sewer, gas, telecommunications, street lighting and drainage assets, etc.

g) The Applicant shall liaise with all relevant service authorities (including, but not limited to electricity, water, stormwater, sewer, gas, telecommunications, street lighting and drainage) to develop final designs that satisfy all requirements of the service authority providers in respect of protection, termination or relocation of existing assets, temporary access and future permanent access for maintenance of assets.

h) The Applicant shall prepare detailed method statements to demonstrate how the proposed excavation is to be conducted such that all relevant utility authority assets are protected and maintained throughout the construction stage of the development, or are relocated. Method statements are to

be submitted to the relevant utility authorities for their written approval.

109. **Installation of Temporary Ground Anchor**

a) For installation of temporary ground anchors to shore the bulk excavation within public roads an NPER Registered Structural Engineer's certificate along with certified plans showing the details and extent of work shall be submitted to Council. The following conditions shall be addressed by the Applicant.

b) The Applicant is required to obtain a 'Temporary Ground Anchor Permit' from Council for which an 'Application for Works on Council's Property' shall be lodged with Council. Subject to the application being approved by Council, the applicant shall pay Council calculated Anchor Fees and a 'Refundable Deposit' as required under Council's 'Fees and Charges 2022 – 2023. Payment of the 'Refundable Deposit' can be made in the form of a Bank Guarantee or security bond.

NOTE: The 'Refundable Deposit' shall be released if no damage occurs.

c) The contractor shall be responsible to obtain and submit to Council a written authority from all public utility authorities that they have no objection in regards to the installation of temporary ground anchors, prior to works commencing.

d) The contractor shall be responsible to obtain permission from the owner of the land where the rock anchors are to be installed, prior to installation of anchors.

e) The contractor shall be responsible for any injury or damage either to persons or property due to the presence or failure of the supporting structure on the public way and the contractor shall indemnify the Council against all claims that may arise from the installation of the supporting structure. In this regard the contractor shall provide written evidence of public liability insurance cover to the minimum value of $20 million, with Council named in the insurance policy, prior to work commencing.

f) The anchors shall be installed in accordance with the manufacturer's instructions. The construction of ground anchors shall be of a temporary nature only and a written undertaking shall be given that the ground anchors are temporary only and shall be de-stressed after final lateral supports are in place. The written undertaking is to be provided to Council, prior to work commencing.

g) Council may unilaterally use the damage deposit for the demolition

and removal of the shoring elements constructed within the public road including the repair/reconstruction of any other associated damage to Councils infrastructure, it be necessary due to non-compliance with these conditions.

h) All shoring with the exception of the released temporary ground anchors shall be completely removed from the public road to a depth of 2.5m on completion. The void shall be backfilled by suitable materials and compacted.

i) All shoring including ground anchors are to be certified by a practicing professional structural engineer. Certification is required as follows:
   i. That the proposed shoring and anchor scheme is capable of supporting the public road, to be submitted prior to work commencing.
   ii. Certification that the shoring and anchor scheme has been adequately constructed, following installation.
   iii. Final certification that the anchors have been de-stressed following de- stressing of the anchors on completion of lateral supports. This is mandatory prior to release/refund of Anchor Bond.

j) Council's footpath and roadway are to be kept safe for the passage of motorists and pedestrians at all times. Closure of any part of the public thoroughfare shall only be carried out with the approval of Council's Traffic Engineer.

k) All stockpiled shoring materials and equipment shall be kept solely within the private property and not obstruct the footpath or roadway at any time.

l) All earth and rock anchors shall be released before the completion of building work.

110. **Water Quality Requirement:** The following stormwater quality targets for post development shall be adopted in accordance with modeling guideline developed by Sydney Metropolitan Catchment Management Authority (CMA).

- 90% reduction in the post development Average Annual Gross Pollutant load (greater than 5mm)
- 85% reduction in the post development Mean Annual Load of Total Suspended Solids (TSS)
- 65% reduction in the post development Mean Annual Load of Total Phosphorus (TP)
- 45% reduction in the post development Mean Annual Load of Total Nitrogen (TN)

Water Quality requirements should be determined by modelling of the proposed development to meet the quality targets. Computer models like MUSIC (the Model for Urban Stormwater Improvement Conceptualisation) can be used to present default and proposed water quality parameters.

111. The stormwater works on Council's roadway, the development property and connection to Council's stormwater system are to be inspected during the entire construction by a competent practicing hydraulic/civil engineer. The inspections are to be carried out at the stages of construction listed in the following schedule. A compliance Certificate verifying that the construction is in accordance with the approved design, this development consent and satisfies the relevant Australian Standard is to be submitted to the Principal Certifying Authority before proceeding beyond the relevant stage of construction.

SCHEDULE OF CONSTRUCTION STAGES REQUIRING INSPECTION

a. Following placement of pipe bedding material. Confirm trench/pipe location, adequacy of depth of cover, bedding material and depth.
b. Following joining of pipes and connection to Council's stormwater system.
c. For on-site detention systems:
    (i) Following set out of detention tank/area to confirm area and volume of storage.
    (ii) Following placement of weep-holes, orifice and/or weir flow control, outlet screen and overflow provision.
d. Following backfilling. Confirm adequacy of backfilling material and compaction.

112. Following completion of all drainage works:

a. Works-as-executed (WAE) plans, shall be prepared and signed by a registered surveyor. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels) and finished ground and pavement surface levels. These plans are to be reviewed by the competent practicing hydraulic/civil engineer that inspected the works during construction.
b. The Principal Certifying Authority is to be provided with a Certificate from a competent practicing hydraulic/civil engineer. The Certificate shall state that all stormwater drainage and related work has been constructed in accordance with the approved plans and consent conditions as shown on the work-as-executed plans, prior to the issuing of Occupation Certification.

113. A Positive Covenant under section 88E of the *Conveyancing Act* shall be created on the title of the property(s) detailing the

i) Overland surface flow path

ii) Finished pavement and ground levels

iii) Prevention of the erection of any structures or fencing

iv) On-site Stormwater Detention system

v) Pump and rising main system

incorporated in the development. The wording of the Instrument shall include but not be limited to the following:

a. The proprietor of the property agrees to be responsible for keeping clear and the maintenance of the facilities consisting of:

i) Overland surface flow path

ii) Finished pavement and ground levels

iii) Prevention of the erection of any structures or fencing

iv) On-site Stormwater Detention system

v) Pump and rising main system

b. The proprietor agrees to have the facilities inspected annually by a competent practicing Hydraulic/Civil Engineer.

c. The Council shall have the right to enter upon the land referred to above, at all reasonable times to inspect, construct, install, clean repair and maintain in good working order the facilities in or upon the said land; and recover the costs of any such works from the proprietor.

d. The registered proprietor shall indemnify the Council and any adjoining land owners against damage to their land arising from failure of any component of the facilities.

The applicant shall bear all costs associated with the preparation of the 88E Instrument. The wording of the Instrument shall be submitted to, and approved by Council prior to lodgment at the Land and Registry Services (LRS). Evidence that the Instrument has been registered at the LRS shall be submitted to Council, **prior to issuing of an Occupation Certificate.**

114. The pump system for the drainage of the basement areas shall satisfy the following conditions:

a. Pumps and rising mains design shall be submitted to the Principal Certifying Authority and shall satisfy the following conditions:

(i) The holding tanks for the pump shall be capable of storing runoff from a one hour, 1 in 100 year ARI storm event.

(ii) Every pump system shall consist of two (2) pumps, connected in parallel, with each pump being capable of emptying the holding tank at a rate equal to the lower of the allowable on site detention discharge rate, or the rate of inflow for the one hour duration storm.

(iii) An overflow, flashing light and audible alarm are to be provided, to warn of pump failure.

(iv) Full details of the holding tank, pump type, discharge rate and the delivery line size are to be documented.

(v) Any drainage disposal to the street gutter, from a pump system must have a stilling sump provided at the property line, and connected to the street gutter by a suitable gravity line.

(vi) The capacity of the stilling sump and outlet pump shall be determined and verified by calculations which are to be documented.

b. Pumping system details shall be submitted to Council or an Accredited Certifier - Civil Engineering, **prior to the issuing of a Construction Certificate.**

115. **Public Domain Conditions**

a) Public domain improvement shall be undertaken and completed at applicant's cost encompassing entire street frontages on Railway Parade and Conder Street (only to the extent where the development fronts the relevant space), Public domain plans shall be prepared with reference to Burwood Council DCP and Public Works Element Manual.

b) Detailed public domain plans shall be prepared that extend to all

frontages or works on Council land. They must be drawn at 1:100 scales, compatible for civil construction e.g. quantity surveying, tendering, supervising and quality control etc. shall be prepared and certified by a qualified civil engineer, landscape architect or urban designer and shall be submitted to and approved by Council **prior to the issue of a Construction Certificate**.

c) The plan shall incorporate sectional details, technical specifications and Council's standard drawings and specifications. Cross sectional view of the proposed works at every 5m intervals and at every critical feature like pits or conflicting services, etc. shall be provided. The cross sections should cover the features extending from the road center line on one side to the property boundary on the other side. The view should include chainage, pits/pipe invert levels, existing & proposed road infrastructures surface levels, conflicting/non-conflicting services. The proposed works should comply with Council's all Standard Drawings from BSD 01 to BDS14, revision E

d) The plan shall include all existing service authority assets on street frontage and in and around the areas as per the survey report. This should include, but not be limited to, high and low voltage electricity, water, stormwater, sewer, gas, telecommunications, street lighting and drainage assets, etc.

e) The plan shall show the entire street frontages of the properties for improvement e.g. footpath paving, kerb & gutter, pram ramps, bollards, service pits, stormwater pit & lintel including mill & re-sheeting of road pavement of the front streets.

f) The Applicant shall liaise with all relevant service authorities to satisfy all requirements of the service authority providers in respect of protection, termination or relocation of existing assets prior to construction. A written consent shall be required where a service authority asset will be affected.

TRAFFIC

116. The design, layout, signage, line marking, lighting and physical controls of all off-street parking facilities must comply with the minimum requirements of the following, where relevant:
    e. AS 2890.1 Part 1: Off-street car parking.
    f. AS 2890.2 Part 2: Off-street commercial vehicle facilities.
    g. AS 2890.3 Part 3: Bicycle parking facilities.
    h. AS 2890.6 Part 6: Off-street parking for people with disabilities.
    i. AS 1428.1: Design for access and mobility.

j. AS 1735.12: Lifts, escalators and moving walks - Facilities for persons with disabilities.

Any non-compliances with the relevant standards shall be approved by Council prior to the issue of a Construction Certificate.

117. **TfNSW condition: Prior to the release of any Construction Certificate**, a 138 consent under the Roads Act shall be issued by the road authority (Burwood Council) for the new building and structures (part encroachment of Community and Cultural Centre building containing Café area, turf lawn area and some lower ground building elements) within the Railway Parade corridor.

118. **TfNSW condition:** A Road Occupancy Licence (ROL) should be obtained from the Transport Management Centre for any works that may impact on traffic flows on Railway Parade and any traffic control signals during construction activities. A ROL can be obtained through https://myrta.com/oplinc2/pages/security/oplincLogin.jsf

119. **TfNSW condition:** Any special events held on the site including market days shall require the event organiser to undertake a Traffic and Transport Management Plan in accordance with the TfNSW Guide to Traffic and Transport Management for Special Events. A link to this Guide is provided below: https://roads-waterways.transport.nsw.gov.au/documents/business-industry/event-management-guidelines/guide-traffic-transport-management-special-events.pdf

120. **TfNSW condition:** TfNSW will provide concurrence to the proposed changes to stormwater drainage system on Railway Parade under s138 of the Roads Act, subject to the detailed design plans and hydraulic calculations of any changes to the stormwater drainage system being submitted to Council for approval as the relevant road authority.

121. **Relocation of existing 'School Zone' sign:** Approval of Burwood Council's Local Traffic Committee and/or any other relevant authority must be obtained to relocate the existing 'School Zone' sign on Railway Parade 2.2m south, and the sign must be relocated accordingly, **prior to the issue of an Occupation Certificate**.

122. Of the required car parking spaces, at least one (1) must be designed and provided for accessible car parking for people with mobility impairment in accordance with Australian Standard AS/NZS 2890.6 - 2009 Parking facilities Part 6: Off-street parking for people with disabilities. Accessible car parking spaces must have a minimum headroom of 2.5m and must be clearly marked and appropriately

located as accessible parking for people with mobility impairment.

123. **Electric vehicle charging:** The proposed three (3) electric vehicle (EV) spaces within the basement parking, shall be installed as fast charging EV spaces.

124. All loading and unloading operations associated with servicing the site must be carried out within the confines of the site, at all times and must not obstruct other properties/units or the public way.

125. At all times the service vehicle docks, car parking spaces and access driveways must be kept clear of goods and must not be used for storage purposes, including garbage storage.

126. All costs associated with the construction of any new road works including kerb and gutter, road pavement, street lighting, drainage system and footway shall be borne by the developer. The new road works must be designed and constructed in accordance with any relevant Australian Standards, Austroads Guides and RMS Technical Directions.

127. All costs associated with signposting for any kerbside parking restrictions and traffic management measures, including any relocation of parking meters, associated with the development shall be borne by the developer.

128. Should works require any of the following on public property (footpaths, roads, reserves), an application shall be submitted and approved by Council prior to the commencement of the works associated with such activity:

    i) Temporary closure of roadway/footpath;
    ii) Mobile crane or any standing plant;
    iii) Scaffolding/Hoardings (fencing on public land);
    iv) Road works including vehicle crossing/kerb & guttering, footpath, stormwater provisions etc; and
    v) Installation or replacement of private stormwater drain, utility service or water supply.

WASTE MANAGEMENT

129. All building work, construction and demolition activities are to be conducted in accordance with the approved Waste Management Plan.

130. During the Demolition/Construction phase of the development, upon disposal of any waste, the applicant is to compile and provide records of the disposal to the principal certifier, detailing the following:

- The contact details of the person(s) who removed the waste
- The waste carrier vehicle registration
- The date and time of waste collection
- A description of the waste (type of waste and estimated quantity) and whether the waste is expected to be reused, recycled or go to landfill
- The address of the disposal location(s) where the waste was taken
- The corresponding tip docket/receipt from the site(s) to which the waste is transferred, noting date and time of delivery, description (type and quantity) of waste.

Note: If waste has been removed from the site under an EPA Resource Recovery Order or Exemption, the applicant is to maintain all records in relation to that Order or Exemption and provide the records to the principal certifier and Council.

131. All waste generated by the uses in the Cultural Centre building shall be stored in the designated waste area in the basement only.

132. Garbage and recycling storage areas are to be:

a. Supplied with both hot and cold water;
b. Paved with impervious floor materials;
c. Coved at the intersection of the floor and the walls;
d. Graded and drained to a floor waste which is connected to the sewer in accordance with the requirements of Sydney Water;
e. Adequately ventilated (mechanically or naturally) so that odour emissions do not cause offensive odour as defined by the Protection of the Environment Operations Act 1997;
f. Fitted with appropriate interventions to meet fire safety standards in accordance with the Building Code of Australia; and
g. Separate bins are to be provided to ensure the separation of recyclables from the general waste stream.

133. Waste and recycling bins shall be kept in a clean and hygienic condition. Bins must not be overloaded and lids must always be closed. Bins are to be washed regularly within the garbage storage room with any waste water being discharged to the sewer by way of the grated drain.

134. Access pathways for manual wheeling bins between storage areas and the collection vehicle parking location must be free of steps.

135. Waste and recycling collections are to be carried out in a manner and at times which do not cause a noise nuisance to the immediate or nearby residents.

136. The owner/occupier of the premises is to enter an agreement with registered waste company or provider for the regular collection of all commercial waste and recyclable material generated from the site. A copy of the agreement is to be retained on site and produced to an authorized Council officer upon request.

137. Bins shall be placed within the publicly access areas of the Urban Park at appropriate locations and in accordance with the recommendations made in the Operational Waste Management Plan prepared by Elephants Foot dated 30 May 2022.

End Of Conditions

Conditions of Approval

1. The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow:

SHEET NO.	SHEET NAME	REVISION
Architectural Plans by CHROFI		
DA-001	Site Analysis	~~***B***~~ ***D***
DA-002	Site Plan	~~***B***~~ ***D***
DA-102	Ground Floor Plan	~~***D***~~ ***E***
DA-103	Lower Ground Floor Plan	~~***B***~~ ***D***
DA-104	Basement 1	~~***B***~~ ***D***
DA-105	Basement 2	D
DA-201	Elevations – Sheet 1	~~***D***~~ ***E***
DA-202	Elevations – Sheet 2	~~***D***~~ ***E***
DA-203	Elevations – Sheet 3	D
DA-301	Sections – Sheet 1	D
DA-302	Sections – Sheet 2	D
DA-303	Sections – Sheet 3	D
DA-401	GFA Diagrams	~~***B***~~ ***D***
DA-402	Signage Design Intent	B
DA-403	Materials and Finishes	D
DA-404	Shadow Diagrams	D
DA-900	3D Visualisation	D
DA-901	3D Visualisation	D
DA-902	3D Visualisation	D
DA-903	3D Visualisation	D
A-DA-904	3D Visualisation	D
A-DA-905	3D Visualisation	D
A-DA-906	3D Visualisation	D
Landscape Plans by Tyrrell Studio		
CS-L002	Legend	C
CS-L101	Demolition Plan	C
CS-L102	Tree Management Plan	~~**C**~~ **E**
CS-L110	Illustrated Landscape Plan	~~***C***~~ ***D***

CS-L111	General Arrangement Plan	~~*C*~~ **D**
CS-L120	Grading Plan	~~*C D*~~
CS-L130	Planting Schedule	~~*C E*~~
~~*LA.DD-2451*~~	~~*Planting Palette*~~	~~*Issue T01, dated 27/09/2024*~~
~~*LA.DD-3001*~~	~~*Detail Plan Library Plaza*~~	~~*Issue T01, dated 27/09/2024*~~
~~*LA.DD-3002*~~	~~*Detail Plan Garden Plaza*~~	~~*Issue T01, dated 27/09/2024*~~
~~*LA.DD-3401*~~	~~*Planting Detail Plan Library Plaza*~~	~~*Issue T01, dated 27/09/2024*~~
~~*LA.DD-3402*~~	~~*Planting Detail Plan Garden Plaza*~~	~~*Issue T01, dated 27/09/2024*~~
CS-L201	Site Sections	~~*B E*~~
CS-L202	Site Sections	~~*A D*~~
CS-L203	Site Sections	~~*A D*~~
CS-L204	Site Sections	A
CS-L300	Paving and Furniture Palette	A
CS-L301	Materials and Finishes Palette	B
CS-L302	Typical Planting Details	~~*B C*~~
CS-L303	Typical Planting, Wall, Stair Details	B
CS-L304	Indicative Views	~~*A B*~~
CS-L305	Indicative Views	~~*A B*~~
	• ~~*Landscape Plans prepared by Tyrrell*~~ • Survey Plan prepared by Higgins Surveyors • Statement of Environmental Effects prepared by Mecone • Response to RFIs letter prepared by Mecone • Access Review prepared by Morris Goding Access Consulting • Access Report prepared by Philip Chun dated 27 September 2024 • Plan of Management (undated), • Acoustic Report prepared by RWDI • Acoustic Addendum Report prepared by RWDI Australia Pty Ltd dated 25 June 2024 • Arboricultural Impact Assessment prepared by Australis Tree Management • BCA Regulatory Compliance Report prepared by McKenzie Group	

	• Carparking Compliance Assessment prepared by ptc • Carparking Letter and Plan prepared by ptc • Civil Stormwater Report and Civil Works Plans prepared by TTW • Construction and Demolition Waste Management Plan prepared by Elephants Foot • Conder St Flood Impact Assessment by TTW • CPTED Report prepared by Mecone • DCP Compliance Table prepared by Mecone • Design Excellence Responses prepared by CHROFI and Tyrrell Studio • Design Statement prepared by CHROFI and Tyrrell Studio • Detailed Site (Contamination) Investigation by Douglas Partners • Ecological Assessment prepared by SIA • ~~**ESD Report by Cundall**~~ • ***ESD Master Specification by JHA Consulting Engineers 16/08/24*** • Fire Engineer's letter by Stantec • ~~**Green Star Strategy Report by Cundall**~~ • Heritage Impact Statement by Jackson-Stepowski • Interim Audit Advice #01 by Ian Swane & Associates • NABERS Energy Guide by Cundall • Operational Management Plan by Burwood Council • Operational Waste Management Plan by Elephant's Foot • Pre-DA Response by CHROFI and Tyrrell Studio • Preliminary (Site) Contamination Investigation BY Douglas Partners • Public Art Plan by Artscape • Remediation Action Plan by Douglas Partners • ~~**Section J Report by Cundall**~~ • ***Section J Report by JHA Consulting Engineers 16/06/25*** • Services and Utilities Report by IGS • Structural DA Report by TTW • Transport, Traffic and Parking Impact Assessment prepared by Road Delay Solutions • Traffic Addendum Report prepared by ptc. dated 17 April 2024 • Wind Impact Statement prepared by RWDI • Operational Waste Management Plan prepared by Elephants Foot dated 12 May 2024 • Heritage Impact Statement prepared by Jackson-Stepowski dated 20 February 2024 • Fire Engineering Compliance Letter prepared by E-LAB Consulting, dated 23 February 2024 • BCA Compliance Letter prepared by Philip Chun dated 23 February 2024.	

(Condition amended by S.4.55(1A) DA 2022.44.4)

~~**1. The development shall be carried out in accordance with the plans and documents listed below and subject to all conditions that follow:**~~

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DA-104	Basement 1	~~***B***~~ ***D***
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DA-201	Elevations – Sheet 1	~~***D***~~ ***E***
DA-202	Elevations – Sheet 2	~~***D***~~ ***E***
DA-203	Elevations – Sheet 3	D
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CS-L111	General Arrangement Plan	~~***C***~~ **D**

CS-L120	Grading Plan	~~***C D***~~
CS-L130	Planting Schedule	~~***C E***~~
~~***LA.DD-2451***~~	~~***Planting Palette***~~	~~***Issue T01, dated 27/09/2024***~~
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CS-L203	Site Sections	~~***A D***~~
CS-L204	Site Sections	A
CS-L300	Paving and Furniture Palette	A
CS-L301	Materials and Finishes Palette	B
CS-L302	Typical Planting Details	~~***B C***~~
CS-L303	Typical Planting, Wall, Stair Details	B
CS-L304	Indicative Views	~~***A B***~~
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(Condition amended - DA 2022.44.3 10/12/2024)

2. In the event of any inconsistency between the conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

Development Not Approved

3. This development consent does not approve the following development, for which separate development consent or Complying Development Certificate (as appropriate) is to be obtained:

    a. Construction of building identification signage / business identification signage;
    b. Temporary events that require development consent (i.e. that are not exempt development or permitted without consent).

Fees

4. The fees and/or bonds shown in the Table of Fees, are to be paid to Council or another approved collection agency (the Long Service Levy Corporation and its agents and an approved insurer under the *Home Building Act 1989*) and suitable evidence of payment is to be provided to the Accredited Certifier prior to the issuing of a Construction Certificate.

TABLE OF FEES

FEES/BONDS TO BE PAID TO COUNCIL OR TO THE NOMINATED BODY PRIOR TO ISSUING A CONSTRUCTION CERTIFICATE

5. Stormwater Works bond for construction by the Applicant/Council the stormwater drainage works **$83,315** (Payment to be made to Council as a bond) to be refunded upon satisfactory completion of works.

6. Building and Construction Industry Long Service Corporation levy **$62,424** (Payment to be made to Council, the Corporation or its Agent). This is based on 0.25% of the CIV of $24,969,612.

7. Damage Deposit - security deposit against damage occurring to Council's assets (footpath, road, stormwater drainage system, kerb and gutter etc) during building work **$8,000** (Payment to be made to Council as a bond **prior to issue of a Construction Certificate and/or commencement of demolition/bulk excavation).**

NOTE: This deposit is refundable if no damage occurs.

PRIOR TO RELEASE OF CONSTRUCTION CERTIFICATE

8. A Heritage Interpretation Plan shall be submitted to Council for approval **prior to the issue of a Construction Certificate**. The Plan shall include the content of the interpretation panels/media (including written text, historic images and graphic design), dimensions of the interpretation panels, materials of all components, and their location or placement. The Plan shall be prepared having regard to relevant NSW Heritage Office guidelines. Satisfaction of this condition shall be confirmed upon written advice by Council. Council acknowledges that approved changes to the Plan may occur post the issue of the Construction Certificate.

9. A Wayfinding Strategy shall be submitted to Council's Manager City Development for approval **prior to the issue of a Construction Certificate**. The Wayfinding Strategy shall address wayfinding for both pedestrians and vehicles.

10. The recommendations of the Crime Prevention Through Environmental Design Report prepared by Mecone (undated) and submitted with DA.2021.44 must be implemented during detailed design development and construction. The applicant shall submit evidence to Council that the recommendations have been implemented **prior to the issue of an Occupation Certificate**. If, prior to the commencement of construction, amendments to the development are required, the applicant shall submit these details to Council for approval **prior to the issue of a Construction Certificate**.

11. CCTV cameras shall be installed at the building so that they can survey the pedestrian entrances and walkways, entrance to the parking levels, waste rooms, lift lobbies, retail areas, public spaces, and lifts/elevators. The CCTV system shall provide a quality image that can assist with the detection of crime and be used by the NSW Police in any investigation (preferably a quality digital system). CCTV system footage shall be retained for a period of no less than 30 days and be available upon request by the NSW Police when required. Details are to be submitted and approved **prior to the issue of a Construction Certificate**.

12. A detailed Construction Management Plan shall be submitted to and approved by the Council's Manager, City Development **prior to the issue of a Construction Certificate**. The Construction Management Plan must include the control and management methods to be implemented in addressing the following issues during the demolition, excavation and construction phases of the project:

    a. Noise and vibration control;
    b. Dust and odour suppression and control;
    c. Storm water control and discharge;
    d. Erosion control;
    e. Waste storage and recycling control;
    f. Litter control
    g. Construction material storage;
    h. Truck cleaning methods on site so as to prevent spread of soil and like materials onto Council's roadways; and
    i. Community Information program, communication procedures and feedback hotline.

13. A Construction Traffic Management Plan must be submitted to and approved by Council's Manager, City Development **prior to the commencement of demolition**

and excavation or issuing of any relevant Construction Certificate (whichever occurs first). The Construction Traffic Management Plan must be complied with at all times. The following matters should be addressed in the plan (where applicable):

a) A plan view of the entire site and frontage roadways indicating:

i) Dedicated construction truck routes to and from the site;
ii) Dedicated construction site entrances and exits, controlled by a certified traffic controller, to safely manage pedestrians and all vehicles in the frontage roadways;
iii) Turning areas within the site for construction and spoil removal vehicles, allowing a forward egress for all vehicles on the site;
iv) The proposed locations of work zones where it is not possible for loading/unloading to occur on the site in the frontage roadways (which will require separate approval by Council);
v) Location of any proposed crane and concrete pump and truck standing areas on and off the site (which will require separate approval by Council);
vi) A dedicated unloading and loading point within the site for all construction vehicles, plant and deliveries; and
vii) Traffic routes to and from the site from the closest arterial road in all directions.

b) Traffic control plan(s) for the site must be in accordance with the Roads and Maritime Services publication "Traffic Control Worksite Manual" and prepared by a suitably qualified person. The main stages of the development requiring specific construction management measures are to be identified and specific traffic control measures identified for each stage.

c) The Traffic Management Plan shall include consideration of minimizing potential traffic safety impacts on school children and parents using the nearby public school during pick up and drop off times

14. All works carried out in conjunction with the development including during the course of demolition, excavation and construction must be implemented in accordance with the approved Construction Traffic Management Plan (CTMP) and/or approved permits from Council or any other Road authority.

15. Heavy vehicles approaching, entering and exiting the site must approach, enter and exit the site in accordance with the approved route(s) as set out in the Construction Traffic Management Plan (CTMP).

16. All heavy vehicles must comply with the approved CTMP, once heavy vehicles have exited the Burwood LGA via the approved routes stated in the CTMP, only State Roads (Parramatta Road, The Boulevarde, Coronation Parade, Liverpool Road and Georges River Road) are permitted to be used on re-entry into Burwood LGA.

17. All hydrant booster pump and fire service equipment shall be provided in accordance

with the Building Code of Australia and housed within an enclosed cupboard of a design and finish that enhances the streetscape. Details of these areas and the enclosures are to be assessed by an Accredited Fire Safety Engineer and shall comply with the performance requirements of the Building Code of Australia; shown on plans and submitted to the Principal Certifying Authority for approval **prior to release of a Construction Certificate**.

18. Noise transmission and insulation ratings for building elements being in accordance with Part F5 of the Building Code of Australia. A wall in a building required to have an impact sound insulation rating to be of discontinuous construction in accordance with BCA Clause F5.3.

    Details of the method of satisfying this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

19. Detailed materials and finishes shall be submitted for approval by Council in relation to the treatment of mechanical and fire equipment where visible from a public place. The details shall demonstrate that the equipment is aesthetically treated and well-integrated into the architectural features of the building.

20. Basement Engineering Design – Structural adequacy:

c. Engineering details shall be submitted to the Accredited Certifier for approval **prior to the issuing of the relevant Construction Certificate**:

d. A report shall be prepared by a professional engineer **prior to the issuing of the relevant Construction Certificate**, detailing the proposed methods of excavation, shoring or pile construction including details of vibration emissions and detailing any possible damage which may occur to adjoining or nearby premises due to building and excavation works. Any practices or procedures specified in the Engineer's Report in relation to the avoidance or minimisation of structural damage to nearby premises, are to be fully complied with and incorporated into the plans and specifications for the Construction Certificate; and

e. A copy of the Engineer's Report is to be submitted to Council for noting only, even if the Council is not the Principal Certifying Authority.

21. **Public Art: Prior to the issue of a Construction Certificate**, a Detailed Public Art Plan for the site must be prepared by an appropriately qualified art curator/advisor/coordinator and approved by Council's Manager City Development. It must be based on the Public Art Plan prepared by Artscape dated May 2022, and must incorporate the following:

f. The provision of multiple art pieces across the site;
g. The new location for the existing public artwork within the Railway Parade road reserve, titled 'Awakenings' (if this artwork is to be relocated within the subject site);
h. The provision of public art by a range of artists including indigenous,

European and more recent migrants, with specific artists selected and a rationale for selecting those artists;

i. The proposed artworks, including their form, dimensions, materials, value, placement within the site, and timing for installation, and engineers' drawings;
j. Ongoing management and maintenance requirements; and
k. Deaccessioning agreements.

Public artwork must be installed to the Council's satisfaction **prior to the issue of any Occupation Certificate.**

22. Mechanical ventilation/air conditioning details are to be submitted to the Accredited Certifier for approval **prior to the issuing of a Construction Certificate** and must include the following:

l. The location and size of proposed ductwork;
m. The location of equipment;
n. The performance characteristics of the proposed motor/s and fan/s; and
o. The air flow characteristics of the system.
p. The operation of the plant shall satisfy Australian Standard AS 1668 "SAA Mechanical Ventilation and Air Conditioning Code", Part 1 and Part 2, Australian Standard AS 3666-1989 and the *Noise Control Act 1975* and any other relevant Australian Acoustic Standard.

At the completion of work a Certificate from an Accredited Certifier, Mechanical Engineer or other suitably qualified person, to the effect that the ventilation system has been installed and performs in accordance with the provisions of Part F4 of the Building Code of Australia, Australian Standard AS 1668 "SAA Mechanical Ventilation and Air Conditioning Code", Part 1 and Part 2, Australian Standard AS 3666-1989 and the *Noise Control Act 1975*, must be submitted to the Principal Certifying Authority **prior to the issue of an Occupation Certificate**.

23. A detailed drainage design and calculations shall be prepared by a competent practicing Hydraulic/Civil Engineer and shall provide the following:

a. The design and calculations shall indicate the details of the proposed method of stormwater disposal and shall be prepared by a competent practicing hydraulic/civil engineer in accordance with Council's Stormwater Management Code;
b. Reasonable allowance shall be made for surface runoff from adjacent properties, and to retain existing surface flow path systems through the site. Any redirection or treatment of these flows shall not adversely affect any other property;
c. Overflow paths shall be provided to allow for flows in excess of the capacity of the pipe/drainage system draining the site, as well as from any on-site stormwater detention storage;
d. plans showing proposed and existing floor, ground and pavement levels to Australian Height Datum (AHD);
e. details of pipelines/channels showing calculated flows, velocity, size, materials, grade, invert and surface levels;
f. details and dimensions of pits and drainage structures;
g. hydrologic and hydraulic calculations;

h. details of any services near to or affected by any proposed drainage line;
i. any calculations necessary to demonstrate the functioning of any proposed drainage facility is in accordance with Council's requirements; and
j. the depth and location of any existing stormwater pipeline and/or channel being connected to shall be confirmed by the applicant on site. Certification of such is to be provided to Council prior to the release of the construction certificate.

The design calculations and detailed drawings are to be approved by an Accredited Certifier - Civil Engineering **prior to the issuing of a Construction Certificate.**

24. The on-site detention (OSD) design shall address the following:

j. The storage volume (SSR) and site discharge (PSD) shall be calculated in accordance with Burwood Council Stormwater Management Code, Clause 4.7;
k. The discharge control pit (DCP) shall be provided with designed orifices to control outflows for 2, 10 and 100 year ARI. Overflow weir/pipe shall be designed and provided to cater for emergency overflow situation;
l. Adequate open grates and access shall be provided to the storage tank for cleaning and ventilation purposes. Step ladder shall be provided to the tank wall;
m. The storage shall be relatively self-cleansing; the base has to have minimum 2% fall to the outlet;
n. The invert level IL of the connecting stormwater pit shall be documented on the plan. Should the existing pit render unsuitable for pipe connection, new pit and lintel shall be built; and
o. The invert level of the tank outlet shall be above hydraulic grade line of downstream drainage system.

The revised drawing shall be approved by an Accredited Certifier - Civil Engineering, **prior to the issuing of a Construction Certificate.**

25. A flood risk management and flood emergency evacuation report together with a flood evacuation plan shall be prepared by a suitably qualified hydraulic/ civil engineer and submitted to the Accredited Certifier. Such documentation shall be submitted to the Accredited Certifier for **approval prior to release of a Construction Certificate.**

26. The basement levels of the proposed building shall be further protected considering PMF level inundation with the help of flood gate or similar devices or other mitigation measures. Detailed design of flood protection barriers/gates/mitigation measures shall be approved by the Accredited Certifier **prior to release of a Construction Certificate**. Additional sump with designed pump out system shall be provided to cater for emergency intrusion of flood water in the basement.

27. The proposed development shall not impede the natural flow path of floodwater with the use of solid wall or similar obstructing devices and shall allow overland flow to pass through. In this regard a Flood Impact Assessment Report shall be prepared by suitably qualified practicing engineer to establish the increase in 1%AEP flood level caused by the proposed development and submitted to the Accredited Certifier for approval **prior to release of a Construction Certificate.**

28. The applicant shall submit an updated Flood Impact Assessment that demonstrates compliance with Council's Stormwater Management Code, particularly clause 3.4 which states that development activities must not cause any adverse impact on adjoining or any other properties. The updated report must be submitted to and approved by the Accredited Certifier **prior to the issuing of a Construction Certificate**.

29. Structural engineer's details prepared and certified by a practicing Structural Engineer for all reinforced concrete and structural members being submitted to the Accredited Certifier for approval **prior to the issuing of a Construction Certificate**.

30. Detailed landscape plans, drawn to scale, by a landscape architect, must be submitted to and approved by the Accredited Certifier **prior to the issue of a Construction Certificate**. The plans must include:

    a. Location of proposed structures on the site including existing trees;
    b. Details of planting on slab, earthworks including mounding and retaining walls and planter boxes (if applicable);
    c. Details of soil depths and specification for landscape soil;
    d. Details of proposed tree pits/bases, including grates;
    e. Location, numbers and type of plant species, having regard to wind conditions and shade effects;
    f. Details of planting procedure and maintenance;
    g. Details of drainage and watering systems; and
    h. Details of balustrades and wind protection measures (where applicable).

31. A site-specific Landscape Management/Maintenance Plan must be submitted to and approved by the Accredited Certifier **prior to the issue of a Construction Certificate**. The Landscape Management/Maintenance Plan shall detail how all landscaped areas including turf will be maintained, particularly before, during and after high-usage events, and replaced in the event of failure.

32. **Water feature:**

    a. The water feature is to be designed in accordance with all relevant Australian Standards, and such that water shall not become stagnant. Water quality must be of a standard appropriate for its use, in accordance with the ANZECC Guidelines for Fresh and Marine Water Quality and relevant Australian Standards.

    b. Details of the water feature construction are to be submitted to the Accredited Certifier for review and approval **prior to the issue of a Construction Certificate**.

    c. **Prior to the issue of a Construction Certificate**, a management and maintenance plan for the water feature is to be submitted to Council for approval. The management and maintenance plan must include details of the operation and management of the water feature to manage noise impacts, proposed treatments for hardscape and water elements, and must clearly address maintenance, operational and cost responsibilities for the feature.as well as . The maintenance plan shall be submitted for the approval of the Manager City Development.

    d. The approved management and maintenance plan must be complied with for as long as the water feature is in place.

33. The recommendations contained in the Acoustic Assessment, by RWDI (#2203505), 30 May 2022, Version B, shall be implemented within the development and all such recommendations shall be clearly **detailed on the Construction Certificate Plans.**

34. As recommended in the Acoustic Assessment referred to above, a detailed acoustic assessment of the mechanical equipment must be undertaken **prior to the issue of a Construction Certificate** and be designed to comply with the requirements of the Noise Policy for Industry. The assessment must include mitigation measures to minimize the impacts of noise on sensitive receivers.

35. Continuous balustrades shall be provided along the side/s of any stairway or ramp, any corridor, hallway, balcony, access bridge or the like, any path of access to a building if:-

    a. It is not bounded by a wall; and
    b. The change in level is more than one (1) metre, or five (5) risers in the case of a stairway, from the floor or ground surface beneath;

except where specific exemptions are provided in the Building Code of Australia.

Balustrades shall prevent as far as practicable:

a. Children climbing over or through it; and
b. Persons accidentally falling from the floor; and
c. Objects which might strike a person at a lower level falling from the floor surface.

Balustrade heights and designs shall comply with Part D2.16 of the Building Code of Australia and Australian Standard/New Zealand Standard AS/NZS 1170 Part 1 – Structural design actions.

Details of the method of satisfying these requirements must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

36. Balcony balustrades being a minimum height of 1m. Details of the method of achieving this must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

37. Framed panels or doors enclosing or partially enclosing a shower or bath shall be glazed with "A" or "B" grade safety glazing material in accordance with Australian Standard AS 1288-2006, Table 4.5 SAA Glass Installation Code (Human Impact Considerations) and B1.4 of the Building Code of Australia. Details of the method of complying with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

38. Details of outdoor lighting must be provided to and approved by the Council's Manager, City Development **prior to the issue of a Construction Certificate**. Outdoor lighting must be in accordance with the Burwood Development Control Plan and the relevant Australian Standards. Spill light shall be minimized and shall not create a nuisance to surrounding properties.

38A. The applicant shall submit an updated Landscape Plan indicating subsoil drainage details, soil volume, strata cells and calculations relevant to the mature tree species and size prior to the issue of a Construction Certificate.

PRIOR TO RELEASE OF AN OCCUPATION CERTIFICATE

39. Prior to the issue of any Occupation Certificate, documentary evidence must be provided to the Principal Certifier to demonstrate that the four (4) allotments pertaining to Lot 15 DP 832440 (Part 2-4 Conder Street, Burwood), Lot 16 DP8324400 (Part 52-60 Railway Parade, Burwood), Part Railway Parade Road Reserve and Part Conder Street Road Reserve have been consolidated into a single allotment.

40. **Heritage Interpretation Plan:** The installation and completion of the heritage interpretation in accordance with the approved Heritage Interpretation Plan required to be submitted prior to the release of a Construction Certificate, shall be verified by an inspection by the Principal Certifier prior to the issue of any

Occupation Certificate or Interim Occupation Certificate.

41. Installation of the approved Public Art (in accordance with the Public Art Plan) shall be completed for each stage of the development in accordance with the approved PAP and verified by an inspection by the Accredited Certifier **prior to the issue of an Occupation Certificate.**

42. The building shall be sited by survey and a registered surveyor's certificate being submitted to the Accredited Certifier, **prior to the issue of an Occupation Certificate,** on completion of the building to indicate the height of the finished floor levels, the height of the roof ridge/parapet and to show boundary clearances and areas of the site occupied by the building.

43. **Wayfinding Strategy:** A vehicular wayfinding strategy (external and internal) shall be prepared in consultation with, and endorsed by Manager City Development **prior to the issue of an Occupation Certificate.**

44. **Vehicular and pedestrian access: Prior to the issue of any Occupation Certificate**, the following requirements must be met:

    a. A physical connection must be provided between the basement level 1 car park of the subject development, and the basement level 1 car park of the Burwood Place development approved under DA.2021.44.

    b. A "Right of Carriage Way" in the form of Schedule 8 of the Conveyancing Act 1919 must be registered over the site being land contained in Lot 16 DP832440 known as 52-60 Railway Parade, Burwood (servient tenement) in favour of Lot 15 DP 832440 known as 2-4 Conder Street, Burwood (dominant tenement). Such easement shall provide for members of the public generally to access by vehicle or on foot over such part or parts of the servient tenement to enable vehicles and persons on foot to have access through the car park, the aisles of the car park and access ramps to access to and from the car park on the dominant land generally as shown on the following architectural plans prepared by CHROFI and forming part of this consent: A-DA-104 Revision B (Basement 1), A-DA-105 Revision B (Basement 2), and A-DA-303 Revision B (Sections – Sheet 3).

    c. A "Right of foot way" in the form of Schedule 8 of the Conveyancing Act must be registered over the development site being land contained in Lot 16 DP832440 known as 52-60 Railway Parade, Burwood (servient tenement) in favour of Lot 15 DP 832440 known as 2-4 Conder Street, Burwood (dominant tenement). Such easement shall provide for members of the public generally to go, pass and repass on foot over the servient tenement; and

    d. Evidence of registration of both of the said easements in subclause (a) and (b) must be provided to the Council and the private certifying authority confirming registration of such easements on title to the land being the servient tenement and the dominant tenement prior to the issue of an occupation certificate on either site (whichever comes first); and

    e. Council provides to the private certifying authority for the development

written confirmation of its satisfaction with the evidence substantiating the registration of such easements on title to the dominant and servient tenements.

f. Prior to registering such easements on title drafts of the proposed easements and plans forming part of such easements must be provided to the Council for its confirmation.

45. A "Section 73 Compliance Certificate" under the *Sydney Water Act 1994* must be obtained from Sydney Water Corporation. Make early application for the certificate, as there may be water and sewer pipes to be built and this can take some time. This can also impact on other services and building, driveway or landscape design.

Application must be made through an authorised Water Servicing Coordinator. For assistance either visit www.sydneywater.com.au > Building and developing > Developing your Land > Water Servicing Coordinator or telephone 13 20 92.

The Section 73 Certificate must be submitted to the Principal Certifying Authority **prior to the issuing of the relevant Occupation Certificate**.

46. **Prior to release of the relevant Occupation Certificate for the development** the Applicant must submit a Validation Report following completion of remediation. The Validation Report must:
    (a) be prepared by a Certified Contaminated Land Consultant who is certified under one of the schemes endorsed by the NSW EPA;

    (b) be submitted to the Principal Certifying Authority for information within three months of the completion of remediation works; and

    (c) be prepared in accordance with the RAP, the NSW EPA Consultants Reporting on Contaminated Land (2020) guidelines, National Environmental Protection Measure (NEPM) 2013 and other guidelines made under the Contaminated Land Management Act 1997.

47. **Prior to release of an Occupation Certificate for the development** a NSW EPA accredited Site Auditor must be engaged to review the Validation Report, prepare Site Audit Report (SAR) and prepare Section A Site Audit Statement (SAS). The SAR and SAS must verify that the site is suitable for the intended land use and be provided to Principal Certifying Authority prior to issue of the Occupation Certificate. A copy of the SAS must also be provided to Council.

GENERAL PLANNING CONDITIONS

~~48. The development shall be operated in accordance with the Operational Management Plan for the Burwood Urban Park Arts and Cultural Centre prepared by Burwood Council and submitted with DA.2022.44, except as modified by these conditions of consent.~~

The development shall be operated in accordance with the Operational Management Plan for the Burwood Urban Park Arts and Cultural Centre prepared by Burwood Council (pages 1-12) and submitted with DA.2022.44, except as modified by these conditions of consent.

~~49. The hours of operation of the café are restricted to:~~

~~a. 7am-10pm Monday to Saturday; and~~

b. ~~8am to 10pm Sunday and public holidays~~.

The approved hours of the food and drink premises is 24 hours a day, 7 days a week.

50. All landscaping must be completed prior to the issue of an Occupation Certificate.

51. Landscaping within the site must be maintained at all times following installation, including the replacement of any plants that are dead, damaged, diseased or stolen, with like for like.

52. The recommendations of the Ecological Assessment prepared by SIA Ecological & Environmental Planning Pty Ltd dated 21 September 2022 shall be implemented in the development to minimize the impacts of removing Tree No. 3 on the Sulphur-crested cockatoo. Those recommendations state as follows:

    c. Remove Tree No.3 outside of the breeding season for this species (i.e. August to January).

    d. Engage an appropriately qualified and experienced fauna handler to be present at the time the tree is removed.

    e. Before felling the tree, tap along trunk using an excavator or loader or similar equipment to scare any birds out of the tree hollow and away from the tree. Repeat several times over an approximately 5 min period.

    f. If removing the tree in stages, branches distant from the tree hollow should be removed first. This would further scare any birds present within the hollow and give them the opportunity to vacate the tree.

    g. After the tree has been felled the fauna handler should check the tree hollow to ensure no birds are trapped or have become injured. Any birds found should be taken to WIRES for care if injured or if uninjured safely relocated to nearby habitat.

    h. Install at least 3 artificial nest boxes containing a hollow and entrance of similar size to that in Tree No.3. These should be mounted at a similar height and orientation as the existing tree hollow. Ideally, one of the artificial hollows mounted would be the existing tree hollow with a minimum of 200mm of the tree trunk above and below. The artificial nest boxes should be mounted on large established trees (e.g. at Burwood Park or similar).

~~53. **The building must be designed to achieve a minimum 5 Star Green Star rating under the Design & As Built Green Building Council of Australia Rating Tool. Prior to the issue of the relevant Construction Certificate, the Applicant shall submit details to the Certifying Authority demonstrating compliance with this requirement. Minor amendments to the detailed design required to adapt the building to achieve 5 Star Green Star certification may be submitted to and approved by the Council prior to the issue of a Construction Certificate. Any minor amendments to the detailed design must be demonstrably associated with the green star certification process.**~~

53. ***The building must be designed to achieve a minimum 4 Star Green self-certified Star rating under the Buildings v1 Green Building Council of Australia Rating Tool. Prior to the issue of the relevant Construction Certificate, the Applicant shall submit details to the Certifying Authority demonstrating compliance with this requirement. Minor amendments to the detailed design required to adapt the building to achieve 4 Star Green Star self-certification may be submitted to and approved by the Council prior to the issue of a Construction Certificate. Any minor amendments to the detailed design must be demonstrably associated with the green star self-certification process.***

(Condition amended by S.4.55(1A) DA 2022.44.4)

54. Prior to the commencement of excavation, the proposed data gap investigation outlined in Remediation Action Plan (RAP), dated 2 December 2022, prepared by Douglas Partners, must be conducted to determine the full nature and extent of the contamination and suitability of the proposed remediation approach. The results of the data gap closure investigation must be presented in a report prepared in accordance with the NSW EPA Consultants Reporting on Contaminated Land (2020) guidelines, National Environmental Protection Measure (NEPM) 2013 and other guidelines made under the Contaminated Land Management Act 1997.

55. The Remediation Action Plan (RAP), dated 2 December 2022, prepared by Douglas Partners, must be updated following results of the data gap investigation. Prior notice of Category 2 remediation work must be provided to Council at least 30 days prior to the commencement of remediation. The notice must be in accordance with Chapter 4, Clause 4.13 of State Environmental Planning Policy (Resilience and Hazards) 2021. Should any alternate remediation approach include the preparation of a Long-Term Management Plan (LTEMP), Council must be consulted as soon as possible and prior to issue of the Construction Certificate. Implementation of a strategy to 'cap and contain' contamination and implement a LTEMP will require modification of the development consent via a 4.55 Application under the EP&A Act.

56. The RAP Review Findings made by the Site Auditor Ian Swane & Associates P/L in the Interim Audit Advice #01 dated 17 December 2022 must be implemented in all new/updated documentation and/or during remediation.

57. An NSW EPA-accredited Site Auditor must be engaged to review the data gap investigation report and updated RAP. The Site Auditor must prepare an Interim

Audit Advice (IAA) letter, or a Section B Site Audit Statement (SAS) confirming the remedial strategy documented in the updated RAP is acceptable, and the site can be made suitable for the proposed development by successful implementation of the updated RAP. The IAA/SAS must be submitted to the Principal Certifying Authority for approval prior to the issuing of a Construction Certificate.

58. **Unidentified Contamination**: Any new information which comes to light during remediation, demolition or construction works which has the potential to alter previous conclusions about site contamination and remediation must be immediately notified to Council and the Principal Certifying Authority in writing. A Section 4.55 Application under the EP&A Act shall be made for any proposed works outside the scope of the approved development consent.

59. **Imported Fill Material:** Filling material must be limited to the following: 1. Virgin excavated natural material (VENM) 2. Excavated natural material (ENM) certified as such in accordance with Protection of the Environment Operations (Waste) Regulation 2014; and/or 3. Material subject to a Waste Exemption under Clause 91 and 92 Protection of the Environment Operations (Waste) Regulation 2014 and recognised by the NSW Environment Protection Authority as being “fit for purpose” with respect to the development subject of this application. Certificates proving that the material imported is ENM or VENM must be provided to the Principal Certifying Authority prior to filling. Certificates are to be provided to Council officers if and when requested. Fill imported on to the site must be compatible with the existing soil characteristic for site drainage purposes.

60. All publicly accessible elements of the development including paving, street furniture, planting, fences, kerbs and drainage must be provided to a standard not less than would be required in Council’s Public Works Elements Manual (Final Draft June 2006).

61. The use of any premises within the development that is food related shall be registered with Council and all required fees paid prior to such use commencing.

62. Natural Turf shall be used on the park areas with appropriate species selection to be used in high use areas. The natural turf shall not be replaced with artificial turf.

63. The number of seats provided within the theatrette shall be restricted to 300.

64. A portable customer service desk with a customer service representative shall be provided on site and be located in a conspicuous area near the theaterette at least one hour before each theatre show and/or event. The customer service representative shall attend to any enquiries, ticket changes, last minute ticket purchases etc.

DEMOLITION

65. Demolition of existing structures are to be carried out in accordance with the requirements of Australian Standard AS 2601 – 2001, where applicable.

66. Hours of demolition work shall be from 7:00am to 7:00pm Mondays to Fridays inclusive (during daylight savings period), 7:00am to 6:00pm Mondays to Fridays inclusive (outside daylight savings period) and from 7:00am to 4:00pm on Saturdays. No demolition work shall be carried out on Sundays or Public Holidays. The owner/builder shall be responsible for the compliance of this condition by all sub-contractors, including demolishers.

67. Access to the site is to be restricted and the site is to be secured when demolition work is not in progress or the site is otherwise occupied.

68. The demolition site is to be provided with measures to mitigate against dust nuisances arising on adjoining sites and roadways. To achieve this, a fence or barrier is to be erected around the site. The construction may be steel mesh which is covered with a suitable filtering medium or such other construction acceptable to Council. An effective program of watering the site is also required to be maintained.

69. Dilapidation surveys are to be carried out by a Practicing Structural Engineer, which is to include a full photographic record of the exterior and interior of the buildings at the applicant's/owners expense on all premises adjoining the site and the survey is to be submitted to Council and the adjoining land owners prior to the commencement of any works. A further dilapidation survey is also to be carried out and submitted to Council and the adjoining owners prior to the issuing of an Occupation Certificate. The dilapidation surveys shall be dated accordingly.

70. Prior to any demolition commencing on site a detailed demolition plan shall be submitted to Council for approval clearly indicating the method of demolition, details of protection of the public in relation to dust control, noise mitigation, sedimentation, traffic control, removal of hazardous building waste on the site, truck access and details of proposed hoardings and site fencing.

Asbestos Removal

71. A WorkCover licensed contractor must undertake removal of more than 10 square metres of any bonded asbestos. Removal of any friable asbestos must only be undertaken by a contractor that holds a current friable asbestos removal licence.

72. Removal of any asbestos must be undertaken in compliance with the requirements of SafeWork NSW. Refer to their Code of Practice "How to Safely Remove Asbestos" dated December 2022.

73. Demolition sites that involve the removal of any asbestos must display a standard commercially manufactured sign containing the words "DANGER ASBESTOS REMOVAL IN PROGRESS" measuring not less than 400mm x 300mm erected in a prominent visible location at the site to the satisfaction of Council Officers. The sign is to be erected **prior to the commencement of**

demolition works and is to remain in place until such time as all asbestos has been removed from the site to an approved waste facility. This will ensure compliance with Clause 469 of the *Work Health and Safety Regulation 2011*.

74. All asbestos waste must be stored, transported and disposed of in compliance with the Protection of the Environment Operations (Waste) Regulation 2005.

75. All asbestos laden waste must be disposed of at an approved waste disposal depot (Refer to the Office of Environment and Heritage or Waste Service NSW for details of sites).

76. All asbestos cement sheeting must be removed prior to the commencement of:

    a. Brick veneering or re-cladding of any building where the existing walls to be covered are clad with asbestos cement; OR
    b. Construction work where the new work abuts existing asbestos cement sheeting and/or where existing asbestos cement sheeting is to be altered or demolished.

BUILDING

77. Toilet facilities are to be provided, at or in the vicinity of the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided:

    c. must be a standard flushing toilet, and
    d. must be connected:
        i. to a public sewer, or
        ii. an approved chemical closet facility.

    The toilet facilities are to be completed before any other work is commenced.

78. The development must be designed and constructed to provide access to and facilities for people with a disability in accordance with the provisions of the Building Code of Australia, Disability (Access to Premises – Buildings) Standards 2010 and Australian Standards AS 1428.1:2021. If, in complying with this condition, amendments to the development are required, the design changes must be submitted to and approved by Council prior to a Construction Certificate being issued.

79. Any excavations and backfilling associated with the erection or demolition of a building shall be carried out in a safe and careful manner and in accordance with appropriate professional standards. All necessary planking and strutting shall be of sufficient strength to retain the sides of excavations. A Certificate verifying the suitability of structural details for any proposed shoring is to be submitted to the Principal Certifying Authority before excavating.

80. All excavations associated with the erection or demolition of the building are to be properly guarded and protected to prevent them from being dangerous to

life or property. The perimeter of the subject site shall be adequately fenced at all times from the commencement of any work on the site (including demolition/excavation). **All site fencing shall be subject to Council's Public Art Policy and shall be provided with Public Art in accordance with Council's Policy.**

81. If the work involved in the erection or demolition of a building:

    a. is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient;
    b. building involves the enclosure of a public place; and
    c. Work (either demolition or erection of a building) is proposed adjacent to a public foot way or area and public safety is at risk.

    A hoarding or fence must be erected between the work site and the public place. Where the height of the work is 2 storeys or greater above ground an overhead "B" Class hoarding must be provided. An application for such fencing or Hoarding shall be lodged to Council and the application approved and all necessary fees paid prior to the erection of any such hoarding or fence.

    Any site fence or hoarding shall be subject to Council's Public Art Policy and public art shall be provided to the Hoarding or Fence as required under Council's relevant policy. Any hoarding or Fence located on Councils property will require a "Works on Council's Property application to be lodged, fees paid and approved prior to the installation of any such structures.

82. Your attention is directed to the following:

WARNING

Utility Services

Before Construction – apply early as building of water and sewer services can be time consuming or may impact on other parts of your development.

Building Plan Approval

The plans approved by Council or the Principal Certifying Authority as part of the Construction Certificate for the development must also be approved by Sydney Water **prior to excavation or construction works commencing**. This allows Sydney Water to determine if sewer, water or stormwater mains or easements will be affected by any part of your development. Please go to http://www.sydneywater.com.au/tapin to apply.

83. The builder is to take all precautions to ensure footpaths and roads are kept in a safe condition and to prevent damage to Council's property. Pedestrian access across the footpath must be maintained at all times. Any damage caused will be made good by Council at Council's restoration rates, at the builder's expense.

84. No materials are to be stored on Council's roads, footpaths or parks.

85. No opening is to be made in any road or footpath, nor is any hoarding to be erected without the prior consent of Council. The builder is to obtain the relevant permit for which fees will be charged in accordance with Council's current Schedule of Fees and Charges.

86. The builder shall erect and maintain in good order all necessary hoardings, barricades and warning signs required to provide adequate public safety. Night warning lamps are to be provided where necessary. A Principal Certifying Authority sign should also be displayed in a prominent position at the front of the development site.

87. Hours of work shall be from 7:00am to 7:00pm Mondays to Fridays inclusive (during daylight savings period), 7:00am to 6:00pm Mondays to Fridays inclusive (outside daylight savings period) and from 7:00am to 4:00pm on Saturdays. No work shall be carried out on Sundays or Public Holidays. The owner/builder shall be responsible for the compliance of this condition by all sub-contractors, including demolishers.

88. When demolition of any existing building is involved, burning of any demolition materials on the site is prohibited. All waste materials to be removed from the site.

89. The approved structure shall not be used or occupied unless an Occupation Certificate (being a Final Certificate or an Interim Certificate) as referred to in section 6.4 of the *Environmental Planning & Assessment Act 1979* has been issued.

90. The building works are to be inspected **during construction** by the Accredited Certifier at the stages of construction listed in the following schedule. The Accredited Certifier must be satisfied that the construction satisfies the standards specified in the Building Code of Australia or in this approval before proceeding beyond the relevant stage of construction.

SCHEDULE OF CONSTRUCTION STAGES REQUIRING INSPECTION

- After the commencement of the excavation for, and before the placement of, the first footing;
- Prior to covering waterproofing in any wet areas, for a minimum of 10% of rooms with wet areas within a building;
- Prior to covering any stormwater drainage connections; and
- After the building work has been completed and **prior to any Occupation Certificate** being issued in relation to the building.

91. An application for a Construction Certificate is to be made to an Accredited Certifier. Council's “Construction Certificate Application” form is to be used

where application is made to Council. Copies are available upon request. A Construction Certificate must be obtained **prior to the commencement of any building work**.

92. Dial Before You Dig is a free national community service designed to prevent damage and disruption to the vast pipe and cable networks which provides Australia with the essential services we use every day – electricity, gas, communications and water.

    Before you dig call "Dial Before You Dig" on 1100 (listen to the prompts) or register on line at www.1100.com.au for underground utility services information for any excavation areas.

    The Dial Before You Dig service is also designed to protect Australia's excavators. Whether you are a backyard renovator, an individual tradesman or a professional excavator, the potential for injury, personal liability and even death exists every day. Obtaining accurate information about your work site significantly minimises these risks.

93. All building works being erected wholly within the boundaries of the property.

94. All sanitary plumbing being concealed in suitably enclosed ducts. Such ducts are to be constructed internally (i.e. not on the outside face of an external wall) and are to be adequately sound-proofed.

95. All plumbing and drainage work being carried out by licensed tradesmen and in accordance with the requirements of the Plumbing Code of Australia and regulations of Sydney Water.

96. The noise emitted by any air-conditioning equipment being (no greater than 5 dBA above background in your neighbours' homes between 10:00pm and 7:00am weekdays and 10:00pm and 8:00am on weekends and public holidays.

97. Safety glazing complying with B1.4 of the Building Code of Australia used in every glazed door or panel that is capable of being mistaken for a doorway or unimpeded path of travel. The glazing must comply with Australian Standard AS 1288–2006: Glass in Buildings - Selection and Installation. Details of the method of complying with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate.**

98. **Prior to the commencement of building work**, the following is to be carried out:

    a. Submit to Council a "Notice of Intention to Commence Building Work and Appointment of a Principal Certifying Authority" form. Council's "Notice of Intention to Commence Building Work and Appointment of a Principal Certifying Authority" form is to be used where application is made to Council.
    b. Ensure detailed plans and specifications of the building are endorsed with

a Construction Certificate by Council or an Accredited Certifier. Council's "Construction Certificate Application" form is to be used where application is made to Council. Copies are available on request.

99. The Principal Certifying Authority or Structural Engineer is to also supervise the construction. All Certificates from the supervising Structural Engineer are to be submitted to the Principal Certifying Authority before an Occupation Certificate is issued stating that all reinforced concrete and/or structural members have been erected in accordance with his/her requirements and the relevant SAA Codes.

100. All activities and works external to the site, or that affect public roads, are to be carried out in accordance with Council's Policies including but not limited to the Works on Council's Road Reserve Assets Policy, Rubbish Skips Policy, Work Zone Policy and Temporary Road Closure (Including Standing Plant) Policy.

101. A road-opening permit shall be obtained for all works carried out on public or Council controlled lands. Restoration of landscaping, roads and paths shall be carried out by Council at the applicant's expense in accordance with Council's **Schedule of Fees and Charges**. The applicant or any contractors carrying out works in public or Council controlled lands shall have public liability insurance cover to the value of $20 million, and shall provide proof of such cover to the Principal Certifier prior to carrying out the works. Please see **Burwood Council's web site** www.burwood.nsw.gov.au - Go to Rates and Payments/ Works on Council Property/ Application for Works on Council Property

102. Spoil and building materials shall not be placed, stored, thrown or caused to fall on any public roadway or footpath. Waste containers shall be placed in accordance with Council's Rubbish Skips Policy. Contact Council for a list of approved skip bin suppliers.

103. The builder is to ensure footpaths and roads affected by construction works are kept safe and prevent any damage to Council property. The builder shall erect and maintain where necessary approved hoardings, barricades, warning signs and night warning lamps to ensure public safety. Pedestrian access across the footpath must be maintained at all times.

104. The builder must ensure that the proposed building materials are suitable to resist flood water inundation. All electrical services and mechanical sensitive equipment etc. that can be damaged by flood water, shall be adequately flood proofed and/or placed above the flood planning level.

105. Temporary measures shall be provided prior to the commencement of any demolition, excavation or construction works on the site to prevent sediment and polluted waters discharging from the site. In this regard an Erosion and Sediment Control Plan (ESCP) is to be prepared by a competent practicing hydraulic/civil engineer in accordance with the publication "Managing Urban Stormwater: Soils & Construction" (Landcom, 2004) and Supplement 10 of Council's Stormwater Management Code.

106. All relevant erosion and sediment control measures identified in the ESCP must be implemented and maintained throughout the entire works period till completion. A qualified engineer shall be engaged for regular inspection, monitoring and reporting to the Principal Certifier in regard to satisfactorily functioning of sediment and erosion control system. Corrective actions must be undertaken immediately where and when necessary.

107. All demolition and excavation materials are to be removed from the site or disposed off-site using methods that comply with relevant environmental protection legislation.

108. A Fire Safety Certificate (copies available from Council) is to be given to the Principal Certifier prior to applying for an Occupation Certificate and thereafter once in every 12 month period an Annual Fire Safety Statement is to be given to Council. The certificate and statement attest to both the inspection of all essential fire safety measures by a suitably qualified person and to the regular maintenance of the fire safety measures. A copy of the Fire Safety Certificate and the Fire Safety Schedule are to be given to the Commissioner of Fire and Rescue NSW **by the building owner** and copies of these documents are to be prominently displayed in the building. Similarly copies of Annual Fire Safety Statements are also to be given to the Commissioner and displayed in the building.

(Vide clause 84 and Part 11& Division 3 of the *Environmental Planning & Assessment (Development Certification & Fire Safety Regulation 2021*)

109. Treatment for the protection of the building from subterranean termites must be carried out in accordance with Australian Standard AS 3660.1-2014 "Termite management - New building work."

If the method of protection is to be by way of a chemical barrier, it becomes the responsibility of the owner to maintain a suitable maintenance procedure in accordance with the manufacturer's requirements. Such responsibility is placed solely upon the owner.

Details showing compliance with this requirement must be noted on the plans or in the specifications **prior to the issuing of a Construction Certificate**.

After treatment the following is to be carried out:

a. A durable notice must be permanently fixed to the building in a prominent location, such as the meter box, indicating:

(i) The method of protection.
(ii) The date of installation of the system.
(iii) Where a chemical barrier is used, its life expectancy as listed on the National Registration Authority label.
(iv) The installer's or manufacturer's recommendation for the scope and frequency of future inspection for termite activity.

b. Provide the Principal Certifier with a Certificate which verifies that termite protection has been provided in accordance with Australian Standard AS 3660.1-2014. In the case of Reinforced Concrete Slab construction the Certificate is to verify that the protection incorporates both beneath slab (Part A) and slab penetrations (Part B) treatment.

110. All building work must be carried out in accordance with the provisions of the Building Code of Australia.

111. **Bulk Earthworks & Shoring**

a) No opening is to be made in any road or footpath, nor is any hoarding to be erected without the prior consent of Council. The builder is to obtain the relevant permit for which fees will be charged in accordance with Council's Schedule of Fees and Charges.

b) The builder shall erect and maintain in good order all necessary hoardings, barricades and warning signs required to provide adequate public safety. Night warning lamps are to be provided where necessary.

c) Public roads to be kept clean and free of any material which may fall from vehicles or plant. Waste containers shall be placed in accordance with Council's Code for Activities Affecting Roads and are subject to the payment of appropriate fees.

d) Heavy vehicles entering and leaving the site must only cross the footpath where it is adequately timbered and strapped. Pedestrian access across this footpath must be maintained in good order at all times during the excavation work ensuring public safety at all times.

e) The contractor shall strictly implement all erosion and sediment control (ESCP) measures prior to the commencement of excavation. Such measures shall be inspected at site by a competent practicing hydraulic/civil engineer and the PCA shall be provided with a compliance certificate that all the ESCP measures have been implemented.

f) The Applicant shall prepare detailed survey reports of all existing service authority assets in and around the site of the proposed development that may be affected in any way by the proposed excavation. Surveys should include, but not be limited to, high and low voltage electricity, water, stormwater, sewer, gas, telecommunications, street lighting and drainage assets, etc.

g) The Applicant shall liaise with all relevant service authorities (including, but not limited to electricity, water, stormwater, sewer, gas,

telecommunications, street lighting and drainage) to develop final designs that satisfy all requirements of the service authority providers in respect of protection, termination or relocation of existing assets, temporary access and future permanent access for maintenance of assets.

h) The Applicant shall prepare detailed method statements to demonstrate how the proposed excavation is to be conducted such that all relevant utility authority assets are protected and maintained throughout the construction stage of the development, or are relocated. Method statements are to be submitted to the relevant utility authorities for their written approval.

112. **Installation of Temporary Ground Anchor**

a) For installation of temporary ground anchors to shore the bulk excavation within public roads an NPER Registered Structural Engineer's certificate along with certified plans showing the details and extent of work shall be submitted to Council. The following conditions shall be addressed by the Applicant.

b) The Applicant is required to obtain a 'Temporary Ground Anchor Permit' from Council for which an 'Application for Works on Council's Property' shall be lodged with Council. Subject to the application being approved by Council, the applicant shall pay Council calculated Anchor Fees and a 'Refundable Deposit' as required under Council's 'Fees and Charges 2022 – 2023. Payment of the 'Refundable Deposit' can be made in the form of a Bank Guarantee or security bond.

NOTE: The 'Refundable Deposit' shall be released if no damage occurs.

c) The contractor shall be responsible to obtain and submit to Council a written authority from all public utility authorities that they have no objection in regards to the installation of temporary ground anchors, prior to works commencing.

d) The contractor shall be responsible to obtain permission from the owner of the land where the rock anchors are to be installed, prior to installation of anchors.

e) The contractor shall be responsible for any injury or damage either to persons or property due to the presence or failure of the supporting structure on the public way and the contractor shall indemnify the Council against all claims that may arise from the installation of the supporting structure. In this regard the contractor shall provide written evidence of public liability insurance cover to the minimum value of $20 million, with Council named in the insurance policy, prior to work commencing.

f) The anchors shall be installed in accordance with the manufacturer's instructions. The construction of ground anchors shall be of a temporary nature only and a written undertaking shall be given that the ground anchors are temporary only and shall be de-stressed after final lateral

supports are in place. The written undertaking is to be provided to Council, prior to work commencing.

g) Council may unilaterally use the damage deposit for the demolition and removal of the shoring elements constructed within the public road including the repair/reconstruction of any other associated damage to Councils infrastructure, it be necessary due to non- compliance with these conditions.

h) All shoring with the exception of the released temporary ground anchors shall be completely removed from the public road to a depth of 2.5m on completion. The void shall be backfilled by suitable materials and compacted.

i) All shoring including ground anchors are to be certified by a practicing professional structural engineer. Certification is required as follows:
    i. That the proposed shoring and anchor scheme is capable of supporting the public road, to be submitted prior to work commencing.
    ii. Certification that the shoring and anchor scheme has been adequately constructed, following installation.
    iii. Final certification that the anchors have been de-stressed following de- stressing of the anchors on completion of lateral supports. This is mandatory prior to release/refund of Anchor Bond.

j) Council's footpath and roadway are to be kept safe for the passage of motorists and pedestrians at all times. Closure of any part of the public thoroughfare shall only be carried out with the approval of Council's Traffic Engineer.

k) All stockpiled shoring materials and equipment shall be kept solely within the private property and not obstruct the footpath or roadway at any time.

l) All earth and rock anchors shall be released before the completion of building work.

113. **Water Quality Requirement:** The following stormwater quality targets for post development shall be adopted in accordance with modeling guideline developed by Sydney Metropolitan Catchment Management Authority (CMA).

- 90% reduction in the post development Average Annual Gross Pollutant load (greater than 5mm)
- 85% reduction in the post development Mean Annual Load of Total Suspended Solids (TSS)
- 65% reduction in the post development Mean Annual Load of Total Phosphorus (TP)
- 45% reduction in the post development Mean Annual Load of Total Nitrogen (TN)

Water Quality requirements should be determined by modelling of the proposed development to meet the quality targets. Computer models like MUSIC (the Model for Urban Stormwater Improvement Conceptualisation) can be used to present default and proposed water quality parameters.

114. The stormwater works on Council's roadway, the development property and connection to Council's stormwater system are to be inspected during the entire construction by a competent practicing hydraulic/civil engineer. The inspections are to be carried out at the stages of construction listed in the following schedule. A compliance Certificate verifying that the construction is in accordance with the approved design, this development consent and satisfies the relevant Australian Standard is to be submitted to the Principal Certifying Authority before proceeding beyond the relevant stage of construction.

SCHEDULE OF CONSTRUCTION STAGES REQUIRING INSPECTION

a. Following placement of pipe bedding material. Confirm trench/pipe location, adequacy of depth of cover, bedding material and depth.

b. Following joining of pipes and connection to Council's stormwater system.

c. For on-site detention systems:

   (i) Following set out of detention tank/area to confirm area and volume of storage.

   (ii) Following placement of weep-holes, orifice and/or weir flow control, outlet screen and overflow provision.

d. Following backfilling. Confirm adequacy of backfilling material and compaction.

115. Following completion of all drainage works:

a. Works-as-executed (WAE) plans, shall be prepared and signed by a registered surveyor. These plans shall include levels and location for all drainage structures and works, buildings (including floor levels) and finished ground and pavement surface levels. These plans are to be reviewed by the competent practicing hydraulic/civil engineer that inspected the works during construction.

b. The Principal Certifying Authority is to be provided with a Certificate from a competent practicing hydraulic/civil engineer. The Certificate shall state that all stormwater drainage and related work has been constructed in accordance with the approved plans and consent conditions as shown on the work-as-executed plans, prior to the issuing of Occupation Certification.

116. A Positive Covenant under section 88E of the *Conveyancing Act* shall be created on the title of the property(s) detailing the

i) *Overland surface flow path*

ii) *Finished pavement and ground levels*

iii) *Prevention of the erection of any structures or fencing*

iv) *On-site Stormwater Detention system*

v) *Pump and rising main system*

incorporated in the development. The wording of the Instrument shall include but not be limited to the following:

a. The proprietor of the property agrees to be responsible for keeping clear and the maintenance of the facilities consisting of:

   i) Overland surface flow path

   ii) Finished pavement and ground levels

   iii) Prevention of the erection of any structures or fencing

   iv) On-site Stormwater Detention system

   v) Pump and rising main system

b. The proprietor agrees to have the facilities inspected annually by a competent practicing Hydraulic/Civil Engineer.

c. The Council shall have the right to enter upon the land referred to above, at all reasonable times to inspect, construct, install, clean repair and maintain in good working order the facilities in or upon the said land; and recover the costs of any such works from the proprietor.

d. The registered proprietor shall indemnify the Council and any adjoining land owners against damage to their land arising from failure of any component of the facilities.

The applicant shall bear all costs associated with the preparation of the 88E Instrument. The wording of the Instrument shall be submitted to, and approved by Council prior to lodgment at the Land and Registry Services (LRS). Evidence that the Instrument has been registered at the LRS shall be submitted to Council, **prior to issuing of an Occupation Certificate.**

117. The pump system for the drainage of the basement areas shall satisfy the following conditions:

a. Pumps and rising mains design shall be submitted to the Principal Certifying Authority and shall satisfy the following conditions:

   (i) The holding tanks for the pump shall be capable of storing runoff from a one hour, 1 in 100 year ARI storm event.

   (ii) Every pump system shall consist of two (2) pumps, connected in parallel, with each pump being capable of emptying the holding tank at a rate equal to the lower of the allowable on site detention discharge rate, or the rate of inflow for the one hour duration storm.

   (iii) An overflow, flashing light and audible alarm are to be provided, to warn of pump failure.

(iv) Full details of the holding tank, pump type, discharge rate and the delivery line size are to be documented.

(v) Any drainage disposal to the street gutter, from a pump system must have a stilling sump provided at the property line, and connected to the street gutter by a suitable gravity line.

(vi) The capacity of the stilling sump and outlet pump shall be determined and verified by calculations which are to be documented.

b. Pumping system details shall be submitted to Council or an Accredited Certifier - Civil Engineering, **prior to the issuing of a Construction Certificate.**

118. **Public Domain Conditions**

a) Public domain improvement shall be undertaken and completed at applicant's cost encompassing entire street frontages on Railway Parade and Conder Street (only to the extent where the development fronts the relevant space), Public domain plans shall be prepared with reference to Burwood Council DCP and Public Works Element Manual.

b) Detailed public domain plans shall be prepared that extend to all frontages or works on Council land. They must be drawn at 1:100 scales, compatible for civil construction e.g. quantity surveying, tendering, supervising and quality control etc. shall be prepared and certified by a qualified civil engineer, landscape architect or urban designer and shall be submitted to and approved by Council **prior to the issue of a Construction Certificate**.

c) The plan shall incorporate sectional details, technical specifications and Council's standard drawings and specifications. Cross sectional view of the proposed works at every 5m intervals and at every critical feature like pits or conflicting services, etc. shall be provided. The cross sections should cover the features extending from the road center line on one side to the property boundary on the other side. The view should include chainage, pits/pipe invert levels, existing & proposed road infrastructures surface levels, conflicting/non-conflicting services. The proposed works should comply with Council's all Standard Drawings from BSD 01 to BDS14, revision E

d) The plan shall include all existing service authority assets on street frontage and in and around the areas as per the survey report. This should include, but not be limited to, high and low voltage electricity, water, stormwater, sewer, gas, telecommunications, street lighting and drainage assets, etc.

e) The plan shall show the entire street frontages of the properties for improvement e.g. footpath paving, kerb & gutter, pram ramps, bollards, service pits, stormwater pit & lintel including mill & re-sheeting of road pavement of the front streets.

f) The Applicant shall liaise with all relevant service authorities to satisfy all requirements of the service authority providers in respect of protection, termination or relocation of existing assets prior to construction. A written consent shall be required where a service authority asset will be affected.

TRAFFIC

119. The design, layout, signage, line marking, lighting and physical controls of all off-street parking facilities must comply with the minimum requirements of the following, where relevant:
    e. AS 2890.1 Part 1: Off-street car parking.
    f. AS 2890.2 Part 2: Off-street commercial vehicle facilities.
    g. AS 2890.3 Part 3: Bicycle parking facilities.
    h. AS 2890.6 Part 6: Off-street parking for people with disabilities.
    i. AS 1428.1: Design for access and mobility.
    j. AS 1735.12: Lifts, escalators and moving walks - Facilities for persons with disabilities.

    Any non-compliances with the relevant standards shall be approved by Council prior to the issue of a Construction Certificate.

120. **TfNSW condition: Prior to the release of any Construction Certificate**, a 138 consent under the Roads Act shall be issued by the road authority (Burwood Council) for the new building and structures (part encroachment of Community and Cultural Centre building containing Café area, turf lawn area and some lower ground building elements) within the Railway Parade corridor.

121. **TfNSW condition:** A Road Occupancy Licence (ROL) should be obtained from the Transport Management Centre for any works that may impact on traffic flows on Railway Parade and any traffic control signals during construction activities. A ROL can be obtained through https://myrta.com/oplinc2/pages/security/oplincLogin.jsf

122. **TfNSW condition:** Any special events held on the site including market days shall require the event organiser to undertake a Traffic and Transport Management Plan in accordance with the TfNSW Guide to Traffic and Transport Management for Special Events. A link to this Guide is provided below: https://roads-waterways.transport.nsw.gov.au/documents/business-industry/event-management-guidelines/guide-traffic-transport-management-special-events.pdf

123. **TfNSW condition:** TfNSW will provide concurrence to the proposed changes to stormwater drainage system on Railway Parade under s138 of the Roads Act, subject to the detailed design plans and hydraulic calculations of any changes to the stormwater drainage system being submitted to Council for approval as the relevant road authority.

124. **Relocation of existing 'School Zone' sign:** Approval of Burwood Council's Local Traffic Committee and/or any other relevant authority must be obtained to relocate the existing 'School Zone' sign on Railway Parade 2.2m south, and

the sign must be relocated accordingly, **prior to the issue of an Occupation Certificate**.

125. Of the required car parking spaces, at least one (1) must be designed and provided for accessible car parking for people with mobility impairment in accordance with Australian Standard AS/NZS 2890.6 - 2009 Parking facilities Part 6: Off-street parking for people with disabilities. Accessible car parking spaces must have a minimum headroom of 2.5m and must be clearly marked and appropriately located as accessible parking for people with mobility impairment.

126. **Electric vehicle charging:** The proposed three (3) electric vehicle (EV) spaces within the basement parking, shall be installed as fast charging EV spaces.

127. All loading and unloading operations associated with servicing the site must be carried out within the confines of the site, at all times and must not obstruct other properties/units or the public way.

128. At all times the service vehicle docks, car parking spaces and access driveways must be kept clear of goods and must not be used for storage purposes, including garbage storage.

129. All costs associated with the construction of any new road works including kerb and gutter, road pavement, street lighting, drainage system and footway shall be borne by the developer. The new road works must be designed and constructed in accordance with any relevant Australian Standards, Austroads Guides and RMS Technical Directions.

130. All costs associated with signposting for any kerbside parking restrictions and traffic management measures, including any relocation of parking meters, associated with the development shall be borne by the developer.

131. Should works require any of the following on public property (footpaths, roads, reserves), an application shall be submitted and approved by Council prior to the commencement of the works associated with such activity:

    i) Temporary closure of roadway/footpath;
    ii) Mobile crane or any standing plant;
    iii) Scaffolding/Hoardings (fencing on public land);
    iv) Road works including vehicle crossing/kerb & guttering, footpath, stormwater provisions etc; and
    v) Installation or replacement of private stormwater drain, utility service or water supply.

WASTE MANAGEMENT

132. All building work, construction and demolition activities are to be conducted in accordance with the approved Waste Management Plan.

133. During the Demolition/Construction phase of the development, upon disposal of any waste, the applicant is to compile and provide records of the disposal to the principal certifier, detailing the following:

    - The contact details of the person(s) who removed the waste
    - The waste carrier vehicle registration
    - The date and time of waste collection
    - A description of the waste (type of waste and estimated quantity) and whether the waste is expected to be reused, recycled or go to landfill
    - The address of the disposal location(s) where the waste was taken
    - The corresponding tip docket/receipt from the site(s) to which the waste is transferred, noting date and time of delivery, description (type and quantity) of waste.

    Note: If waste has been removed from the site under an EPA Resource Recovery Order or Exemption, the applicant is to maintain all records in relation to that Order or Exemption and provide the records to the principal certifier and Council.

134. All waste generated by the uses in the Cultural Centre building shall be stored in the designated waste area in the basement only.

135. Garbage and recycling storage areas are to be:

    a. Supplied with both hot and cold water;
    b. Paved with impervious floor materials;
    c. Coved at the intersection of the floor and the walls;
    d. Graded and drained to a floor waste which is connected to the sewer in accordance with the requirements of Sydney Water;
    e. Adequately ventilated (mechanically or naturally) so that odour emissions do not cause offensive odour as defined by the Protection of the Environment Operations Act 1997;
    f. Fitted with appropriate interventions to meet fire safety standards in accordance with the Building Code of Australia; and
    g. Separate bins are to be provided to ensure the separation of recyclables from the general waste stream.

136. Waste and recycling bins shall be kept in a clean and hygienic condition. Bins must not be overloaded and lids must always be closed. Bins are to be washed regularly within the garbage storage room with any waste water being discharged to the sewer by way of the grated drain.

137. Access pathways for manual wheeling bins between storage areas and the collection vehicle parking location must be free of steps.

138. Waste and recycling collections are to be carried out in a manner and at times

which do not cause a noise nuisance to the immediate or nearby residents.

139. The owner/occupier of the premises is to enter an agreement with registered waste company or provider for the regular collection of all commercial waste and recyclable material generated from the site. A copy of the agreement is to be retained on site and produced to an authorized Council officer upon request.

140. Bins shall be placed within the publicly access areas of the Urban Park at appropriate locations and in accordance with the recommendations made in the Operational Waste Management Plan prepared by Elephants Foot dated 30 May 2022.

AUSGRID REQUIREMENTS

140. The developer shall comply with all requirements stipulated in the Ausgrid referral letter (undated) submitted for this Application (attached to this Consent).

End of Conditions