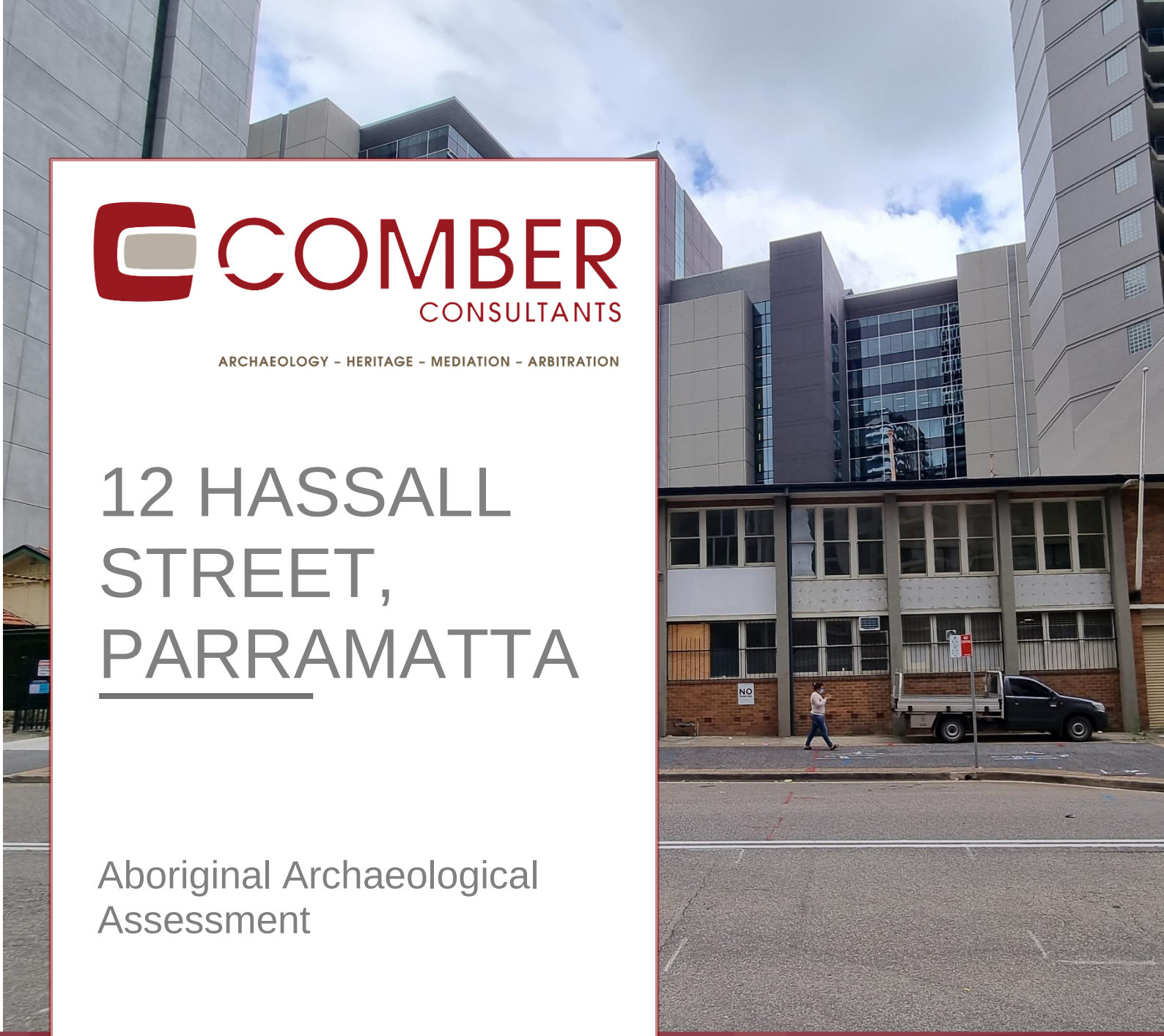

COMBER CONSULTANTS

ARCHAEOLOGY – HERITAGE – MEDIATION – ARBITRATION

# 12 HASSALL STREET, PARRAMATTA

## Aboriginal Archaeological Assessment

April **2022**

**Report to:** **GQ Hassall Street Pty Ltd**

**LGA:** **City of Parramatta council**

**Version:** **C.2022**

ABN 96 109 670 573 | 76 EDWIN STREET NORTH | CROYDON, NSW, 2132 | T 02 9799 6000 | F 02 9799 6011 www.comber.net.au

# ACKNOWLEDGEMENT OF COUNTRY

We acknowledge the Traditional Custodians of the land that we live and work on.

We pay our respects to the Elders, past, present and emerging, for they hold the memories, the traditions, the culture and hopes of Aboriginal people.

We honour and acknowledge the stories, traditions and living cultures of Aboriginal and Torres Strait Islander peoples on this land and commit to building a brighter future together.

A better understanding and respect for Aboriginal and Torres Strait Islander cultures develops an enriched appreciation of Australia's cultural heritage and can lead to reconciliation. This is essential to the maturity of Australia as a nation and fundamental to the development of an Australian identity.

# DOCUMENT CONTROL

**PROJECT NO:** GQ423 **STATUS:** FINAL

| Rev | DATE | Prepared by | Edited by | Approved By |
|---|---|---|---|---|
| A | 30/03/2022 | Dr Jillian Comber<br><br>The history contained in section 4 of this report was written by Caroline Plim, Historian | David Nutley | Dr Jillian Comber |
| B | 08/04/2022 | Dr Jillian Comber | David Nutley | Dr Jillian Comber |
| C | 22/04/2022 | Dr Jillian Comber | David Nutley | Dr Jillian Comber |

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# EXECUTIVE SUMMARY

GQ Hassall Street Pty Ltd proposes the redevelopment of 12 Hassall Street, Parramatta. The Proposal includes demolishing existing buildings and erecting a 61 storey mixed use commercial and residential tower with basement parking.

To ensure that the Aboriginal archaeology and cultural heritage is not adversely impact upon by the proposal Comber Consultants was commissioned to undertake this Aboriginal archaeological and cultural heritage assessment. This report was prepared in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.*

The Planning Secretary's Environmental Assessment Requirements (SEARS), SSD-35609161, were issued on 28th January 2022.

This assessment has determined that the study area contains Aboriginal archaeological and cultural heritage significance and has the potential to contain subsurface Aboriginal archaeological deposits. The evidence also indicates that it is highly likely that such deposits will contain contact archaeology, and possibly evidence of occupation during the period of the Native Conferences. Therefore it will be necessary to undertake archaeological testing and salvage prior to the redevelopment of the site.

This report makes the following recommendations:

**Recommendation 1**: Aboriginal Consultation
Aboriginal community consultation in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* should be undertaken. An Aboriginal Cultural Heritage Assessment Report (ACHAR) will need to be prepared which details the results of the consultation and the archaeological assessment. This archaeological report will need to be appended to the ACHAR.

**Recommendation 2: Test and Salvage Excavations**
As subsurface Aboriginal objects are predicted to exist within the study area, and it is an offence to harm such objects, test and salvage excavation should be undertaken. As SEARS have been issued it will not be necessary to apply for an Aboriginal Heritage Impact Permit.

**Recommendation 3**: Induction
An Aboriginal heritage induction should be provided to all employees, contractors and contractors engaged on the project on the significance of the Aboriginal heritage, that it an offence to harm Aboriginal objects and be advised of their responsibilities under the National Parks and Wildlife Act 1974 in respect of Aboriginal heritage.

**Recommendation 4**: Unexpected Finds and Human Remains Procedure
Aboriginal Objects: If any Aboriginal objects are unexpectedly uncovered during the redevelopment of the site, all work must cease in the vicinity of the object and an area of at least one metre around the Aboriginal objected secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted for further advice. The consultant will assess the object and provide further advice. In addition, the consultant will liaise with the Registered Aboriginal Parties. No-one should enter the secured area and work can only recommence when advised by the consultant.

Human Remains: If any skeletal remains are uncovered during the redevelopment of the site, all work must cease in the vicinity of the human skeletal remains and an area of at least one metre around the skeletal remains secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted and must attend immediately. The consultant will inspect the skeletal remains to confirm that they are human. If the remains are human, the consultant will contact and liaise with the Police, Heritage NSW and the Registered Aboriginal Parties, all of whom will most likely attend the site. Work will not be able to recommence within the secured area until suitable management procedures are in place. It could take several months to determine an appropriate course of action

# 1 INTRODUCTION

## 1.1. Background

GQ Hassall Street Pty Ltd propose the redevelopment of 12 Hassall Street, Parramatta. The development includes demolition of the existing buildings on the site and construction of a 61 storey mixed use building with five levels of basement parking.

To ensure that the Aboriginal archaeology and cultural heritage of the site is not adversely impact upon by the proposal Comber Consultants was commissioned to undertake this Aboriginal archaeological assessment. This report was prepared in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW.*

## 1.2. Location and Description

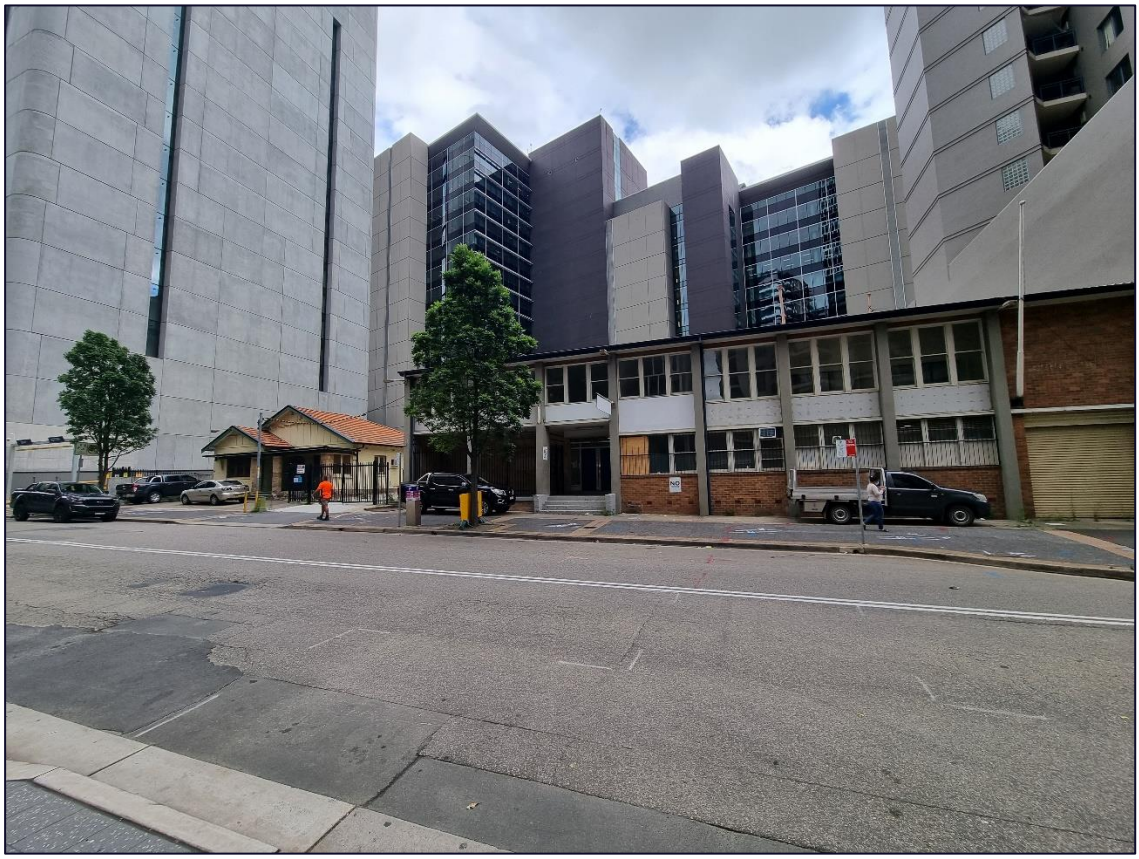
The site is located at 12 Hassall Street, Parramatta within the Local Government Area of the City of Parramatta and is known as Lot 156, DP 1240854. The subject site is located on the northern side of Hassall Street, within a rapidly developing area of Parramatta. The site is bound by land zoned B3 Commercial Core to it's northern, eastern and western boundaries, providing a range of mixed use developments, high rise office developments and educational facilities, including the new education and innovation hub by Western Sydney University at 6 Hassall Street. The site has an area of 2,055m$^2$ as shown in table 1 below. Figure 1 shows the location of Parramatta and Photographs 1 and 2 shows the study area.

**Table 1: Boundary Dimensions**

| Boundary | Distance (m) |
|---|---|
| North | 49.82m |
| East | 41.465m |
| South | 49.81m (Hassall St) |
| West | 40.81m |

**Figure 1:** Parramatta indicated by arrow.

**Photograph 1:** Study area edged in yellow



**Photograph 2**: The study area

# 2 METHODOLOGY

This project was conducted in three stages, being background research, field survey and report preparation, as detailed below.

**Stage 1: Background Research**

Prior to the field component of this project, the Aboriginal Heritage Information Management System (AHIMS) was searched on 20th December 2021. A copy of the extensive search is attached at Appendix A. Site data, associated documents and archaeological survey reports held by AHIMS database were reviewed. Environmental information relating to Aboriginal land use was also researched. Such research facilitated an understanding of the potential nature of sites and site patterning in the region, which enabled a predictive statement to be made. It also provided an archaeological and environmental context within which a significance assessment could be made, if any Aboriginal sites were located during the field survey.

**Stage 2: Site Inspection**

The archaeological site inspection was undertaken on 23rd February by Rivers McEwen of Comber Consultants. The whole of the study area was inspected on foot.

**Stage 3: Report Preparation**

Further archaeological research was conducted, where necessary, to clarify the results of the survey and this report prepared.

# 3 LEGISLATION

## 3.1. National Parks & Wildlife Act 1974

The *National Parks & Wildlife Act 1974* (NPW Act) provides statutory protection to all Aboriginal sites within New South Wales. Heritage NSW is the State Government agency responsible for the implementation and management of this Act.

Part 6 of the NPW Act provides for protection of all "Aboriginal objects" which are defined as:

"Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction and includes Aboriginal remains".

Part 6 of the Act states that it is an offence to harm or desecrate an Aboriginal object or Aboriginal place, without an Aboriginal Heritage Impact Permit (AHIP).

Subsurface archaeological deposits ("objects") are predicted to exist within the study area which will be disturbed during the course of the development. The evidence also indicates that it is highly likely that such deposits will contain contact archaeology, and possibly evidence of occupation during the period of the Native Conferences. Therefore, it will be necessary to undertake Aboriginal archaeological testing prior to the development.

Prior to undertaking the testing, Aboriginal community consultation must be undertaken in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010*. Such consultation can take up to four months.

As this is a State Significant Development it will not be necessary to apply for an AHIP to undertake the testing and salvage.

## 3.2. Heritage Act 1977

State Heritage Register
s31 of the *NSW Heritage Act 1977* provides for the establishment and maintenance of the State Heritage Register by the Heritage Council. s32 allows the Minister to direct the listing of an item which is of State heritage significance and sets out the procedure for listing an item. Aboriginal places can be listed on the State Heritage Register (SHR) if they are of State heritage significance. Such places can include Mission sites and cemeteries.

The study area is not listed on the State Heritage Register.

## 3.3. Environmental Planning & Assessment Act 1979

This project is being undertaken as a State Significant Development under Part 4, Division 4.7 of the *Environmental Planning & Assessment Act 1979* (EPA Act). Section 4.41 of the EPA Act (see below) does not require that a State significant development seek approval under the NPW Act as follows:

4.41 **Approvals etc legislation that does not apply**
(cf previous s 89J)
(1) The following authorisations are not required for State significant development that is authorised by a development consent granted after the commencement of this Division (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply)—
- (a) (Repealed)
- (b) a permit under section 201, 205 or 219 of the *Fisheries Management Act 1994*,
- (c) an approval under Part 4, or an excavation permit under section 139, of the *Heritage Act 1977*,
- (d) an Aboriginal heritage impact permit under section 90 of the *National Parks and Wildlife Act 1974*,
- (e) (Repealed)
- (f) a bush fire safety authority under section 100B of the *Rural Fires Act 1997*,
- (g) a water use approval under section 89, a water management work approval under section 90 or an

activity approval (other than an aquifer interference approval) under section 91 of the *Water Management Act 2000*.

(2) Division 8 of Part 6 of the *Heritage Act 1977* does not apply to prevent or interfere with the carrying out of State significant development that is authorised by a development consent granted after the commencement of this Division.

(3) A reference in this section to State significant development that is authorised by a development consent granted after the commencement of this Division includes a reference to any investigative or other activities that are required to be carried out for the purpose of complying with any environmental assessment requirements under this Part in connection with a development application for any such development.

The Planning Secretary's Environmental Assessment Requirements, Build-to-rent-housing, SSD-35609161 dated 28th January 2022, require the following:

"19. Aboriginal Cultural Heritage

- Provide an Aboriginal Cultural Heritage Assessment Report prepared in accordance with relevant guidelines, identifying, describing and assessing any impacts for any Aboriginal cultural heritage values on the site".

This report satisfies the requirement to address Aboriginal cultural heritage issues in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* and will consider the impact upon cultural heritage values of the project. This report will be appended to the Aboriginal Cultural Heritage Assessment Report.

# 4 ABORIGINAL HISTORY

## 4.1. Darug

The Darug people are the traditional owners of the main east-west ridge of the Blue Mountains, the northern Blue Mountains and the Cumberland Plain in which the study area is located (Tindale 1974; Attenbrow 2003).

Research by R.H. Mathews, a pioneer linguist and anthropologist, in the early twentieth-century revealed that the Darug (or 'Dharruk' people as he referred to them) inhabited an area adjoining the 'Thurawal' (Dharawal) to the south and Gundungurra and Wiradjuri to the west. Their territory extended along the coast to the Hawkesbury River and inland to Windsor, Penrith and Campbelltown; then from the mouth of the Hawkesbury River to Mount Victoria (Mathews 1901a: 140; Mathews 1901b:155). Archaeological and historical records examined in *Sydney's Aboriginal Past* identify three distinct groups – the coastal, hinterland and mountain Darug (Attenbrow 2003:23).

## 4.2. The Burramatta

Aboriginal people have occupied the valley extending from Prospect to the coastline for at least twenty thousand years. One or possibly two clans occupied the land around the banks of the Parramatta River at the headwaters of Sydney Harbour (Kass, Liston & McClymont 1996: 4). The surrounding area was reasonably fertile and, with the resources of the river, was able to support their living needs. Anthropological studies indicate that clan sizes varied widely, consisting of between thirty to sixty people who moved through their territory using seasonal routes to access food, shelter and other resources necessary for survival as well as ceremonial sites. Generally, people camped, travelled, foraged, fished and hunted in smaller, extended family groups, coming together at times with the larger group for ceremonies and ritual combats (Attenbrow 2003: 29).

The people living at the head of the Parramatta River were a clan of the Darug, known as the *Burramatta*, *Burramattagal* (sometimes written as *Boromedegal*) *or Burramattagalleon* clan. The word *burra* means eel whilst the word *matta* means creek or river and described the name of the country. The suffix "-gal" (man) or "-galleon" (woman) was added to describe a man or woman from Burramatta. (Phillip 13 Feb 1790 in HRA 1(1) cited in Attenbrow 2003; Attenbrow 2003:22-24; Kass et al. 1996:6).

Initially Parramatta was named Rose Hill, with the name "Parramatta" being formally adopted in 1792. It was a derivation of the Aboriginal name for *Burramatta* or *Boromedegal* clan (various spellings), recorded as originally inhabiting this location (Attenbrow 2003: 24; Phillip 13 Feb 1790 in HRA I (I): 155-61; Kass 1996: 6). Aboriginal groups habitually seen near a particular place became known by early colonists by those place names, often arbitrarily. Sometimes a British place name was used but at other times an Aboriginal name (or approximation) such as 'Parramatta' or '*Burramatta'* was adopted (Attenbrow 2003: 30). The Parramatta district is thought to be a linguistic and economic boundary between the coastal and inland Darug people. Although opinions differ, linguists believe that a dialect of the Darug coastal language was spoken from the Sydney peninsula as far west as Parramatta, while a hinterland dialect was spoken from Parramatta to the north, west and south (Arthur Capell 1970 cited in Attenbrow 2003: 33).

## 4.3. Other Sydney Clans

The earliest colonial records of the Aboriginal people encountered at Port Jackson generally refer to 'tribes'. In modern anthropological terms however, it is more likely that many of the communities they referred to were local or territorial clans. Groups that they saw hunting, fishing or gathering together were not all from the same clan (though they might have been related by marriage) but were bands or communities sharing the same land (Attenbrow 2003: 22).

Late eighteenth-century observers recorded descriptions of groups of Port Jackson Aborigines at this time. In 1798 David Collins noted that:

> *...each family has a particular place of residence from which is derived its distinguishing name. This is formed by adding the monosyllable Gal to the name of the place: thus the southern shore of Botany Bay is called Gwea, and the people who inhabit style themselves Gweagal* (Collins 1798 cited in Attenbrow 2003: 22).

Governor Arthur Phillip was one of the earliest Europeans to see what is now known as the Parramatta district and wrote that:

> *...the south side of the harbour from the above side of the cove to Rose Hill, which the natives call Parramatta, the district is call Wann, and the tribe Wangal* (Phillip 1790 cited in Attenbrow 2003: 22).

Watkin Tench also recorded the name 'Parramàtta' linking it to the place at the head of today's Parramatta River (Tench 1793 cited in Attenbrow 2003: 22). The township established in the vicinity of Rose Hill was based on its traditional name, 'Parramatta'. The name was also generally applied to the surrounding district.

Governor Phillip Gidley King made observations about the extent of Aboriginal territories to the west of Port Jackson, noting Aboriginal place names. He wrote that:

> *...the tribe of Cadi inhabit the south side, extending from the south head to Long Cove; at which place the district of Wanne, and the tribe of Wangal, commences, extending as far as Par-ra-mata, or Rose Hill... I have already observed that the space between Rose-Hill and Prospect-Hill is distinguished by eight different names, although the distance is only four miles* (King 1793 cited in Attenbrow 2003: 22).

Places linked to the Rose Hill/Parramatta area were Wau-maille/Warmul, Malgray-matta/Mal-gra-mattar, Era-worong/A-rar-woo-rung, Carra-matta/Car-rar-mattar, Bool-bane-matta/Bul-barn-mattar, Carro-wotong/Kar-rar-wotong, Mar-ron/Mararong and Arrowanelly (alternative spellings were given). It is thought that the name Mararong was associated with the Prospect Hill area; the word War-mul referred to the place inhabited by the Cannemegal; and Arrowanelly is linked to a place named 'Island at the Flats' associated with the Bediagal (Attenbrow 2003: 22). The name Warmul is shown as Weymaly in nineteenth-century Blanket Returns. As a result of the displacement resulting from European colonisation and settlement it is likely that Aboriginal people from these locations were forced into neighbouring areas. The general location of some of these communities, as well as the language and clan groups around Port Jackson, is shown in Figure 2 below. The Burramattagal/Boromedegal lived in the vicinity of Rose Hill and present day Parramatta.

Documentary sources provide little detailed information about the boundaries of the traditional 'country' with which Sydney Aboriginal clans identified. Due to variances in spelling used by the authors of the various records, it is difficult to ascertain the number of clans. It is quite likely that some were not recorded (Attenbrow 2003: 28-29

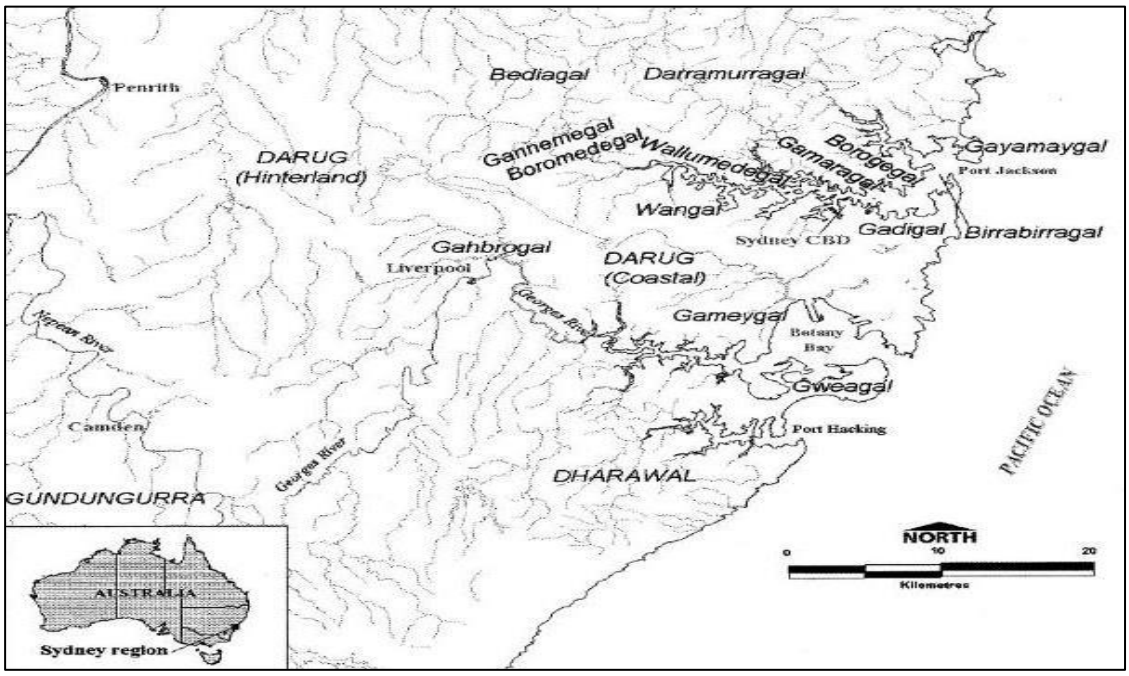



**Figure 2**: Map showing the territory associated with the Darug. Parramatta is thought to be the western extremity of the territory of the Coastal Darug and the traditional land of the Boromedegal/Burramatta clan of the Darug. The boundary between the adjacent language groups or dialects is not able to be identified precisely (Attenbrow 2003: 23).

## 4.4. Language and Dialects

Although attempts were made by British colonists to learn and record local languages and dialects and where they were spoken, methods were not systematic and some went unrecorded. British colonists observed variations in the Darug language on the Cumberland Plain but the variants were not systematically recorded. Watkin Tench (c.1758-1833), a naval officer noted that people spoke 'different dialects of the same language; many of the most common and necessary words, used in life, bearing no similitude, and others being slightly different'. It was observed that although individuals from the coast and from the Hawkesbury were using different dialects to converse, they understood each other without difficulty (Tench 1793: 122 in Fitzhardinge 1979: 230). Tench was bemused by the variance in the languages considering the geographical proximity of the places, noting that 'these diversities arise from want of intercourse with the people on the coast, can hardly be imagined, as distance inland is but thirty-eight miles; and from Rose Hill not more than twenty, where the dialect of the sea coast is spoken' (Tench 1793: 122 in Fitzhardinge 1979: 231).

William Dawes (1762-1836), David Collins (1756-1810) and Governor Phillip Gidley King (1758-1808) made lists of words spoken by the coastal people (Attenbrow 2003:31). Dawes, a naval officer and scientist recorded details about pronunciation, verb tenses and sentence construction. A significant characteristic of the Aboriginal language recorded in eighteenth-century colonial records is the use of the suffix '-gal' (man) or '-galleon' (woman). In some areas the suffix was added to a word descriptive of the country in which the community lived. (Phillip 13 Feb 1790 in Attenbrow 2003:22). For example, Burramattagal describes a man from Burramatta or Burramatagalleon describes a woman from Burramatta. The names of some groups of the Sydney region are associated with a local animal food source. For example, the word *Burramatta* (linked with the Parramatta district) is derived from *burra* meaning eel, *matta* meaning river (Attenbrow 2003: 28).

It was not until the late nineteenth and early twentieth-century that more methodical attempts to record Aboriginal languages were made by individuals such as R.H. Mathews, an anthropologist and linguist. By this time however there were few fluent speakers of the languages and dialects spoken in Sydney (Attenbrow 2003: 31-32). Despite the small number of informants available Mathews mapped new boundary alignments based on his research concluding that:

> *...a dialect of the Darug language, which was spoken on the Cumberland Plain and to the west of the Lane Cove River, was spoken on the "Sydney Peninsula" – an area he described as "extending between the south shore of Port Jackson and the north shore of Botany Bay and as far inland as Rosehill (Parramatta district)"* (Attenbrow 2003: 33).

Since the 1970s anthropologists and archaeologists have presented new theories about the boundaries of linguistic and tribal groups in and around the Sydney Basin, and debate on the subject continues. The extent of the Darug languages and dialects spoken in the Sydney region as summarised by Attenbrow in *Sydney's Aboriginal Past* is shown in Table 2 below (2003: 34).

| Language/dialect | Boundaries |
|---|---|
| Darug, coastal dialect/s | The Sydney Peninsula (north of Botany Bay, south of Port Jackson, west to **Parramatta**), as well as the country to the north of Port Jackson, possibly as far as Broken Bay |
| Darug, hinterland dialect | The Cumberland Plain from Appin in the south to the Hawkesbury River in the north; west of the Georges River, **Parramatta**, the Lane Cove River and Berowra Creek |

**Table 2**: Map showing the extent of the Darug language in the Sydney Region (Attenbrow 2003: 34)

It is essential to emphasise that due to the dearth of historical documentation and the imprecise nature of boundaries between language groups, any language or dialect boundaries mapped today are only indicative (Attenbrow 2003: 35). Further information on the Darug language including word lists and places names can be found in Val Attenbrow's *Sydney's Aboriginal Past: investigating the archaeological and historical records* (2003) and in J.L. Kohen's *Daruganora: Darug Country - the place and people* (Revised Edition) (2009).

## 4.5. Food and Subsistence

The land around the head of the river provided the Burramatta clan with diverse plant and animal resources. The saltwater river and fresh water streams provided a rich environment where fish, turtles, crays, shellfish and molluscs could be caught or collected. Like other clans living along the river, the Burramatta people made canoes from which to fish or for transport (Kass *et al* 1996: 6). The shallow-draught, water craft made of bark and two to three metres in length were skilfully manoeuvred around the river. Bangalay (*Eucalyptus botryoides*) and species of Stringybark (*Eucalyptus agglomerata*) are thought to have been used for canoe construction (Turbet 1989:50). Colonial observers noted that coastal Aboriginal people obtained bark for canoes during excursions to Parramatta (Collins 1798: Vol 1 App 6). The large River Oak or *C. cunninghamiana* growing on the freshwater reaches of the rivers might have been used on both the coast and inland (Attenbrow 2003:112). Trees in Parramatta Park bear scars where bark was removed for making canoes.

The ample fresh water sources attracted native animals which were hunted or trapped. The hunting of tree-dwellers such as possums and gliders is thought to have been a common activity. Kangaroo and wallaby were hunted less often and most likely when several clans came together for ceremonies (Brook & Kohen 1991:3-4). Aboriginal people of the district used traps and snares to catch animals to eat. In 1789 on a journey between Rose Hill and the Nepean, observations were made that traps were used to catch ducks which were plentiful and snares were used to catch "opossums" and other tree and small ground dwelling animals (Bradley c.1802, SLNSW Manuscripts, Electronic transcript, p.166).

Other food resources included bull ants and the eggs and larvae of the longicorn beetle or witchetty grub (Kass *et al* 1996:6). Seasonal plant foods including fruits, tubers, shoots, flowers, berries, seeds and nectar of local trees, and grasses were also prominent in the diet. Food collection required a detailed knowledge of each plant's properties as well as of the local environment, seasonal variations and preparation methods. Macrozamia for example is poisonous unless prepared in a particular way. Plants also provided ingredients for medicinal preparations (Brook & Kohen 1991: 5). Observations made by Francis Barrallier (1773-1853) during exploration in 1802 revealed that the Parramatta people's customs relating to food and hunting were similar to those of those practised between Nattai and the lower Wollondilly. The local environment was also the source of raw materials for tool and weapon-making, clothing and shelter (Attenbrow 2003:71).

Aboriginal people relied on an extensive knowledge of their land and its resources and the acquisition of diverse skills essential to their survival in an environment that could be unpredictable. By 1814 it was increasingly difficult for Aboriginal people to catch or procure food using traditional methods. Similarly, food-gathering patterns were altered by the lack of access to their traditional lands, which were now farmed by the new settlers. Limited opportunities were offered by Europeans willing to barter spirits and tobacco, and even food, for fish (Barratt 1981:71-2).

A report in the *Sydney Gazette* published after the first Aboriginal Conference (see below for details of the "Aboriginal Conference") held at Parramatta and the proposed establishment of a "Native Institution" outlined the problems facing Aboriginal communities who tried to maintain a traditional way-of life in the face of rapidly expanding settlements.

> *... when the weather is cold, the woods afford them little or no food, and they become a prey to many loathsome diseases which poverty entails upon the human frame. The kangaroo has almost disappeared about the Settlements; the opossum, long substituted as their chief dependence, has at length become as scarce; the roots of the earth are by nature too sparingly administered to constitute anything like a dependence to them; and the tribes of each district dare not incroach (sic) upon any other, In the summer those of the coast subsist by fishing; but in the winter, only for the occasional aid they derive from us, their situation would be equally miserable: -And whence have those evils originated, but in the clearing of the immense forests which formerly abounded in the wild animals they lived upon? This admission certainly gives them a claim upon the consideration of the British Settler; and we cannot imagine for a moment, that anyone who bears that character will withhold any means that may fall within his power of forwarding the benevolent views of the Native Institution* (*Sydney Gazette* 31 Dec 1814: 2).

## 4.6. European Occupation

After British settlement Aboriginal communities were dislocated with experiences varying widely. It was not long after settlement at Port Jackson in January 1788 that Governor Phillip began to search for arable land. An expedition led by Governor Phillip set out on 22 April 1788 venturing up the harbour to Duck River. They then continued on foot following the upper part of the Parramatta River on its south bank. On the 24 April the party continued along the river through

land that was 'fine open country, having very little timber, and being perfectly free from underwood' (Kass *et al* 1996: 11-12; HRA I (I):74, 97). The party reached a point at which the 'tide ceased to flow' and where they were 'stopped by large broad stones over which a fresh water stream ran'. A little to the west they reached a billabong skirted by a raised area of land that Phillip named "The Crescent". From this vantage point thousands of acres of what appeared to be arable land could be seen. The party continued on to Prospect Hill or Bellevue as Phillip named it. They did not encounter Aboriginal people. However, traces of Aboriginal campsites, hearths and traps were observed and their presence in the surrounding bush was felt (Kass *et al* 1996: 11-12).

Surveys of the area by the explorers revealed little about the Burramatta clan who possibly chose to observe the intruders more closely until their intentions were known. In investigating the land around the head of the river Lieutenant William Bradley recorded in his journal that his party:

> *... went up the Harbour to the lake or creek~~ing~~ running to the NW above the flats, we went about 3 Miles up; to a very fine run of water, the Country on both sides pleasant & the ground apparently fit for opening with far less trouble than any in the other parts of the Harbour & the Soil good; a little above the part where the fresh water meets the tide is the place supposed would produce slate, but had been found on examination not fit for working: We tried it as Coal without success: found a great number of Cranes & other Birds about & above the flats, all very shy* (Bradley c.1802: 106).

It is thought that Bradley and his party reached a location between present day Lennox Bridge and the wharf without reporting any encounters with the land's traditional owners who might have hoped that these strangers would not return (Campbell 1927: 354).

Plans for a new settlement at the head of the river were made and, as recorded by Watkin Tench, 'named by the Governor Rose Hill, 16 miles inland, (it) was established on the 3d November (1788), the soil here being judged better than that around Sydney'. Fears of retaliation from the Aboriginal inhabitants were expressed and "a small redoubt was thrown up, and a captain's detachment posted in it (in the area now known as "Parramatta Park") to protect the convicts who were employed to cultivate the ground" (Tench cited in Flannery 1996:92). However, attacks did not occur.

The settlement's establishment is well-documented and focuses mainly on what must have appeared to the traditional owners as the reckless destruction of their homeland, history and, most critically, their means of survival. In February 1790 Despatches record that the Captain's guard at Rose Hill was reduced and that 'there is nothing to be apprehended from the natives' (HRA I/I: 143). The clearing and development of the area was swift and by 16 November 1790, Tench estimated that 200 acres (80.94 ha) had been cleared and some cultivated. Seeing the landscape through European eyes he described the gently rolling 'hill and dale' as 'grand and capacious' (Tench 1793 in Fitzhardinge 1979:193, 195) and the field nearby was soon to be the location of a planned township for the agricultural settlement. By March of the following year the area of land cleared had doubled and whatever was not cultivated was thinned of trees to be used for grazing (Bradley c.1802:232; Collins 1798:Vol 1, Ch 15).

Watkin Tench is one of few diarists who recorded the reaction of the Burramatta clan to the colonist's occupation of their territory. On the 14 September 1790 while travelling in Port Jackson or on the Parramatta River he reported meeting 'two Indians' in a boat. After discussing the wounding of the Governor 'they said they are inhabitants of Rose Hill, and expressed great dissatisfaction at the number of white men who had settled in their former territories. In consequence of which declaration, the detachment at that post was reinforced on the following day' (Tench 1793: Ch 8 cited in Flannery 1996:140).

Specific information about the Burramatta clan or impact of settlement does not appear to have been recorded by the settlers. It is not known why there is little record of the Burramatta at or around Rose Hill at this time. They might have avoided the immediate area to avoid confrontation until they knew more about the intentions of the intruders. Clearly within a short period of time much of their country was changed beyond recognition. Except for the river and its resources, the environment at Rose Hill and the plant and animal resources it once supported was substantially altered. In order to survive, the Burramatta clan had little option but to move further afield to places where they could sustain themselves, providing adequate food and shelter. It is likely that they had contact with the settlers at Rose Hill but, attracting little attention to themselves, are not readily identifiable in the historical record by their clan name. In contrast Darug from the coastal parts of Sydney often accompanied exploration parties acting as interpreters and guides and who do appear in the record, often by name. However, records reflect that Aboriginal people from various clans were coming and going through Parramatta at this time.

On 2 June 1791 by order of the Governor the settlement at Rose Hill was named 'Par-ra-màt-ta' after the name used by the traditional owners (Tench 1793:132 in Fitzhardinge 1979:239). At this time Aboriginal communities living at the 'head of the harbour' were encouraged to supply the surplus from their fishing expeditions to the Parramatta settlement. A number of contemporary observers including David Collins and John Hunter recounted (although somewhat differently) an incident involving members of the Burramatta clan and convicts at this time. Collins' account suggested a generally friendly and mutually beneficial relationship existed with the traditional owners at this time (Collins 1798: Vol 1 Ch 13).

> *Since the establishment of that familiar intercourse which now subsisted between us and the natives, several of them had found it their interest to sell or exchange fish among the people at Parramatta; they being contented to receive a small quantity of either bread or salt meat in barter for mullet, bream, and other fish. To the officers who resided there this proved a great convenience, and they encouraged the natives to visit them as often as they could bring the fish. There were, however, among the convicts some who were so unthinking, or so depraved, as wantonly to destroy a canoe belonging to a fine young man, a native, who had left it at some little distance from the settlement, and as he hoped out of the way of observation, while he went with some fish to the huts. His rage at finding his canoe destroyed was inconceivable; and he threatened to take his own revenge, and in his own way, upon all white people. Three of the six people who had done him the injury, however, were so well described by some one who had seen them, that, being closely followed, they were taken and punished, as were the remainder in a few days after.*
>
> *The instant effect of all this was, that the natives discontinued to bring up fish; and Bal-loo-der-ry, whose canoe had been destroyed, although he had been taught to believe that one of the six convicts had been hanged for the offence, meeting a few days afterwards with a poor wretch who had strayed from Parramatta as far as the Flats, he wounded him in two places with a spear. This act of Ballooderry's was followed by the governor's strictly forbidding him to appear again at any of the settlements; the other natives, his friends, being alarmed, Parramatta was seldom visited by any of them, and all commerce with them was destroyed. How much greater claim to the appellation of savages had the wretches who were the cause of this, than the native who was the sufferer?* (Collins 1798: Vol 1 Ch 13).

Although Aboriginal law was not accepted under British law, it was observed by colonists that revenge for an injustice was permitted under Aboriginal law (Collins 1798: Vol 1 Ch 13), generally in the form of a non-fatal spearing. This was only one instance where the differences between European and Aboriginal cultures were viewed with incredulity. Problems arose between colonists and Aboriginal people when resolutions could not be reached resulting in offence or to physical conflict. What seemed an equitable solution to one party was not necessarily considered fair or reasonable to the other, ultimately leading to the escalation of conflict and acts of retribution.

## 4.7. Aboriginal Resistance and Conflict with Settlers

There are numerous accounts of conflict between settlers and Aboriginal people on the Cumberland Plain in the nineteenth-century. As the subject of this report is Parramatta this history will focus on events that had an impact on Aboriginal communities in the vicinity.

By the close of 1791 large parts of the Parramatta district had been cleared as had 300 acres (121.4 ha) at Toongabbie six miles (9.6km) distant, leaving only small pockets of uncleared land between (Tench 1793 in Campbell 1927:360-1). The colonisation process put pressure on the resources available to local Aboriginal communities, blocking access to traditional pathways, camping places and hunting grounds. Relations deteriorated with increasing attacks from both sides, causing injury and sometimes death. The fatal spearing of Governor Phillip's gamekeeper, John McIntyre in retribution by Pemulwuy (c.1750-1802), a warrior, was the catalyst for the 'first (but unsuccessful) punitive expedition' against Aboriginal people on the Cumberland Plain (Attenbrow 2003: 14). This was by no means Pemulwuy's last act of resistance or retaliation against the depredations that colonisation forced on them. Pemulwuy is thought to be from the Botany Bay area, north of the Georges River or the Bediagal or 'woods tribe'. With the support of other members of his community, he courageously waged armed warfare against the intruders whose settlements were spreading across the Sydney basin resulting in theft of their land and destruction of their traditional way of life (Kohen 2005:318-9).

The colony grew rapidly during the 1790s and the land surrounding Parramatta and other settlements no longer provided a 'viable subsistence base' for the traditional owners, forcing them to rely on settlements and settlers for food and other resources. Some people maintained peaceful associations with colonists providing opportunities for the latter to learn about Aboriginal culture and the environment. Rites and ceremonies continued to be held outside of the

settlements and, although the 'events' were observed by colonists, their significance was generally concealed (Attenbrow 2003: 15).

Conflict between Aborigines and settlers increased in 1793 and 1794 with a number reported around the Parramatta district, in particular along the routes to Prospect Hill and Toongabbie. At the same time the government, explorers and some settlers maintained friendly relations with individual Aboriginal men, who they relied on as guides and interpreters, as well as their communities who were given freedom to come and go from settlements (Collins 1798: Vol 1 Ch 24, 26). By 1797 relations between colonists and Aborigines had deteriorated. The European population and the area of land settled had expanded to the north and south of Parramatta. Reacting to the untenable situation, bands of Aboriginal people began a guerrilla war, attacking settlers who stole and occupied their land, prevented access to their homeland and who were exploiting their precious resources. Conflict was 'waged in earnest between 1797 and 1805 during which time the farms in the Parramatta-Toongabbie area and the Hawkesbury and
Georges River districts were raided' in retaliation against 'random killings and massacres by white colonists' and dispossession from traditional lands. Retaliatory attacks were made on colonists who ventured out of the settlements, away from their farms, or into the bush (Attenbrow 2003: 14, 15).

In 1797 a raid of the government farm at Toongabbie by a desperate group of Aboriginal people and the theft of grain and musket balls led to an armed pursuit by a large group of settlers. A confrontation between the armed settlers and one hundred Aboriginal warriors led by Pemulwuy erupted on the outskirts of Parramatta. Reports suggest that in attempting to capture the resistance leader, muskets were fired and spears were thrown. The resistance leader was severely injured and five Aboriginal men were killed. Receiving buck shot to his head and body Pemulwuy was taken to hospital from where he soon escaped (Collins 1798 Vol 2 Ch 3; Kohen 2005:318-9).

Governor Hunter was not ignorant of the cause of much of the conflict between settlers and Aboriginal people. He placed blame for some incidents squarely with the settlers, also acknowledging that the forces of law and order rarely took this into account. He expressed in despatches that,

> *Much of the hostile disposition which has occasionally appear'd in those people has been but too often provoked by the treatment which many of them have received from the white inhabitants, and which have scarsely (sic) been heard of by those who have the power bestowing punishment* (Hunter in HRNSW Vol 4: 1 cited in Brook & Kohen 1991:15).

Subsequent Governors such as King were less sympathetic to the double-standards that were being imposed (Brook and Kohen 1991:16). Pemulwuy continued active resistance and further instances of conflict were reported in despatches to Britain, describing the conduct of the Aboriginal warriors led by the 'active daring leader named Pemulwye' around settlements such as Parramatta and Toongabbie (HRNSW King to Hobart 30/10/1802 HRNSW Vol 4:867). Pemulwuy evaded capture and continued his campaign of resistance to British settlement until 1802 when he was shot and killed by an armed patrol (Kass et al 1996: 49).

## 4.8. The Native Institution and Aboriginal Conferences at Parramatta

The orders made by the Governor leading up to the 1814 conference help in understanding some historical documents linked to this period in colonial history. It cannot be assumed that names used to identify Aboriginal communities after this date reflect pre-settlement names identifying clan or language group affiliations. Given the effect of dispossession, dislocation and dispersal from traditional land it is likely that new family groups or mixed communities formed taking up residence in remnant pockets of bushland on the outskirts of settlements and homesteads. Forced movement of people resulted in the loss of many aspects of Aboriginal culture and the emergence of new groups incorporating people from diverse areas. Reorganisation ensured the preservation of some of the core cultural practices and knowledge in Aboriginal communities (Hinkson 2001: xxiv-xxv).

Some individuals or families began living within settlements, adopting aspects of European culture. There were still intermittent outbreaks of hostilities as the Cumberland Plain became more densely settled and expanded westward. An outbreak of hostility in 1816 led to the imposition of new and tighter restrictions on the movement of Aboriginal people in and around settlements such as Parramatta. Despite expressions of sympathy with their plight, Governor Macquarie ordered the mobilisation of military detachments to 'drive away these hostile Tribes from the British Settlements'. As 'a counter balance for the restrictions', natives were offered land on which to establish themselves as settlers, as well as the necessary tools and stores for six months. As attacks on settlers were reported at the Nepean, Grose Valley, Hawkesbury and South Creek, restrictions were also imposed on Aboriginal people between Sydney and Parramatta. General Orders were that those found in the vicinity were to be detained (*Sydney Gazette* 11 May 1816:1;

HRA I/9:139-145, 365; Brook & Kohen 1991: 21, 23, 32). At the same time Land Grants previously given to Aboriginal people were rescinded.

The establishment of the Native Institution, a school for Aboriginal children in Parramatta, in 1814-15 had a significant impact on the lives of some Aboriginal children and their families. The history of the Institution together with the Annual Native Conference held in the Market Place will be discussed here as both drew Aboriginal people to the area in the first half of the nineteenth-century. Although only once a year, the conference and the feast held afterwards brought together large groups of local and distant Aboriginal clans who camped in the vicinity of Parramatta for the period surrounding the event.

This school for the education and training of Aboriginal children was central to an assimilation policy instituted by Governor Lachlan Macquarie (1762-1824) in 1814. Although consistent with Macquarie's humanitarian interests, the idea of a 'Native Institution' was instigated by William Shelley (1774-1815), a trader and former missionary who had recently settled in Parramatta (Brook & Kohen 1991:54-5). Shelley claimed to have spoken to a 'number of tribes and individuals' who showed interest in their children attending school and on 20 August 1814 Macquarie instructed him to draw-up a proposal. Shelley began teaching four Aboriginal children to read and write from his home in Parramatta prior to the school's establishment and by December of that year rules and regulations for an institution were gazetted (Brook & Kohen 1991: 57; SRNSW Reel 6038 Frames 0295-0297). The live-in school run by Shelley was to cater for six boys and six girls for a two-year trial period. Reading and writing, as well as domestic, trade and agricultural skills were to be taught within a general framework of Christian morals and values. Land set-aside for the school's use is shown in the map reproduced below (Figure 3).

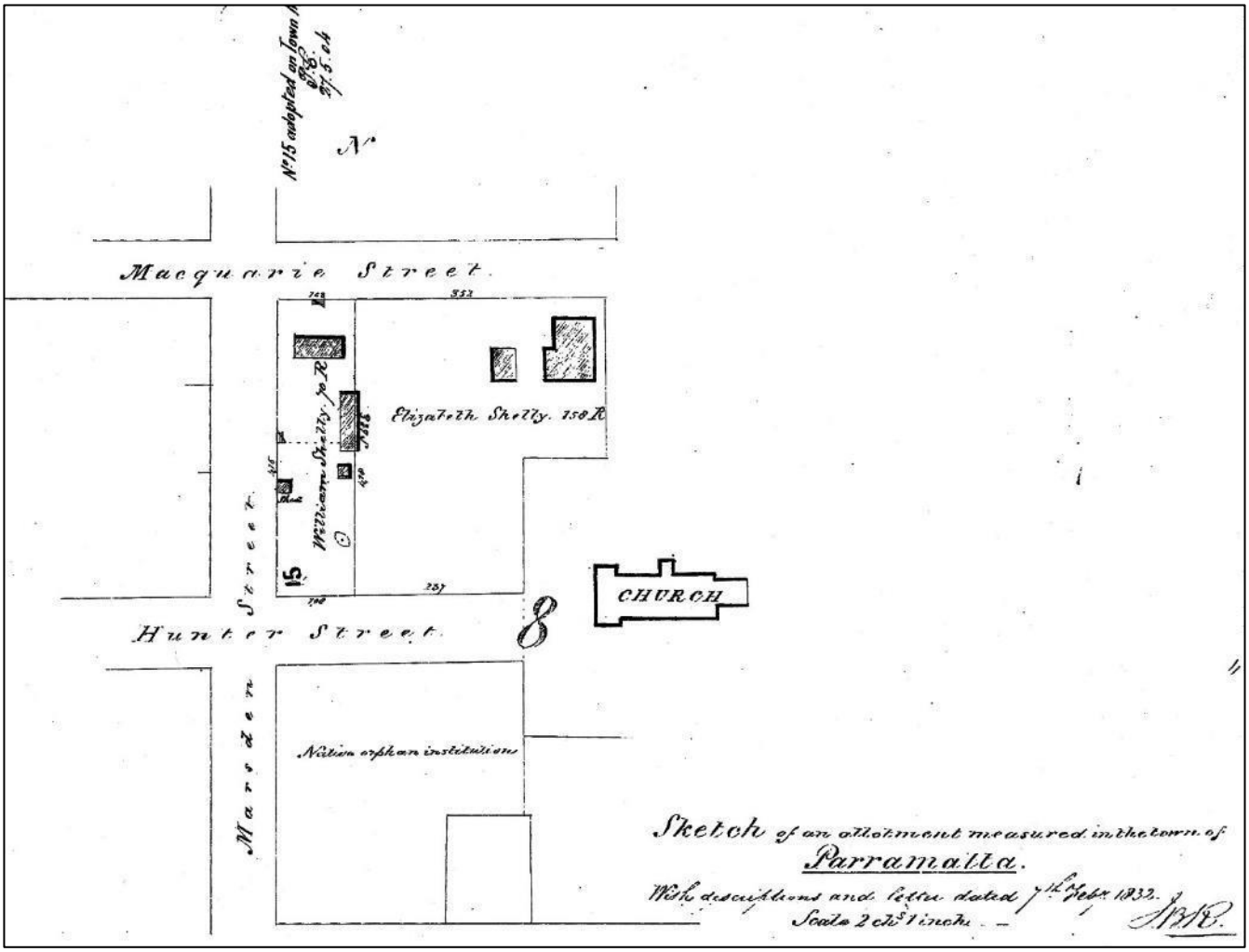



**Figure 3**: Site of the Native Institution shown in a plan of William and Elizabeth's Shelley's allotment to the north (SRNSW SR No 4815)

The school occupied a large site 'near the Church of Parramatta' (bounded by today's Macquarie, Marsden and Hunter Streets), in addition to a block to the south bounded by Hunter St (to the north) and Marsden St (to the west). A building at the rear of the site was built, leased or owned by the Government (Brook & Kohen 1991: 64; Kass *et al* 1996: 81). The site of the former Native Institution lies to the north west of the study area

To attract students to the school Macquarie announced a meeting or conference with Aboriginal tribes to be held on 28 December 1814 at the Market Place in Parramatta. A 'feast' was planned and a committee was instructed to speak to Aboriginal people about the aims of the Institution and its administration. The conference also had another purpose. It was to be announced that Aborigines would be divided into 'District Tribes' based on their place of usual 'resort'. Tribes would then elect a Chief who the Governor would 'distinguish with an 'honorary Badge'. The nominated Chief would be responsible for resolving problems that arose within the tribe and was accountable to the Governor for their conduct. Aboriginal people wishing to become settlers would be considered for the allocation of land. The conference was to be an annual event when the parents of children attending the Institution could see them (ML Manuscripts ADD 340 27 Dec 1814 cited in Brooks & Kohen 1991:65-6). *The Sydney Gazette* recorded many of the annual conferences held at Parramatta, noting the number who attended and the names of individuals who received copper chest plates in acknowledgement of their status as chiefs or for services to the colony. The Market Place where they congregated was located in Section 26 to the west of Allotment 6 and south of the present site of the Town Hall. The site and the Native Institution nearby are indicated on the plan below (Figure 4).

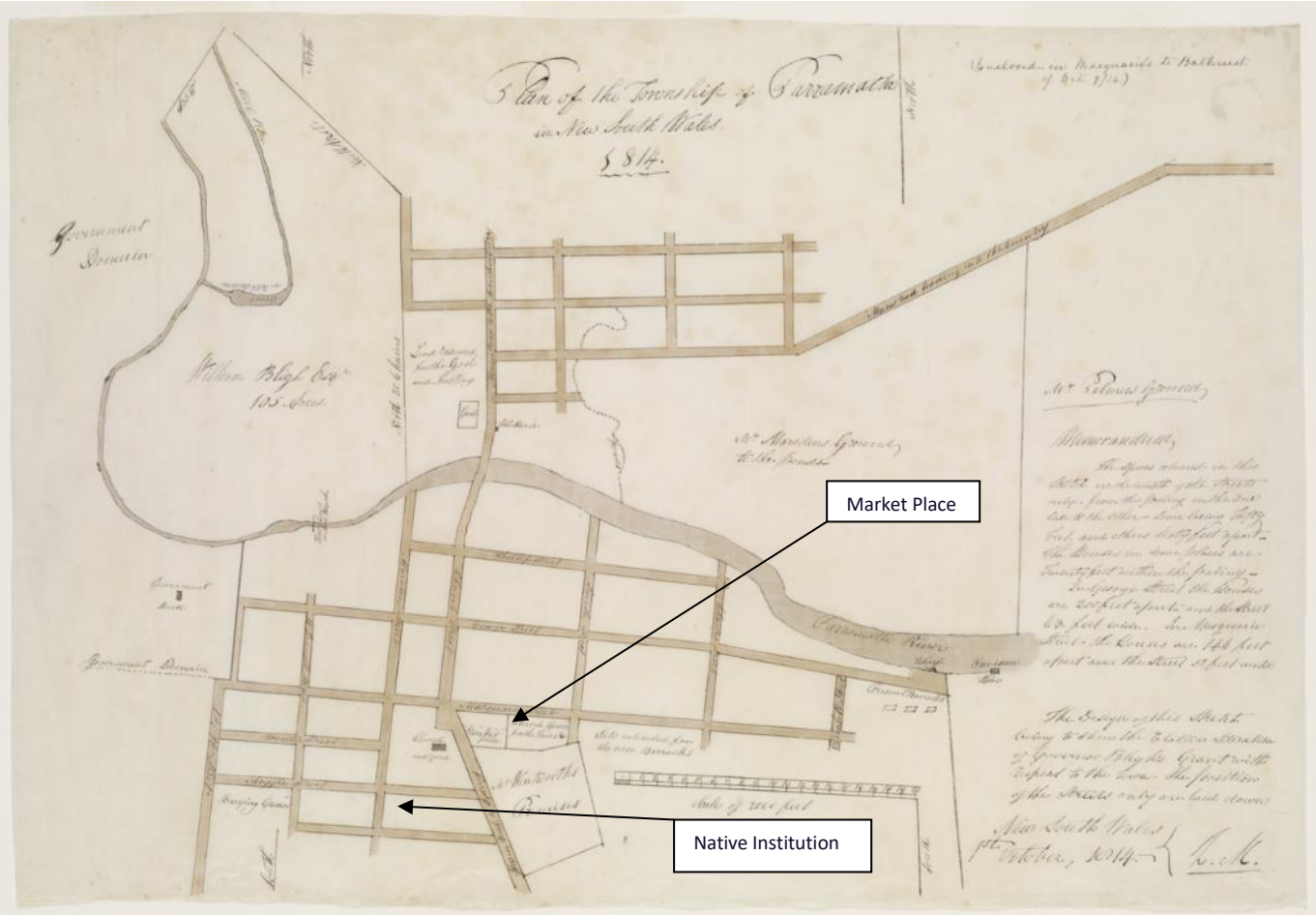



**Figure 4:** The site of Market Place at Parramatta where the Annual Conference and Feast instituted by Lachlan Macquarie were held from 1814 until 1835. The current study area is located approximately 200m to the south east of the Market Place (Plan of the Township of Parramatta in NSW, 1 Oct 1814, LM, ML M2 811.1301/1814/1)

About sixty Aboriginal people of all ages, male and female, attended the first meeting at Parramatta with the report in the Sydney Gazette speculating that others had not come, doubting the colonists' motives or fearing that their children would be forcibly taken away. Ultimately four children were 'yielded up to the benevolent purposes of the Institution' in addition to three children already being tutored by Shelley (*Sydney Gazette* 31 Dec 1814: 2). The Native Institution officially opened on 18 January 1815, operating at Parramatta until 1824 when it was closed (Turbet 1989: 12). These children were no longer allowed to associate with their families.

Children enrolled in 1815 were identified as being from Richmond, Prospect, Caddie (Cattai Creek), Portland Head and South Creek ranging from four to eight years of age. It is not known if the places reflect the areas in which their families settled, or was the traditional land with which their clan or band identified. Children enrolled in later years came from the Hawkesbury, Cowpastures, Botany Bay, Newcastle and Kissing Point. Lists do not identify any children from the Parramatta district or *Burramatta* people, providing evidence of the extent of disruption and dislocation that they endured due to colonisation. Aboriginal parents were reticent to relinquish their children to the school and numbers remained low. Some children were surreptitiously taken back by their parents who, it could be assumed, did not want to abandon them to a system that rejected their cultural traditions and isolated them from their family and community (Brook & Kohen 1991: 68-70, 78; SLNSW ML Manuscripts DLADD 85 Digitised). Enrolment at the school varied from year to year, with the number increasing to 23 in 1820 (Misc Papers ML DLADD 85: 8). The children's achievements were displayed to their parents at the Annual Meeting held in the Parramatta Market Place (HRA I/10: 95). A few students are recorded as having become ill and died while in the school's care (*Sydney Gazette* 29 Dec 1821). Among the diseases introduced by the settlers, smallpox had a devastating impact on the Aboriginal population with adults and children dying in significant numbers (Bellingshausen in Barratt 1981: 43). A more comprehensive account of the Native Institution can be found in J. Brook and J.L. Kohen's *The Parramatta Native Institution and the Black Town*: *A History* (1991).

Following the inaugural Aboriginal Conference in December 1814 they were held annually. Macquarie and a few subsequent Governors used the event as an opportunity to diffuse tensions between Aborigines and settlers, to promote the Native Institution as well as to distribute clothes and blankets. With the exception of 1815, they were held annually until 1835 (Turbet 1989:12). In Despatches Macquarie reported that natives 'from different parts of the colony up to 100 miles distant' attended the Native Meeting in the Parramatta Market Place and clothing and blankets were distributed to each Aboriginal man, woman and child (HRA I/10: 95). In 1821 a record number of some 340 Aboriginal people attended the Conference to farewell Lachlan Macquarie, one of few Governors who had made a sincere effort 'to understand and gain their trust and confidence' (Kass *et al* 1996: 81).

Reminiscences of local settlers and their families record that leading up to the Annual Conference people would set-up camp on the outskirts of Parramatta where their fires would be seen through the night. Aboriginal people from the west set up camp at Clay Cliff Creek to the south-east of the town centre; those from the south camped at the head of A'Beckett's Creek (near the junction of Woodville Road and Union St, Granville); while others would congregate on the Western Road near the toll house. In the 1830s camps were set-up 'out of Parramatta, towards Prospect'. The creeks mentioned above and the main routes into Parramatta are shown in the map below (Figure 7). Following the feast and blanket distribution Aboriginal people would gather on the site of the Native Institution at the corner of Macquarie and Marsden Streets (to the east of the Study Area) for a corroboree (John Taylor cited in Kass *et al* 1996: 105; Hassall 1902: 17).

The *Sydney Gazette* and later the *Sydney Herald* reported on attendance at the Annual Aboriginal Conference, presentations made by the children of the Native Institution and any other activities that took place. Although 287 Aborigines attended in January 1832 the government's interest in its continuation declined (*Sydney Gazette* 12 Jan 1832). In May 1833 a dinner was arranged by the Committee of the Female Factory and although the Conference was held, Governor Bourke did not want Aboriginal people to be encouraged to attend (Brook & Kohen 1991: 102). It was now held in May so that the distribution of clothes and blankets would coincide with winter (Kass *et al* 1996: 105). The genuine interest in the future of the Aboriginal community expressed by Governor Macquarie was not shared by Bourke and the event was now little more than a hollow goodwill gesture when blankets could be conveniently distributed (Brook & Kohen 1991: 102). The Annual Conference at Parramatta was discontinued in 1835 (Turbet 1989: 12).

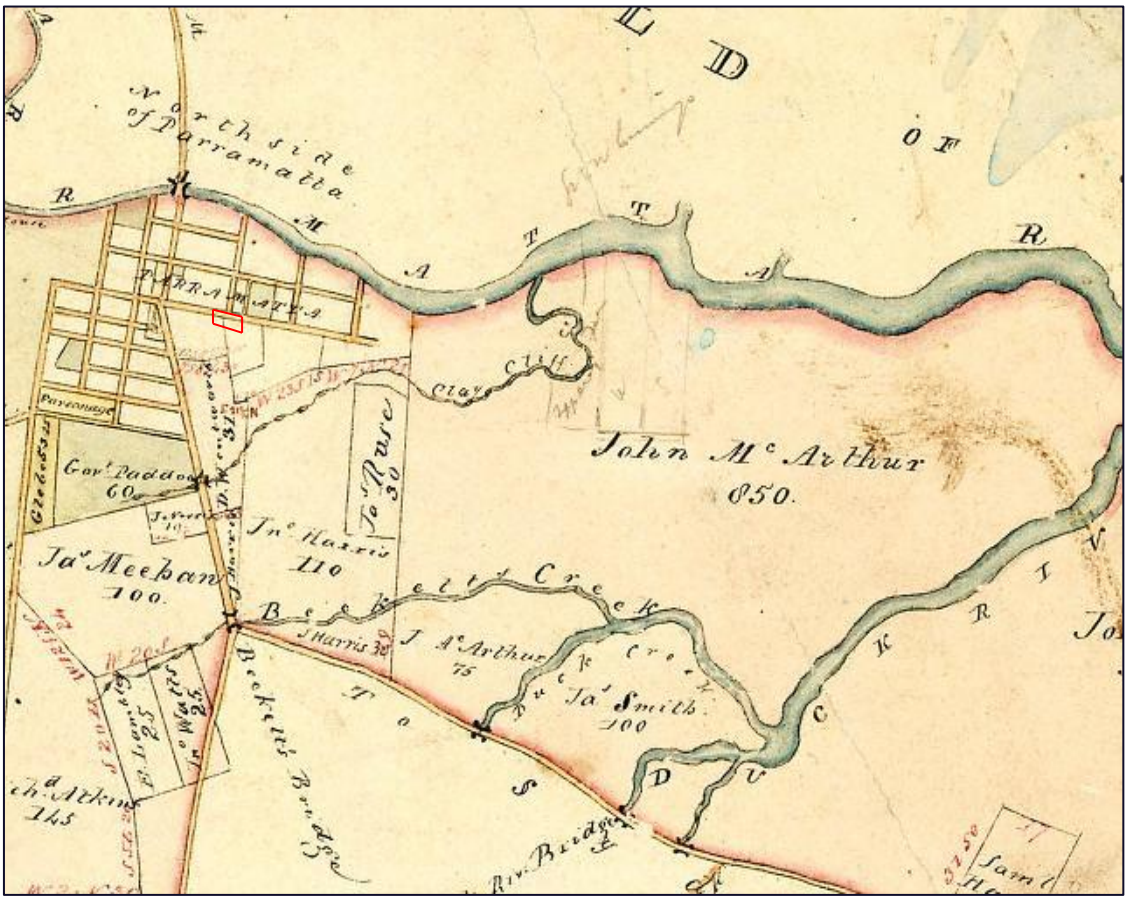



**Figure 5**: Map of the Parish of St John showing Clay Cliff Creek, A'Becketts Creek, Duck Creek and Duck River and the main routes into the town of Parramatta. Not dated. Approximate location of the present study area outlined in red (Parish of St John, PMapMN05, Id 14063601, AO Map 277).

A notable student of the Native Institution was Maria Lock born at Richmond Bottoms on the eastern floodplain of the Hawkesbury River c1805. She was the daughter of Yarramundi, "Chief of the Richmond Tribes". Her family belonged to the Boorooberongal clan of the Darug people. Maria was an exceptional student and won first prize in an 1819 school examination ahead of 20 fellow students of the Native Institution and almost 100 non-Aboriginal students. In 1824 Maria married an illiterate convict carpenter, the first officially sanction union of a convict and an Aboriginal woman. They initially settled on a small farm at Black Town (Blacktown) and were employed by Rev. Robert Cartwright at Liverpool. In 1831 she petitioned for the Blacktown area deceased estate of her brother Coley (Colebee). Although opposed by Rev Cartwright, she was granted 40 acres (16.2 ha) of her own choosing near her residence (granted in her convict husband's name on her behalf). She received another 40 acres at Liverpool (again through Robert's name) in 1833 and finally also received Colebee's 30 acre (12.1 ha) Blacktown grant in 1843 ([Brooks & Kohen 1991: 256, Parry 2005)

In 1844 a further 30 acres were acquired at Blacktown. Before her death in 1854 Maria and Robert had 10 children. Upon her death in 1878 her lands were divided equally among her children and their descendants. However, in 1920, the Aboriginal Protection Board deemed her freehold land to be an Aboriginal Reserve (Plumpton) and their title was revoked.

## 4.9. Population Numbers

In the years following settlement there was no systematic or comprehensive documentation of the extent of the Aboriginal population, their language group or clan or the extent of traditional land with which they identified. Census and musters often linked to blanket distribution in Parramatta provide some record of families and individuals and the areas in which they were living. It is likely that they do not accurately reflect all Aboriginal people living in the district for a variety of reasons including fear of retribution for conflict with settlers, loss of their children to the Native Institution, or loss of their freedom and independence. Colonial records document many of the names of 'native guides and friendly natives' who were given rewards for their services to the colony although they are not always identified by their clan name (Misc Papers ML SLNSW DLADD 85 Digitised). The records of the Native Institution include the names

of the children who attended the school, although usually only their European names and also the geographical area where their families were living. Sometimes diaries, letters and other records kept by European settlers and visitors to the colony make reference to Aboriginal communities and specific families living in and on the periphery of settlements.

Census or muster documents reflect the different ways that Aboriginal people were identified by colonial administrators. Records show that some individuals continued to identify themselves by what appear to be traditional community or clan names as well as the European names. The 1828 census recorded 49 members of the "Parramatta Tribe" including 21 men, 13 women and fifteen children who were recorded by the local Magistrate. On the Governor's recommendation they were to be given 'Blankets and Slops' on the 23rd April 1828 in commemoration of 'His Majesty's Birthday' (Sainty & Johnson 1985: 15).

Returns for Aborigines for 1834 provide a little more detail than previous records, and in some respects were consistent with musters of the European population at that time. The Return lists the Aboriginal and European names of individuals, estimated age, 'Designation Tribe', and 'Place or District of Usual Resort'. It appears that only the adult males (14) are named on the list and wives (9) and male and female children (11) are numbered. Of a total of 34 individuals listed, twenty were from Prospect and two from Duck River, both locations close to Parramatta. Others were from Kissing Point (Ryde) and Breakfast Creek (Quaker's Hill). Only *Mosquito* known as Will Will from Duck River gave the name of his 'tribe' which was *Watergoro* (Col Sec, Special Bundles, SRNSW Reel 3706). There is some inconsistency between the spelling and use of names from year to year making it difficult to trace individuals.

In 1837 both adult males and females and a few children were named on the Parramatta return with the named individuals totalling 30. The record shows the *Watergoro* from Duck River and the *Weymaly* from Prospect both in close proximity to Parramatta (Col Sec,

Special Bundles, SRNSW Reel 3706). The relationship between the *Burramatta* people noted in early settlement records and the *Watergoro* and *Weymaly* shown in Blanket Returns is not known (Col Sec, Special Bundles, SRNSW Reel 3706).

The 1840 Blanket Return taken at Parramatta recorded eight men and 12 women, 18 of whom were listed by name. Twenty children were noted however no Duck River people are recorded. Five adults and children are shown as *Weymaly* although only a few are shown as living at Prospect while others are at 'Bungarrabbee' further west (Bungarribee, Blacktown) (Col Sec, SRNSW Reel 1927). L.E. Threlkeld compiled Returns for Aboriginal men, women and children in 1839 and 1840 showing the population taken at Parramatta as 61 and 40 respectively. The population had dropped markedly not only in Parramatta but in other districts where returns were recorded (Col Sec, Special Bundles, SRNSW Reel 3706).

The Duck River or *Watergoro* people do not appear in any Parramatta Returns after 1837. From 1840 until 1843 Returns continue to include the *Weymaly* people of Prospect, as well as people from other districts who travelled considerable distances to receive blankets. By 1845 official records suggest that there were no longer any of Parramatta's Aboriginal inhabitants resident in the locality. Darug people continued to live on the Cumberland Plain however 'their presence did not always attract written comment from the authorities or observers' (Kass *et al* 1996: 106).

It is clear that the lives of people who had lived according to traditional ways in this area were catastrophically altered by European occupation and settlement over a century. Through perseverance and showing great resilience Aboriginal Australians retained some of their core traditions, customs and beliefs, passing them onto future generations despite the significant changes imposed on their lives. In 2006 Indigenous people represented 0.9% of a population of 154,158 in the Parramatta Local Government Area (2006 Census Stats www.abs.gov.au).

# 5 ENVIRONMENTAL CONTEXT

## 5.1. Preamble

The landscape context is important in understanding Aboriginal land use and occupation and the manner in which they interact with it. Describing the physical setting of the area being assessed and the resources within enables a predictive statement to be made about the potential for the area to contain Aboriginal archaeological potential.

## 5.2. Topography

The study area is within the Cumberland Plain, which is characterised by low and gently undulating slopes. The Cumberland Plain covers approximately 600 square kilometres. It is bordered on the west by the Blue Mountains and on the east by the Georges River and headwaters of the Parramatta Rivers. To the north is the Hornsby Plateau and to the south is the Woronora Plateau (Smith 1989a:8).

The study area is within the CBD of Parramatta which includes commercial/residential development and associated infrastructure. It is located approximately 500m to the south of the Parramatta River, within the floodplain of the Parramatta River. The study area is on the side of a slope that descends south to Clay Cliff Creek from a small ridgeline occupied by Lancer Barracks. It descends east to what were once swamp lands adjacent to Charles Street and Smith Street. Clay Cliff Creek has been channelized and is approximately 100m to the south of the study area

## 5.3. Geology

The Cumberland Plain overlies the Wianamatta Group of Shales. Within the study area the Wiamanatta Group of shales overlies Hawkesbury Sandstone (sandstone with some quartz). Hawkesbury Sandstone provides materials suitable for the manufacture of ground edge axes and weathers to provide rockshelter suitable for habitation or surfaces for art.

Surrounding the study area is the Liverpool Sub-group which includes Bringelly Shales, Ashfield Shales and Minchinbury Sandstone (Sydney 1:250,000 Geological Map). This sub-group is comprised of shales, carbonaceous claystones, claystones laminate, fine to medium grained lithic sandstone and some coal (Smith 1989a:8).

Several locations on the Cumberland Plain within the vicinity of the study area contain suitable material for stone tool manufacture, such as silcrete. Silcrete outcrops are located at Luddenham approximately 29kms to the southwest, Plumpton approximately 17kms to the north-west, St Clair approximately 21km to the west and Erskine Park approximately 19km to the west. Other material used in the manufacture of stone tools on the Cumberland Plain, includes chert, tuff, quartz, basalt and quartzite, which are located within the Rickabys Creek Formation, 29kms north-west of the study area (Clarke & Jones 1988, Smith 1989a:9-11 & 1989b:6-7). It is also likely that volcanic materials were obtained from the dolerite quarry just east of Prospect Reservoir.

Lithic materials such as quartz, silcrete, chert and tuff are suitable for small tool manufacture whilst basalt is suitable for axe blanks. The sandstone provided shelter, a suitable surface for artworks or for a perfect abrasive surface for sharpening axes.

## 5.4. Soils and the Parramatta Terrace Sand

*Soils*

Geotechnical testing by Douglas Partners "indicates that the site is located close to a boundary between alluvial/estuarine sediments and the residual clay soils overlying Ashfield Shale. The alluvial or estuarine sediments typically include clays, silts and sands" (Douglas Partners 2017:2). Coring by Douglas Partners confirms that under 100mm of concrete are dark grey clayey sands and yellow/red brown and light brown, sandy clay and silty clay. Mapping by Mitchell (2008) indicates that the site is on the boundary of the Pleistocene Parramatta Terrace Sand (see below) and Late Pleistocene or Tertiary alluvial clay and sand. The testing by Douglas Partners confirms the presence of the Late Pleistocene alluvial clay and sand.

*Terrace Sand*

A fluvial sand terrace (Parramatta Terrace Sand) has been recorded along the banks of the Parramatta River and throughout much of Parramatta (Mitchell 2008; Comber 2010a; Casey & Lowe 2009). Culturally, this terrace sand would have been a valuable environmental asset for Aboriginal people. Mitchell (2008:16) suggests that the Parramatta terrace sand would have contained a number of important resources for Aboriginal people to utilise. These resources would have included waterholes with fresh fish, areas for shelter, fuel, food and shell resources. Sandy soils are also

suitable for burials and provide a good location for campsites. Excavations in the sand terrace (McDonald 2005; Comber 2010a;) have confirmed the importance of the terrace sand to the Darug people. Artefacts and other evidence of occupation have been recorded with dates indicating possible Pleistocene occupation (McDonald 2005; Comber 2010). Mapping by Mitchell (2008:7) (Figure 6) indicates that the present study area is not located on the Parramatta Terrace Sand.

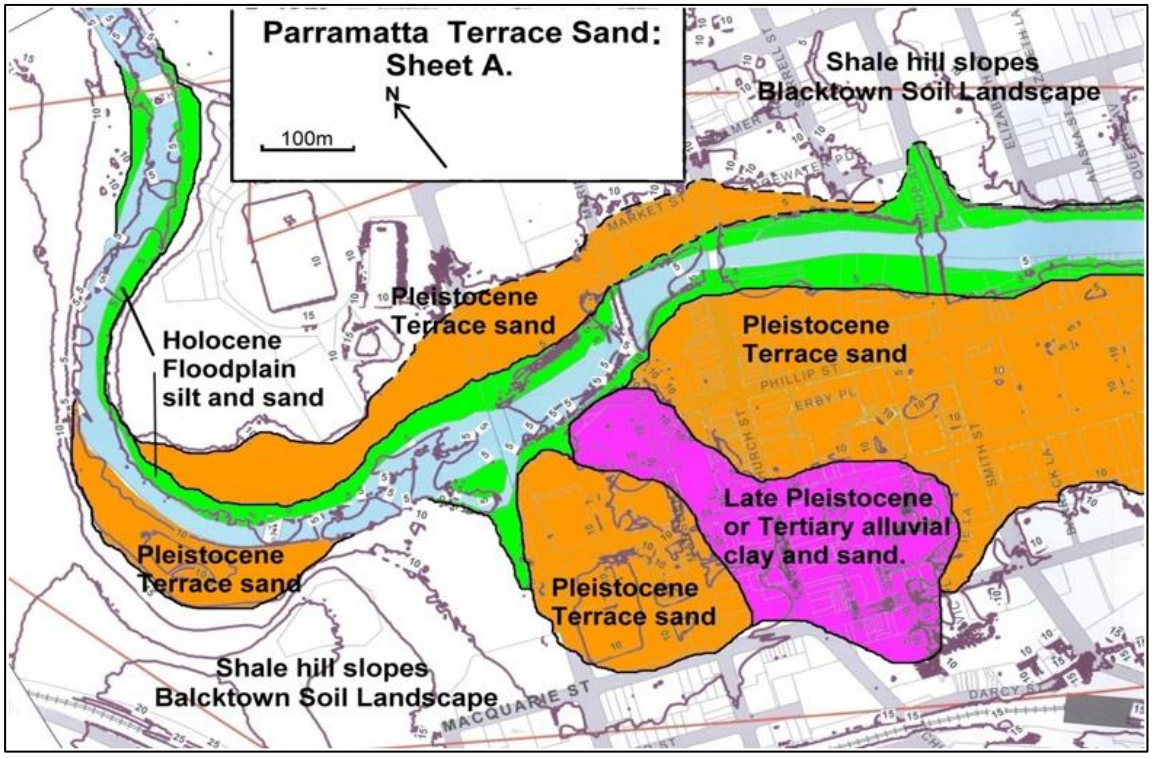



**Figure 6:** Showing the Indicative distribution of the Parramatta Terrace Sand at the time of European settlement. The approximate location of the study area is outside of this map as indicated by the red arrow.
(Plan courtesy Mitchell 2008:7)

## 5.5. Stream Order Modelling

Stream order can be used to predict Aboriginal land use patterns. Parramatta River would be classified as a fourth order stream. As indicated on Figure 9 below, Clay Cliff Creek, which has since been channelised, flowed 100m to the south of the study area at 12 Hassall Street. It is difficult to classify this channel as its original course and length is no longer obvious. However, extensive swamp lands were in the surrounding areas. The small creeks that once flowed into those swamps make this a third order creek.

A first order stream is the smallest and is a small tributary that flows into and feeds larger streams but does not normally have any water flowing into it. The joining of two first order streams creates a second order stream and when two second order streams join they form a third order stream. In addition, first and second order streams generally form on steep slopes and flow quickly until they slow down and meet the next order waterway. First order streams are intermittent.

Modelling undertaken by McDonald and Mitchell (1994) on the Cumberland Plain indicates that stream order can be used to predict areas of archaeological potential. The model hypothesis is that in any particular climate and landscape, a threshold catchment area is necessary to allow permanent stream flow or the establishment of waterholes with extended longevity (i.e. months to years). The critical point where these conditions are met appears to be at the junction of two second or third order streams. Such a location is likely to contain more complex sites with a high density of artefacts, whilst second and third order streams are also likely to contain large sites within 100 metres of the watercourse.

Therefore, from the landscape in the vicinity of the study area, (near a third order stream and the rich resources of nearby wetlands) (Figure 7), it can be predicted that the site contains high archaeological potential.

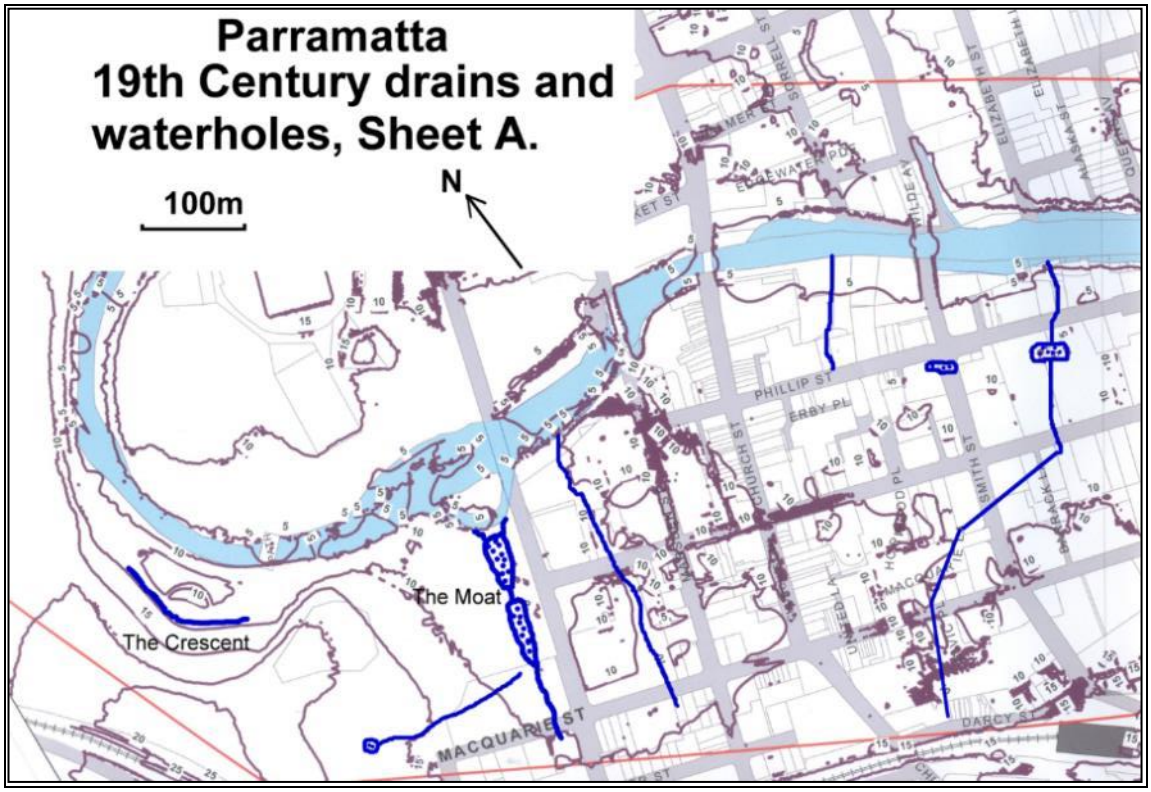



**Figure 7:** Indicative layout of 19th century creeks (now channelized drains) and waterholes, shown as royal blue lines. Edge of swamps indicated by purple lines. Study area indicated by red arrow. Small creek line (flowing from swamp) on eastern side of study area now channelized (Mitchell 2008)

## 5.6. Vegetation

The vegetation of the Cumberland Plain was mapped by Benson (1981) and the NSW National Parks & Wildlife Service (2002). Historically, the undulating slopes of Western Sydney would have supported a tall open-forest of Cumberland Plain Woodland.

The area was mapped by Benson (1981) as being woodland of *Eucalyptus moluccana* (Grey Box) in association with *Eucalyptus tereticornis* (Forest Red Gum). The understorey included *Acacia parramattensis*, *Acacia floribunda* and other acacia sp., *Casuarina cunninghamiana* (River Oak), *Bursaria spinosa* (Sweet Bursaria, Blackthorn) and *Hardenbergia violocea* (False Sarsparilla) with grasses of *Themeda australis* (Kangaroo Grass) and *Lomandra longifolia*.

Such a vegetation community would have provided a variety of edible plant species and plants suitable for artefact manufacture. For example, the tall Grey Box and Red Gum's would have provided bark to make coolamons, shields or canoes, whilst the long Lomandra leaves would have been used for basket weaving (Baker et al 1986:136). Acacia gum was a sweet nutritious food source and the acacia seeds were a valuable source of protein. The dried seeds were ground between stones and baked as a bread/damper and the green seeds eaten like peas (Low 1992:86). In addition, Cumberland Plain vegetation provided habitat for a variety of marsupials and birds whilst the Creek would have provided fish, yabbies and eels.

However, the nature and composition of the study area has been altered by past clearance and European land management activities, including urban development. The study area presently forms part of the urbanised area of the Parramatta CBD. No native vegetation remains on the site.

## 5.7. Current Land Use and Disturbance

As can be seen from Photograph 1 the site currently occupied by a 2 storey building, detached single storey bungalow and a bitumen carpark. Photograph 3 below shows the 1943 aerial of 12 Hassall Street, with the same bungalow present. The two storey building was previously occupied by the Police Citizen Youth Club but is now utilised as the 'Engineering Hub' associated with the WSU development at 2b-6 Hassall Street, Parramatta. The first three properties adjacent to the study area's eastern boundary have been demolished and replaced by the current commercial and residential buildings. Photograph 4 shows the buildings currently on the site.

Whilst the current development on the site may have disturbed surface evidence of occupation, it is possible that subsurface evidence will remain. It is highly likely that extensive fill will exist on the site. Such fill would have been used to level the site prior to construction of the current buildings on the site. Such fill would have protected subsurface deposits. Archaeological excavations throughout Parramatta and at the nearby Parramatta Square indicate that extensive subsurface evidence of Aboriginal occupation can remain despite later disturbance.

**Photograph 3:** 1943 aerial photograph. 12 Hassall Street in yellow (Source: 1943 aerial imagery from SixMaps NSW)

**Photograph 4:** Showing the buildings currently on the site.

# 6 ARCHAEOLOGICAL BACKGROUND

## 6.1. The Cumberland Plain

Many surveys have been undertaken in the Sydney region which indicate the richness of the archaeological resources and which provide information about Aboriginal occupation within the region. In particular Attenbrow (2003) has excavated a range of sites within the Sydney Basin. The aim of her study was to identify local geographic variation and temporal changes in the subsistence patterns and material culture of the people of this area. She excavated sites at Balmoral Beach, Cammeray, Castle Cove, Sugarloaf Point (Lane Cove River), Darling Mills State Forest, Winston Hills, Vaucluse and Cumberland Street in the Rocks. Dates for initial occupation vary from approximately 10,000 years BP at Darling Mills to approximately 450 years BP at Cumberland Street, The Rocks.

One of the oldest dated occupation for the Sydney region is 15,000 years BP from the Shaws Creek K2 rock shelter on the Nepean River (Kohen 1984; Nanson et al 1987). However, these dates must be considered in association with environmental data related to sea level rises. The Sydney region that we know today was vastly different to the landscape of 15,000 years ago.

The period of maximum glaciation was 15,000 – 18,000 years BP. Therefore, the date of the K2 rock shelter and Attenbrow's Darling Mills site indicate that Aboriginal people lived throughout a period of extreme environmental change. During this period, sea levels were up to 130m below current levels (Nutley 2006:1). About 10,000 years ago as temperatures began rising at the end of the last ice age, the polar ice started melting and sea levels rose. The rising sea levels forced people to abandon coastal sites and move inland, with the result that the oldest coastal sites were inundated.

By about 6,000 years ago rising water levels had flooded the coastal plain forming the Sydney landscape that we know today. The vast majority of sites in the Sydney region date to around 5,000 years BP, after sea levels had stabilised. Whilst research into submerged indigenous sites is now being undertaken (Nutley 2006), there are few sites in the Sydney area that are known to date beyond 10,000 years BP. Therefore, research undertaken to date has focused on subsistence patterns and cultural change, e.g. Attenbrow (2003).

However, many archaeological surveys have been conducted within the Sydney region, particularly on the Cumberland Plain in relation to Environmental Impact Statements. As a result of these studies, which were occasioned by the burgeoning urban expansion extending into the Cumberland Plain, the NPWS recognised the need for a coherent study of the area to fully assess the impact of urbanisation on the natural and cultural heritage of the Cumberland Plain. Smith (1989a) was commissioned by the NPWS to undertake an Aboriginal Site Planning Study to be utilised in the management of Aboriginal sites on the Cumberland Plain. Prior to her study, 307 sites had been recorded on the Cumberland Plain, mainly open artefact scatters (297) with four scarred trees, one carved tree, four axe-grinding grooves and a Mission site (the Blacktown Institute). Smith (1989a:2) added 79 open sites and 29 isolated finds from field surveys related to her study.

Smith's (1989a:3) analysis indicated that site location and site densities were influenced by the availability of water and raw materials. She concluded that other factors such as topography, natural vegetation and soil types did not influence site location. She also identified that the majority of sites recorded have been in the northern sector of the Cumberland Plain, during site surveys of areas threatened by development (Smith 1989a:21). Her field studies (1989a & 1989b:10) confirmed that site densities in the southern Cumberland Plain appear to be lower overall to site densities on the northern Plain.

Since Smith's study, there has been a dramatic increase in development in Western Sydney, resulting in a great deal more archaeological survey and excavation (Comber 1990, 1991, 2006a; McDonald 1989, 2002 & 2005a). This further work has indicated the complexity in the archaeological record of the area that was not previously recognised. For example, sites on permanent water are more complex than sites on ephemeral drainage lines with major confluences being prime site locations. However, McDonald (2005a) reports that archaeological sites are found in a range of landscapes and that their condition is dependent on the amount of impact from European land practices.

McDonald's (2005a) report demonstrates the dynamic nature of stone tool technologies on the Cumberland Plain. She reviewed previous work within a theoretical framework to identify intra and inter-regional variation. She not only identified change over time in the stone tool technology, but the manner in which "stone technologies were organised in relation to landscape" (McDonald 2005a:np). Her report provides a framework to tentatively date sites through

technological analyses and to identify cultural changes.

Her study also indicated that the surface representation of a site on the Cumberland Plain does not necessarily reflect the actuality of that site. Of the excavations conducted by her, sub-surface deposits were present even when there was no surface indication of a site. According to McDonald (2005a:5), "despite artefacts being rare or completely absent on the surface at each of the sites investigated, all six sites were found to contain intact archaeological deposit. Almost 500 square metres were excavated during this Project and almost 35,000 artefacts retrieved."

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- Fourth-Fifth order creeks (or rivers): Archaeological evidence will be more complex and possibly stratified, reflecting more permanent and repeated occupation on major creeks.
- Third order creeks: Evidence of more frequent occupation such as knapping floors or higher artefact densities will be found in the lower reaches of tributary creeks.
- Second order creeks: Sparse archaeological evidence will be found which indicates occasional use and/or occupation.
- First order creeks: Due to the intermittent nature of water flow only very sparse evidence would be found in the headwaters of upper tributaries such as background artefact scatter.

Kohen's studies at Penrith confirmed the importance of fifth order creeks and rivers. He recorded over 50 sites in the Penrith area which included open artefact scatters, axe grinding grooves and rock shelters. Kohen (1997:7) indicates that sites occurring throughout the Penrith area "are particularly likely to occur adjacent to the rivers and creeks. The distribution of raw materials associated with the manufacture of stone tools suggests that chert and basalt were carried or traded east from the river gravels and that silcrete was traded or carried from sources near South Creek and Eastern Creek, west towards the Nepean flood plain".

Comber (2006a & b) also recorded open artefact scatters and scarred trees within the Cumberland Plain. She undertook excavation at two sites at Penrith Lakes known as Camenzulis (2010c) and PL9 (2010d). At PL9 she retrieved more than 1,500 artefacts, including backed blades and an edge ground axe. Her work confirms McDonald's (2005) and Kohen's predictive model that sites are more likely to occur adjacent to the rivers and high order creeks. These excavations (Comber 2010c & d) at Penrith Lakes further indicates the possibility that sub-surface archaeological deposits will remain despite disturbance by non-Aboriginal activities and the complexity of such sites. Surveys (2006a & b) undertaken prior to the excavations recorded the areas as being disturbed by agricultural activities. They had been grazed, ploughed, planted with crops and a dam constructed. Only a small number of artefacts were recorded on the surface but over 2,500 artefacts retrieved during excavation.

A survey undertaken by Comber (2008a) and subsequent excavations undertaken by Stening (2011) at Doonside demonstrated that although no surface artefacts were recorded (Comber 2008) substantial subsurface deposits did exist on the site with over 1,000 artefacts being recovered from a highly disturbed context (Stening 2011). This site was located beside Eastern Creek an important 4$^{th}$ or 5$^{th}$ order creek. It is an important watershed with extensive evidence of Aboriginal occupation.

Excavations currently being completed by Comber at the Parramatta North Urban Transformation site (PNUT), which currently contains the Cumberland Hospital and is located on the Parramatta River near Domain Creek and Toongabbie Creek has yielded extensive evidence of Aboriginal occupation. Due to historic ploughing and topdressing no artefacts were observed on the surface. However, over 3,000 artefacts have been recovered from the current program of testing.

## 6.2. Parramatta

A number of archaeological investigations have been undertaken throughout Parramatta. The results of these investigations can inform the assessment of the current study area. In the broader Parramatta region, a rock shelter on

Toongabbie Creek has been dated to around 5,500 years BP (Attenbrow 1992:4 – 5). Other sites within a 10km radius of the Parramatta LGA date to within 10,000 years BP with the majority within the last 3-5,000 years (Dallas 2003:27).

The locations of some of the previous investigations in the vicinity of the study area are shown in Figure 8 below.

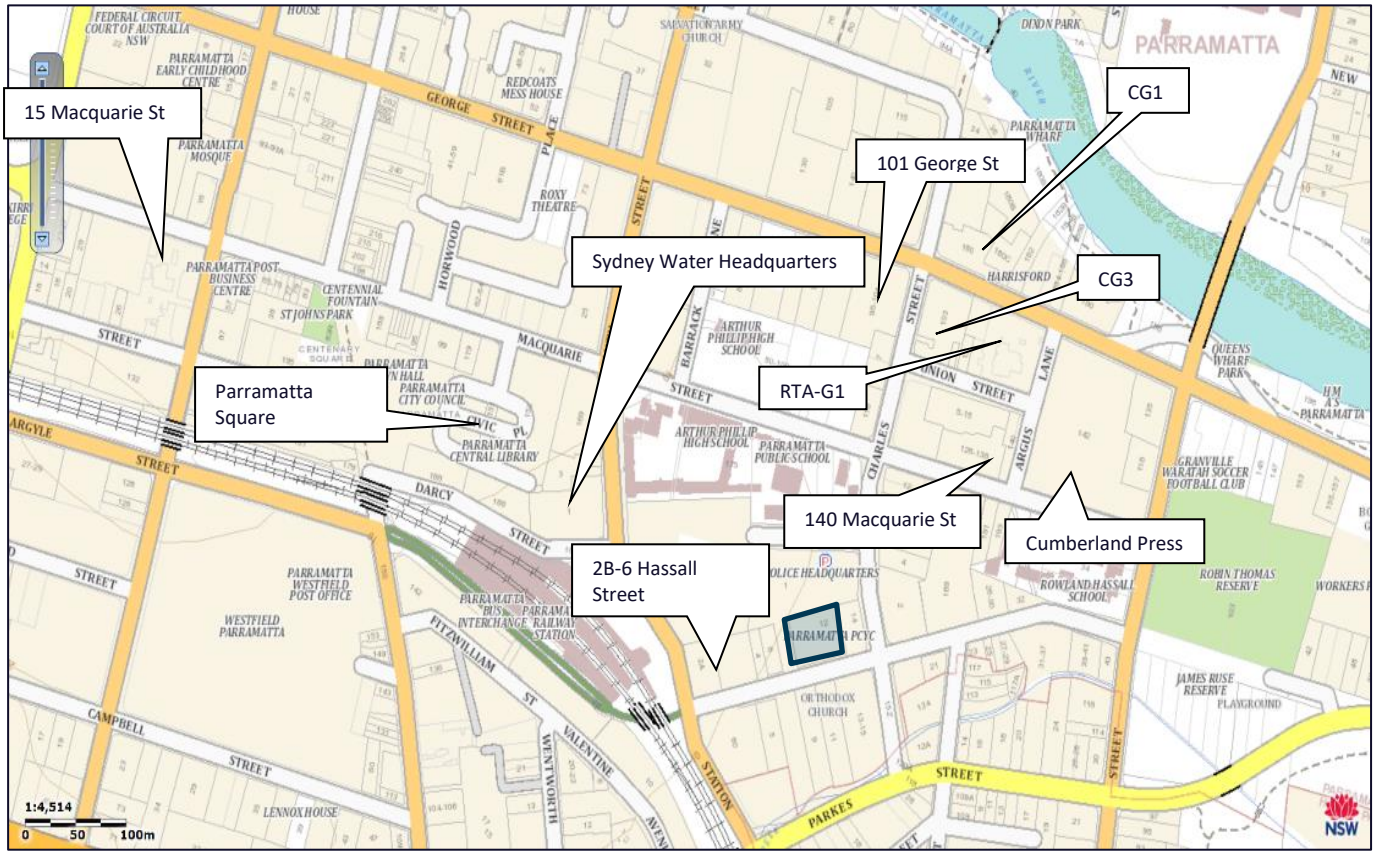


**Figure 8: Showing the location of the archaeological investigations in the wider Parramatta area. The location of the study area is outlined in blue.**

**Parramatta Children's Court Site: Corner Macquarie and George Streets**

Excavations undertaken at Parramatta by Haglund (2005) indicate that Aboriginal artefacts can still be located despite the impact of later development. At the Parramatta Children's Court site, on the corner of Macquarie and George Streets (approximately 450m to the north west of the present study area), artefacts were located in a disturbed context. A total of 157 items over 10mm in length were excavated, along with a large number of smaller pieces of core and flake fragments, along with knapping debitage.

Artefact types included pebble/cobble tools, cores/core fragments, complete flakes, flake fragments and flaked pieces. Complete flakes made up the majority of the analysed assemblage, with n=78, followed by 59 flake fragments. Raw materials included silicified tuff, silcrete, quartz, quartzite and sedimentary/metamorphic rock, with a ratio of around 3:1 for silicified tuff to silcrete. Most of the silicified tuff flakes were short and broad, with a tendency to hinge terminations, and only four of the 60 silicified tuff flakes were longer than 30mm. In comparison, the silcrete flakes tended to be longer with parallel margins. Flake platforms were generally part of a single larger scar and most were broad rather than focal. The cobble/pebble tools identified suggested broken and/or worn items were recycled for reuse in a different manner. Haglund (2005:16-17) suggested that people camped or moved across the Parramatta area in small family groups, with no evidence of extensive or repeated visits.

**Parramatta Old Hospital Site: George and Marsden Streets**

Haglund (2006 & 2007) also undertook testing at the Parramatta Old Hospital Site bound by George and Marsden Streets, approximately 350m from the present study area. Artefacts recovered were attributed to one of four groups according to the area in which they were excavated, as these groups/areas were considered to vary depending on environmental conditions and later colonial land use patterns. In total, 870 items were collected, although this was considered to be a sample of the cultural material which may have been present in the area. Items recovered included complete flakes, flake fragments, cores/core fragments and retouched pieces. Flake fragments were the most common artefact type collected,

followed by complete flakes. A total of 23 cores were recovered along with a further 8 core fragments, and 15 pieces exhibiting modification by retouch were identified. Silcrete was the dominant raw material type, although it was closely followed by silicified tuff. Chalcedony, fine grained siliceous, quartz, quartzite and igneous items were also identified. Artefacts were considered to have been widely although sparsely distributed across the pre-colonial landscape (Haglund 2007:50). The Parramatta terrace sand was not identified at this site.

Haglund (2006) concluded that this area was a more preferred site to the Children's Court site and that there may have been some difference in activities. However, she concludes that this area was never a major campsite, but was visited sporadically by groups who manufactured artefacts at this site (Haglund 2007:37).

**CG1: Corner George and Charles Streets**

McDonald undertook excavations on the north-eastern corner of George and Charles Streets, Parramatta (2005b) at site name CG1. This was considered to be the first systematically collected artefact assemblage recovered from the Parramatta terrace sand adjoining the Parramatta River (McDonald 2005b:i). Aboriginal artefacts were initially uncovered during historical archaeological investigations. Subsequent excavations for evidence of Aboriginal occupation uncovered numerous stone artefacts within the alluvial sand deposits at the site, with a total of 6,763 artefacts identified, along with an additional 680+ non-flaked lithic items which were considered to be manuports to the site. The highest density of artefacts was identified in one 1x1m test pit, which contained 393 artefacts.

The CG1 site (McDonald 2005b) revealed a subsurface artefact density of 24 artefacts per $m^2$. Substantial variation in raw material types was seen at CG1, and included silcrete, silicified tuff, quartz, silicified wood, igneous stones, ironstone and other. Silcrete was predominant in the upper 20cm of the deposit, whilst silicified tuff was more frequent below 20cm depth and particularly below 40cm (McDonald 2005b:64. It was considered that the relative proportions of sildrete and silicified tuff indicated a stratified site (McDonald 2005b:30). Artefacts identified include possible anvils and hammers, backed artefacts, tools/possible tools, cores/core-tools, retouched artefacts, debitage, complete flakes and flaked pieces. The CG1 (McDonald 2005b) assemblage generally comprised plain (or single) platforms comprising 56.5% of the total, with other platform types including cortex, ridged, scarred, faceted, focal and bipolar.

The site was considered to be stratified and showed spatial patterning of artefacts, including horizontal and vertical distribution of artefacts. Artefacts formed on different raw material types varied in frequency according to the depth at which they were identified. Both local and distant raw material types were represented in the assemblage. It was considered that much of the silcrete present at the site originated from the silcrete source at the Olympic Village site.

McDonald's (2005b) CG1 site appears to have been occupied from the Pre-Bondaian or early Holocene, approximately 6 – 10, 000 years ago. The size of artefacts at CG1 (McDonald 2005b) exhibited an increase with depth, indicating the change with depth from Bondaian occupation to the older Pre-Bondaian assemblage. McDonald (2005b: 91) states that the presence of "dentate retouched tools" described by McCarthy (1976) as Capertian "saws", a preference for silicified tuff and unifacial flaking resulting in wide flakes with "plain" platforms are all indicative of early occupation, along with the low frequency of backed artefacts.

**CG3: 101A-105 George Street**

McDonald (2005c) excavated another area opposite CG1, known as CG3, located at 101A-105 George Street, Parramatta. This site was located within the Parramatta terrace sand, although this was considered to be on the margins. The historical development of the site had truncated the top of the deposits, resulting in the removal of much of the A horizon and leaving an approximate 20-40cm of deposit in which Aboriginal cultural material was identified (McDonald 2005c:49). A total of 510 artefacts were recovered during the archaeological excavations, comprising cores, retouched artefacts, tools/possible tools, proximal debitage, and other debitage. Raw materials included silicified tuff, silcrete, quartz, silicified wood, quartzite and unidentified materials, with silicified tuff comprising the majority of the assemblage at around 80%. Artefact densities across the site were low at around 2-6 artefacts per $m^2$ (McDonald 2005c:53).

Analysis of the artefacts recovered from CG3 (McDonald 2006) indicates that the assemblage is Pre-Bondaian in age, however the more recent assemblages are missing from this site, most likely as a result of soil stripping and modern development. The artefacts from CG3 (McDonald 2006) are large, indicative of the Pre-Bondaian occupation at this site. The project identified the potential for intact deposits within the Parramatta terrace sands with potential for addressing archaeological issues (McDonald 2005c:87).

**RTA site G1: 109-113 George Street**

McDonald (2005d) also excavated an area beside CG3, located at 109-113 George Street, known as the RTA site G1

(McDonald 2005d). The RTA site G1 provided a sequence of occupation dating from the late Pleistocene through to the mid-Holocene. The RTA site is located at the corner of George Street and Argus Lane and bound by Union Street to the south. Although the site had been heavily impacted by development, the sub-surface deposits revealed an "accumulation of evidence from multiple occupation episodes, no doubt occurring at many different times" (McDonald 2005d:147). Radiocarbon dating provided a range of dates indicating continuous occupation of the site. The most important date showed that the alluvial sand terrace, on which this site was located, was possibly first occupied during the late Pleistocene period, about 30,000 years BP and then showed various phases of occupation (McDonald 2006:107). The earliest date obtained from this site, 30,000 years BP, provides the oldest date for the Sydney Basin (McDonald 2006:4)

Artefact types recovered include hatchets, anvils, serrated tools, retouched tools, usewear artefacts, backed artefacts, cores, flakes and debitage. Raw material types included silicified tuff, silcrete, quartz, silicified wood, quartzite and unidentified materials, with silcrete comprising the majority of the assemblage. The average lithic density across the site was 38 artefacts per $m^2$. The assemblage described by McDonald (2005a: 88-101) contains 29 silcrete artefacts larger than 5cm, although only one of these was excavated from the upper 20cm of the deposit.

The results of McDonald's (2005a) RTA-G1 excavation indicate that the site was occupied from the Late Pleistocene with repeated occupation through the terminal Pleistocene and throughout the Holocene with the most recent radiocarbon date from the site being around 3,000 years old. The evidence demonstrates that the upper 20cm of the deposit represents the Bondaian phase of the Eastern Regional Sequence with a prevalence of glossy, heat treated silcrete dating to the last 5,000 years. The deposit below 20cm represents the Pre-Bondaian, dominated by silicified tuff, representing occupation from approximately 30,000 years ago (McDonald 2005a: 147).

**95-101 George Street**

In 2005 Austral Archaeology undertook an assessment of 95-101 George Street, Parramatta and identified the potential for subsurface deposits to exist at that location. Austral Archaeology (2007) subsequently undertook salvage excavation of the site. A total of 601 whole and broken flakes were recovered. The investigation proposed that the raw materials for the artefacts had been sourced both locally and from other regions. It was suggested that the prime local source would have been the gravel load of the Parramatta River. Other sources included the Olympic Village site, about 5km to the east, sandstone bodies to the north and west and the Nepean River, about 25km away (Austral Archaeology 2007:ii). This investigation also concluded that much of the artefact production had occurred *in situ*. Importantly, the study found that historic ground disturbance had left much of the archaeological deposit intact and the artefacts were found within the sandy matrix of the sand terrace that lay below the phases of historic occupation. The report also concluded that this is the same alluvial sand terrace identified by McDonald (2005b & d) and that the assemblage from 95-101 George Street is probably part of the site identified by McDonald to encompass both CG1 and RTA-G1 (McDonald 2005b & d). Another finding from this study was the conclusion that sites closer to the Parramatta River represented occupational sites that were regularly used. Sites further from the river appeared to be more 'opportunistic or casual use knapping events' (Austral Archaeology 2007:iv).

While the excavations at 95-101 George Street (Austral 2007) did not provide any suitable samples for radiocarbon dating, the range of tool types, depth of deposit and raw materials were used to establish a relative date rage for occupation of the site. The upper layers of the deposit indicate late Holocene or Bondaian occupation of the site, while the deeper material which exhibits a preference for silicified material, suggests occupation prior to 5,000 years BP. Tuff was the dominant raw material collected in this assemblage, comprising 45% of the total assemblage, while FGS was the second most common material with 23.2% of the total, and silcrete with 16.3% of the total. The assemblage collected at 101 George Street (Austral 2007) shows that overall artefact size is small with the maximum artefact length being 39cm. The assemblage collected at 95-101 George Street (Austral 2007) was dominated by conchoidal initiations with this type representing 97.3% of the total number of flakes, 1.6% bending initiation and 1.1% bipolar initiations. The assemblage was dominated by single (flat) platforms which comprised 65.6% of the total flaked artefacts, and cortical platforms represented 5.4% of the total number of flaked artefacts. The analysis (Austral 2007: 117) states that the larger artefacts are indicative of the Pre-Bondaian occupation of the site, and that Bondaian artefacts are generally significantly smaller in size.

**Sydney Water Monitoring**

In 2009 monitoring of excavations in Macquarie Street by AHMS (2009) on behalf of Sydney Water were conducted opposite Civic Place and at the intersection with Charles Street. The Sydney Water excavations, which were between 1.3m and 2m in depth (AHMS 2009:18, 23) were subjected to archaeological monitoring but no Aboriginal objects were found (AHMS 2009:39). The Parramatta terrace sand had been considered to extend into this area, although no evidence of the sand sheet was identified during the monitoring works. The soil profile in the trenched directly opposite Civic Place was

shown to contain road base and levelling fill overlying an orange/mottled heavy Tertiary clay, although it was noted that this area had been impacted through the installation of an historic drain trench within a former creek channel.

**Sydney Water Headquarters: 1 Smith Street**
McDonald (2004a) undertook excavations in the south eastern corner of Parramatta Square (Civic Place) development site at 1 Smith Street, which was to become the Sydney Water Headquarters, uncovering Aboriginal artefacts. This site had been identified as a PAD and registered as AHIMS site 45-6-2678 SSP1. A total of 198 lithic items were excavated at the site. The majority of the assemblage (n=118, 59.6%) comprised quartz, followed by silcrete, silicified tuff and silicified wood. A range of artefact types were identified, including a number of bipolar cores and bipolar debitage. The majority of the assemblage comprised debitage.

This investigation concluded that although the site had been subjected to more than 100 years of development, approximately 40% of the site remained "undisturbed or only superficially impacted" (McDonald 2004a: 34). Artefact density across the site was considered to be very low at 2-3 artefacts per $m^2$, although one trench yielded 25 artefacts (McDonald 2004a: 19). The site was considered to have been occupied in a transient, non-residential manner, due to its distance from water (McDonald 2004a:30). McDonald states that similar locations in the Parramatta CBD are likely to contain "intact artefact bearing deposits" (McDonald 2004a: 34). The assemblage at the Sydney Water Headquarters was considered to be more recent than those dominated by silicified tuff, based on the fact that quartz was the dominant raw material type present (McDonald 2004a:32). The excavation at the Sydney Water headquarters allowed an understanding of the way the areas away from the Parramatta River were utilised by Aboriginal people before colonial settlement occurred.

**15 Macquarie Street**
Comber (2010a) undertook archaeological excavations at 15 Macquarie Street, Parramatta which had been highly disturbed throughout its history of use since 1804. At the time of excavation, it was a sealed car park. This excavation retrieved 350 artefacts and the analysis identified that intact archaeological deposits were present on this site. The subsurface artefact density at 15 Macquarie Street Parramatta (Comber 2010a) was 2.3 artefacts per m2. The results of lithic analysis at 15 Macquarie Street Parramatta (Comber 2010a) indicate that the assemblage collected contained 15 microliths and an edge ground axe. The presence of microliths, indicative of the Australian small tool tradition and Bondaian phase of the Eastern Regional Sequence, and an edge ground axe, demonstrating the Eloueran phase in the assemblage, demonstrate that typologically this assemblage belongs to the Australian small tool tradition and the Bondaian and Eloueran phases of the Eastern Regional Sequence. There was a distinct preference for silcrete which comprised 59.39% of the total assemblage, while quartzite only comprised 2.03% of the total.

The results of lithic analysis at 15 Macquarie Street Parramatta (Comber 2010a) indicate that the assemblage collected contained 15 microliths and an edge ground axe. The presence of microliths, indicative of the Australian small tool tradition and Bondaian phase of the Eastern Regional Sequence, and an edge ground axe, demonstrating the Eloueran phase in the assemblage, demonstrate that typologically this assemblage belongs to the Australian small tool tradition and the Bondaian and Eloueran phases of the Eastern Regional Sequence. There was a distinct preference for silcrete which comprised 59.39% of the total assemblage, while quartzite only comprised 2.03% of the total. The assemblage retrieved from 15 Macquarie Street (Comber 2010a) contained 195 flaked artefacts with 98.5% of these being conchoidal initiation types and 1.5% being represented by bending initiations.

The excavations at 15 Macquarie Street (Comber 2011a) revealed an assemblage that was dominated by single platforms which contributed 64.6% of the total number of flaked artefacts, while cortical platforms were present on 7% of the flaked artefacts and focussed platforms comprised 15.8% of the total.

Evidence of the Parramatta Terrace Sand was not found at this site.

**Cumberland Press Site: 142-154 Macquarie Street, Parramatta**
Work undertaken by Haglund (2008) and Comber (2011b) at 142-154 Macquarie Street, Parramatta (the Cumberland Press site) revealed that subsurface artefacts were present on this very disturbed site. The Parramatta terrace sand was identified at this site. The site had previously been subjected to multiple uses including a Colonial hotel and residences. Prior to excavation this site was a sealed car park at the rear of the Cumberland Press building. The excavation of the Cumberland Press site by Haglund produced an overall average artefact density of 10 artefacts per $m^2$ (Haglund 2008: Appendix C 13), while the Comber Consultants Cumberland Press excavation produced a sub-surface artefact density of 3.5 artefacts per $m^2$ (Comber 2011b). Haglund (2008) identified that the area tested was too small to allow conclusions to be made regarding spatial patterning of group sizes and frequencies of site use.

The assemblage recovered during Haglund's (2008) and Comber Consultants' (Comber 2011b) Cumberland Press excavations were dominated by silcrete with silicified tuff being the next most common raw material. The lithic analysis and the results of the excavations lead to the conclusion that the Cumberland Press site was missing the deeper Pre-Bondaian deposit present below 20cm at the RTA-G1 site. Silcrete was the predominant material in both Cumberland Press excavations with Haglund's (2008) assemblage with silicified tuff being the next most common raw material. Comber's (2011b) assemblage was also dominated by silcrete, which comprised 90.48% of the total assemblage, while quartzite was not represented in this collection.

The size of the artefacts collected by Comber (2011b) at Cumberland Press was small, with only four (19.05% of the total assemblage) artefacts having a measurement greater than 20mm. The previous Cumberland Press excavation by Haglund (2008) produced a total of 26 out of 104 artefacts measuring greater than 20mm, comprising 25% of the total assemblage (2008: Appendix C 9). Information on initiation types is not provided in the lithic analyses. The Cumberland Press excavations by Haglund (2008) revealed that the most commonly occurring platform type was plain, comprising 39.29% of the total. Information on platform types was not available for the Comber (2011b) Cumberland Press excavation.

Evidence of the Parramatta Terrace Sand was found at this site.

**140 Macquarie Street**

Excavations undertaken by Comber (2010b) at 140 Macquarie Street for Endeavour Energy on a previously disturbed site uncovered intact *in situ* archaeological deposits and approximately 60 artefacts. The excavation at 140 Macquarie Street Parramatta (Stening 2011) revealed an artefact density of 3.5 artefacts per $m^2$. These results confirm that intact sub-surface archaeological deposits may still exist despite later disturbance. Again, this site contained a sealed car park and buildings.

The assemblage collected from 140 Macquarie Street (Stening 2011) was comprised of 63 flakes without retouch, three retouched flakes and one anvil/hammer stone. The most commonly occurring artefact type was the flake without retouch making up 94.03% of the total assemblage. Retouched flakes made up the second most commonly occurring artefact type with 4.48% of the total, and the anvil/hammer stone comprising 1.49% of the assemblage. Of the three retouched flakes, one is a broken backed artefact and another is probably the proximal portion of the original flake used to make the backed artefact. This was retouched after the original flake broke with a transverse snap, possibly during production of the backed artefact. The distal portion of the third retouched flake exhibited clear evidence of use wear. All three retouched flakes measure less than 30mm in length and are classified as microliths, according to Gould's (1969: 235) description, therefore dating the assemblage to the Bondaian and Eloueran phases of the Eastern Regional Sequence.

The assemblage collected at 140 Macquarie Street (Stening 2011) showed that the artefacts were generally small with only 3.17% of all flakes having a dimension greater than 30mm. At 140 Macquarie Street (Stening 2011) conchoidal flakes were the most commonly occurring initiation type with conchoidal flakes representing 92.42% of the total and bipolar flakes representing 7.58% of the total. At 140 Macquarie St (Stening 2011) single platform dominated the assemblage, comprising 48.48% of the total.

Evidence of the Parramatta Terrace Sand was found at this site.

**Harris Street Footpath**

Comber (2015) undertook an excavation along Harris Street, Parramatta, in advance of the installation of new cabling and ducting for Endeavour Energy. The excavated area was covered by a concrete footpath. A total of 59 artefacts were recovered during the excavation. The artefact density for the site was 6.55 artefacts per m2. The assemblage was comprised of one core, six flakes without retouch, three retouched flakes and 49 flaked pieces. The prevalence of quartz (42.37% of the total) artefacts in this assemblage, suggested that a local source of quartz was available for the production of small artefacts. Silcrete was the second most commonly occurring raw material representing 27.11% of the total; glass comprised 20.34% of the total; chert comprised 8.47% of the total; and quartzite 1.7% of the total. Artefacts were recovered from a depth of up to 45cm.

Typologically the assemblage excavated from the Harris Street footpath belongs to the Australian small tool tradition and the Bondaian phase of the Eastern Regional Sequence, which is dated to no later than 7,000BP. An examination of the reduction intensity of this assemblage, which was undertaken in terms of flake and flaked piece size, the amount of cortex present on artefacts and cores, and the ratio of flakes to cores, generally demonstrates that there is a high reduction intensity within this assemblage. The core to flake ratio, however, suggests a lower reduction intensity, suggesting that the site was occupied for short periods of time by more mobile people.

Evidence of the Parramatta Terrace Sands was identified at this site.

**Parramatta Square**

The present study area is located to the south of Parramatta Square (formerly known as Civic Place)

Parramatta Square is divided into a number of development sites numbered Parramatta Square (PS) 1-7.

In 2004 McDonald undertook preliminary excavations for the City of Parramatta Council at Civic Place to inform the planning process for the redevelopment of Civic Place, into Parramatta Square. The purpose of the excavations was to "identify whether Indigenous heritage sites are likely to occur across the proposed development area" (McDonald 2004b: 1). Due to the constraints of the site (i.e. the presence of buildings and the location of historical archaeological testing), only 0.07% of Civic Place (Parramatta Square) was investigated. She excavated a total of six trenches. A small number of artefacts were collected from each trench, with a total of 37 artefacts recovered across the site. The trenches contained historic fill to a depth of approximately 40cm, overlying a heavily compacted light brown silty deposit, which in turn overlay a heavily compacted pale coloured deposit coming onto an uneven red/yellow clay base. There was no evidence of an intact A horizon. European artefacts were found throughout the trench. There was no evidence of the Parramatta Terrace Sand.

The dominant material type was silcrete, with a total of 14 silcrete artefacts excavated. Nine silicified tuff artefacts, eight chert artefacts, and four quartz artefacts were collected, along with single examples of quartzite and unknown/fine grained silicious artefacts. No formal tools were identified, and most artefacts comprised full flakes (n=13), followed by flake fragments (n=10), flaked pieces (n=8) and broken flakes (n=3), with a single example of a bipolar quartz flake and a cone split broken flake also identified (McDonald 2004b:20). Due to the excavation methodology, no assessment of spatial distribution of artefacts was possible. The artefact density was considered very low at 2.6 artefacts/$m^2$.

The results of this excavation indicate that several areas within the Parramatta Square development contained intact soil horizons, and that higher concentrations of artefacts "may survive in isolated pockets across the site" (2004b:2). No details regarding the spatial (either horizontal or vertical) distribution of artefacts was presented in the report.

GML Heritage undertook archaeological salvage of PS1 which is located to the south-east of the current study area. They uncovered 122 artefacts within a moderately disturbed context. Aboriginal objects were present in discrete concentrations at around 20cm below the "surface" at the end of historical archaeological investigations. Whilst the upper layers had been impacted, the lower two spits below the "surface" at the end of the historical archaeological investigations were relatively intact. The soil was the Blacktown residual soil profile, truncated and with very high clay content. The study area was on a simple gentle slope that did not contain any depressions or low areas akin to swamp or drainage channels. Evidence of the terrace sand was not found. The artefacts comprised seven raw material types:

- The dominant material was mudstone with a total of 48.
- Silcrete: 43 artefacts
- Chert: 24 artefacts
- "Minor representations of quartz and petrified wood also occurred within the assemblage"

In 2015 and 2016 Comber (Comber & Stening 2018) undertook salvage excavations at 153 Macquarie Street, named PS3. The study area was located on grey clays and the Parramatta Town Drain, which channelised the historic creek line, ran diagonally through the study area. The study area rose up from Macquarie Street towards the south-eastern corner of the site. More than 600 artefacts were uncovered during these excavations, despite significant disturbance to the site with enormous concrete footings and a multitude of services across the site. Over 400 artefacts were retrieved including glass artefacts. The excavation has only just been completed and the detailed analyses has only just commenced. Therefore, statements about artefact types, distribution, depth etc., cannot be made at this stage.

Comber undertook salvage excavations at PS5&6 and PS2 (renamed 8PS). At PS5&6 over 200 artefacts have been found including an artefact which has possibly been made from English flint which was exported to the Australian Colony as ballast in the early 19th century. In addition, hearths possibly dated to as late as 1850 were uncovered A total of 221 cultural lithics, including 126 artefacts, were recovered, plus three hearths. The artefacts would have been used for cutting meat and woodworking. The artefact analyses and dating of the hearths indicates that the site was initially occupied prior to c.7,500 BP, continuing into the contact phase around 1830 (Comber & Stening 2019a). At PS2 approximately 350 artefacts were retrieved (Comber & Stening 2019b).

Excavations were also undertaken at 2B-6 Hassall Street, Parramatta (Comber 2018a) which uncovered 517 cultural lithics and nine glass artefacts A clay heat retainer hearth was recorded. This was a small highly disturbed site yet it revealed substantial subsurface evidence of occupation, including contact archaeology

Excavations at 5-7 Charles St and 116 Macquarie Street, Parramatta also provided subsurface evidence of occupation (Comber 2020). This was a highly disturbed site with multiple layers of European occupation. Yet Aboriginal artefacts and evidence of the terrace sand were uncovered at this site.

Test excavations were undertaken at 37-39 Smith Street, Parramatta.The site was highly disturbed, with much of the soil profile having been truncated as a result of construction on site during the 1980s. However, despite this, substantial evidence of occupation was uncovered indicating continuous occupation from over 8,000 years BP, to the early period of European contact. The excavations uncovered nodules of ochre within the eastern portion of the site, and a total of 168 cultural lithics were recovered, consisting of 130 artefacts, 29 heat shatters, eight non-diagnostic fragments, a recently broken fragment of cultural stone and a hammerstone. Glass artefacts were also uncovered indicating occupation during the early contact phase (Comber 2020).

The studies undertaken within Parramatta to date indicate the archaeological importance of the Parramatta Terrace Sand and the possibility for artefacts and subsurface *in situ* deposits to remain despite later urban development. All excavations on the Parramatta Terrace Sand and elsewhere in Parramatta have yielded artefacts, regardless of the post-contact use of the site. In some cases, *in situ* deposits have been located (as at 140 Macquarie Street), whilst in other excavations although *in situ* deposits have not been found, important information about Aboriginal occupation was still gained (such as at Harris Street). Despite the amount of disturbance, it is still possible to gain useful information about the history of Aboriginal occupation in Parramatta. The information gained contributes to an understanding of Aboriginal land use and occupation patterns, including during the contact period, as the majority of the sites excavated by Comber Consultants within Parramatta have revealed evidence of contact archaeology.

## 6.3. Study Area

A search of the AHIMS register indicated that there are no previously registered sites within the study area. The site is not an Aboriginal Place. Seven sites have been recorded within the vicinity of the study area (Figure 9 and Appendix A). All sites are located within a 300m buffer of the study area.

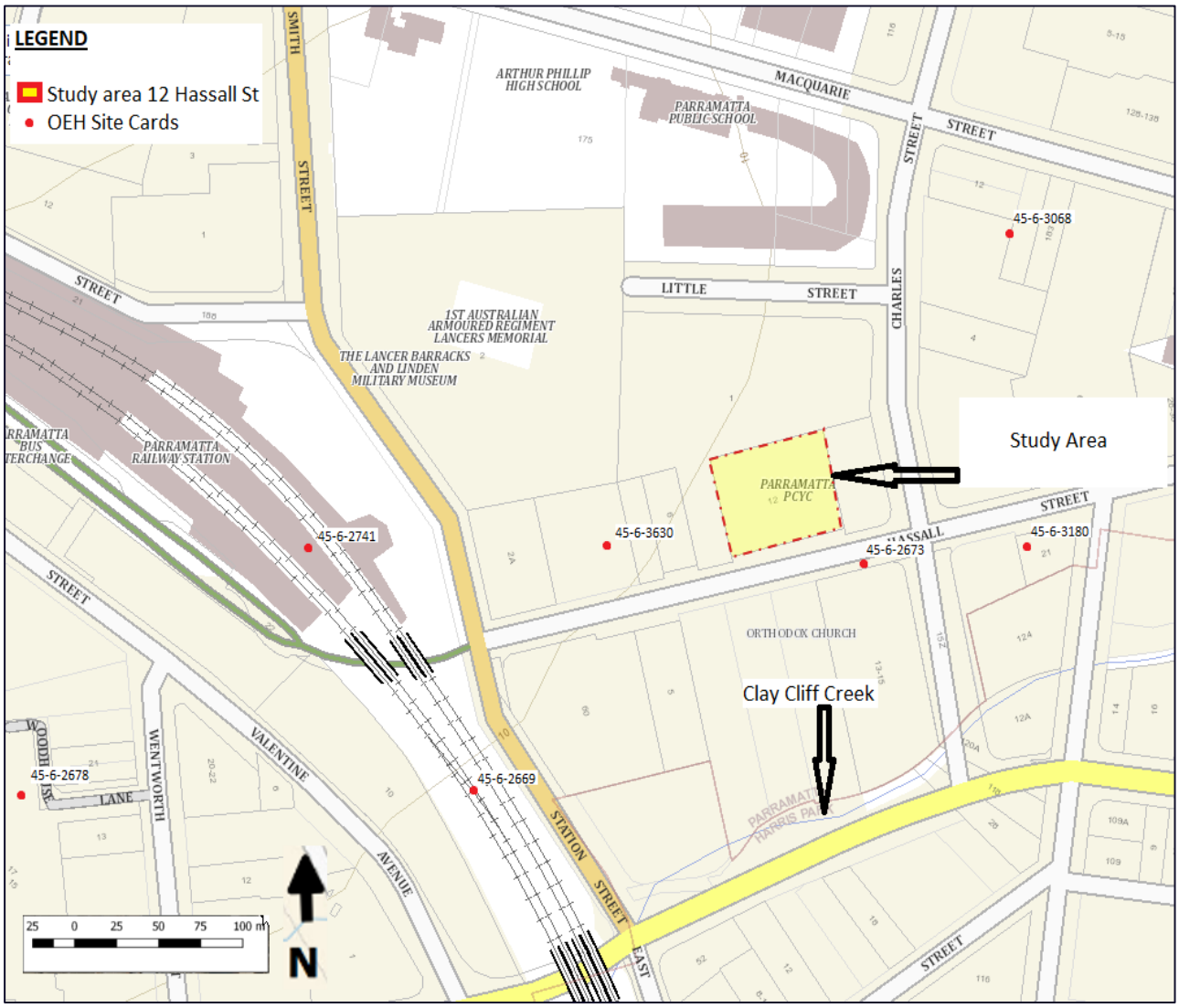


**Figure 9:** Map of the study area showing the location of entries in the AHIMS register

## 6.4. Site Prediction

On the basis of the above environmental and archaeological information, it is expected that subsurface archaeological deposits which include stone artefacts will be located across the study area. Raw material types expected to be identified include silicified tuff, silcrete, quartz, and chert. It is predicted that a range of artefact types will be recovered, including flakes, flake pieces, cores and potentially a range of retouched artefacts. The evidence from previous studies indicates that it is possible that contact artefacts made from glass or other European materials such as flint may be located on the site.

Given that the site has been cleared of all vegetation and natural features, it is not expected that rock shelters, axe grinding grooves, engravings, scarred or carved trees will be located.

# 7 RESULTS, IMPACT & MITIGATION

## 7.1. Results

The study area is within the urban landscape of Parramatta. It contains a building constructed in the 1970s and a 1930s bungalow. As the study area contains buildings and a concrete apron and parking area, visibility was nil. As a result evidence of Aboriginal occupation was not observed on the surface. However, as previously indicated, previous studies in Parramatta have indicated that evidence of subsurface occupation will still remain despite later development. The evidence also indicates that most sites contain fill. This fill would have protected any Aboriginal objects on the site.

## 7.2. Mitigation

The proposed development will maximise all space within the development envelope and includes a basement, so that it will not be possible to avoid impact.

As Aboriginal objects are predicted to exist within the study area, and it is an offence to harm such objects, test excavations are proposed as a mitigation measure, as avoidance of the potential deposits is not possible. Prior testing under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* will not be required as it is possible that the site contains contact archaeology. Pages 24-25 state that "areas known or suspected to be conflict or contact sites" are not "excluded from the definition of harm". Therefore, it will be necessary to apply for an Aboriginal Heritage Impact Permit to undertake testing.

It will also be necessary to undertake Aboriginal consultation in accordance with the *Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010* and an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared. It is a requirement that the ACHAR accompany the AHIP application.

The information gained from archaeological excavation contributes to our knowledge and understanding of Aboriginal occupation. This knowledge can then be passed down to future generations through educational programs and interpretation. Such strategies will contribute to maintaining social cohesion within the Aboriginal community and to building social cohesion within the broader community and protecting cultural values for future generations. Archaeological sites are valued by the Aboriginal community for more than their archaeological/scientific values. Such sites reflect both the physical and spiritual presence of ancestors on country. It is therefore important that as much information as possible is obtained to ensure recognition of Aboriginal heritage and to pass this information on to future generations. To ensure appropriate management a two stage excavation program is proposed which will ensure that the maximum amount of information is gained from this site. The aim of Stage 1 will be to determine the nature and extent of the subsurface deposit and Stage 2 is to recover evidence that will compliment and extend the information obtained from other sites excavated within Parramatta.

# 8 SIGNIFICANCE ASSESSMENT

## 8.1. Preamble

Significance assessment is the process whereby sites or landscapes are assessed to determine their value or importance to the community.

A range of criteria have been developed for assessing the significance which embody the values contained in the Burra Charter. The Burra Charter provides principles and guidelines for the conservation and management of cultural heritage places within Australia.

Following are the criteria which will be used to assess the study area:

**Social or Cultural Value** (sometimes termed "Aboriginal" value) which refers to the spiritual, traditional, historical or contemporary associations and attachments which the place or area has for the present day Aboriginal community.

**Historic Value** refers to the associations of a place with a person, event, phase or activity of importance to the history of an Aboriginal community.

**Scientific (archaeological) Value** refers to the importance of a landscape, area, place or object because of its archaeological and/or other technical aspects.

**Aesthetic Value** refers to the sensory, scenic, architectural and creative aspects of the place.

**Representativeness** refers to whether the site demonstrates the principal characteristics of that site and is a good representative example of that site type.

**Rarity** refers to the degree to which such a site is known elsewhere and whether the site is uncommon, rare or endangered.

## 8.2. Assessment

**Social or Cultural Values**

The study area has the potential to contain evidence of Aboriginal occupation which provides a continuing cultural link to their past. The study area could provide evidence of tangible and intangible links of Aboriginal occupation with the lifestyle and values of their ancestors.

**Historic Values**

The current site is only 200-300m south-east of the former Market Place where Governor Macquarie's annual feast was held and is near the Native Institute. The location is significant to the members of the Aboriginal community as a significant site of early contact and the beginning of the policy to remove children from their families. The study area is predicted to contain significant historic values

**Scientific (archaeological) Values**

The study area has the potential to yield further information through detailed scientific and archaeological research into the nature of Aboriginal occupation and techniques utilised in subsistence activities. It has the potential to contain sub-surface archaeological deposits, including contact archaeology such as glass artefacts.

**Aesthetic Values**

The current site does not contain Aboriginal aesthetic values, however, after excavation the objects uncovered might meet this criteria

**Representative Values**

Until the excavation has been completed it is not known if the site contains representative values.

**Rarity Values**

Until further research has been completed it is not known if the study area contains rarity values.

## 8.3. Statement of significance

The information detailed in this report indicates the project is within close proximity to a number of significant sites. Consultation with representatives of the Aboriginal community indicates that the study area is of high importance to the local and broader Aboriginal community. The artefacts predicted to be located on the site will provide evidence of Aboriginal occupation representing their past providing a direct link to their ancestors. The current site is only 200-300m south-east of the former Market Place where Governor Macquarie's annual feast was held and is near the Native Institute. The location is significant to the members of the Aboriginal community as a significant site of early contact and the beginning of the policy to remove children from their families. As a result, the study area is predicted to contain significant historic values The study area has the potential to yield further information through detailed scientific and archaeological research into the nature of Aboriginal occupation and techniques utilised in subsistence activities. It has the potential to contain sub-surface archaeological deposits, including contact archaeology such as glass artefacts. The current site does not contain Aboriginal aesthetic values, however, after excavation the objects uncovered might meet this criteria. Until the excavation has been completed it is not known if the site contains representative or rarity values.

# 9 RECOMMENDATIONS

The following recommendations are made based on:

- Legal requirements under the terms of the *National Parks & Wildlife Act 1974* (as amended).
- Research into the archaeological record for the Parramatta CBD, and the study area.
- Results of the assessment as outlined in this report.

**Recommendation 1**: Aboriginal Consultation
Aboriginal community consultation in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* should be undertaken. An Aboriginal Cultural Heritage Assessment Report (ACHAR) will need to be prepared which details the results of the consultation and the archaeological assessment. This archaeological report will need to be appended to the ACHAR.

**Recommendation 2: Test Excavation**

As subsurface Aboriginal objects are predicted to exist within the study area, and it is an offence to harm such objects, test and salvage excavation should be undertaken. As SEARS have been issued it will not be necessary to apply for an Aboriginal Heritage Impact Permit.

**Recommendation 3: Induction**

An Aboriginal heritage induction should be provided to all employees, contractors and contractors engaged on the project on the significance of the Aboriginal heritage, that it an offence to harm Aboriginal objects and be advised of their responsibilities under the *National Parks and Wildlife Act 1974* in respect of Aboriginal heritage.

**Recommendation 4: Unexpected Finds and Human Remains Procedure**

*Aboriginal Objects*: If any Aboriginal objects are unexpectedly uncovered during the redevelopment of the site, all work must cease in the vicinity of the object and an area of at least one metre around the Aboriginal objected secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted for further advice. The consultant will assess the object and provide further advice. In addition, the consultant will liaise with the Registered Aboriginal Parties. No-one should enter the secured area and work can only recommence when advised by the consultant.

*Human Remains:* If any skeletal remains are uncovered during the redevelopment of the site, all work must cease in the vicinity of the human skeletal remains and an area of at least one metre around the skeletal remains secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted and must attend immediately. The consultant will inspect the skeletal remains to confirm that they are human. If the remains are human, the consultant will contact and liaise with the Police, Heritage NSW and the Registered Aboriginal Parties, all of whom will most likely attend the site. Work will not be able to recommence within the secured area until suitable management procedures are in place. It could take several months to determine an appropriate course of action.

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# APPENDIX A: AHIMS SEARCH

## AHIMS Web Services (AWS)

### Extensive search - Site list report

Your Ref/PO Number : HSt
Client Service ID : 648398

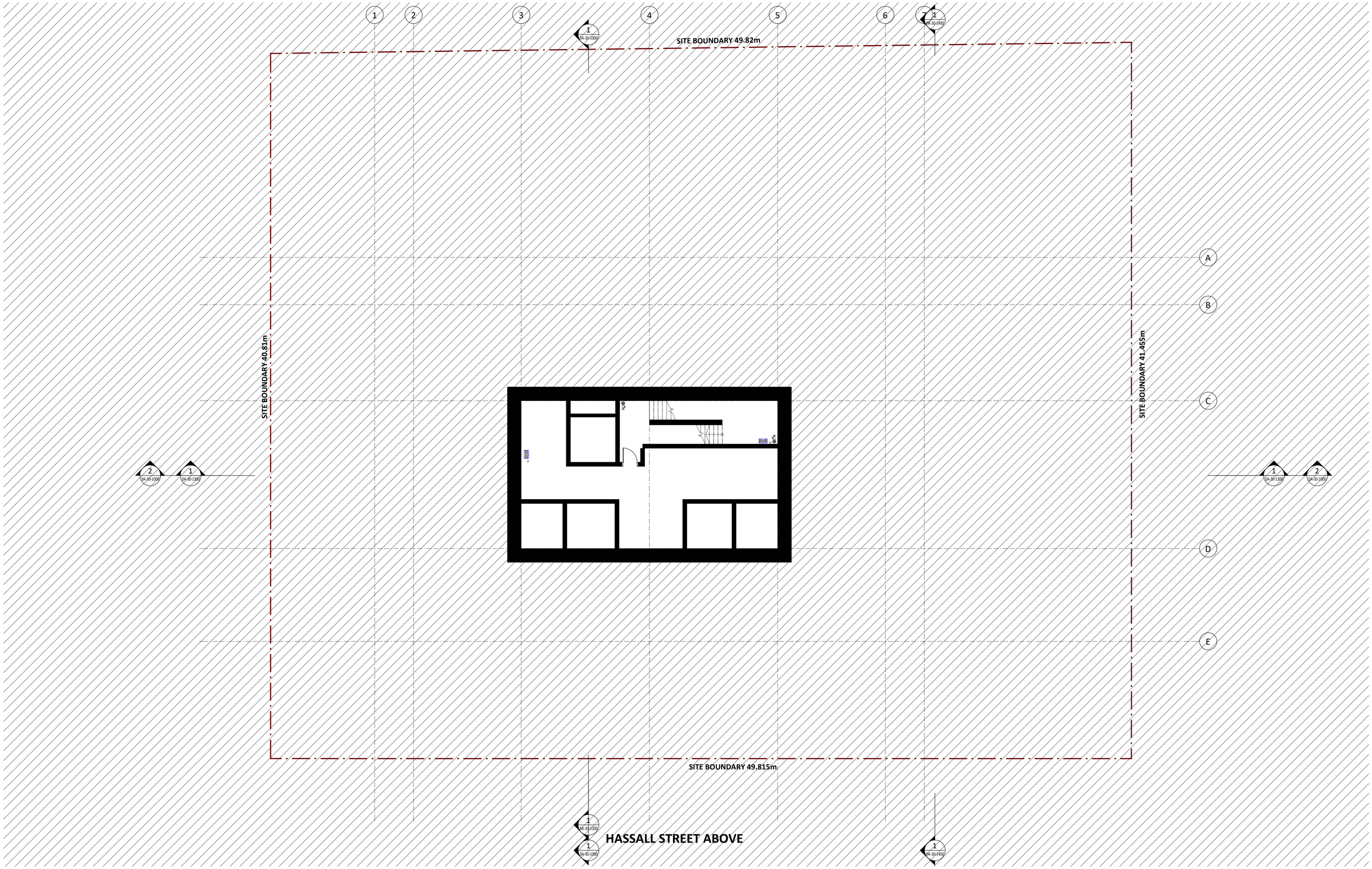
| SiteID | SiteName | Datum | Zone | Easting | Northing | Context | Site Status ** | SiteFeatures | SiteTypes | Reports |
|---|---|---|---|---|---|---|---|---|---|---|
| 45-6-3214 | Wigram & Hassall St AS | GDA | 56 | 315825 | 6256231 | Open site | Valid | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | | |
| | **Contact** | **Recorders** | Extent Heritage Pty Ltd - Pyrmont - Individual users,Mr.Alistair Hobbs | | | | | **Permits** | 4043 | |
| 45-6-3630 | Hassall St PAD | GDA | 56 | 315587 | 6256244 | Open site | Destroyed | Potential Archaeological Deposit (PAD) : 1 | | |
| | **Contact** | **Recorders** | Comber Consultants Pty Limited,Ms.Jillian Comber | | | | | **Permits** | 4412,4527 | |
| 45-6-2741 | Parramatta Transport Interchange PAD | AGD | 56 | 315450 | 6256250 | Open site | Valid | Potential Archaeological Deposit (PAD) : - | | 99438,99497,102196,103782 |
| | **Contact** | **Recorders** | Doctor.Susan (left ahms) Mcintyre-Tamwoy | | | | | **Permits** | 2121,4767 | |
| 45-6-3895 | PLR Macquarie St PAD | GDA | 56 | 315787 | 6256398 | Open site | Valid | Potential Archaeological Deposit (PAD) : - | | |
| | **Contact** | **Recorders** | GML Heritage Pty Ltd - Surry Hills,Doctor.Tim Owen | | | | | **Permits** | | |
| 45-6-2669 | Kendall Street, Harris Park | AGD | 56 | 315525 | 6256150 | Open site | Valid | Potential Archaeological Deposit (PAD) : - | | 102196,103782 |
| | **Contact** | **Recorders** | Jim Wheeler | | | | | **Permits** | 1767 | |
| 45-6-3180 | 21 Hassall Street | GDA | 56 | 315761 | 6256247 | Open site | Partially Destroyed | Potential Archaeological Deposit (PAD) : 1 | | 103758 |
| | **Contact** | **Recorders** | Ms.Ngaire Richards | | | | | **Permits** | 3906,3975 | |
| 45-6-3118 | Clay Cliff Creek Levee | GDA | 56 | 315801 | 6256294 | Open site | Valid | Artefact : 1, Potential Archaeological Deposit (PAD) : 1 | | 102992,102997,102998 |
| | **Contact** | **Recorders** | Ms.Fenella Atkinson | | | | | **Permits** | 3788 | |

**** Site Status**
**Valid** - The site has been recorded and accepted onto the system as valid
**Destroyed** - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.
**Partially Destroyed** - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground
**Not a site** - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

**Report generated by AHIMS Web Service on 20/12/2021 for Jillian Comber for the following area at Address : 12 HASSALL STREET PARRAMATTA 2150 with a Buffer of 200 meters.. Number of Aboriginal sites and Aboriginal objects found is 7**

This information is not guaranteed to be free from error omission. Heritage NSW and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

# APPENDIX B: PLANS

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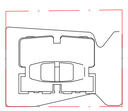

HASSALL STREET

N

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**Note**
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| Rev | Amendment | By | Chk* Reg. Arch | Date |
|---|---|---|---|---|
| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP

GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 1 2 5 8m
@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 6 FLOOR PLAN

**Drawing Number** DA-10-0300
**Revision** A

A1

Autodesk Docs://12 Hassall Street Gurner/PA030501_12HassallStGurner_AA_AR_DA.rvt

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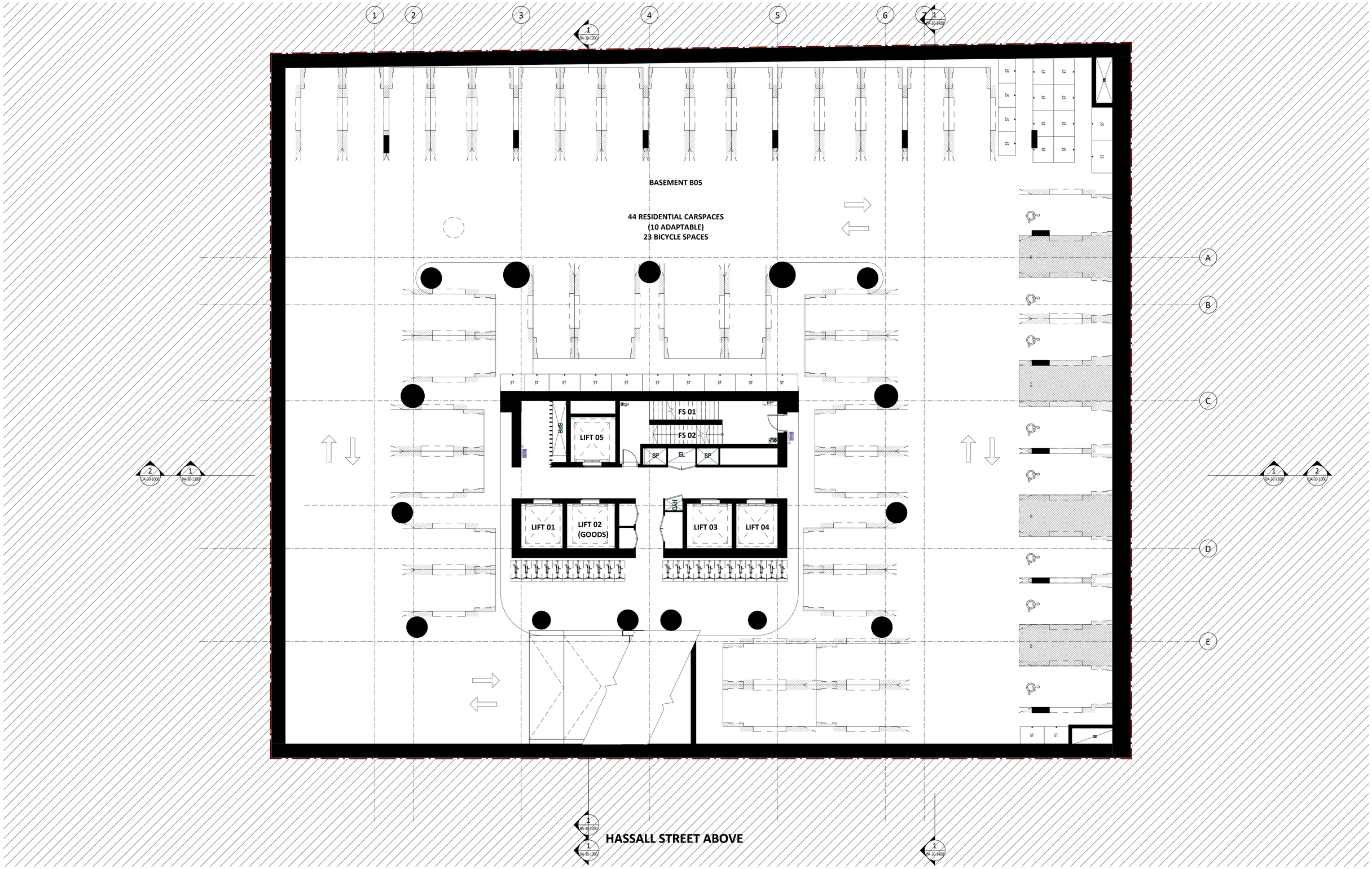


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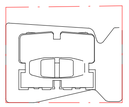

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 5 FLOOR PLAN

**Drawing Number** DA-10-0400
**Revision** A

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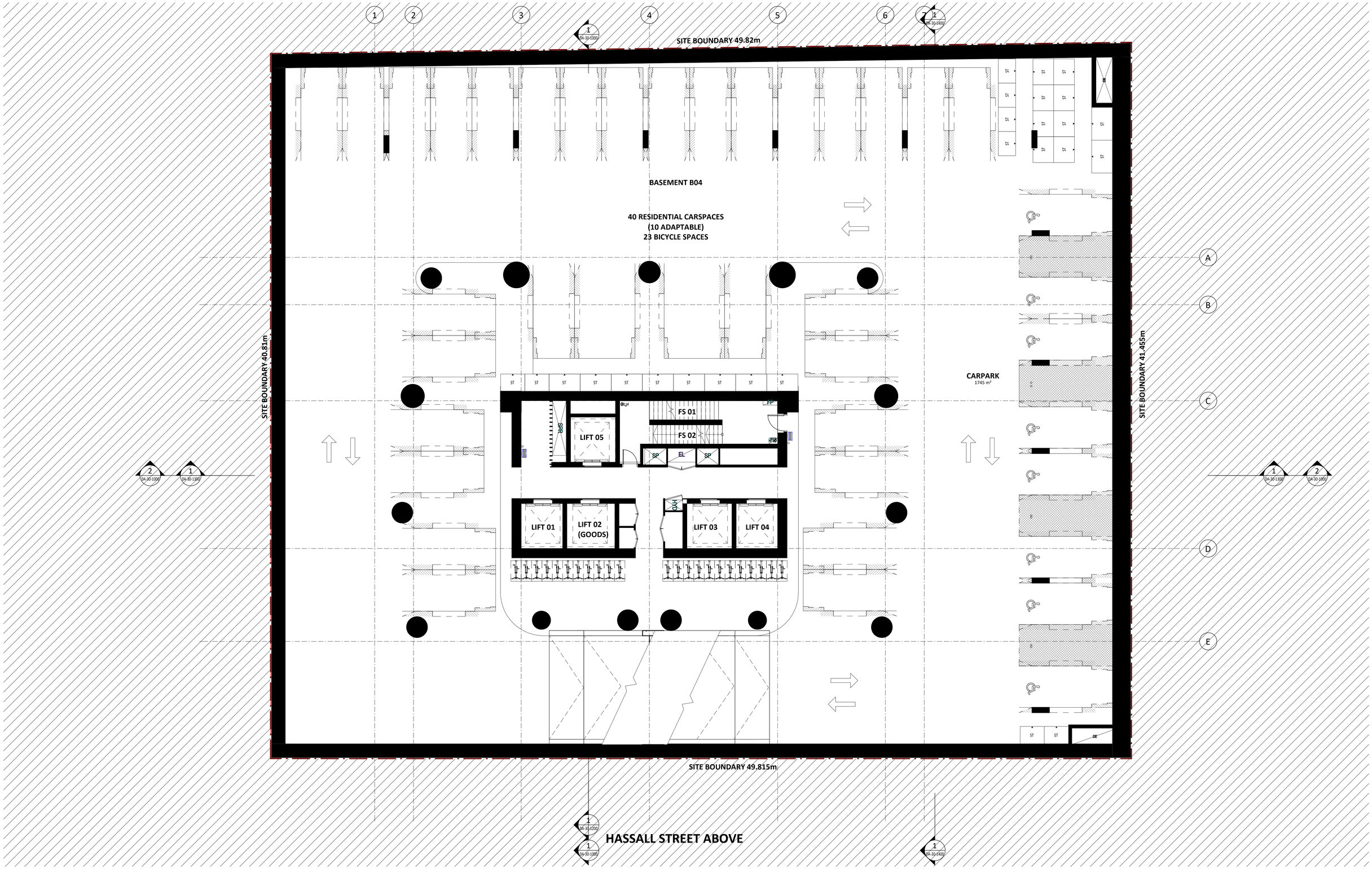


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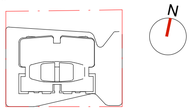


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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 4 FLOOR PLAN

**Drawing Number** DA-10-0500
**Revision** A

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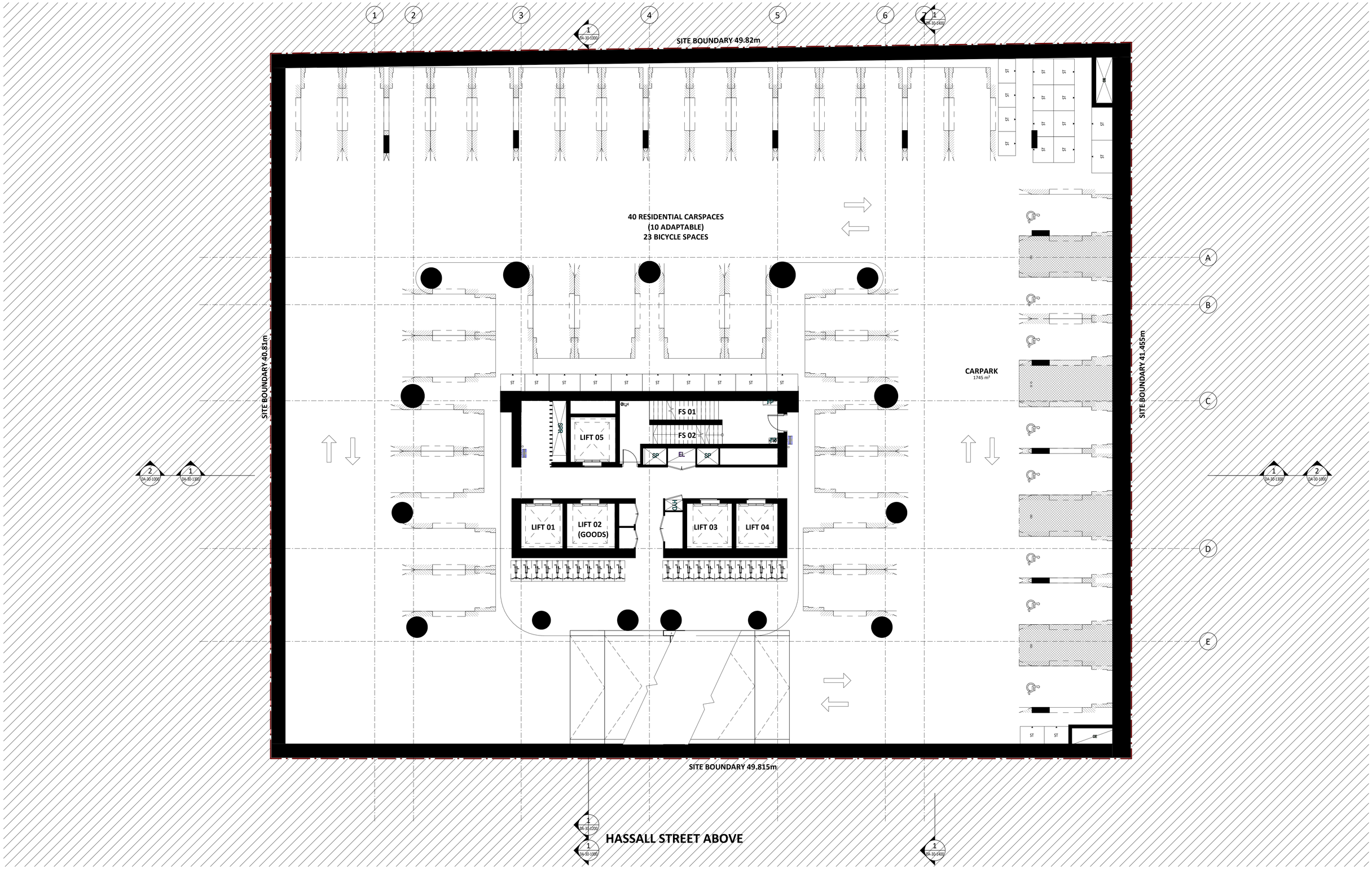


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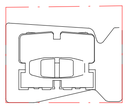

HASSALL STREET

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

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12 Hassall St, Parramatta

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**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 3 FLOOR PLAN

**Drawing Number** DA-10-0600
**Revision** A

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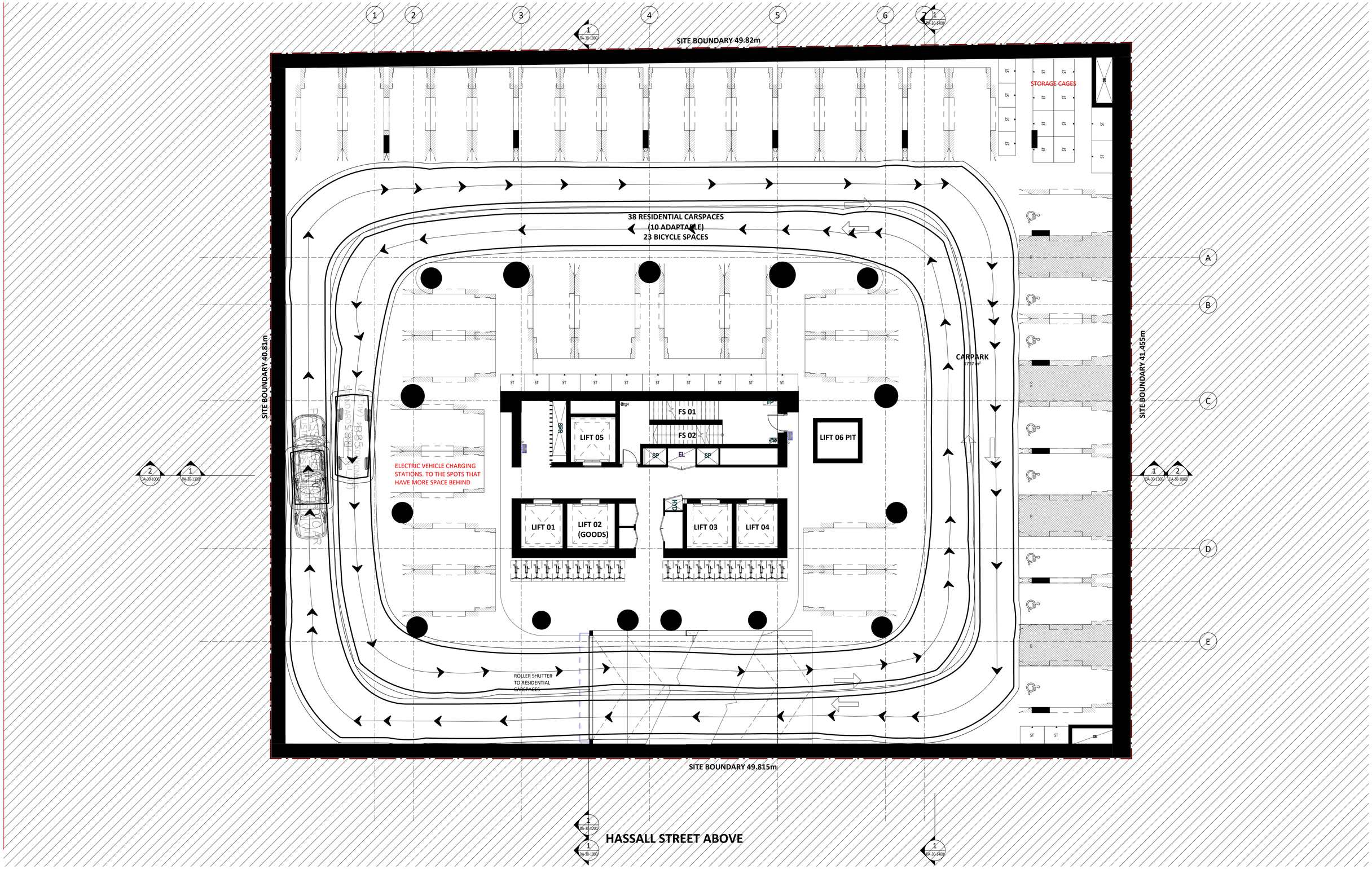


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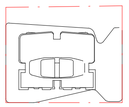

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 2 FLOOR PLAN

**Drawing Number** DA-10-0700
**Revision** A

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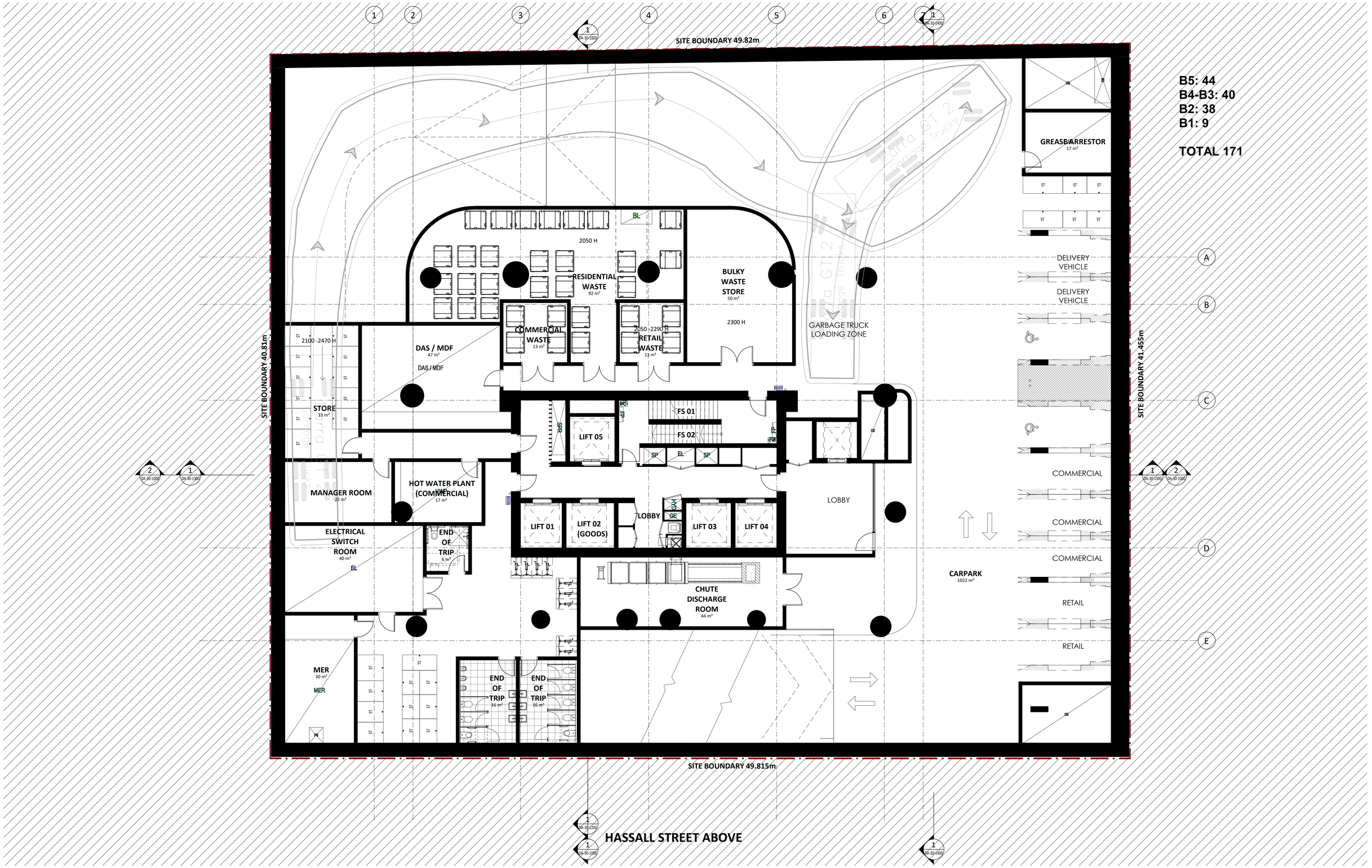


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**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

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S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 1 FLOOR PLAN

**Drawing Number** DA-10-0800
**Revision** A

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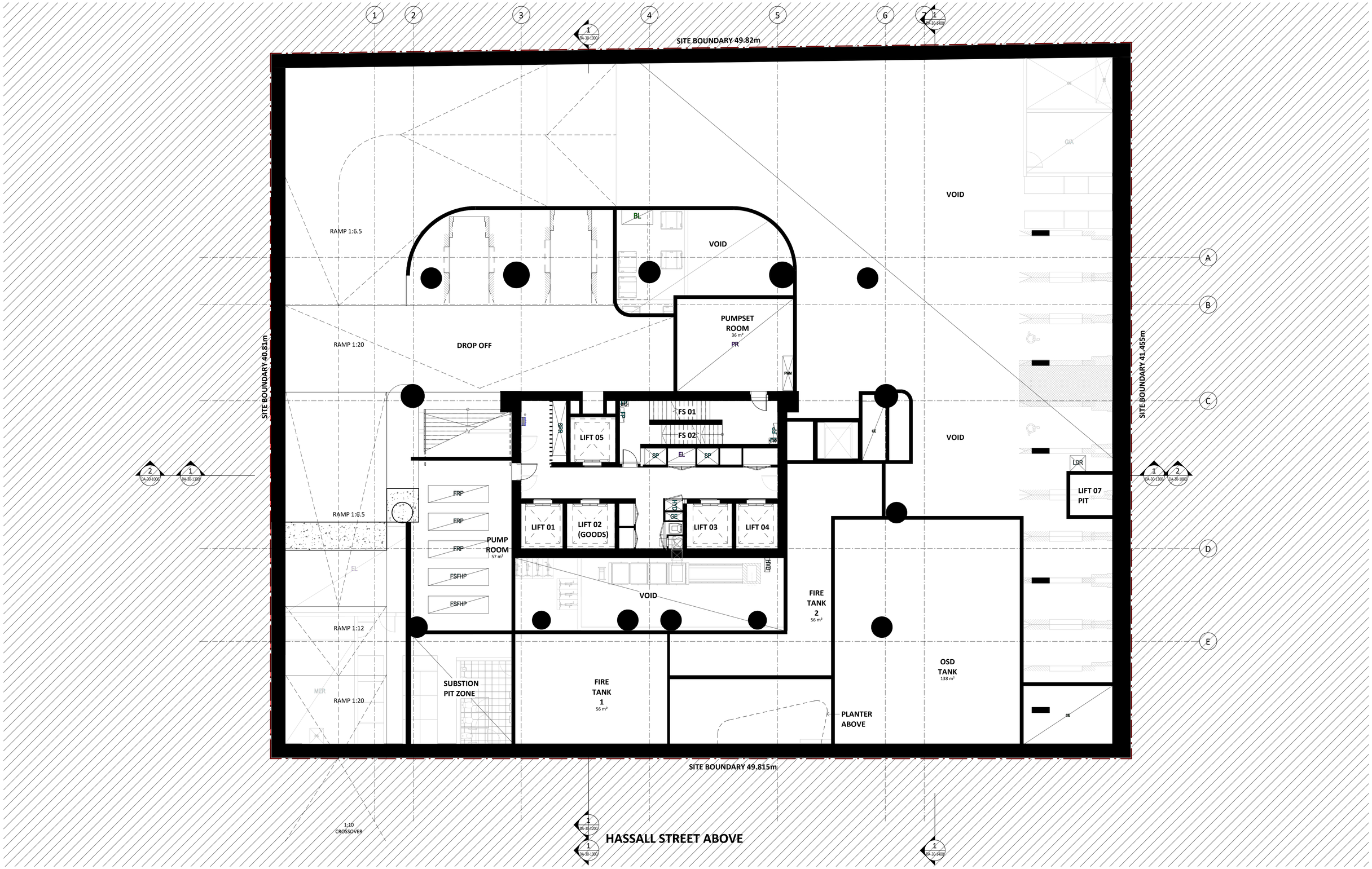


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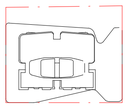


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GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
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NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
B-GENERAL ARRANGEMENT PLANS
BASEMENT LEVEL 1M FLOOR PLAN

**Drawing Number** DA-10-0900
**Revision** A

A1

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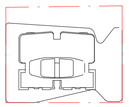


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**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 00 GROUND FLOOR PLAN

**Drawing Number** DA-10-1000
**Revision** A

A1

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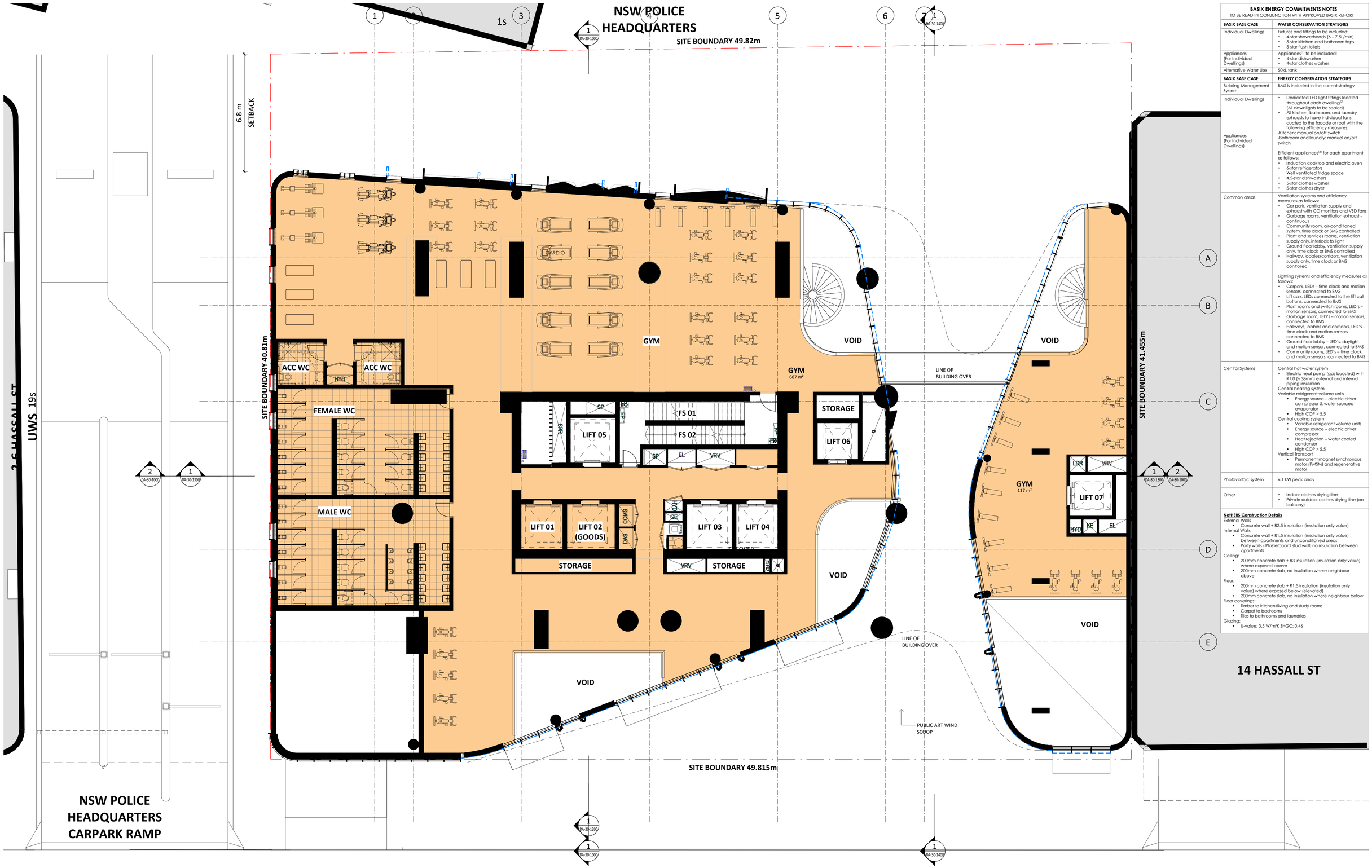


## BASIX ENERGY COMMITMENTS NOTES

TO BE READ IN CONJUNCTION WITH APPROVED BASIX REPORT

| BASIX BASE CASE | WATER CONSERVATION STRATEGIES |
|---|---|
| Individual Dwellings | Fixtures and fittings to be included:<br>• 4-star showerheads (6 – 7.5L/min)<br>• 5-star kitchen and bathroom taps<br>• 5-star flush toilets |
| Appliances (For Individual Dwellings) | Appliances[1] to be included:<br>• 4-star dishwasher<br>• 4-star clothes washer |
| Alternative Water Use | 50kL tank |
| **BASIX BASE CASE** | **ENERGY CONSERVATION STRATEGIES** |
| Building Management System | BMS is included in the current strategy |
| Individual Dwellings | • Dedicated LED light fittings located throughout each dwelling[2] (All downlights to be sealed)<br>• All kitchen, bathroom, and laundry exhausts to have individual fans ducted to the facade or roof with the following efficiency measures:<br>-Kitchen: manual on/off switch<br>-Bathroom and laundry: manual on/off switch |
| Appliances (For Individual Dwellings) | Efficient appliances[3] for each apartment as follows:<br>• Induction cooktop and electric oven<br>• 6-star refrigerators<br>Well ventilated fridge space<br>• 4.5-star dishwashers<br>• 5-star clothes washer<br>• 5-star clothes dryer |
| Common areas | Ventilation systems and efficiency measures as follows:<br>• Car park, ventilation supply and exhaust with CO monitors and VSD fans<br>• Garbage rooms, ventilation exhaust - continuous<br>• Community room, air-conditioned system, time clock or BMS controlled<br>• Plant and services rooms, ventilation supply only, interlock to light<br>• Ground floor lobby, ventilation supply only, time clock or BMS controled<br>• Hallway, lobbies/corridors, ventilation supply only, time clock or BMS controlled<br><br>Lighting systems and efficiency measures as follows:<br>• Carpark, LEDs – time clock and motion sensors, connected to BMS<br>• Lift cars, LEDs connected to the lift call buttons, connected to BMS<br>• Plant rooms and switch rooms, LED's – motion sensors, connected to BMS<br>• Garbage room, LED's – motion sensors, connected to BMS<br>• Hallways, lobbies and corridors, LED's – time clock and motion sensors connected to BMS<br>• Ground floor lobby – LED's, daylight and motion sensor, connected to BMS<br>• Community rooms, LED's – time clock and motion sensors, connected to BMS |
| Central Systems | Central hot water system<br>• Electric heat pump (gas boosted) with R1.0 (~ 38mm) external and internal piping insulation<br>Central heating system<br>Variable refrigerant volume units<br>• Energy source – electric driver compressor & water sourced evaporator<br>• High COP > 5.5<br>Central cooling system<br>• Variable refrigerant volume units<br>• Energy source – electric driver compressor<br>• Heat rejection – water cooled condenser<br>• High COP > 5.5<br>Vertical Transport<br>• Permanent magnet synchronous motor (PMSM) and regenerative motor |
| Photovoltaic system | 6.1 kW peak array |
| Other | • Indoor clothes drying line<br>• Private outdoor clothes drying line (on balcony) |

**NatHERS Construction Details**

External Walls
- Concrete wall + R2.5 insulation (insulation only value)

Internal Walls:
- Concrete wall + R1.5 insulation (insulation only value) between apartments and unconditioned areas
- Party walls - Plasterboard stud wall, no insulation between apartments

Ceiling:
- 200mm concrete slab + R3 insulation (insulation only value) where exposed above
- 200mm concrete slab, no insulation where neighbour above

Floor:
- 200mm concrete slab + R1.5 insulation (insulation only value) where exposed below (elevated)
- 200mm concrete slab, no insulation where neighbour below

Floor coverings:
- Timber to kitchen/living and study rooms
- Carpet to bedrooms
- Tiles to bathrooms and laundries

Glazing:
- U-value: 3.5 W/m²K SHGC: 0.46

**Key Plan:**

HASSALL STREET

N

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| Rev | Amendment | By | Chk* Reg. Arch | Date |
|---|---|---|---|---|
| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 01 FLOOR PLAN

**Drawing Number** DA-10-1100
**Revision** A

A1

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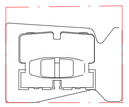

HASSALL STREET

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| A | DRAFT | PTW | | 2022.09.03 |

Consultants

Client
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

Architect
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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Project PA030501
12 Hassall St
12 Hassall St, Parramatta

Status
DEVELOPMENT APPLICATION

Title
B-GENERAL ARRANGEMENT PLANS
LEVEL 02 FLOOR PLAN

Drawing Number DA-10-1200
Revision A

A1

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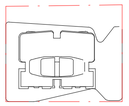


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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 03 FLOOR PLAN

**Drawing Number** DA-10-1300
**Revision** A

A1

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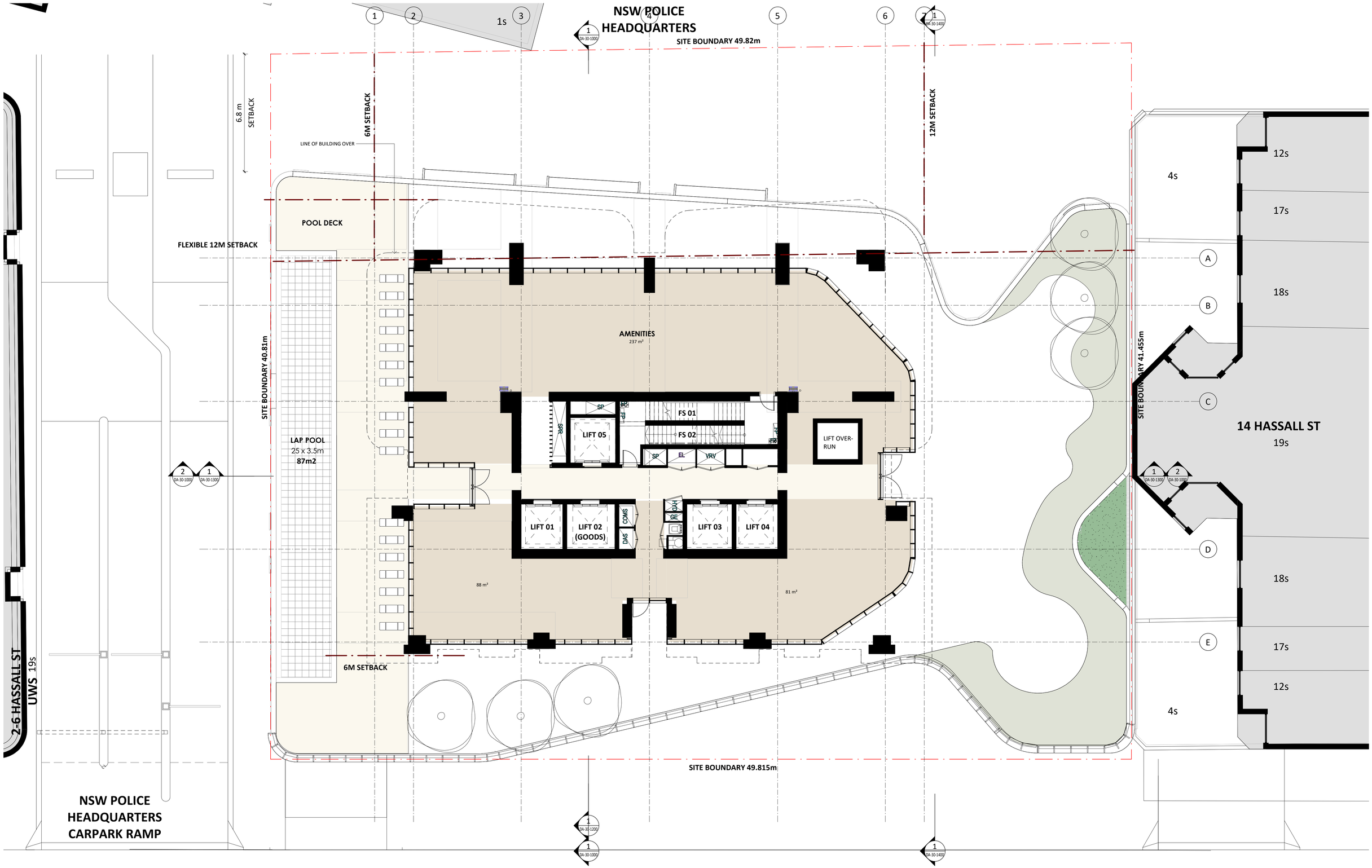


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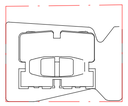


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| A | DRAFT | PTW | | 2022.09.03 |

Consultants

Client
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

Architect
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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Project PA030501
12 Hassall St
12 Hassall St, Parramatta

Status
DEVELOPMENT APPLICATION

Title
B-GENERAL ARRANGEMENT PLANS
LEVEL 04 FLOOR PLAN

Drawing Number DA-10-1400
Revision A

A1

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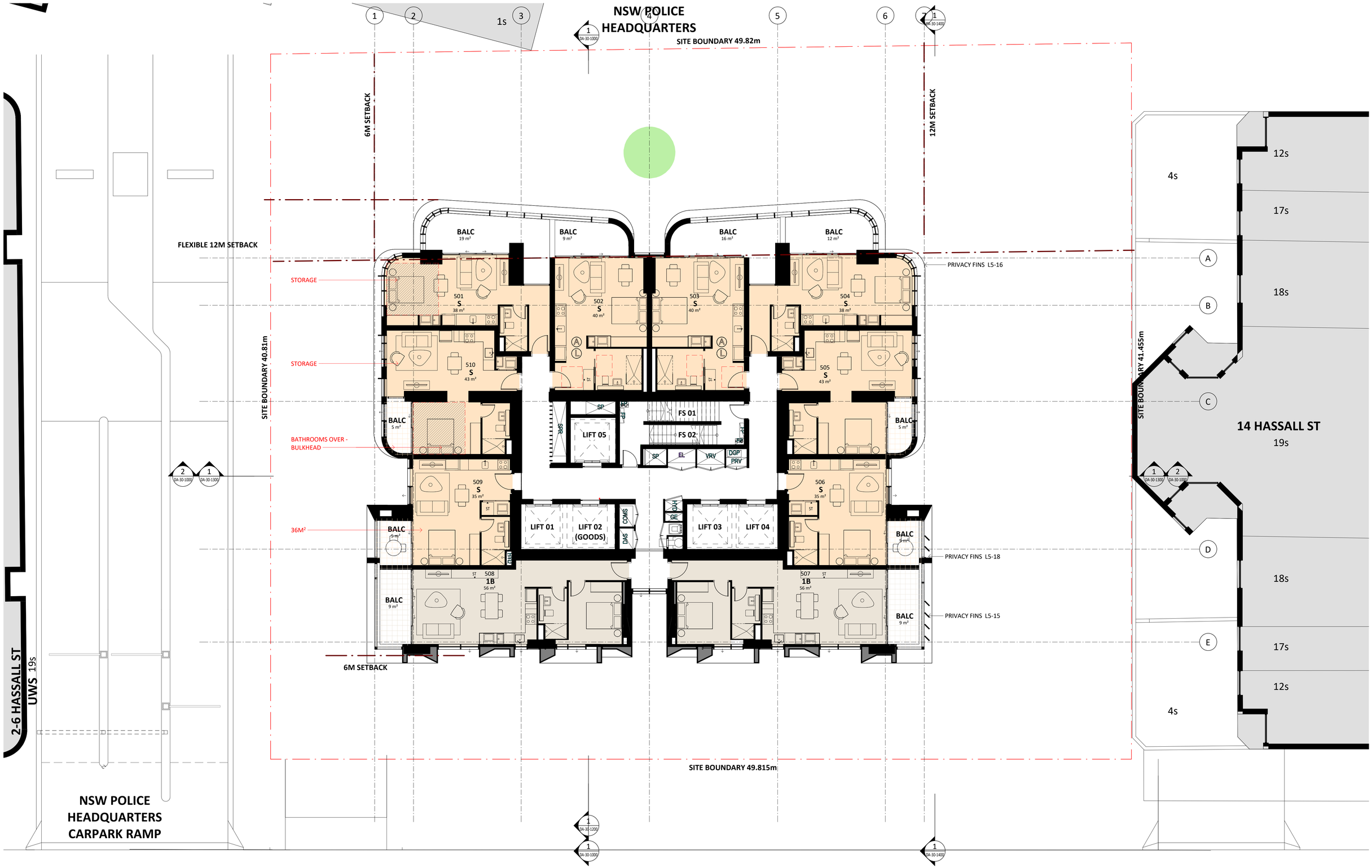


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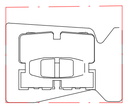


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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVELS 05-08 FLOOR PLAN

**Drawing Number** DA-10-1500
**Revision** A

A1

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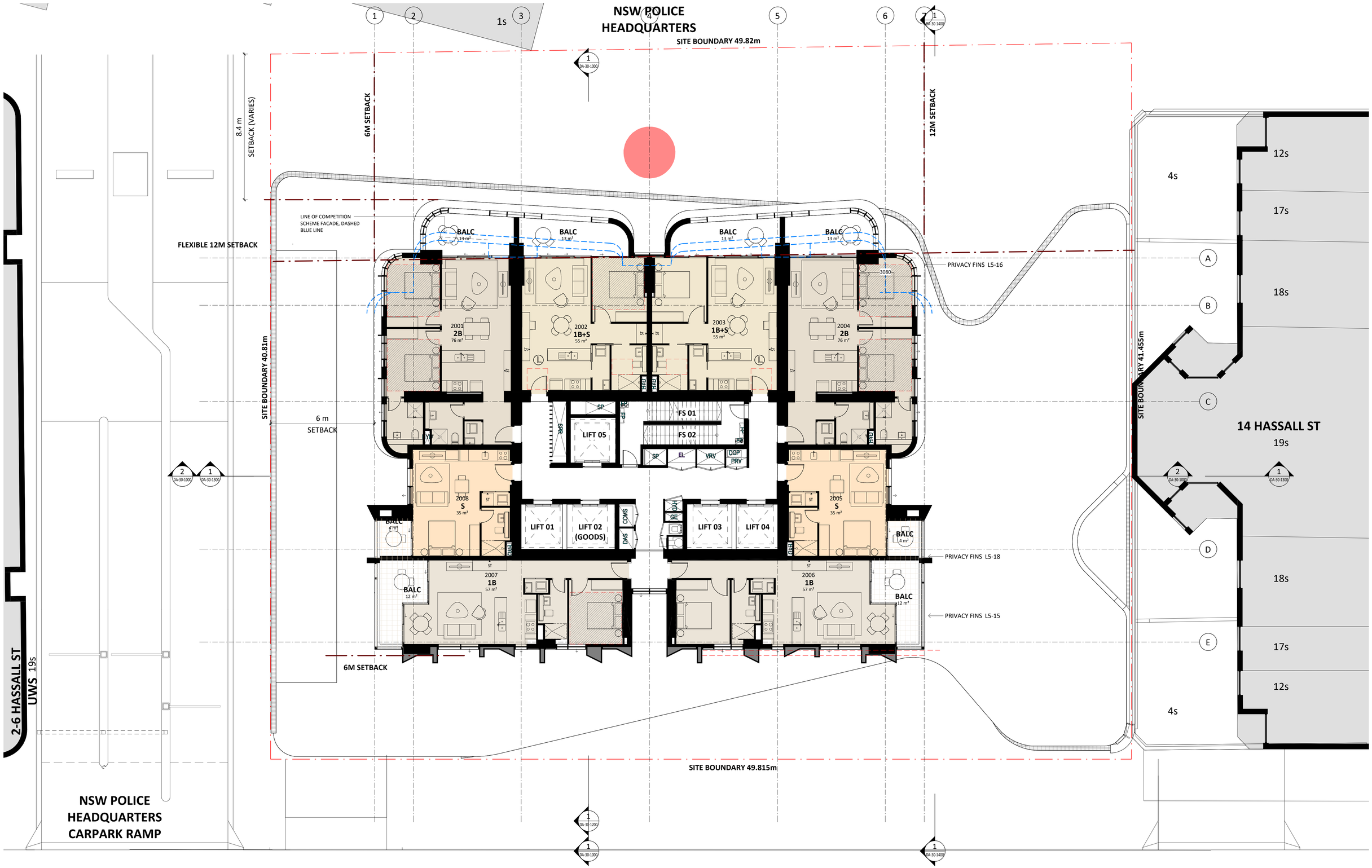


**Key Plan:**

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVELS 09-24, 26-27 FLOOR PLAN

**Drawing Number** DA-10-2000
**Revision**

A1

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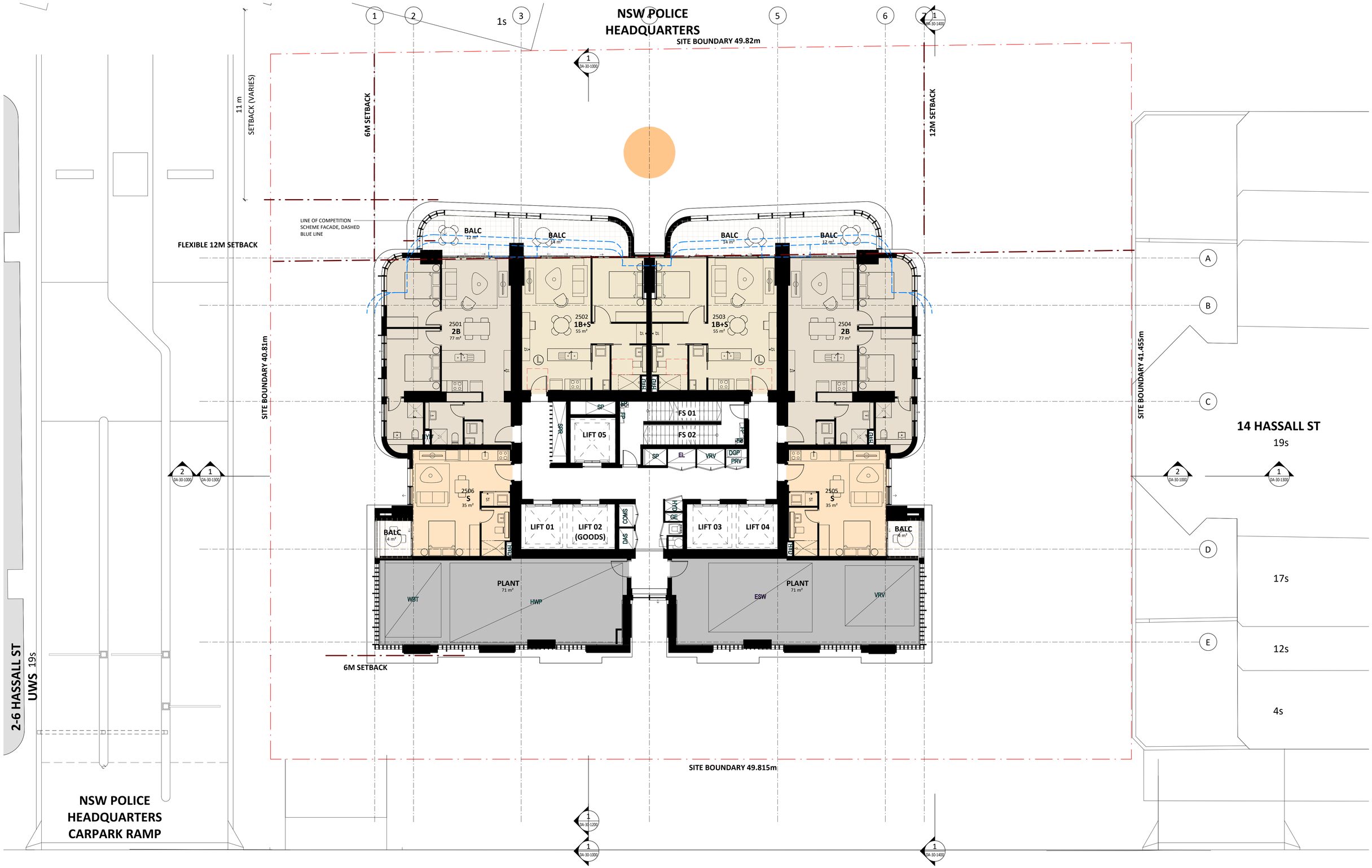


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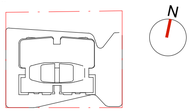


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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 25 FLOOR PLAN (PLANT)

**Drawing Number** DA-10-2500
**Revision** A

A1

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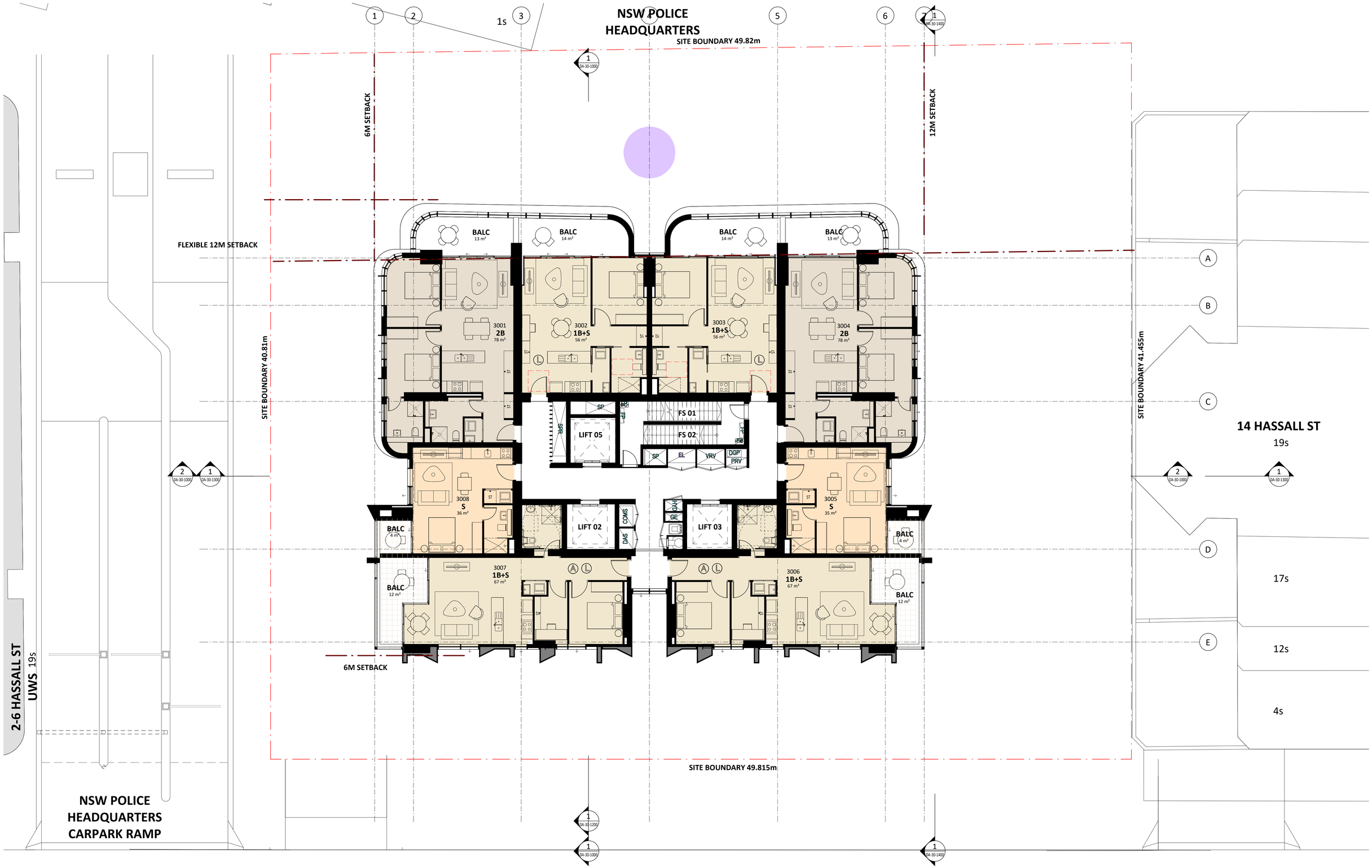


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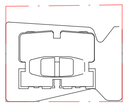


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Consultants

Client
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028


Architect
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778


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Project PA030501
12 Hassall St
12 Hassall St, Parramatta

Status
DEVELOPMENT APPLICATION

Title
B-GENERAL ARRANGEMENT PLANS
LEVELS 28-38 TYPICAL FLOOR PLAN

Drawing Number DA-10-3000
Revision A

A1

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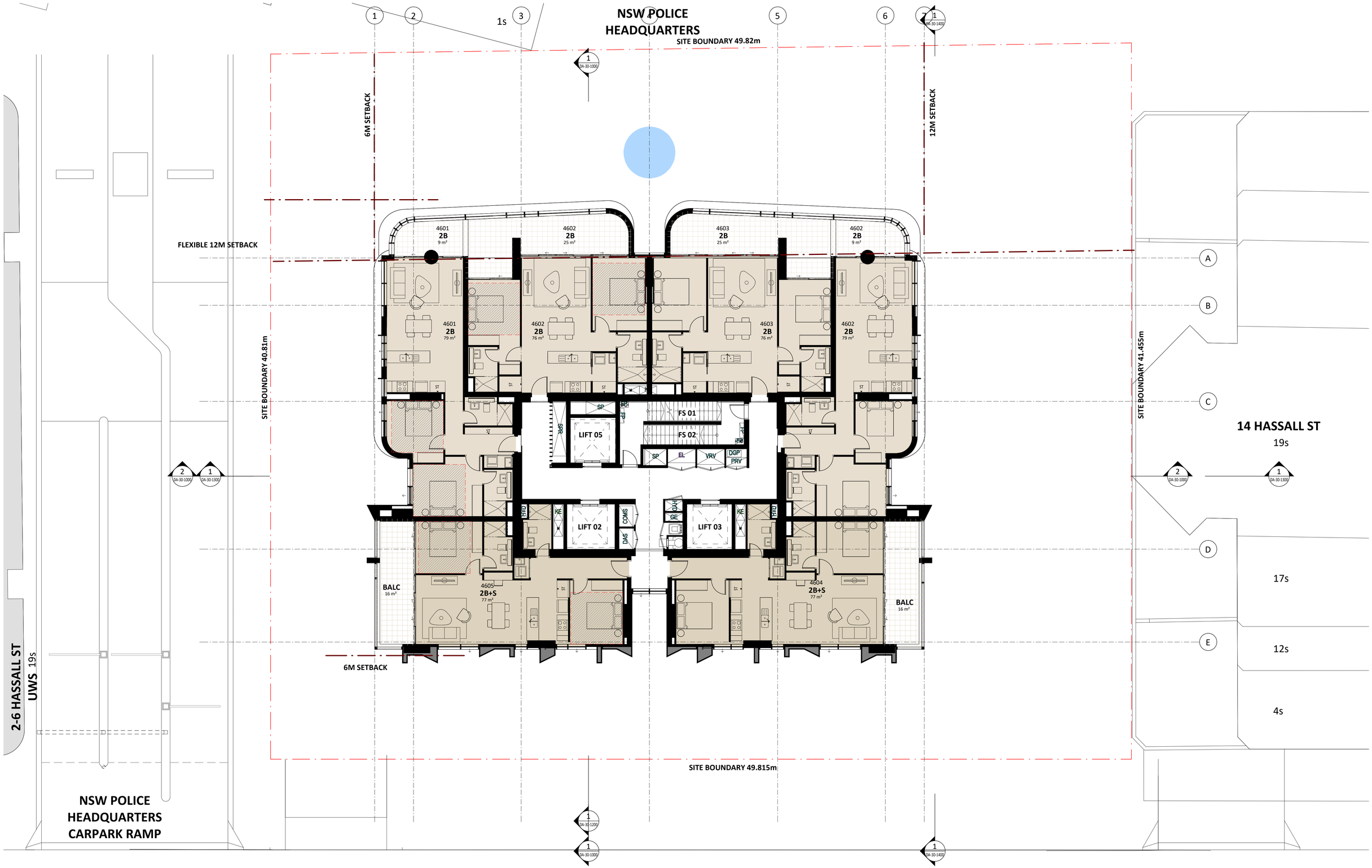


Key Plan:

HASSALL STREET

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Consultants

Client
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

Architect
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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Project PA030501
12 Hassall St
12 Hassall St, Parramatta

Status

Title
B-GENERAL ARRANGEMENT PLANS
LEVELS 39-48 TYPICAL FLOOR PLAN

Drawing Number DA-10-4600
Revision

A1

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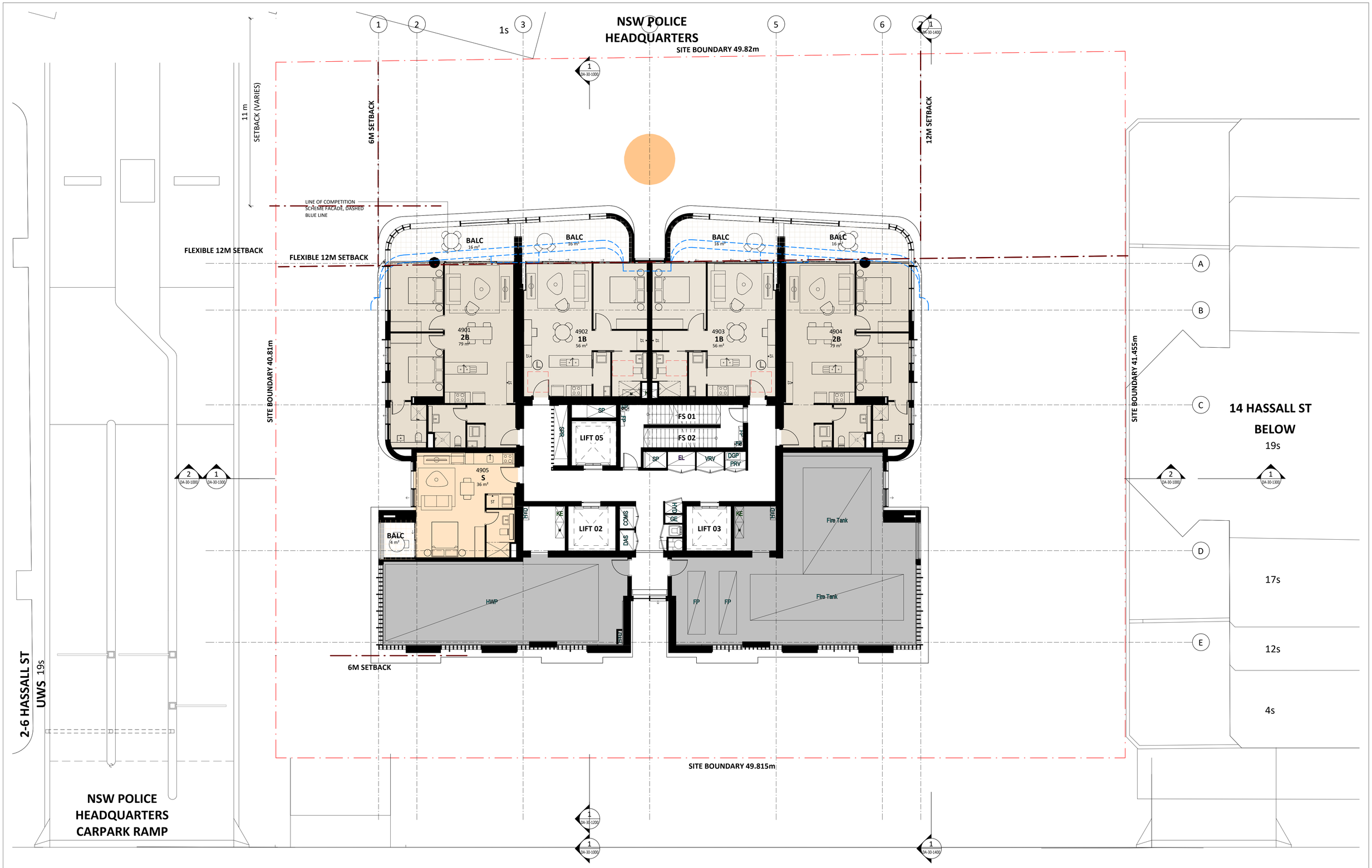


Key Plan:

HASSALL STREET

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Consultants

Client
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028


Architect
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778


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Project PA030501
12 Hassall St
12 Hassall St, Parramatta

Status
DEVELOPMENT APPLICATION

Title
B-GENERAL ARRANGEMENT PLANS
LEVELS 49 FLOOR PLAN (PLANT)

Drawing Number DA-10-4900
Revision A

A1

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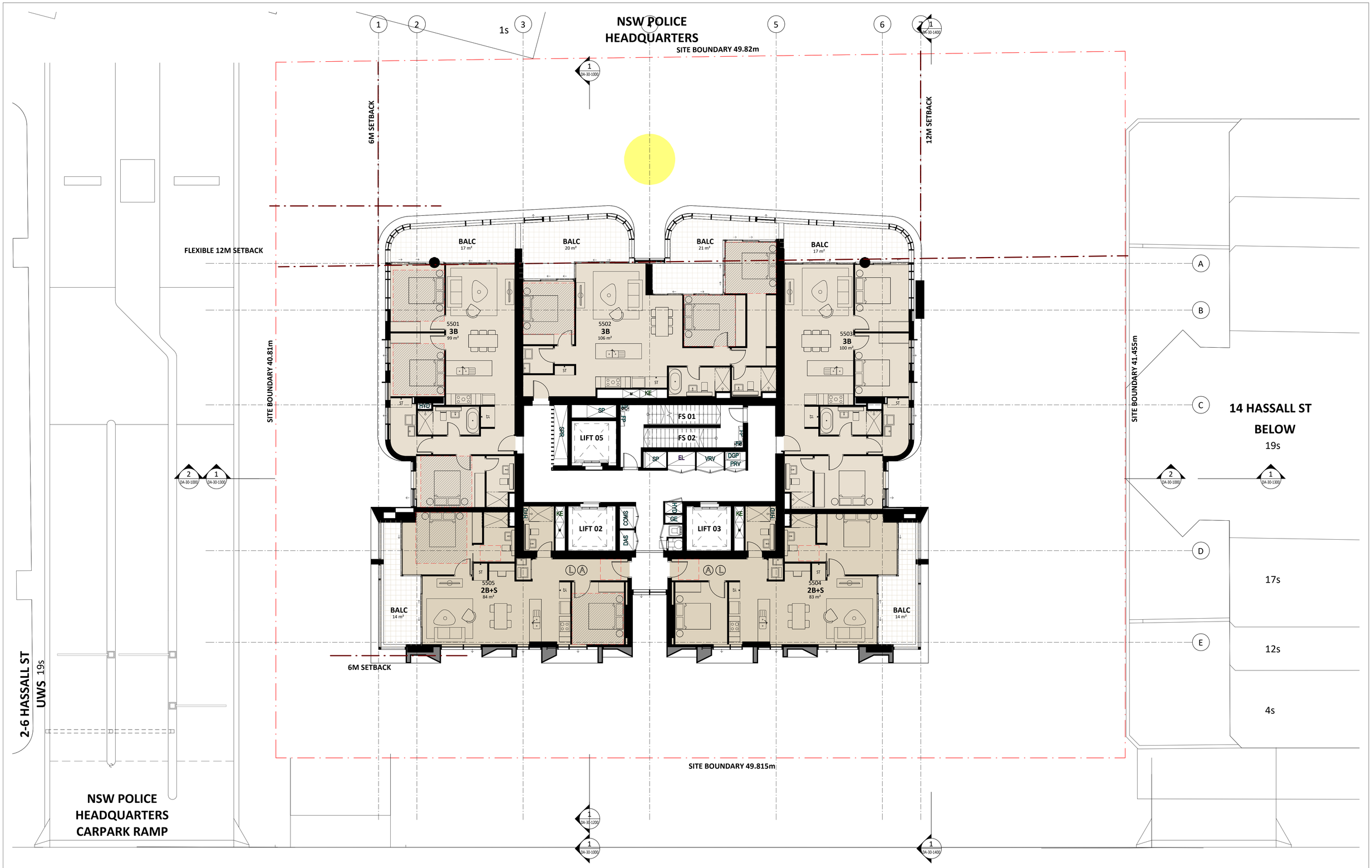


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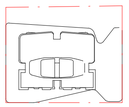


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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVELS 50-58 TYPICAL FLOOR PLAN

**Drawing Number** DA-10-5500
**Revision** A

A1

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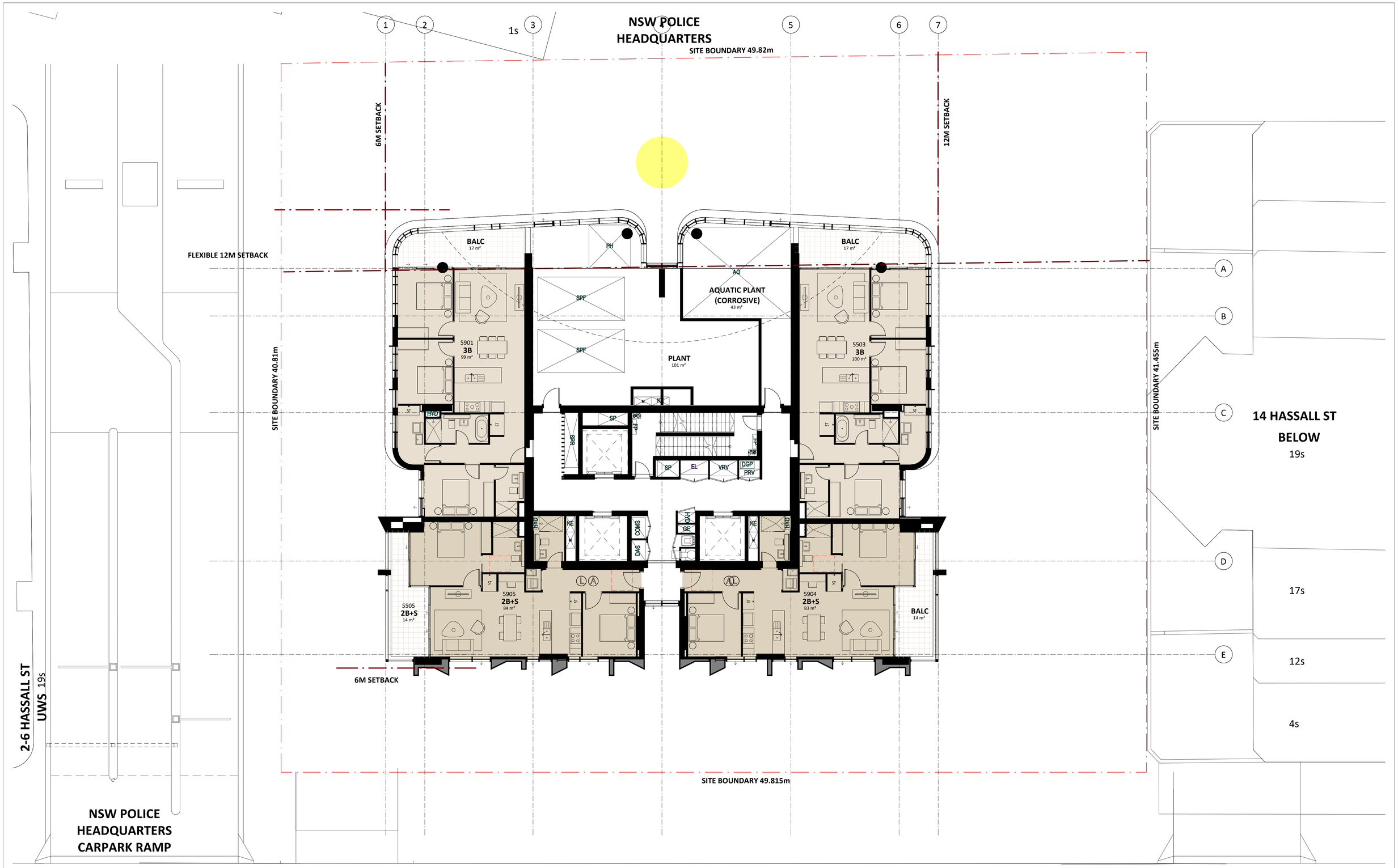


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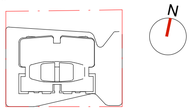


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| Rev | Amendment | By | Chk* Reg. Arch | Date |
|---|---|---|---|---|

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 59 FLOOR PLAN

**Drawing Number** DA-DA-10-5900
**Revision**

A1

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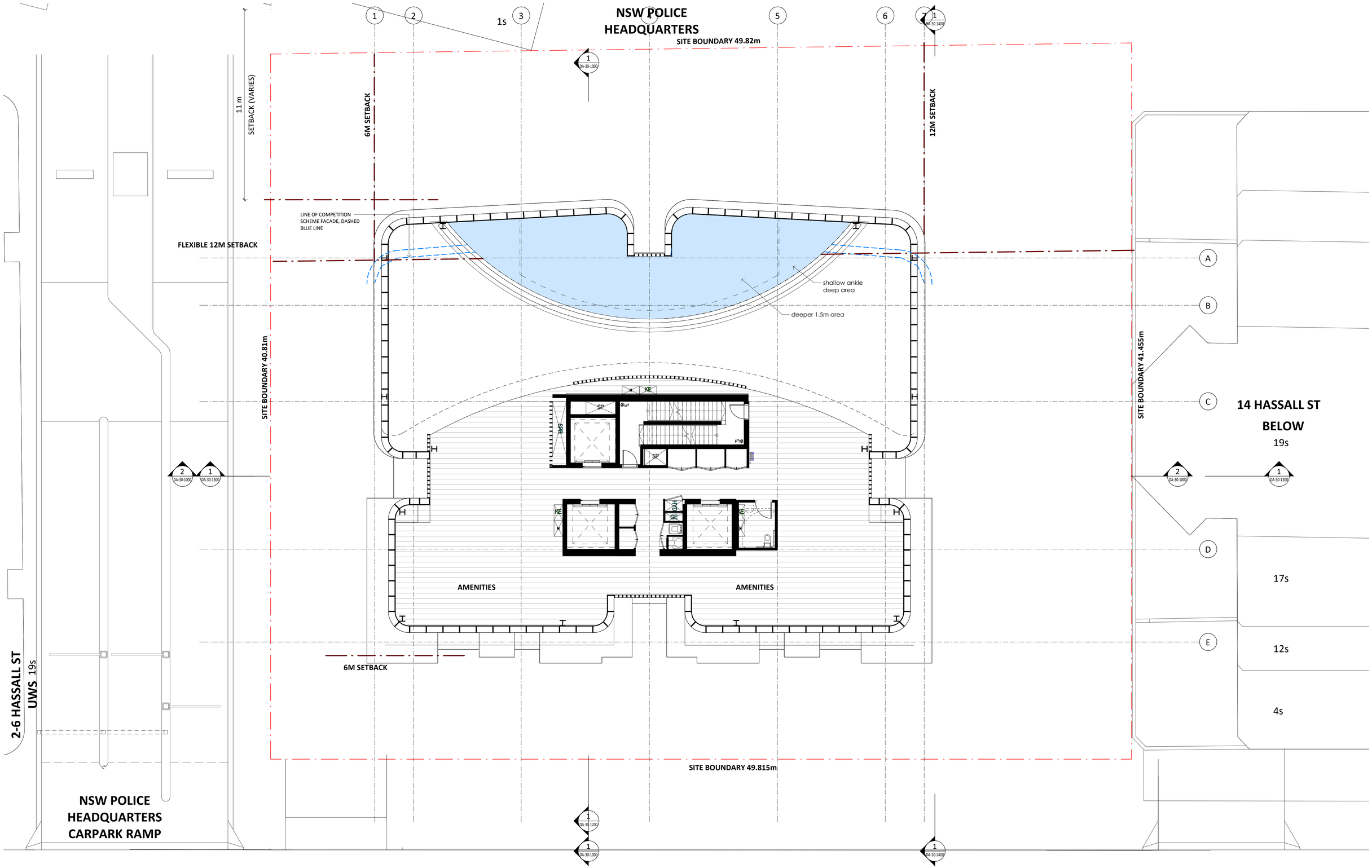


**Key Plan:**

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| Rev | Amendment | By | Chk* Reg. Arch | Date |
|---|---|---|---|---|
| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LEVEL 60 FLOOR PLAN (AMENITIES)

**Drawing Number** DA-10-6000
**Revision** A

A1

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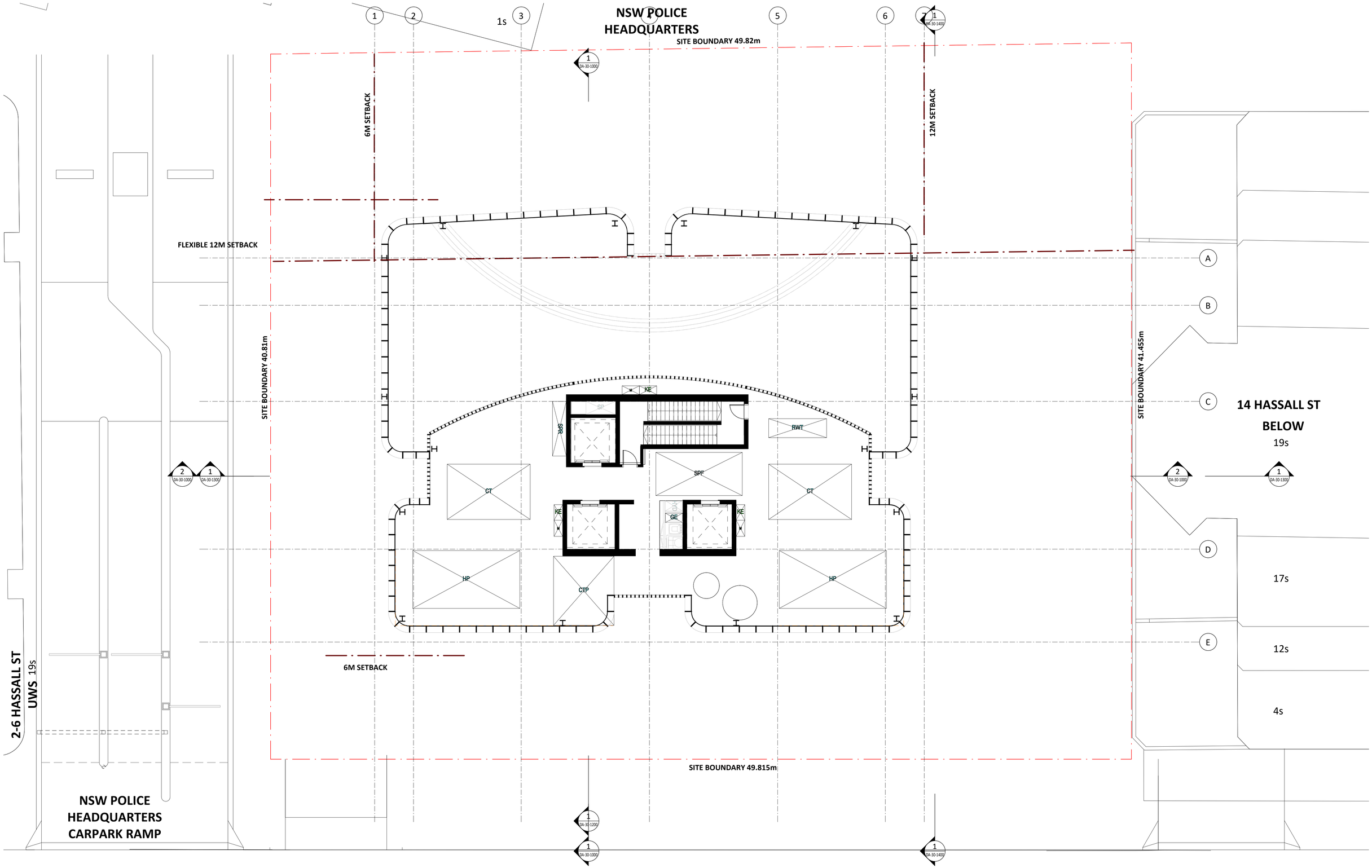


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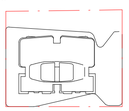


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|---|---|---|---|---|
| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPEMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
PLANT ROOM PLAN

**Drawing Number** DA-10-6101
**Revision** A

A1

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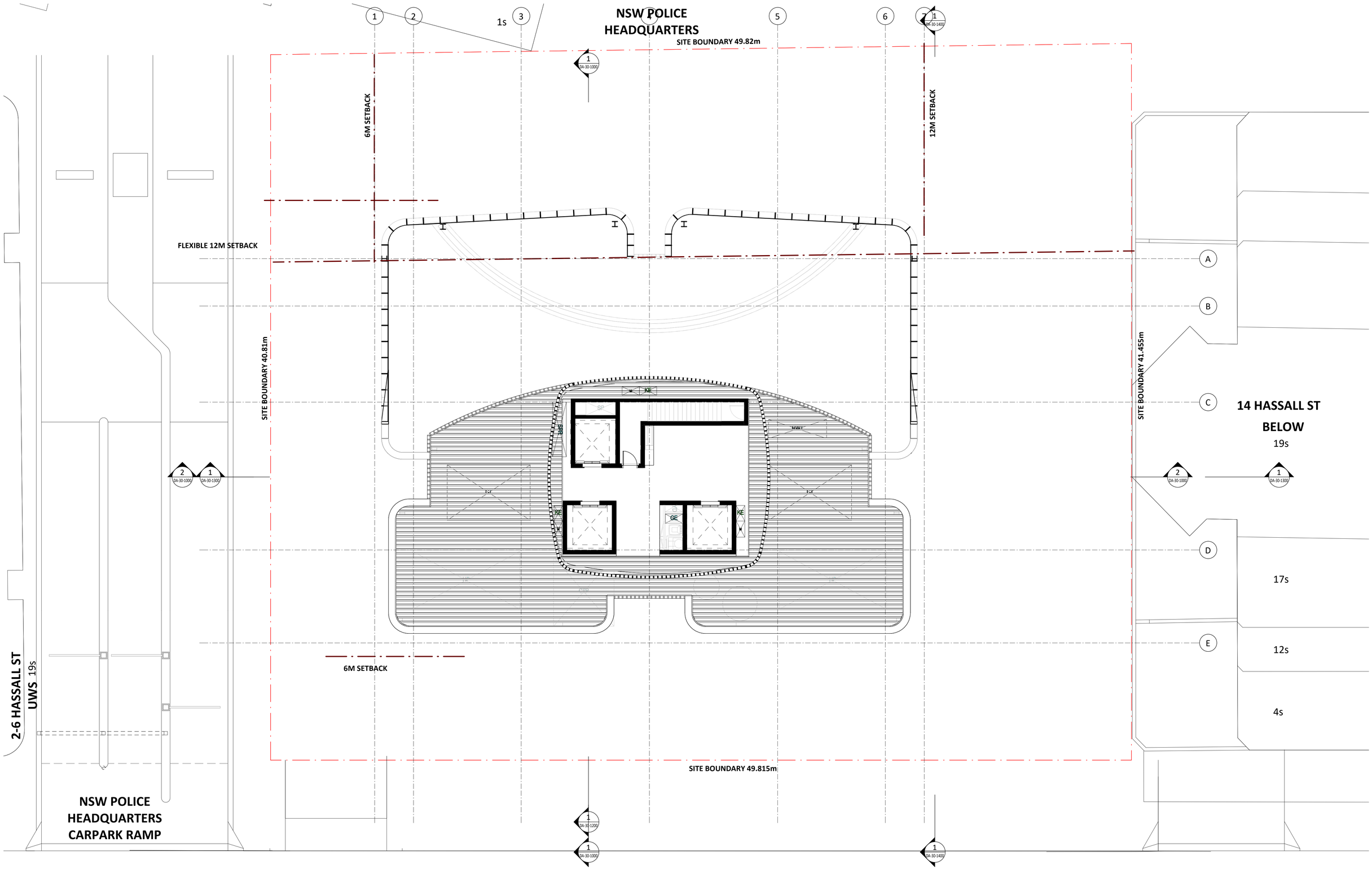


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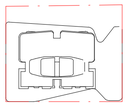

HASSALL STREET

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPEMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
LIFT MACHINE ROOM

**Drawing Number** DA-10-6102
**Revision**

A1

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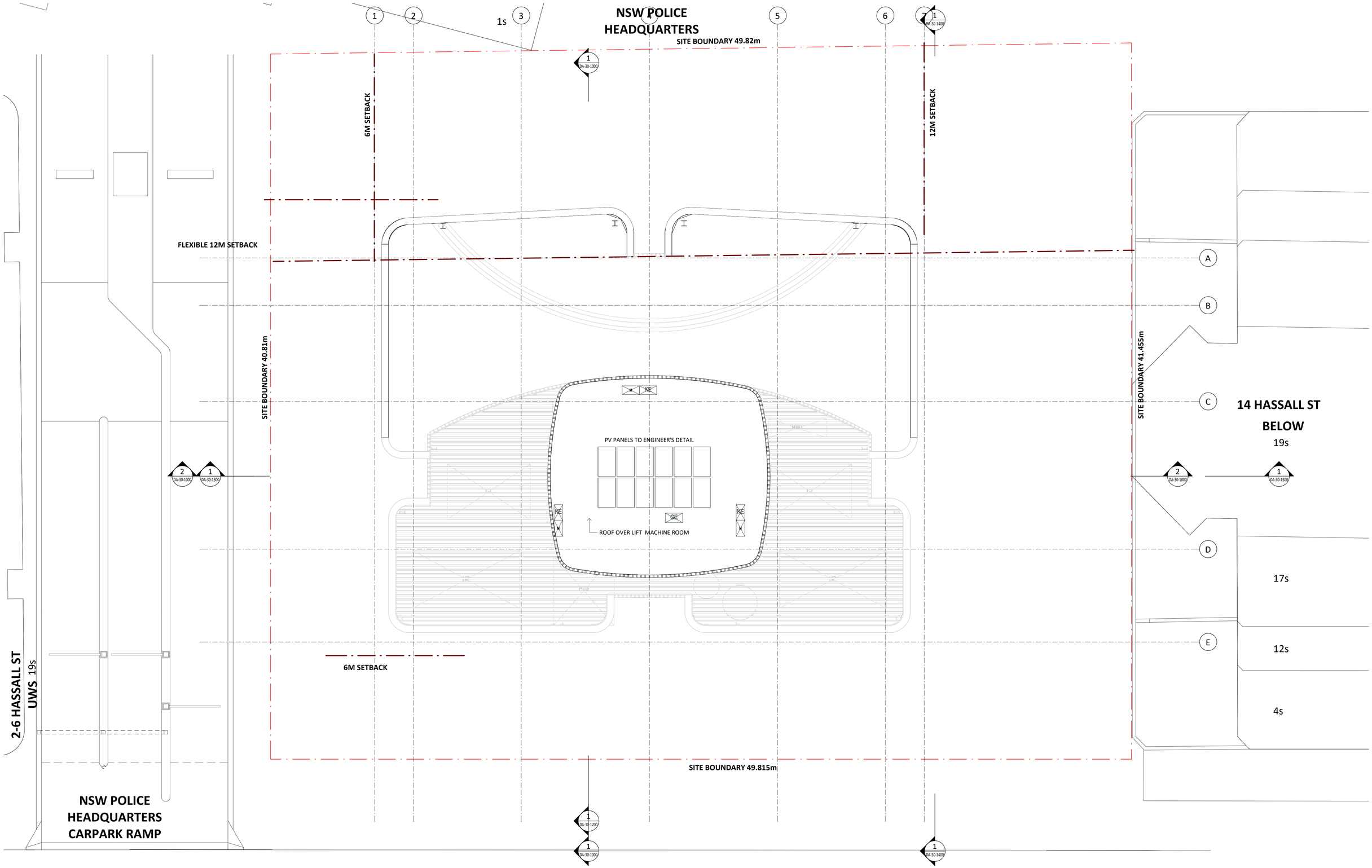


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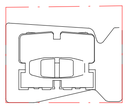

HASSALL STREET

N

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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
@ A1 1 : 100

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
B-GENERAL ARRANGEMENT PLANS
ROOF PLAN

**Drawing Number** DA-10-6200
**Revision** A

A1

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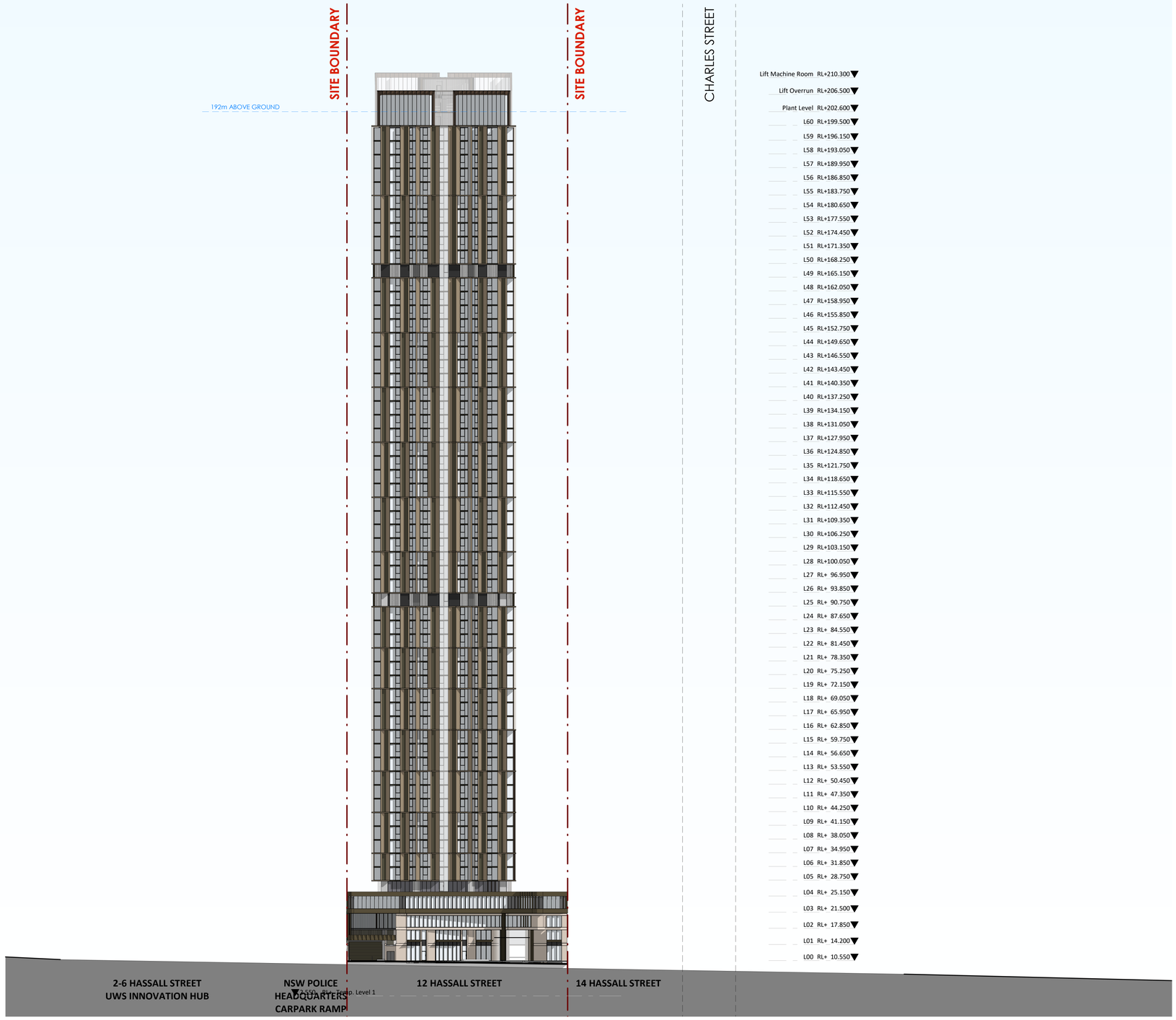


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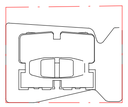


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|---|---|---|---|---|
| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 5 10 20 30 40m
@ A1 1 : 500

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
C-ELEVATIONS
HASSALL STREET ELEVATION
1-500

**Drawing Number** DA-20-1000
**Revision** A

A1

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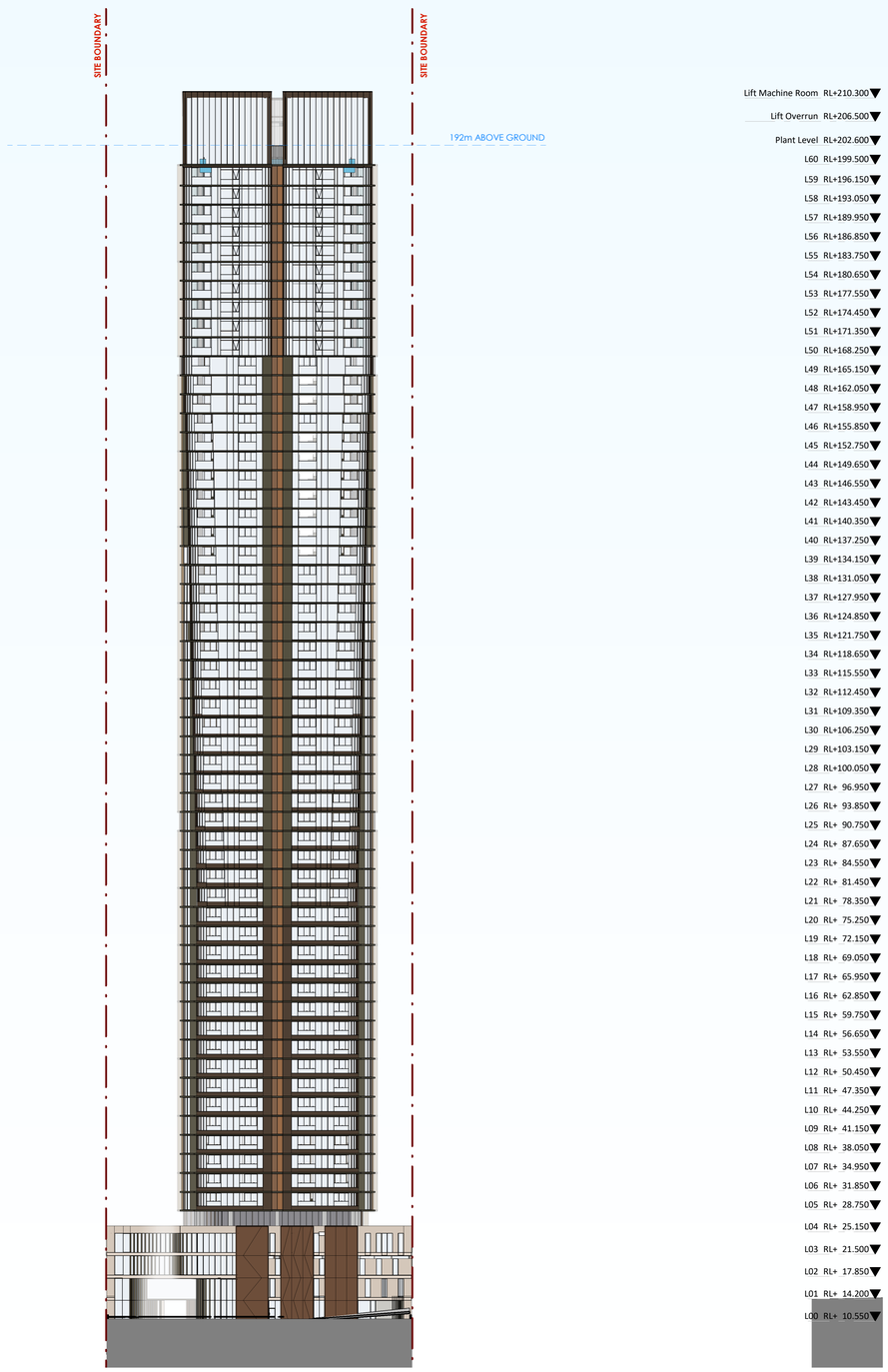
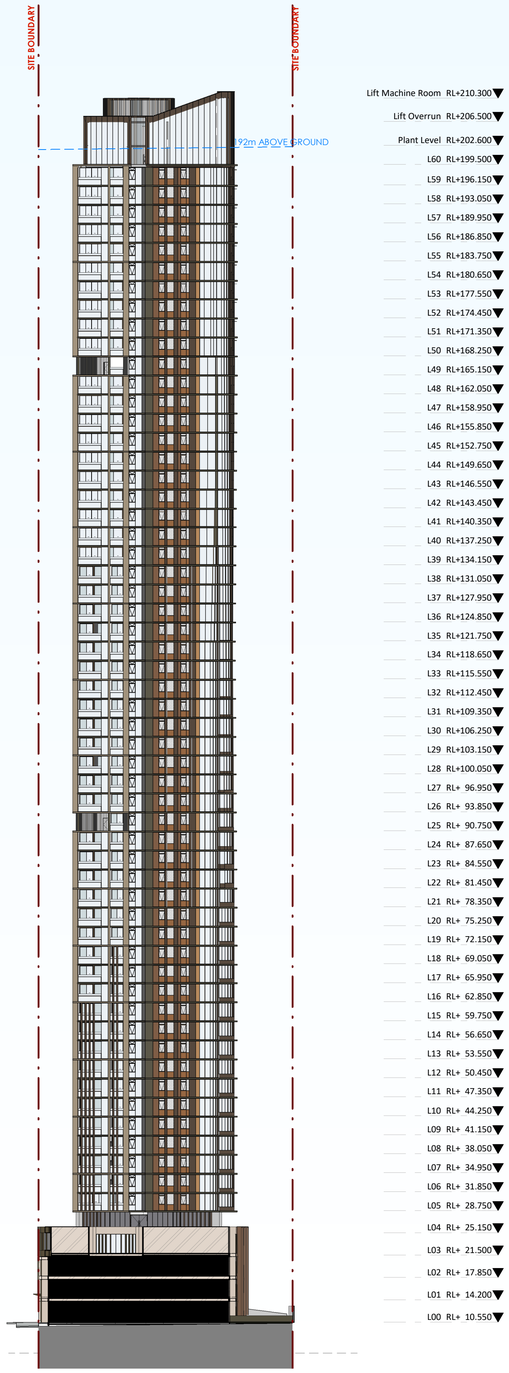
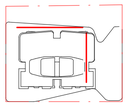



1 NORTH ELEVATION
1 : 500




2 EAST ELEVATION
1 : 500

**Key Plan:**

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| Rev | Amendment | By | Chk* Reg. Arch | Date |
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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 1 2 5 8m
@ A1 1 : 500

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
C-ELEVATIONS
NORTH AND EAST ELEVATIONS
1-500

**Drawing Number** DA-20-1100
**Revision** A

A1

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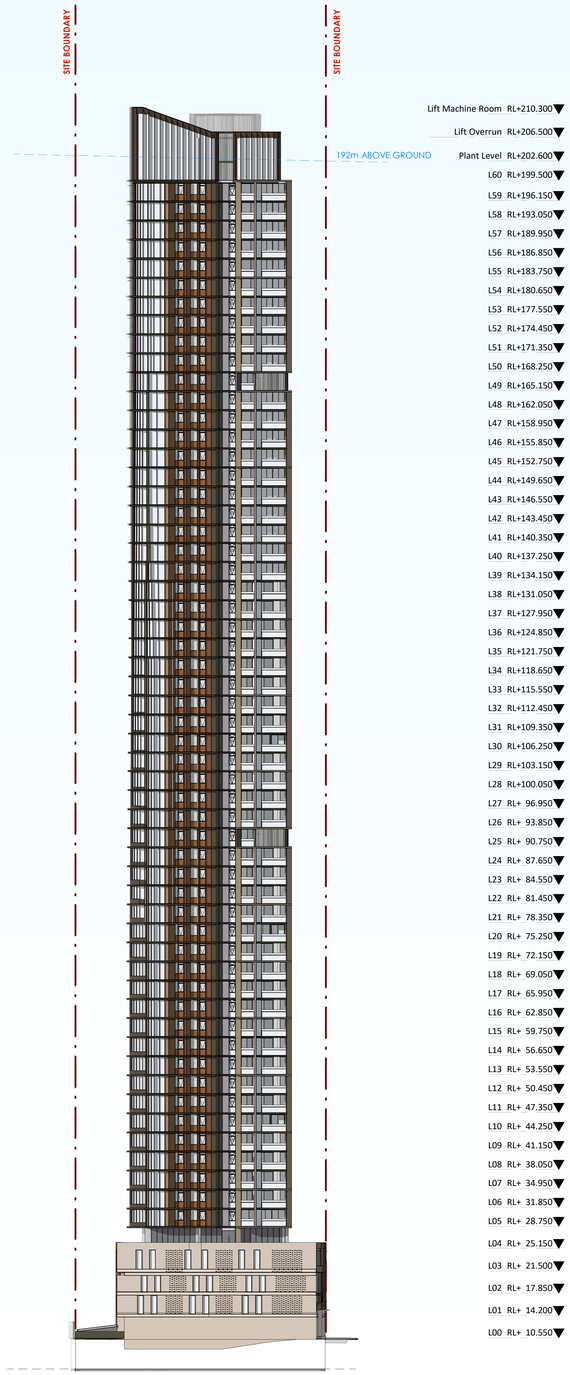
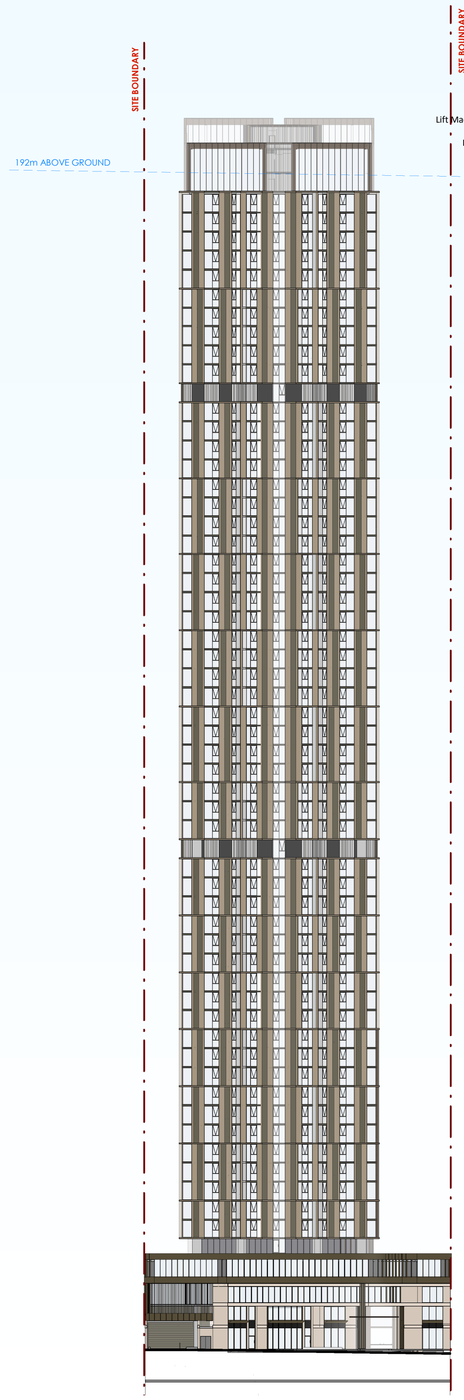



| | |
|---|---|
| Lift Machine Room | RL+210.300 |
| Lift Overrun | RL+206.500 |
| Plant Level | RL+202.600 |
| L60 | RL+199.500 |
| L59 | RL+196.150 |
| L58 | RL+193.050 |
| L57 | RL+189.950 |
| L56 | RL+186.850 |
| L55 | RL+183.750 |
| L54 | RL+180.650 |
| L53 | RL+177.550 |
| L52 | RL+174.450 |
| L51 | RL+171.350 |
| L50 | RL+168.250 |
| L49 | RL+165.150 |
| L48 | RL+162.050 |
| L47 | RL+158.950 |
| L46 | RL+155.850 |
| L45 | RL+152.750 |
| L44 | RL+149.650 |
| L43 | RL+146.550 |
| L42 | RL+143.450 |
| L41 | RL+140.350 |
| L40 | RL+137.250 |
| L39 | RL+134.150 |
| L38 | RL+131.050 |
| L37 | RL+127.950 |
| L36 | RL+124.850 |
| L35 | RL+121.750 |
| L34 | RL+118.650 |
| L33 | RL+115.550 |
| L32 | RL+112.450 |
| L31 | RL+109.350 |
| L30 | RL+106.250 |
| L29 | RL+103.150 |
| L28 | RL+100.050 |
| L27 | RL+ 96.950 |
| L26 | RL+ 93.850 |
| L25 | RL+ 90.750 |
| L24 | RL+ 87.650 |
| L23 | RL+ 84.550 |
| L22 | RL+ 81.450 |
| L21 | RL+ 78.350 |
| L20 | RL+ 75.250 |
| L19 | RL+ 72.150 |
| L18 | RL+ 69.050 |
| L17 | RL+ 65.950 |
| L16 | RL+ 62.850 |
| L15 | RL+ 59.750 |
| L14 | RL+ 56.650 |
| L13 | RL+ 53.550 |
| L12 | RL+ 50.450 |
| L11 | RL+ 47.350 |
| L10 | RL+ 44.250 |
| L09 | RL+ 41.150 |
| L08 | RL+ 38.050 |
| L07 | RL+ 34.950 |
| L06 | RL+ 31.850 |
| L05 | RL+ 28.750 |
| L04 | RL+ 25.150 |
| L03 | RL+ 21.500 |
| L02 | RL+ 17.850 |
| L01 | RL+ 14.200 |
| L00 | RL+ 10.550 |

## 1 WEST ELEVATION
1 : 500




| | |
|---|---|
| Lift Machine Room | RL+210.300 |
| Lift Overrun | RL+206.500 |
| Plant Level | RL+202.600 |
| L60 | RL+199.500 |
| L59 | RL+196.150 |
| L58 | RL+193.050 |
| L57 | RL+189.950 |
| L56 | RL+186.850 |
| L55 | RL+183.750 |
| L54 | RL+180.650 |
| L53 | RL+177.550 |
| L52 | RL+174.450 |
| L51 | RL+171.350 |
| L50 | RL+168.250 |
| L49 | RL+165.150 |
| L48 | RL+162.050 |
| L47 | RL+158.950 |
| L46 | RL+155.850 |
| L45 | RL+152.750 |
| L44 | RL+149.650 |
| L43 | RL+146.550 |
| L42 | RL+143.450 |
| L41 | RL+140.350 |
| L40 | RL+137.250 |
| L39 | RL+134.150 |
| L38 | RL+131.050 |
| L37 | RL+127.950 |
| L36 | RL+124.850 |
| L35 | RL+121.750 |
| L34 | RL+118.650 |
| L33 | RL+115.550 |
| L32 | RL+112.450 |
| L31 | RL+109.350 |
| L30 | RL+106.250 |
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| L28 | RL+100.050 |
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| L26 | RL+ 93.850 |
| L25 | RL+ 90.750 |
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| L23 | RL+ 84.550 |
| L22 | RL+ 81.450 |
| L21 | RL+ 78.350 |
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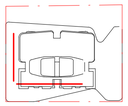
| L19 | RL+ 72.150 |
| L18 | RL+ 69.050 |
| L17 | RL+ 65.950 |
| L16 | RL+ 62.850 |
| L15 | RL+ 59.750 |
| L14 | RL+ 56.650 |
| L13 | RL+ 53.550 |
| L12 | RL+ 50.450 |
| L11 | RL+ 47.350 |
| L10 | RL+ 44.250 |
| L09 | RL+ 41.150 |
| L08 | RL+ 38.050 |
| L07 | RL+ 34.950 |
| L06 | RL+ 31.850 |
| L05 | RL+ 28.750 |
| L04 | RL+ 25.150 |
| L03 | RL+ 21.500 |
| L02 | RL+ 17.850 |
| L01 | RL+ 14.200 |
| L00 | RL+ 10.550 |

## 2 SOUTH ELEVATION
1 : 500

**Key Plan:**

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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 1 2 5 8m
@ A1 1 : 500

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
C-ELEVATIONS
SOUTH AND WEST ELEVATIONS
1-500

**Drawing Number** DA-DA-20-1200
**Revision** A

A1

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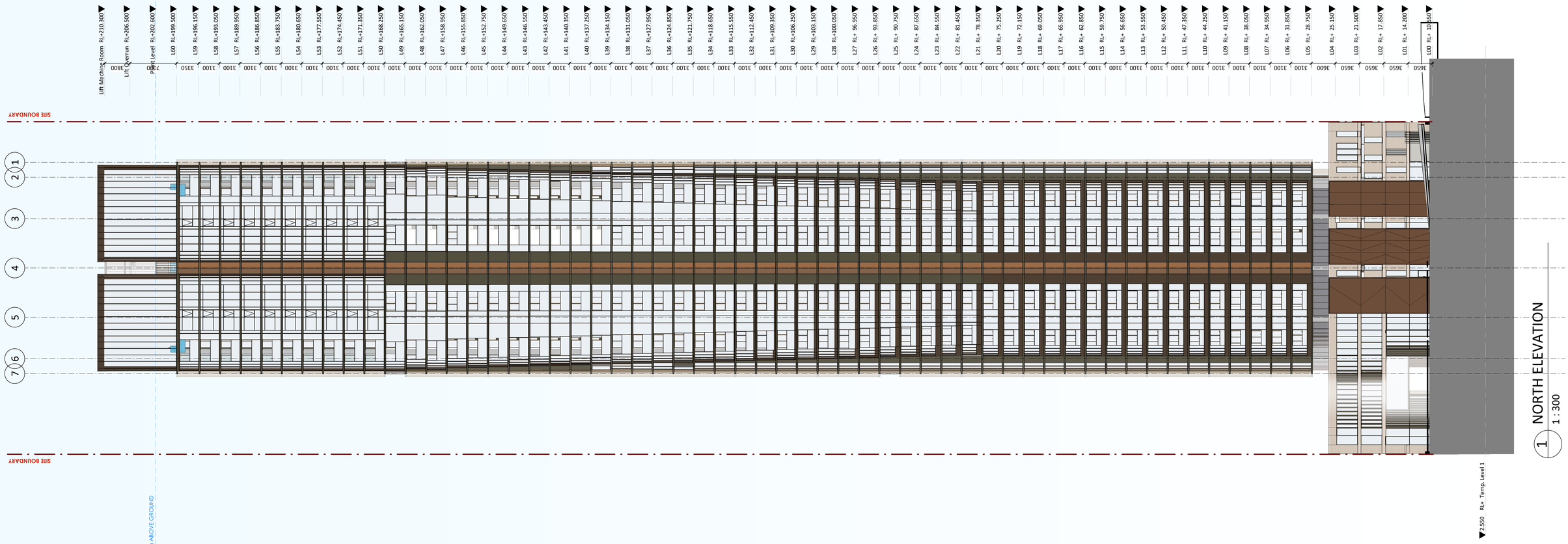


1 NORTH ELEVATION
1 : 300

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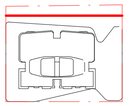
**Key Plan:**



HASSALL STREET

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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 2 5 10 20m
@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
C-ELEVATIONS
NORTH ELEVATION 1-300

**Drawing Number** DA-20-1300
**Revision** A

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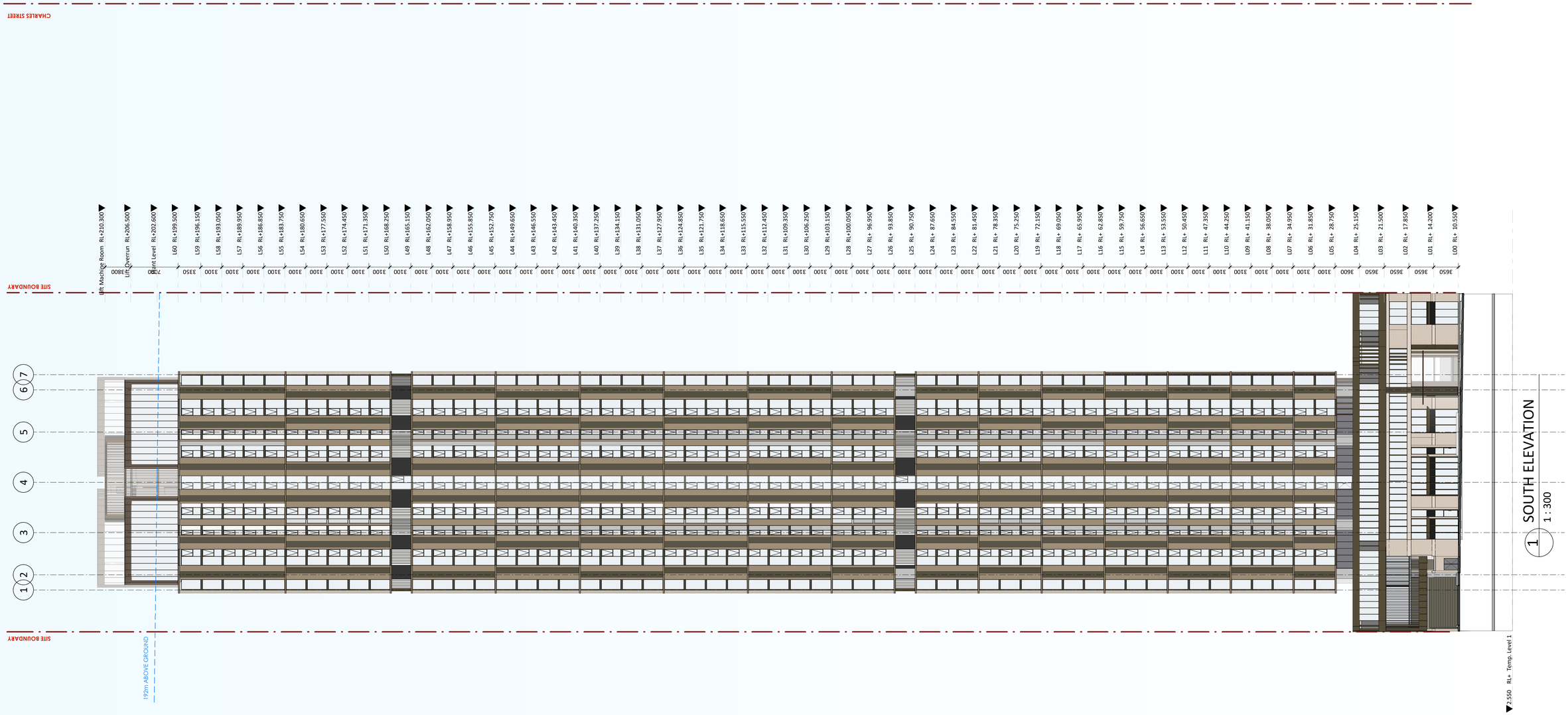


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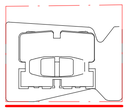

HASSALL STREET

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**Consultants**

**Client**
GURNER™ GROUP

GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 2 5 10 20m
@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
C-ELEVATIONS
SOUTH ELEVATION (HASSALL STREET) 1-300

**Drawing Number** DA-20-1400
**Revision** A

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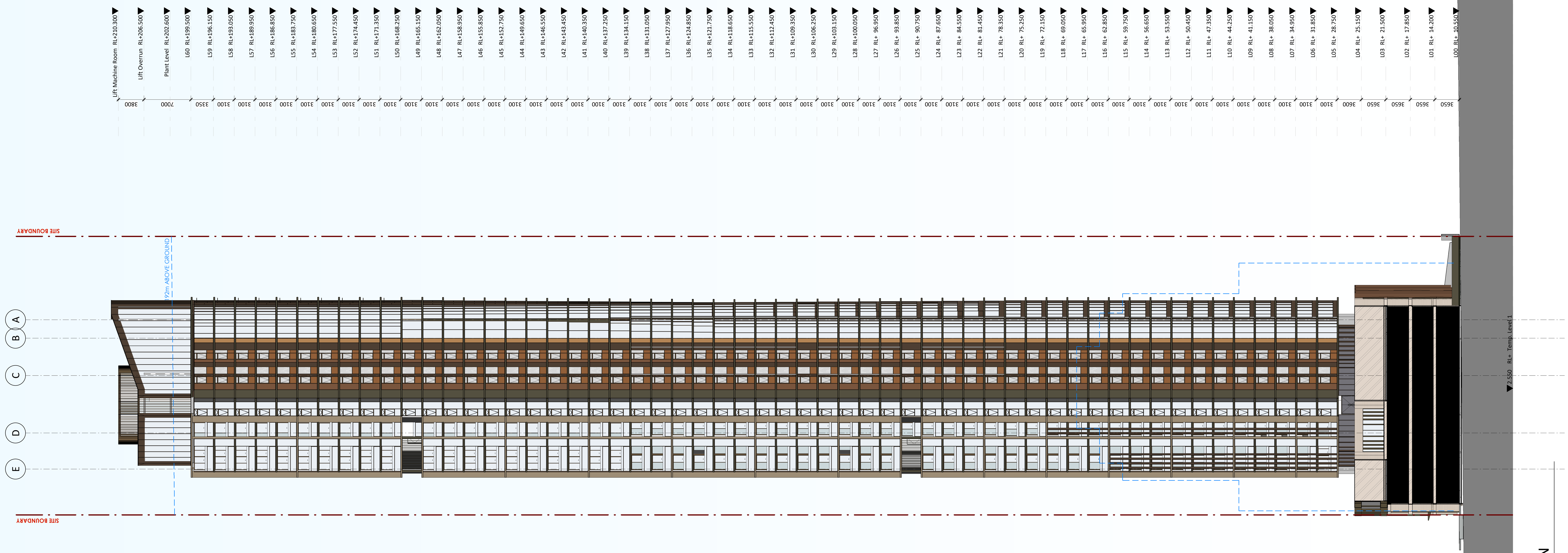


1 EAST ELEVATION
1 : 300

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Key Plan:

HASSALL STREET

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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 2 5 10 20m
@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
C-ELEVATIONS
EAST ELEVATION 1-300

**Drawing Number** DA-20-1500
**Revision** A

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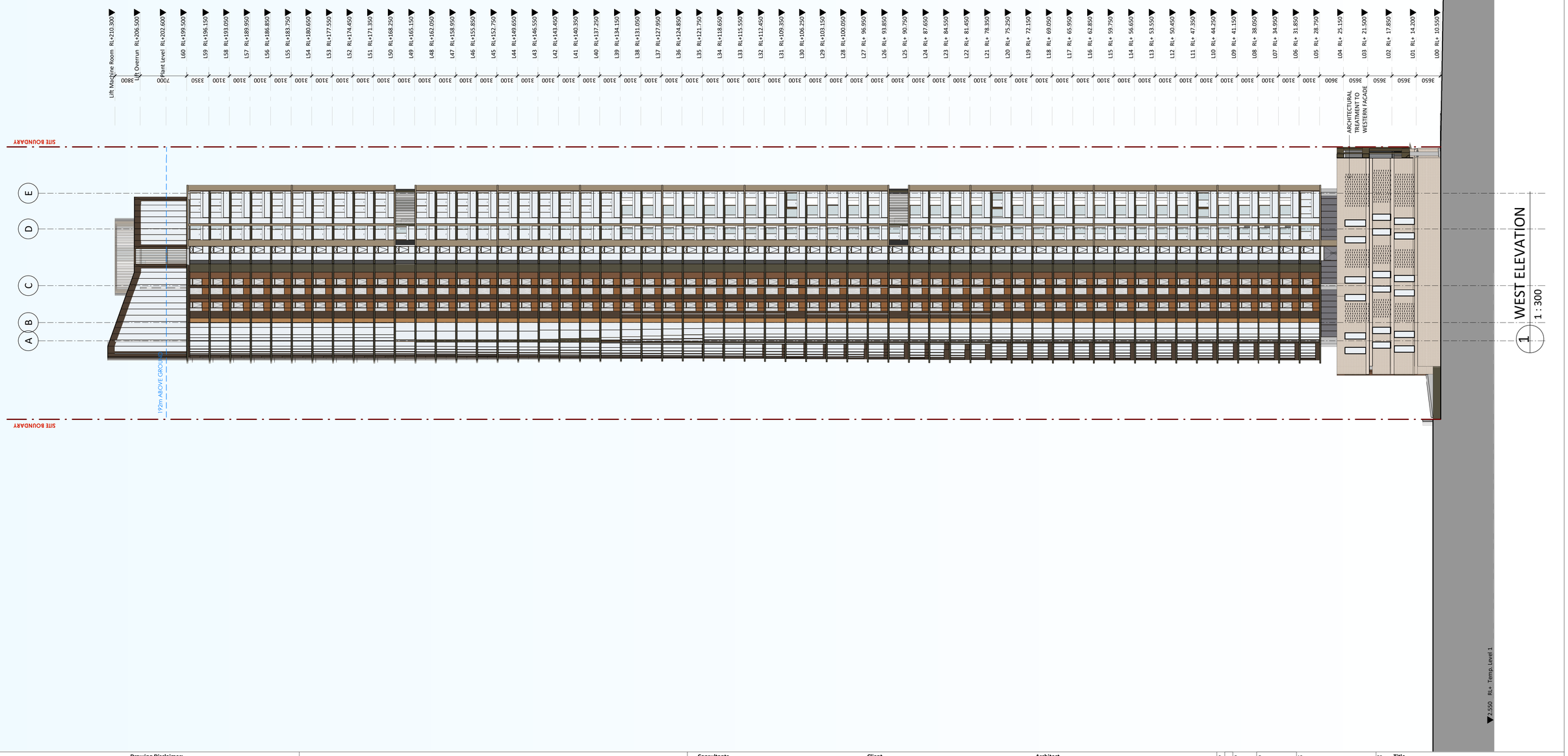


1 WEST ELEVATION
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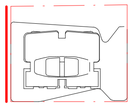


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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 2 5 10 20m
@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
C-ELEVATIONS
WEST ELEVATION 1-300

**Drawing Number** DA-20-1600
**Revision** A

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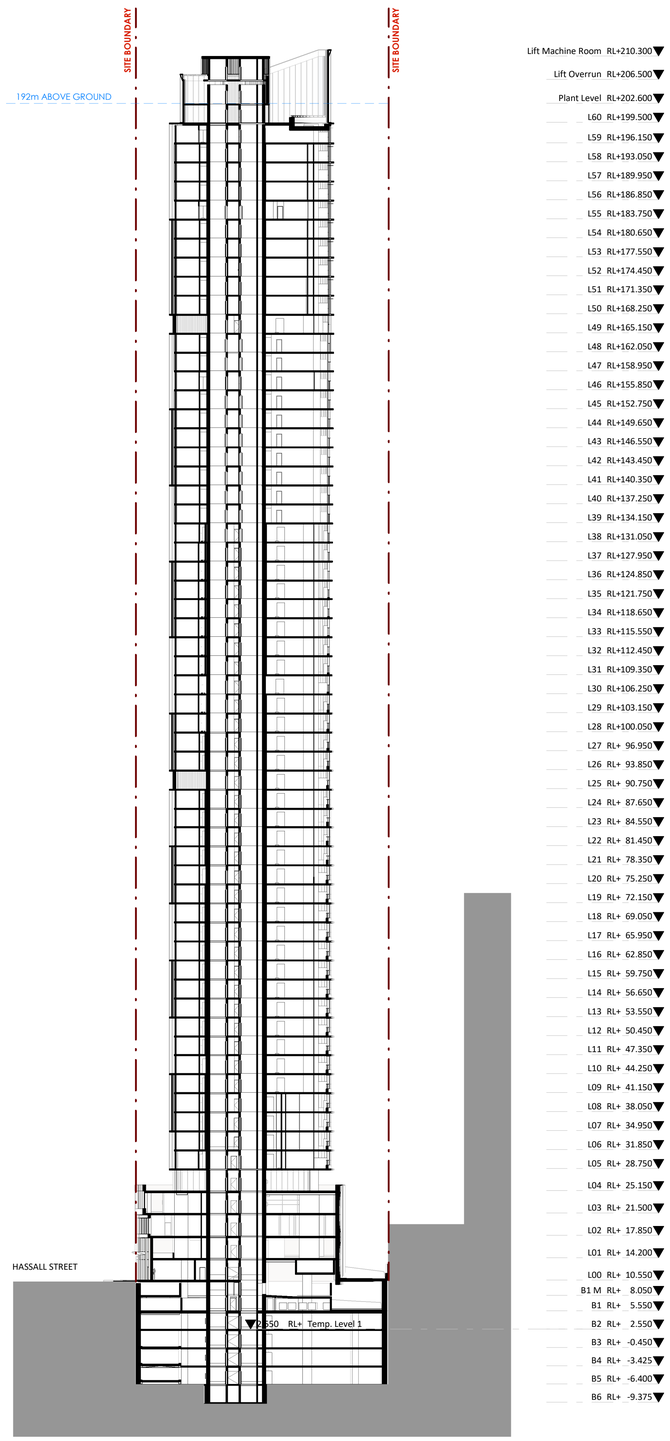
A1

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| Lift Overrun | RL+206.500 |
| Plant Level | RL+202.600 |
| L60 | RL+199.500 |
| L59 | RL+196.150 |
| L58 | RL+193.050 |
| L57 | RL+189.950 |
| L56 | RL+186.850 |
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1 SECTION A
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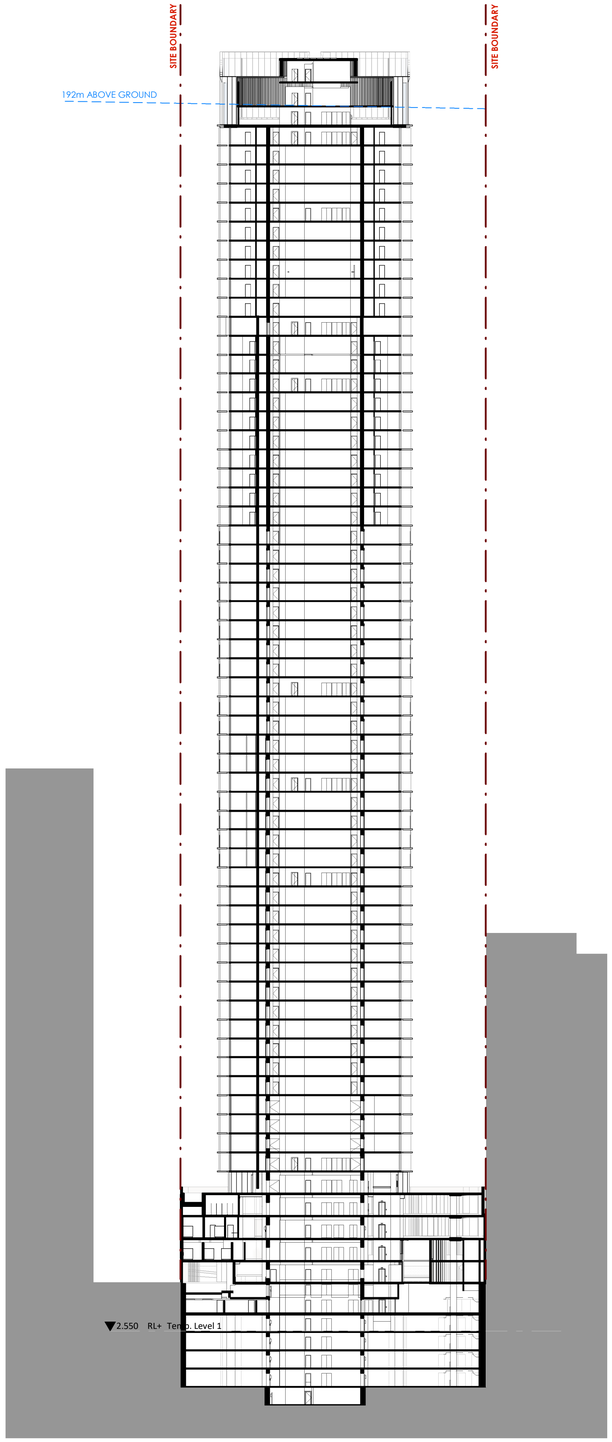


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| Lift Machine Room | RL+210.300 |
| Lift Overrun | RL+206.500 |
| Plant Level | RL+202.600 |
| L60 | RL+199.500 |
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| L05 | RL+ 28.750 |
| L04 | RL+ 25.150 |
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| L01 | RL+ 14.200 |
| L00 | RL+ 10.550 |
| B1 M | RL+ 8.050 |
| B1 | RL+ 5.550 |
| B2 | RL+ 2.550 |
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2 SECTION B
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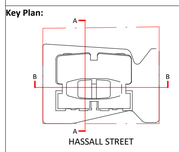


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| A | DRAFT | PTW | | 2022.09.03 |

**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

0 5 10 20 30 40m
@ A1 1 : 500

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**
DEVELOPMENT APPLICATION

**Title**
D-SECTIONS
SECTION A & B 1-500

**Drawing Number** DA-30-1000
**Revision** A

A1

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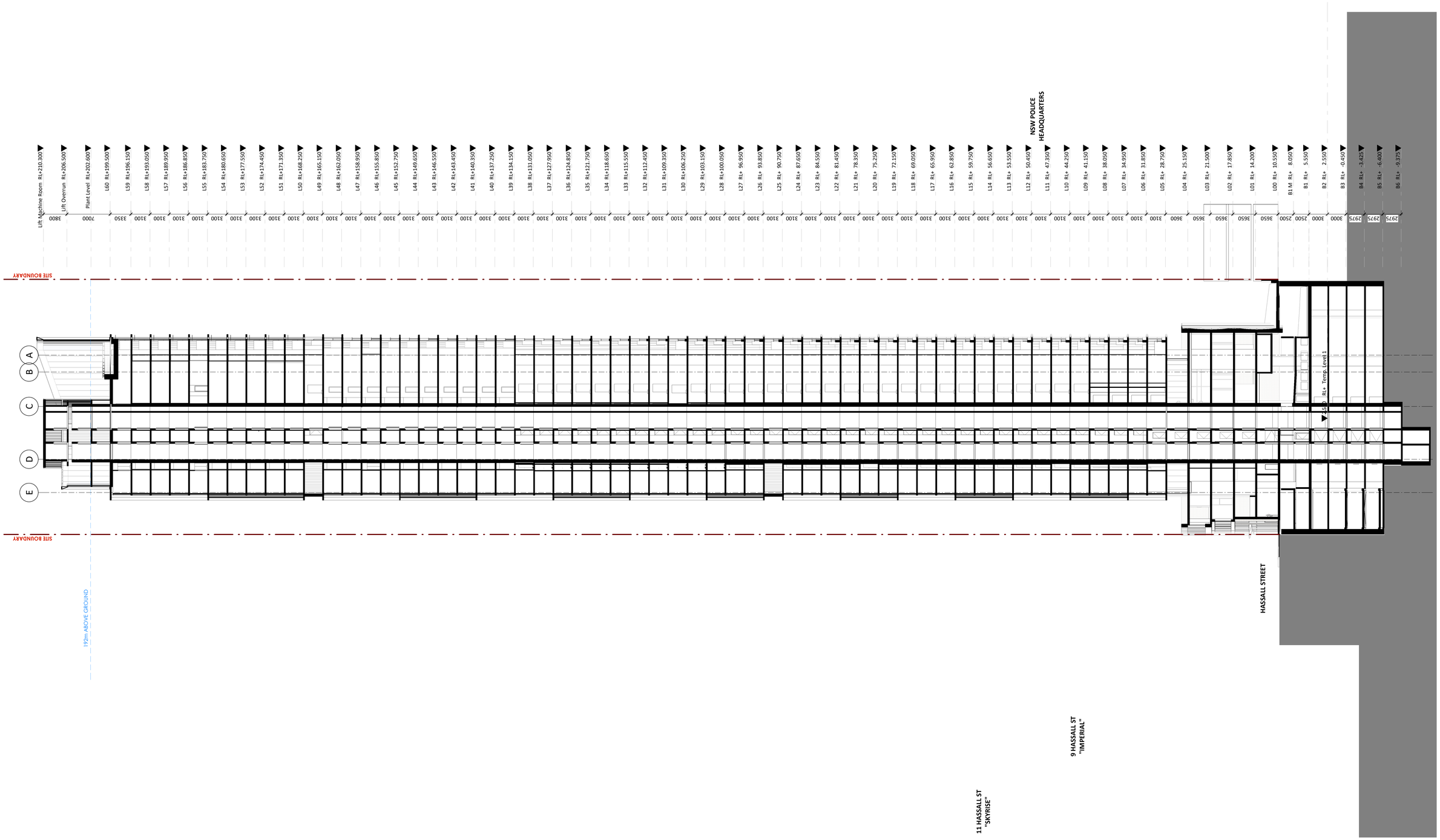


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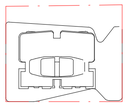

HASSALL STREET

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GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

PTW

0 1 2 5 8m
@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
D-SECTIONS
SECTION A 1-300

**Drawing Number** DA-30-1200
**Revision** A

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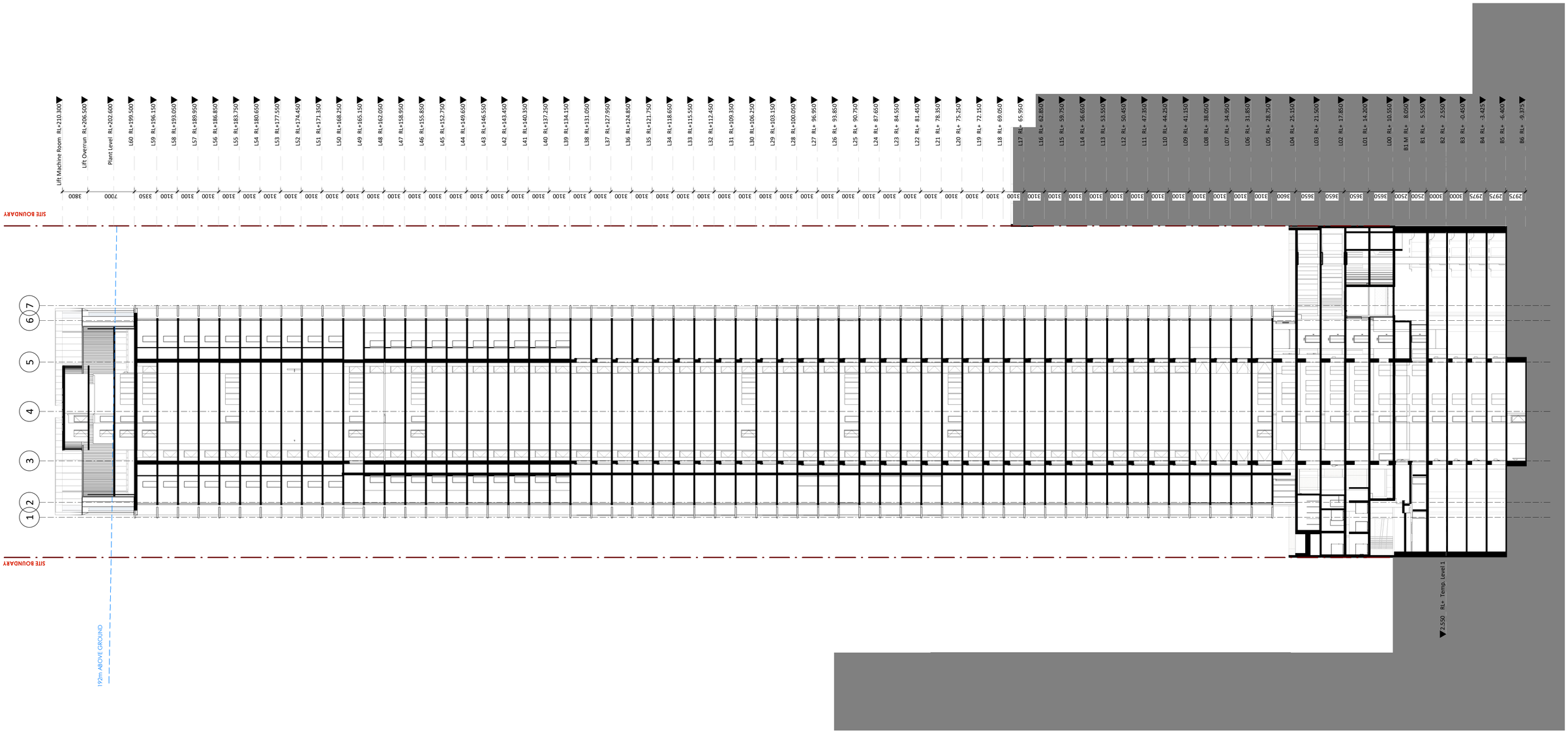


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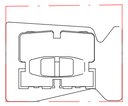

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GURNER™ GROUP
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3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
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@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
D-SECTIONS
SECTION B 1-300

**Drawing Number** DA-30-1300
**Revision** A

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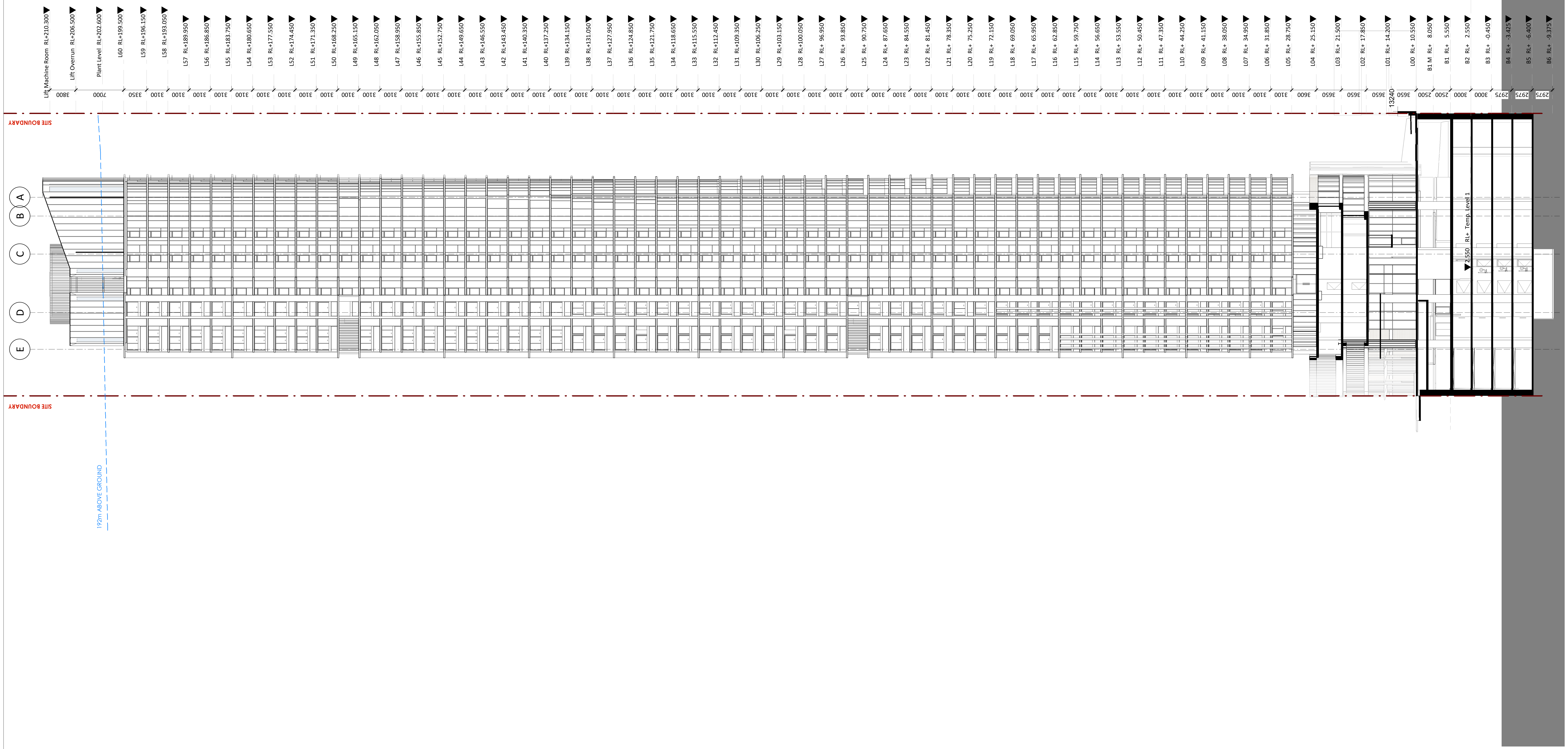


1 SECTION C
1 : 300

Key Plan:

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|---|---|---|---|---|
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**Consultants**

**Client**
GURNER™ GROUP
GQ Hassall Street Pty Ltd
3 Goldman Lane, Double Bay, NSW 2028

**Architect**
PTW Architects
Level 11, 88 Phillip Street
Sydney NSW 2000 Australia
T +61 2 9232 5877
ptw.com.au

Peddle Thorp & Walker P/L
ABN 23 000 454 624
trading as PTW Architects

NSW Nominated Architects
S Parsons Architect No.6098
D Jones Architect No.4778

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@ A1 1 : 300

**Project** PA030501
12 Hassall St
12 Hassall St, Parramatta

**Status**

**Title**
D-SECTIONS
SECTION C 1-300

**Drawing Number** DA-30-1400
**Revision** A

A1

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# GLOSSARY

**Adze:** an axe like bifacial tool with a bevelled bit or blade edge usually used to work wood, or sometimes to dig for root crops.

**Alluvium:** material which is transported by a river and deposited at points along the flood plain of the river.

**Artefact:** any object made by human agency. All lithic tools and lithic debitage are considered artefacts.

**Artefact scatter:** also known as a surface scatter or open site, where prehistoric material such as artefacts and waste debris are lying exposed on the surface of the ground.

**Assemblage:** a collection of artefacts from an archaeological site.

**Australian small tool tradition:** a mid-Holocene tool industry of the Australian Aborigines that appeared about 5,000 years ago when a new ensemble of small, flaked stone tools began to come into use. The types consisted of backed blades and flakes, Unifacial and bifacial points, and small adze flakes. There are some regional distributions of tools, including Bondi points, geometric microliths, Pirri points and Tula adzes.

**Axe:** a stone artefact that has been ground on one or more sides to produce a sharp edge.

**Backed blade:** a blade flake that has been abruptly retouched along one or more margins opposite an acute (sharp) edge. Backed pieces include backed blades and geometric microliths. They are thought to have been hafted onto wooden handles to produce composite cutting tools or spears. Backed blades are a feature of the "Australian small tool tradition", dating from between 5,000 and 1,000 years ago in south eastern Australia (Mulvaney 1975).

**Bifacial flaking or retouch:** when flakes have been removed from two opposing faces.

**Biomantle:** the upper part of soil produced by biodynamical agents and processes of which bioturbation is normally hierarchically dominant. By definition, it contains at least 50% biofabric, a condition met in essentially all topsoils.

**Bioturbation:** the alteration of a site by non-human agency, eg. burrowing animals, tree and grass roots, insects

**Blade:** a flake that is at least twice as long as it is wide.

**Bondi point:** a small, asymmetric backed point, named after Bondi Beach where it was first found, which is a component of the Australian small tool tradition. It is usually less than 5cm long and is sometimes described as a backed blade.

**Broad platform flake:** a flake which has a platform which is as wide as, or wider than, the body of the flake.

**Bulb of percussion:** a rounded bulge where the force from the hammerstone has radiated through the stone and split it from the core.

**Burin:** a flake tool that was produced by the removal of two flakes at right angles to one another to produce a very fine sharp and durable edge.

**Carved trees:** trees which have had designs carved into the bark or heartwood and in some areas may have been used to mark burial or initiation sites.

**Chert:** a very fine crystalline aggregate of silica.

**Context:** the time and space setting of an artefact, feature or culture. The context of a find is its position on a site, its relationship through association with other artefacts, and its chronological position as revealed through stratigraphy. An artefact's context usually consists of its immediate matrix (the material surrounding it, eg. clay, gravel or sand), its provenience (horizontal and vertical position within the matrix), and its association with other artefacts (occurrence together with other archaeological remains, usually in the same matrix). The assessment of context includes study of what has happened to the find since it was deposited.

**Core:** a piece of stone bearing one or more negative (concave) flake scars. A stone which has obviously had flakes and flaked pieces struck from it.

**Cortex:** refers to the original weathered outer surface of the rock used to manufacture an artefact.

**Debitage (debris):** detached pieces that are discarded during the reduction process.

**Distal end:** the end opposite to the platform or the point end of a blade.

**Dorsal surface:** the 'back' of the artefact or the side that was once part of the outside of the core or shows evidence of previous flake removals.

**Edge-ground artefact:** an artefact (generally an axe or adze) whose cutting edges have been ground, rather than flaked, to form a sharp edge.

**Eraillure scar:** the small flake scar on the dorsal side of a flake next to the platform. It is the result of rebounding force during percussion flaking.

**Erosion:** the wearing away or loosening and transportation of soil or rock by water, wind and ice.

**Fabricator:** a stone or bone artefact used in the manufacture of other tools. Often rod shaped and worn heavily on one end, it is used to chip flakes from a core, or to retouch a flake.

**Flake:** any piece of stone removed from a larger mass (core) by application of force (percussion), and having a striking platform and bulb of percussion.

**Flaked piece:** any stone struck from a larger mass by percussion but not containing all or any of the characteristics of a flake.

**Focal platform flake:** a flake which has a platform narrower than the body of the flake.

**Grinding groove:** a depression resulting from the sharpening of stone tools such as axes and adzes, usually located on surfaces of fine homogenous sandstone and near water.

**Grinding stone:** a thick stone used as a mortar for grinding seeds, roots, tubers, or ochre.

**Hammerstone:** the stone that is used to remove flakes from the core.

**Holocene:** that portion of geologic time that postdates the latest episode of continental glaciation. The Holocene Epoch is synonymous with the recent or postglacial interval of Earth's geologic history and extends from 10,000 years ago to the present day. It was preceded by the Pleistocene Epoch and is part of the Quaternary Period, a time characterised by dramatic climatic oscillations from warm (interglacial) to cold (glacial) conditions that began about 1.6 million years ago. The term Holocene is also applied to the sediments, processes, events, and environments of the epoch.

**Horizon (or soil horizon):** the layers of the upper crust of the earth. The top, or O, horizon is the layer of undecomposed litter; the A horizon is topsoil, where most roots grow; B is the subsoil; and C is the parent rock material, broken into chunks. Although some roots can penetrate into the C horizon, few microorganisms live there.

**Isolated find:** a single stone artefact found on the surface of the land not in association with any other artefact.

**Knapping:** the process of hitting one stone (core) with another (hammerstone) to produce a flaked artefact.

**Lamellate flaked piece:** thin and wedge shaped, similar to a flake, but without the diagnostic features of a flake. A lamellate may by the distal end of a flake which has had its platform broken off.

**Lithic:** anything made of stone. Derived from the Greek word meaning stone or anything pertaining to stone.

**Manuport:** piece of stone intended to be, or used as, a core that has been carried to the area from somewhere else.

**Microlith:** a small (1 – 3cm long) flake with evidence of retouch. Bondi points, scrapers and backed blades are all types of microliths.

**Midden:** a prehistoric refuse site chiefly composed of shell fragments.

**Multidirectional core:** a lithic mass (core) with evidence of flaking originating from more than one direction and with more than a single striking platform.

**Negative flake scar:** the scar left by the removal of a flake. The scar may also show a rounded depression which is the negative of the bulb of percussion.

**Open site:** also known as a surface or artefact scatter, where prehistoric material such as artefacts and waste debris are lying exposed on the surface of the ground.

**Pirri point:** a symmetrical leaf-shaped point, up to 7cm long, unifacially flaked all over its dorsal surface. The striking platform and bulb of percussion are sometimes removed to produce a rounded, thinned butt. Pirri points are a component of the Australian small tool tradition, found generally in inland Australia. The term pirri is an Aboriginal word for 'wood engraving tool'.

**Platform:** the flat surface which receives percussion or pressure in the removal of a flake or flaked piece.

**Pleistocene:** a geochronological division of geological time, an epoch of the Quaternary period following the Pliocene. During the Pleistocene, large areas of the northern hemisphere were covered with ice and there were successive glacial advances and retreats. The lower Pleistocene began about 1.8 million years ago; the Middle Pleistocene about 730,000 years ago; and the Upper Pleistocene about 127,000 years ago; it ended about 10,000 years ago. The Pleistocene was succeeded by the Holocene.

**Potential archaeological deposit (PAD):** any location considered to have a moderate to high potential for subsurface archaeological material

**Potlid:** small circular piece of stone that has literally "popped off" the surface of the artefact due to exposure to extreme heat.

**Proximal end:** the 'top' of the artefact, or the part that the knapper hit to remove it from the core, where the platform is expected to be.

**Quarry:** a location from which stone has been extracted in order to make stone artefacts.

**Retouch:** refers to the secondary working of an artefact after it has been struck from the core. Retouch is used to sharpen the edges. It is the intentional modification of a stone tool edge by either pressure or percussion flaking techniques.

**Scarred trees:** trees from which bark has been removed for the manufacture of everyday items such as containers, canoes or shields.

**Scraper:** a generalised term used to describe a flake tool that has a retouched edge angle of approximately 60 to 90 degrees.

**Silcrete:** silica-rich duricrust identified by the presence of complete granules or even pebbles within the matrix.

**Stratigraphy:** the study and interpretation of the stratification of rocks, sediments, soils, or cultural debris, based on the principle that the lowest layer is the oldest and the uppermost layer is the youngest. The sequence of deposition can be assessed by a study of the relationships of different layers.

**Taphonomy:** Literally, 'the laws of burial'. In archaeology, it is the study of the processes by which archaeological remains are transformed by human and natural processes during their incorporation into archaeological deposits, their subsequent long-term preservation within those deposits, and their recovery by archaeologists. The aim is to understand the processes resulting in the archaeological record.

**Thumbnail scraper:** a small flake with a convex scraper edge, shaped like a thumbnail and located opposite the flake's platform. They exhibit unifacial retouch (usually on the ventral surface) and are usually less than 30mm in length.

**Transect:** an arbitrary sample unit which is a linear corridor of uniform specified width. A straight line or narrow sections through an archaeological site, along which a series of observations or measurements is made.

**Tuff:** a rock formed of volcanic fragments (generally ash).

**Typology:** a scheme to order multiple types in a relational manner. A common typology orders types in a hierarchical manner.

**Unidirectional core:** a core with only one striking platform surface and with flake scars extending in only one direction.

**Unifacial flaking or retouch:** where flakes have been removed from one face only.

**Use-wear:** the physical changes to the edges of an artefact as a result of its use. Modification of a tool resulting from its use.

**Ventral surface:** the 'front' of the artefact, or the side that was once part of the interior of the core.