

# Victor Harbor 2013 Pty Ltd

Demolition of existing buildings and structures, construction of an eighteen storey mixed use building comprising of commercial tenancy, residential apartments, car parking, landscaping and associated site works

# 126 Wright Street, Adelaide

DA 020/A025/17

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### <u>OVERVIEW</u>

Application No	020/A025/17
Unique ID/KNET ID	2017/08633/01 Appian 1984
Applicant	Victor Harbor 2013 Pty Ltd
Proposal	Demolition of existing buildings and structures, construction of an eighteen storey mixed use building comprising of commercial tenancy, residential apartments, car parking, landscaping and associated site works
Subject Land	126 Wright Street Adelaide
Zone/Policy Area	Capital City Zone
Relevant Authority	State Commission Assessment Panel
Lodgement Date	30 March 2017
Council	Adelaide City Council
Development Plan	Adelaide (City) Development Plan [Consolidated – 24
	September 2015]
Type of Development	Merit
Public Notification	Category 1
Referral Agencies	Associate Government Architect, Adelaide Airport
Report Author	Karl Woehle – Planning Officer
RECOMMENDATION	Development Plan Consent subject to conditions

### EXECUTIVE SUMMARY

The applicant seeks Development Plan Consent for the demolition of existing structures and construction of a mixed use building comprising of residential apartments, commercial tenancy, car parking and associated building works in the Capital City Zone at 126 Wright Street, Adelaide.

The proposed development is a merit kind of development that triggers a statutory referral to the Associate Government Architect (AGA) and Adelaide Airport. The proposed land use is considered acceptable and consistent with the land-uses envisaged in the Capital City Zone.

The proposed built form exceeds the maximum height of 43 metres set out in this part of the Capital City Zone, however the development site is located less than 200 metres to the west of Morphett Street which is identified as a high concentration public transport route. The proposed development therefore qualifies for over-height provisions and the additional height of 13.8 metres is considered acceptable.

The podium and tower elements of the proposed development has been appropriately setback from the northern and southern boundaries (Wright Street). The front setback appropriately addresses the local heritage place to east and the AGA in principle supports the built form and setbacks of the development, but has queried the scale of the podium. On balance however, the four storey podium is not considered excessive and should not adversely impact the streetscape.

There are small shortfalls in private open space for 2 and 3 bedroom apartments, however this shortfall is supplemented by the larger apartments which exceed the minimal requirements and the communal space located on level 18. The proposal is largely consistent with Development Plan policies regarding design and appearance of buildings, activation, interface management and apartment amenity.

The proposal achieves appropriate performance outcomes in respect to technical matters such as pedestrian, bicycle, vehicle access, waste management and acoustics.



On balance, it is considered that the proposal satisfies the intent of the Capital City Zone and other relevant development control policies. It is consequently considered that it warrants Development Plan Consent subject to conditions.

#### ASSESSMENT REPORT

#### 1. BACKGROUND

#### 1.1 Strategic Context

A significant review of Adelaide City planning policies was undertaken in March 2012 resulting in a new policy framework that supports a city form that is aligned with the directions of the 30-Year Plan for Greater Adelaide and creating a more active vibrant city. Introduced policies of relevance place emphasis in the Capital City Zoning which encourages a high quality exemplar development for the City centre. It is noted that this application was lodged prior to the recent gazetted Ministerial DPA, as such the policies used in the assessment of this application are contained in the previous Adelaide (City) Development Plan Consolidated [September 2015].

#### 1.2 Pre-Lodgement Process

The proponent engaged in the Pre-lodgement Service offered by the Development of Planning, Transport and Infrastructure to proponents of development involving building work exceeding 10 million dollars in value within the Capital City Zone.

The proponent participated in three (3) Pre-lodgement Panel meetings and two (2) Design Review sessions. The applicant responded to some of the issues raised during the pre-lodgement panel meeting and design review panel sessions, particularly with respect to the following issues:

- impact on the immediate locality
- height and scale of the building
- materiality and building articulation
- apartment amenity; and
- physical built form.

### 2. DESCRIPTION OF PROPOSAL

Demolition of existing buildings and structures, construction of an eighteen storey mixed use building comprising of commercial tenancy, residential apartments, car parking, landscaping and associated site works

The table below summaries particulars of the proposed development

Land Use	Mixed use building comprising of commercial tenancy,
Description	residential apartments
Building Height	18 storeys (56.8 metres)
Affordable Housing	Applicant indicated that they would like to explore the
-	affordable housing initiative and that further detail of the final
	design will be provided to Renewal SA upon planning consent
Description of levels	Basement: Fire services, storage cages, cold and hot water
	services and car stacker/hoist
	Ground Floor: Commercial tenancy sharing an entrance and
	foyer space with the residential apartments; car parking, waste
	room, storage cages and bicycle parking
	Level 1 – 16: A total of 34 residential apartments consisting of
	6 studio apartments, 16 one bedroom apartments, 11 two
	bedroom apartments, 1 three bedroom loft apartment
	Level 17 - Indoor communal area with associated outdoor



	space, bbq, landscaping and se	eating
Site Access	Vehicle access will be obtained	via Wright Street. Pedestrian
	access to both the commercial	and residential components can
	be accessed via the same entra	ance addressing Wright Street.
Apartment floor	Dwelling Type	Floor Area (excluding POS)
area (excluding	Studio Apartments	37-43 square metres
balconies)	1 Bedroom apartments	48 square metres
	2 Bedroom apartments	71 – 75 square metres
	3 bedroom apartments	139 square metres
Car Parking	5 car parking spaces will be pro	
	parking stacking system that is	accessed from Wright Street.
	The car parks are located in the	e basement level of the proposed
	building and cannot be physica	
	basement.	
Bicycle Parking	35 spaces provided in a secure	room located on the ground
	floor, access to bicycle parking	is via main entrance through the
	lobby.	5
Encroachments	No encroachments are propose	ed within the development
Staging	No staging required	

### 3. SITE AND LOCALITY

#### 3.1 Site Description

The subject land is located at 126 Wright Street, Adelaide and is comprised of 1 allotment situated on the northern side of Wright Street, near the north eastern corner of Whitmore Square. The allotment is regular in shape and has a narrow frontage of 9.6 metres and site area of approximately 273m<sup>2</sup>. The site is generally flat in nature and is predominately used for vehicle parking.



#### Figure 1 – Subject site

	Lot No	Street	Suburb	Hundred	Title Reference
A6	in F107633	Wright	Adelaide	Adelaide	CT 5185/557





Figure 2 – Location Map The subject land gains vehicle access via Wright Street



## Figure 3: Site Photographs



Subject land – looking north

Wright Street – looking west



Wright Street – looking east



Wright Street - looking south



Neighbouring site – western side



Neighbouring properties (LH) – eastern side



Whitmore Square – looking northeast to Looking west – LH properties subject site





#### 3.2 Locality

The northern portion of the subject land is developed with a warehouse structure and associated vehicle parking fronting onto Wright Street. The immediate locality consist of commercial uses and residential dwellings in the form of detached, semi-detached and row dwellings ranging from one to three storeys in height.

To the eastern side of the development site there are several local heritage listed developments. The built architectural expression in the immediate locality abutting the subject site to the east and west is typified by classical cottage fronted dwellings with front setbacks generally ranging from 2-4 metres.

Wright Street is a two way Street with parallel parking and associated paved pedestrian footpaths, the street provides an east-west link from Whitmore Square through to King William Street and several streets connect Wright Street with Gouger Street, a significant retail and hospitality precinct. Wright Street is characterised by mature trees and a medium to high level of pedestrian amenity.

The subject land is approximately 113m from Morphett Street which is identified in the Development Plan as a high concentration public transport route, alternatively the site is approximately 400m from King William Street which offers frequent fix rail public transport.

#### 4. COUNCIL COMMENTS or TECHNICAL ADVICE

#### 4.1 Adelaide City Council

Advice was sought from Council administration regarding technical matters. The following points were raised for consideration:

- A dedicated on-street loading facility, as require by the Waste Management Report, cannot be provided on Wright Street. Council noted that applicant may apply for a loading zone on Wright Street, however public will also be able to use the loading zone.
- Council encourages the storage and reuse of collected stormwater.
- There was a lack of correlation between Waste Management Plan provided and the detailed plans.
- The sight distance between exiting vehicles and pedestrians on footpath are required to meet the requirements of Australian Standards AS2890.1
- Bicycle users are required to negotiate two swing doors, which is both inconvenient and may detract from bicycle usage.

The following comments were made with regards to the Local Heritage context

- The setback from the street boundary is less than the (nominal) 4 metre setback to the front wall of the adjoining Local Heritage Place.
- Proposed podium dominates the streetscape particularly when viewed from the east.
- 4 storey podium has no contextual basis.
- Materials selection fails to address the fine grain nature.
- Over-developed site results in a limited design response.

The applicant responded to the Council comments and provided amended plans which provides appropriate provisions for the waste room, in line with the recommendations contained in the Waste Management Report. The applicant reduced the height of the letterbox and fire booster to improve pedestrian visibility for exiting vehicles.



The Adelaide City Council responses are contained in the **ATTACHMENTS** and are further discussed in the Planning Assessment.

#### 5. STATUTORY REFERRAL BODY COMMENTS

#### 5.1 Government Architect

The Government Architect is a mandatory referral in accordance with Schedule 8 of the *Development Regulation 2008*. The Commission must have regard to this advice. The Associate Government Architect (AGA) responded to the referral and expressed that the proposed height is challenging in this location due to the adjacency to Local Heritage places close to the subject site.

Support of this height is contingent on the delivery of quality apartment amenity that is above and beyond the minimum requirements as well as achieving a high quality design outcome, in terms of scale, form and expression of building to its current and future context.

The AGA supports the provision of the podium in principle and the materiality, as well as the design intent of the two metre front setback to address the locality, however concern was expressed with the proposed height of the podium and its relationship with the existing context.

The provision of a small café tenancy as a means of street activation and the two metre front setback from the street is supported by the AGA. There are concerns regarding the location of the firebooster and letterbox, which could compromise the view when exiting the development via vehicle.

There is principle support for the materials/finishes and the design approach for creating shift in the built form and the intent to address the scale of the development. Air-conditioners units on balconies are not supported due to the adverse impacts on the amenity and street, however screening devices are a positive design move.

The AGA considers the following elements of the proposed development would benefit from protection as part of the planning consent.

- Review of podium height.
- Review of treatment to car hoist entry at ground level.
- Review of air conditioning condenser units locations to mitigate environmental and acoustic impacts.
- Relocation of the fire booster and letter boxes, or provision of further information regarding vehicle exit safety strategy.
- Development of a management strategy to implement the wind assessment report recommendations of securing loose furniture to ensure public and resident safety.

The AGA's statutory referral response is contained in the **ATTACHMENTS** and are further discussed in the Planning Assessment.

#### 5.2 Adelaide Airport

The Airport Authority is a mandatory referral in accordance with Schedule 8 of the Development Regulation 2008. The Commission must take direction to the advice. The Airport Authority reviewed the proposed development and waived the requirement for an Airspace Study.



The Department of Infrastructure and Regional Development has granted 126 Wright Street Adelaide airspace approval. The approval stipulates the building must not exceed a maximum height of 101.00 metres AHD, inclusive of all lift over-runs, vents, chimneys, aerials, antennas, lightning rods, and roof top garden planting.

The Airport Authority's statutory referral response and airspace approval is contain in the **ATTACHMENTS**.

### 6. PUBLIC NOTIFICATION

The application is a Category 1 development pursuant to Capital City Zone Principle of Development Control 37(a). No public notification was required.

#### 7. POLICY OVERVIEW

As this Development Application was lodged on 27 March 2017, the former consolidation of the Development Plan is applicable. The subject site is contained wholly within the Capital City Zone as described in the Adelaide City Council Development Plan Consolidated 24 September 2015.



Figure 4 – Zoning Map

### 7.1 Capital City Zone

The Zone encourages a diverse range of land uses with non-residential land uses at the ground floor level for an active street frontage. There is a prescribed height limit of 43 metres (with exemption criteria to exceed this) and a minimum height of 26.5 metres. The zoning provisions support developments of a high standard of architectural design and finish that is appropriate to the City's role and image as the capital of the State.



#### 7.2 Council Wide

The Council Wide provisions provide direction on the desire for increased levels of activity and interest at ground level; the safe and convenient servicing of sites; a high standard of design and appropriate bulk and scale of buildings and contribution to streetscape.

#### 7.3 Overlays

#### 7.3.1 Affordable Housing

Affordable housing overlay as depicted on Development Plan Map Adel/A (Overlay 15b) recommends that developments comprising 20 or more dwellings should include a minimum of 15 percent affordable housing.

#### 7.3.2 Adelaide City Airport Building Heights

The development site is subject to Airport Building Heights, the proposed development was referred out to the Airport Authority.

#### 8. PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Adelaide City Development Plan, which are contained in **ATTACHMENTS**.

#### 8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
Building Height	43 metres (except where the airport's operations require a lesser height)	56.8 to highest parapet	YES NO PARTIAL	Negligible variance to recommended guideline considered acceptable, noting building site qualifies for over- height criteria
Car Parking	No parking provisions for the zone	5 car parking spaces proposed	YES 🛛 NO 🗍 PARTIAL 🗌	
Bicycle Parking	34 Residential spaces 3 visitor spaces 2 café Total 39 spaces	35 bicycle parks	YES NO PARTIAL	Generally meets provisions, visitor bicycle parking present in Wright St
Front Setback	Zone envisages high street walls to frame the street	Podium setback from Street frontage	YES X NO D PARTIAL D	LH place adjacent support setback from street frontage.
Rear Setback	Zone does not seek rear setback	Ground floor abuts rear boundaries	YES X NO D PARTIAL V	
Side Setback	Zone does not seek side setback	Building constructed to boundaries	YES X NO D PARTIAL	
Apartment Size	Studio – 35m 1B/R – 50m <sup>2</sup> 2B/R – 65m <sup>2</sup> 3B/R – 80m <sup>2</sup>	<b>Proposed</b> Studio – 37-43m <sup>2</sup> 1B/R – 48m <sup>2</sup> 2B/R –71-75m <sup>2</sup> 3B/R –139m <sup>2</sup>	YES NO PARTIAL	Generally meets provisions. Minor shortfall in 1B/R apartments.



Private Open Space	Studio – No minimum 1B/R – 8m <sup>2</sup> 2B/R – 11m <sup>2</sup> 3B/R – 15m <sup>2</sup>	<b>Proposed</b> Studio –6m <sup>2</sup> 1B/R – 9m <sup>2</sup> 2B/R –9m <sup>2</sup> 3B/R –9m <sup>2</sup>	YES NO PARTIAL	Studio and 1B/R meet provisions 2-3B/R do not meet provisions, it is noted that POS opens directly into living space and there is a communal floor
Storage	Studio – 6m <sup>3</sup> 1B/R – 8m <sup>3</sup> 2B/R – 10m <sup>3</sup> 3B/R – 12m <sup>3</sup>	25 storage units located on ground floor and basement	YES NO PARTIAL	

#### 8.2 Land Use and Character

The proposal involves the development of a residential apartments and commercial tenancy in the form of a café, which is consistent with PDC 1 which seeks this form of land-use within the Capital City Zone. Whilst no affordable housing has been formally included in the proposal, the nature of some apartments may lead themselves to being such a price point. Additionally the applicant has expressed a willingness to explore this further with Renewal SA. Advisory note is recommended in this respect.

#### 8.3 Building Height

Capital City Zone PDC 19 establishes a building height should not exceed 43 metres in height unless it meets one or more of the criteria listed in PDC 19 or when the airport's operations require a lesser height. The Zone encourages developments to take advantage of the premium City location and should have a building height of no less than half the maximum height.

Alternatively PDC 20 supports developments with a lower build height when a development is adjacent to a heritage place, which applies to this development site.

The proposed building would reach a height of approximately 56.8m to the highest parapet. The proposed height exceeds the maximum envisaged height in PDC 19 by approximately 13.8m. It is noted that subject site is situated within 200metres of Morphett Street, which is highlighted as a high concentration public transport route, as such the proposed development therefore qualifies for over-height criteria listed in PDC 19.

The proposed development is consistent PDC 19 and not at significant odds with the desired City Form. Whilst PDC 20 provides provisions for a reduced scale, the applicant chose to respond to the local heritage by means of establishing appropriate design considerations that references not only the local heritage but the immediate locality, including an appropriate front setback respecting the adjoining places.

#### 8.4 Setback and Transition

The Capital City Zone PDC 10 seeks developments to be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.

Additionally PDC 11 of the Capital City Zone seeks buildings to be designed with podiums and upper level setbacks in the order of 3-6 metres. This policy provision seeks to provide extended views to the sky, human scale at street level and create a comfortable pedestrian environment.

The ground floor of the development with the exception of the front setback is to be built to all boundaries. The front setback ranges from 2.6-2.8m from Wright Street, which contextually responds to the setback of the adjacent local heritage place to the east and the character fronted cottage to the west. The setback from Wright Street also provides the development the opportunity for outdoor dining/seating space for the café at ground floor, which is supported by the AGA and consistent with PDC 10 of the Capital City Zone.

The proposed 4 storey podium is approximately 13.4m in built height. The AGA supports the provision of the podium in principle but is concerned by the height of the podium and it's relation to the existing context. It is however noted that the height of the podium draws references from the height and scale of the building at 130 Wright Street and also is considered a lesser height and scale to the nearby Bohem development to the west. The four storey podium is not considered excessive and should not adversely impact the streetscape.

The tower portion of the proposed development is setback 3m from Wright Street, with the exception of levels 8-11 where the balconies project into the space and are setback 2.5m from the street. Balconies located on the northern side (rear) of the tower have been setback 2.5m, whilst the built face of the tower reflects a setback 3m from the northern boundary. The eastern side of the tower is built to the boundary, whilst the western side has been setback slightly from the boundary to provide some further articulation when viewed from the west. A single storey rooftop structure is further setback from the north, east and south boundaries, with the exception of the plant room enclosure abutting the eastern boundary.

The proposed development responds to the existing pattern of buildings in the locality and attempts to break down the mass of the slender building by providing a podium with setbacks to the northern and southern boundaries. The provision of northern setback should provide sufficient northern aspects and safeguard the apartment amenity from potential adjoining developments. The setback from the northern boundary is considered appropriate and consistent with PDC 67 which encourages a 3m setback from adjoining sites.



Figure 5 - 130 Wright Street, Adelaide



#### 8.5 Design and Appearance

The Capital City Zone seeks buildings to reflect innovative design approaches and contemporary architecture that responds appropriately to the locality and context of the building. The policies place a strong emphasis on ground floor activation through careful building articulation and fenestration, frequent openings in building facades, balconies, awnings and other features.

The proposed development has been divided into two elements, the four storey podium and tower element. The podium form is differentiated from the tower element by a selection of different external finishes, materials and window treatments. The podium has been setback from the street front to respond to the local heritage place and built pattern in locality, which is supported by the AGA. The ground floor presents frequent openings to the streets, whilst the café at ground level should provide activation at street level. The AGA noted that further review of car hoist entry at ground level is recommended, which is supported from a planning perspective.

The tower element of the proposed development has been broken up into 3 segments. Each segment in the tower represents 4-5 storey sections which shifts the orientation of the southern balconies from east to west which also results in alternating floor plans. This design approach has also been implemented on the northern (rear) apartments. The design approach attempts to break up the mass of the tower and introduce some articulation and movement into the built form. Due to the tight development site, the articulation of the tower is limited, which is reflected in the slender proportions. The AGA generally supports the design direction taken and considers the breakdown in built form appropriate.

The proposed external materials and finishes consist of textured concrete panels, dark coloured bricks, aluminium panelling and aluminium battens consistent with PDC 7 of the Capital City Zone. Additionally the proposed materiality responds to the fine grain of the buildings in the locality and the AGA has expressed in principle support for the proposed materials and finishes.

The design of the proposed development attempts to mitigate the mass and scale of the development through the use of a podium, front setback, materiality and façade treatments. The proposed development is generally consistent with the desired character and design policies of the Capital City Zone and appropriately responds to the locality.

#### 8.6 Apartment Amenity

The Development Plan seeks medium to high scale residential developments to provide a high standard of apartment amenity with functional internal layouts. All residential developments should have direct access to natural ventilation and light.

The proposed apartments generally meet the minimal unit sizes as prescribed in PDC 70 Council Wide. It is noted that the one bedroom apartments presents a shortfall of  $2m^2$ , which is not at significant odds with the Development Plan. It is noted that the proposed studio, two bedroom and three bedroom apartments exceed the minimal unit sizes prescribed in PDC 70 Council Wide.

All habitable rooms in the proposed development have access to natural light and ventilation. The proposal exhibits floor to floor heights of 3.1metres which should ensure a floor to ceiling height of 2.7m, which is sought in the Development Plan. The AGA supports the functional layouts and the mix of apartment types and configurations. The proposed development has a total of 25 storage cages located on the ground floor and basement, which compliments the generous apartment sizes and is consistent with PDC 81, which seeks appropriate storage space and area.



Air conditioning condenser units on balconies are generally not supported due to the adverse impacts on private open space and the streets. The AGA supports the intent to screen the condensers and to integrate the screening into the overall architectural expression. AGA noted that further detail is required to demonstrate that the screening devices can appropriately mitigate the visual, environmental and acoustic impacts of the air conditioning units.

#### 8.7 Private open space

The two and three bedroom apartments do not meet the minimal private open space provisions set out in the Development Plan. It is noted that the shortfall is supplemented by the larger apartments, which surpass the minimal apartment floor size. Additionally the communal open space on level 17 is considered to further offset the shortfall in private open space, consistent with PDC 59 Council Wide, which contemplates a lesser amount of private open space where communal open space is provided.

#### 8.8 Heritage

#### Capital City Zone

#### Desire Character

Exemplary and outstanding building design in desired recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identificated street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

PDC 10 of the Capital City Zone seeks buildings to be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.

#### Council Wide

PDC 162 Development on land adjacent to land containing a Heritage Place should demonstrate design consideration of the relationship with the Heritage Place (without necessarily replicating its historic detailing) by establishing compatible:

- (a) scale, bulk and setbacks;
- (b) proportion and composition of design elements;
- (c) form and visual interest (as determined by play of light and shade, treatments of openings and depths of reveals, roofline and silhouette, colour and texture of materials and details, landscaping and fencing);
- (d) width of frontage and boundary set-back patterns; and
- (e) vehicle access and carparking arrangements.

The local heritage building located to the east of the proposed development and is setback approximately 4m from Wright Street. The adjacent character fronted residential cottage located to the west exhibits a setback of approximately 2.5metres.

The ground floor of the proposed development has been setback approximately 2.2 - 2.8m from Wright Street. The fire booster located on the eastern boundary adjacent the local heritage place is 1.2m in height which is less than the existing boundary fence height. The ground floor frontage encompasses complimentary uses that provides openings in the build façade and views in and out of the site. The proposed front setback references the existing local heritage site and attempts to soften the mass of the podium at street level. The Studio apartment balconies on levels 1-3 are setback 2m from Wright Street, consistent with the setbacks provided at ground floor. The AGA strongly supports the design intent of the 2m setback to address the established scale and pattern of the immediate streetscape.



The four storey podium responds to the built form and massing to the immediate west (130 Wright Street) and incorporates a brick façade/veneer into the podium which references the fine grain materiality in the locality and is supported by the AGA.

Notwithstanding the overall height of the building, the proposed development displays a design respond that is compatible with the local heritage and built streetscape. The proposed podium, setbacks and materiality attempts to mitigate the mass of the development and is considered consistent with the relevant heritage policies in the Development Plan.

#### 8.9 Traffic Impact, Access and Parking

#### 8.9.1 Car Parking

The Capital City Zone does not prescribe a minimum or maximum car parking requirement. Council within the Pre-lodgement discussions did not express concerns regarding the vehicle movements in and out of the development due to the small number of carparks provided. The development site is currently being utilised as a private carpark in which 8-9 vehicles are parked on.



Figure 6 - 8 vehicles parked on the existing development site

The proposal includes 5 carparks via a fully automated car parking stacking system. Access to the carpark is from Wright Street from an existing access point. It is noted that vehicles leaving the proposed development will be exiting the premise in a backward direction onto Wright Street. Concerns were raised regarding the height of the letterbox and fire booster and the potential impact on pedestrian visibility for vehicles exiting the development.

The applicant responded and provided amended plans that reduced the height of the letterbox and fire booster. As such the fire booster located against the eastern boundary is 1.2 metres in height and is lower than the existing fence on the eastern boundary. The revised letter box is 1.25m in height and is unlikely to significantly impact western views down Wright Street.



It is considered that due to potential low traffic movements in and out of the site the proposed development is unlikely to further exacerbate any traffic issue in Wright Street.

The proposal on its merits is consistent with the Car Parking provisions contain in the Development Plan and is not considered to be of concern to the proposed development.

#### 8.9.2 Bicycle Parking

Table Adel/6 anticipates a high scale residential development to include 1 bicycle park for every apartment with a total floor space with less than 150 square metres and 2 bicycle parks for apartments with a total floor area greater than 150 square metres. 1 visitor bicycle park should be provided for every 10 dwellings.

The proposal includes 34 bicycle parking spaces which is equivalent to 1 bicycle park per apartment, consistent with the provisions set out in the Development Plan. The bicycle parking is a secure room at ground level that can be accessed from Wright Street via lobby.

The proposal does not include dedicated bicycle parks for visitors or for the café. It is noted that there are bicycle racks located in close vicinity to the proposed development, which could supplement the minor shortfall in bicycle parks. The proposed bicycle parking is considered appropriate and consistent with the Development Plan provisions.

#### 8.9.3 Traffic

The traffic impacts of the proposed development is considered low due to the limited car parking spaces provided. Council noted that a dedicated on-street loading facility, as required by the Waste Management Report cannot be provided on Wright Street. Whilst the applicant may apply for a loading zone on Wright Street, it will not preclude public from using this space temporarily. Which could make waste collection challenging.

Council also highlighted that there is already a loading zone located at 134 Wright Street, which is adjacent to the development site. The proposed development is unlikely to significantly increase traffic within Wright Street and is generally considered acceptable.

#### 8.10 Environmental Factors

#### 8.10.1 Crime Prevention

The Development Plan generally seeks developments to integrate and attempt to facilitate natural passive surveillance, clear lines of sight and appropriate lighting within the design of the buildings to reduce potential crime. The proposed commercial use at ground level in addition to the vehicle and pedestrian movements should provide activation and casual surveillance at street level. Balconies fronting Wright Street will provide the best opportunity for passive surveillance of Wright Street after hours.

The applicant has not provided details in relation to the use of surveillance cameras, however the applicant envisages the use of an intercom/surveillance system that will be directly connected to apartments. The applicant has also indicated that appropriate lighting will be provided to the site and front entrance of the building to provide building security, which will allow permeable views to and from the site.



No details have been provided in relation to the use of physical access control, however it would be encouraged that entry to the foyer, lifts, bicycle parking and car parking areas would be through the use of swipe cards. The applicant has encouraged that these final details can be conditioned accordingly to satisfy the Development Plan requirements.

The proposed development generally satisfies the Development Plan provisions relating to Crime Prevention through Urban Design which promotes active street frontages, passive surveillance and appropriate security measures. A condition will be placed on the application to ensure the final details of the physical security measures are up to a high standard and to the satisfaction of State Commission Assessment Panel.

#### 8.10.2Noise Emissions

The Council wide noise emission and noise intrusion controls seeks developments to incorporate attenuation measures to prevent and mitigate unreasonable interference to the amenity and the desired character of the locality.

The design documentation indicates that air-conditioning units located on apartment balconies will be screened to ensure minimal visual and noise impacts on the residents and adjoining properties.

Resonate Acoustics has undertaken an environmental noise impact assessment on the proposed development against the Development Plan's noise ingress and noise emission requirements. The report demonstrated that, with noise mitigation treatments detailed in the report, the development is able to comply with the proposed internal noise criteria set out in the Development Plan. The recommendations contained in the report will be conditioned within any consent, to ensure appropriate acoustic environments are provided to residents and neighbouring properties.

Addition provisions in the Development Plan encourage ancillary actives such as deliveries and collection of private waste, goods and empty bottles at appropriate hours. The proponent has acknowledged these provisions and has encouraged a conditioned placed on this assessment to ensure compliance with this policy.

#### 8.10.3Waste Management

Council Wide waste management policies and objectives collectively encourages the use of a dedicated area for on-site waste collection and sorting of recyclable materials, that does not create unacceptable levels of smell and odour or detrimentally affect amenity.

The proposed development includes a storage room large enough to accommodate 2x240 litre organic waste bins, 3x 660 litre general waste bins, 2x 660 litre recycling bins and provision for 2x 660 litre spare bins, which is consistent with the Consultant's recommendations set out in the technical report.

Recycling and general waste is disposed of via waste chute located in the services room on each level. Organic waste is dealt with via waste chute located within the lobby space on the ground floor.



The consultant's report proposed waste collection will occur on street in a dedicated loading zone located on Wright Street. Bins would be collected directly from the bin storage room and would be emptied into the collection vehicle on the street and returned back to the bin storage room. The Consultant's report indicated that waste and recycling collection would occur 3 time per week, which will also be dependent of occupancy rates etc. The waste report recommended that the collection of waste and recycling should occur within nominated time (7am-7pm) to prevent the loading zone from not being accessible due to parked cars.

The proposed waste management for the proposed development is generally consistent with the Council Wide policies. Additionally Council do not have concerns relating to the collection of waste from Wright Street. It is noted that collection of waste from the proposed development is contingent on the collection vehicle getting access to a 'loading zone'. Whilst this is not the most effective means of collecting waste it is deemed acceptable.

#### 8.10.4 Stormwater Management

The applicant engaged a consultant to conduct a drainage strategy for the proposed development. The consultant considers the site to be 100% impervious.

The proposed development will cover the entire site and there is no landscaped areas proposed. The consultant concluded that given the limited available storage area and constraints of the site, no provisions have been made for the collection and re-use of stormwater run-off within the proposed development

#### 8.10.5 Energy Efficiency

Council Wide Development Plan provisions seeks developments that are compatible with long term sustainability of the environment whilst minimising consumption of non-renewable resources and utilises alternative energy generation systems.

The design of the building utilises both passive and active design techniques to address the thermal comfort for occupants. The proposed development is positioned in a north-south configuration, which should provide good direct solar access to living areas and is generally consistent with PDC 108 which encourages passive energy reductions. The location of the windows and balconies should reduce summer sun and maximise winter sun. All habitable rooms in the development have access to natural ventilation and sunlight. The applicant has indicated that they intent to meet the provisions for high performance insulation and glazing and compliance with the Energy Efficiency of the Building Code Australia

The building incorporates zoning of air conditioning within the apartments, energy efficient hot water services, low energy lighting with energy efficient controls and timers, as well as high efficiency elevators. The proponent has indicated that the design of the roof will allow for the provisions of some photovoltaic cells which could be used to offset and assist with lobby lighting, ventilation and air conditioning. It is noted that further design documentation is still required and will be provided in the building rules stage.

The energy efficiency initiatives applied throughout the proposed development generally satisfy the various policies and design techniques under the Council Wide (Energy Efficiency) and are considered acceptable for the intended use.



#### 8.10.6 Wind Analysis

The Development Plan provisions encourages developments over 21 metres in building height to be designed to reduce potential wind impacts on adjacent properties and pedestrian environment. The policy provisions in the Development Plan encourages the use of podiums, verandas, and placement of building as design initiatives that could mitigate potential wind impacts.

The applicant provided a Wind Impact Statement for the proposed development. The report highlighted that the downwash flows from the south and west facades are the main concerns for the ground level footpath. It was determined that the potential downwash is mitigated by the inclusion of a canopy at ground level and as a result the downwash is not likely to cause an exceedance of the walking or standing criterion.

Direct wind will be the main impact to the amenity areas at level 17 as the communal areas is exposed to prevailing winds. A recommendation for a 1.8 metre high balustrade for the surrounding outer perimeter of level 17 was put forth within the report. The recommendation has since been adopted by the applicant and amended plans were provided.

The report concluded that the proposed development would not generate wind conditions in excess of the criterion for safety. The proposed development utilities appropriate building design initiatives and mitigates potential wind impacts, consistent with the Development Plan provisions and deemed acceptable.

#### 8.10.7 Site Contamination

The applicant engaged a consultant to conduct a Preliminary Site Investigation on the subject site.

The site investigation determined that the proposed redevelopment for high density residential land use and based on the historical review is considered to be of low risk of contamination. It was noted in the report that there are some unknowns, particularly in relation to the nature of fill material on the site and the activities during the site's use as a metal fabrication company.

It was concluded in the report that the site is unlikely to pose unacceptable health or environmental risk and is deemed appropriate for the proposed land use.

#### 8.11 Signage

The applicant has indicated that a separate application for signage relating to the proposed commercial use will be lodgement once the commercial tenancy is filled.

#### 8.12 Overshadowing

The immediate locality consist of residential uses ranging from low to high density, light commercial uses and various mixed use developments. The shadow diagrams indicate that due to the slender proportions of the development, it should not unreasonably overshadow adjoining properties in the immediate locality for longer than 2 hours during the winter solace. Which is considered consistent with PDC 120 Council Wide which seeks developments to be designed and sited to minimise overshadowing of buildings, and public and private outdoor spaces.

Whilst the potential impact of the proposed development could create some interface issues with the lower density residential properties it is noted that the proposed development is not at odds with the Capital City Zone which anticipates high scale development.



#### 9. CONCLUSION

The proposed development generally meets the quantitative provisions of the Development Plan. Whist the proposed development marginally exceeds the maximum envisaged height, the development site qualifies for over height exemptions. The design approach of the proposed development is considered to mitigate the height of the development. It is also noted that the additional height is unlikely to detrimentally impact the City Form as outlined in figures CC/1 and CC/2 of the Capital City Zone

The proposal is generally considered to be consistent with the Development Plan provisions and worthy of conditional Development Consent on the basis of the following:

- Building articulation and architectural expression is principally supported by the AGA and considered appropriate for the Capital City Zone and responds to the built form of the immediate locality.
- The setback from boundaries is considered appropriate, whilst responding to the adjacent local heritage place.
- The AGA in principle supports the setbacks of the development, but has queried the scale of the podium. On balance however, the four storey podium is not considered excessive and should not adversely impact the streetscape.
- Apartments have been configured to provide access to natural light and ventilation and should provide a high level of apartment amenity.
- The nature of many of the apartments lend themselves to likely being of an affordable price point. The applicant has indicated they intend to pursue the possibility of formalising this with Renewal SA.
- Proposed built height is supported by Capital City Zone policies and respects the city form set out within the Development Plan
- The proposed commercial tenancy at ground floor has the potential to contribute to the further activation of Wright Street and is consistent within the Capital City Zone.

When assessed against the relevant Development Plan policies the proposal generally satisfies the relevant provisions. The proposal is generally consistent with the desired character of the Capital City Zone and should not result in or cause unacceptable impacts on the local amenity. Accordingly, the proposal warrants Development Plan consent subject to conditions.

#### 10. RECOMMENDATION

It is recommended that the State Commission Assessment Panel:

- 1) RESOLVE that the proposed development is NOT seriously at variance with the policies in the Development Plan.
- 2) RESOLVE that the State Commission Assessment Panel is satisfied that the proposal generally accords with the relevant Objectives and Principles of Development Control of the Adelaide City Development Plan.
- 3) RESOLVE to grant Development Plan Consent to the proposal by Victor Harbor 2013 Pty Ltd for the demolition of existing buildings and structures, construction of an eighteen storey mixed use building comprising of commercial and residential apartments, car parking, landscaping and associated site works at 126 Wright



#### PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No 020/A025/17.

Drawing Title	Drawing No.	Rev	Date
Basement 1	A2.01	[A1]	02.06.17
Ground Floor Plan	A2.02	[A2]	25.07.17
Level 01 – 03 Plan	A2.03	[A3]	03.08.17
Level 04 – 07 Plan	A2.04	[A1]	02.06.17
Level 08 – 11 Plan	A2.05	[A1]	02.06.17
Level 12 – 14 Plan	A2.06	[A1]	02.06.17
Level 15 - Plan	A2.07	[A1]	20.06.17
Level 16 - Plan	A2.08	[A1]	02.06.17
Level 17 - Plan	A2.09	[A1]	02.06.17
South Elevation	A3.01	[A2]	25.07.17
East Elevation	A3.02	[A2]	25.07.17
North Elevation	A3.03	[A1]	02.06.17
West Elevation	A3.04	[A2]	25.07.17
South Elevation	A3.05	[A2]	25.07.17
Section 01	A4.01	[A2]	25.07.17
Material & Finishes	A8.02	[A1]	02.06.17
3D Views	A9.01	[A2]	25.07.17
3D Views	A9.02	[A1]	02.65.17

- 2. Prior to Development Approval for superstructure works, the applicant shall submit a final detailed schedule of external materials and finishes including car hoist entry door and the screening devices for the air-conditioning units on balconies in consultation with the Associate Government Architect to the reasonable satisfaction of the State Commission Assessment Panel.
- 3. All vehicle car parks, driveways and vehicle entry and manoeuvring areas shall be designed and constructed in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6.2009) and be constructed, drained and paved with bitumen, concrete or paving bricks in accordance with sound engineering practice and appropriately line marked to the reasonable satisfaction of the State Commission Assessment Panel prior to the occupation or use of the development.
- 4. All bicycle parks shall be designed and constructed in accordance with Australian Standard 2890.3-2015.
- 5. The development and the site shall be maintained in a serviceable condition and operated in an orderly and tidy manner at all times.
- 6. All trade waste and other rubbish shall be stored in covered containers prior to removal and shall be kept screened from public view.
- 7. Graffiti shall be removed within five (5) business days of the graffiti becoming known or visible with the timely removal of graffiti being the responsibility of the operators of the development.



- 8. Air conditioning or air extraction plant or ducting shall be screened such that no unreasonable nuisance or loss of amenity is caused to residents and users of properties in the locality to the reasonable satisfaction of the State Commission Assessment Panel.
- 9. All external lighting on the site shall be designed and constructed to conform to Australian Standard (AS 4282-1997).
- 10. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.
- 11. A Construction Environment Management Plan (CEMP) shall be prepared and implemented in accordance with current industry standards including the EPA publications "Handbook for Pollution Avoidance on Commercial and Residential Building Sites Second Edition" and, where applicable, "Environmental Management of On-site Remediation" to minimise environmental harm and disturbance during construction.
- 12. The finished floor level of the ground floor level entry shall match that of the existing footpath unless otherwise agreed to by the State Commission Assessment Panel.
- 13. All Council, utility or state-agency maintained infrastructure (i.e. roads, kerbs, drains, crossovers, footpaths etc.) that is demolished, altered, removed or damaged during the construction of the development shall be reinstated to Council, utility or state agency specifications. All costs associated with these works shall be met by the proponent.
- 14. The acoustic attenuation measures recommended in the Planning Stage Acoustic Report, dated 11 May 2017 by Resonate Acoustics, shall be fully incorporated into the building rules documentation to the reasonable satisfaction of the State Commission Assessment Panel. Such acoustic measures shall be made operational prior to the occupation or use of the development.

#### ADVISORY NOTES

- a. The applicant is encouraged to explore the affordable housing initiative with Renewal SA.
- b. The applicant is encouraged undertake a management strategy to implement the wind assessment report recommendations of securing loose furniture to ensure public and resident safety.
- c. This Development Plan Consent will expire after 3 years from the date of this Notification, unless final Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- d. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 3 years of the final Development Approval issued by Council and substantially completed within 5 years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.



- e. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide, (telephone number 8204 0289).
- f. The applicant should ensure there is no objection from any of the public utilities in respect of underground or overhead services and any alterations that may be required are to be at the applicant's expense.
- g. As work is being undertaken on or near the boundary, the applicant should ensure that the boundaries are clearly defined, by a Licensed Surveyor, prior to the commencement of any building work.
- h. Any activity in the public realm, whether it be on the road or footpath, requires a City Works Permit. 48 hours' notice is required before commencement of any activity. Email: cityworks@adelaidecitycouncil.com

Karl Woehle Planning Officer DEVELOPMENT DIVISION DEPARTMENT OF PLANNING, TRANSPORT and INFRASTRUCTURE

# **126 WRIGHT ST APARTMENTS** ADDRESS 126 WRIGHT ST ADELAIDE SA 5000

PREPARED FOR:

# **BUILT 29**

JOB NO:

17001

DATE: 03.08.17

REVISION:

## DRAWINGS:

A1.01	LOCATION PLAN
A1.02	CITY & TRANSPORT
A1.03	SITE ANALYSIS
A1.04	SITE SURVEY
A1.05	STREETSCAPE ANAL
A1.06	DESIGN PROCESS
A2.01	FLOOR PLAN - BASE
A2.02	FLOOR PLAN - GROU
A2.03	FLOOR PLAN - LEVE
A2.04	FLOOR PLAN - LEVE
A2.05	FLOOR PLAN - LEVE
A2.06	FLOOR PLAN - LEVE
A2.07	FLOOR PLAN - LEVE
A2.08	FLOOR PLAN - LEVE
A2.09	FLOOR PLAN - LEVE
	ELEVATION - SOUTH
	ELEVATION - EAST
	ELEVATION - NORTH
	ELEVATION - WEST
A3.05	ELEVATION - SOUTH
A4.01	SECTION 1
	PRECEDENTS
	MATERIALS & FINISH
	3D VIEWS
A9.02	
	SHADOW DIAGRMAS
A10.02	SHADOW DIAGRMAS



ENZO CAROSCIO ARCHITECTURE & DESIGN 70 Halifax Street Adelaide SA 5000 Telephone +61 8 8155 6063 enzo@enzocaroscio.com enzocaroscio.com

# [A3] PLANNING AMENDMENT

	REVISION
	[A1]
RT ZONES	[A1]
	[A1]
	[A1]
NALYSIS	[A1]
S	[A1]
SEMENT	[A1]
ROUND	[A2]
VEL 1-3	[A3]
VEL 4-7	[A1]
VEL 8-11	[A1]
VEL 12-14	[A1]
VEL 15	[A1]
VEL 16	[A1]
VEL 17	[A1]
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## ADELAIDE CITY ZONES

CCCapital City ZoneCFCity Frame ZoneCiL33City Living Zone MS(A) Main Street Zone Site Zone



#### .... ..... .....

THE PARTY AND A DESCRIPTION OF

A REAL PROPERTY AND

**Primary City Access** Secondary City Access Local connector Bus Route

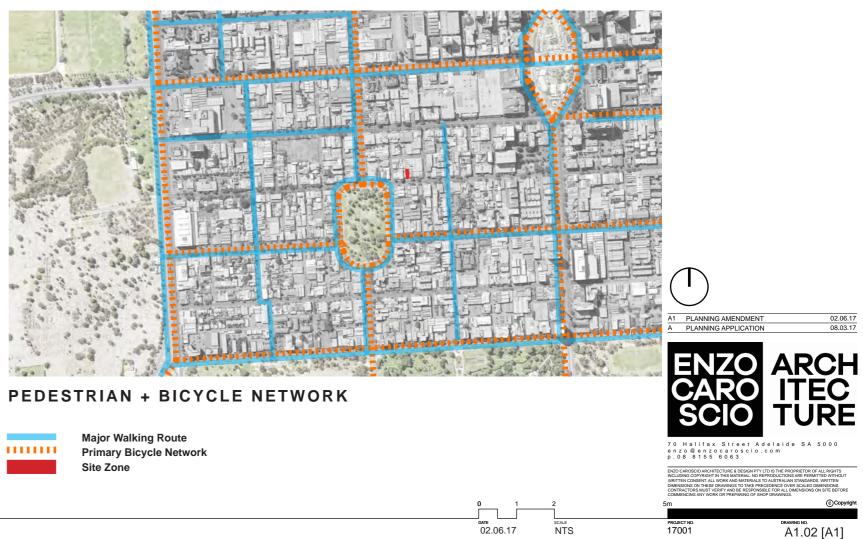
High Concentration Public Transport Route Site Zone



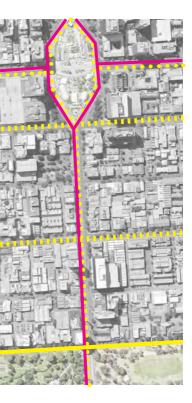
# ADELAIDE CITY POLICY AREAS



Main Street Policy Area 14 South West Policy Area 33 Site Zone







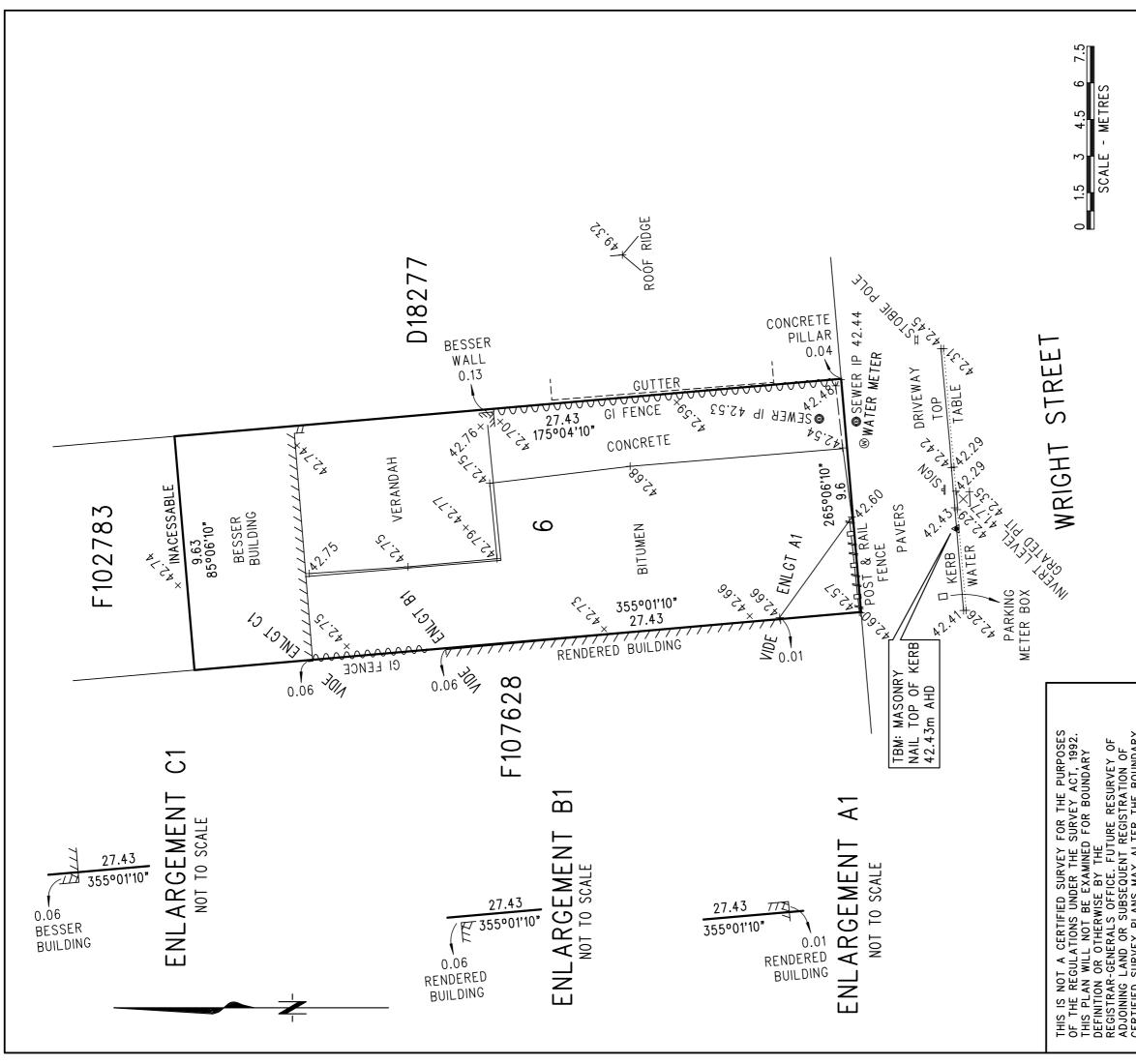


WHITEMORE SQUARE VIEW









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r 1 OF 1	CL 3103/33/		PHONE (08) 8332 7111 FAX (08) 8364 1829
VERSION No. 1	3	ALLOT	SURVEYING & PLANNING CONSULTANTS
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N DW 31-10-16	BUILD 29 PTY LTD FOR THE PURPOSES OF SITE REDEVELOPMENT AND SHOULD NOT BE USED FOR ANY OTHER PURPOSE, JOHN C BESTED & ASSOCIATES		6628/22763 WITH A PUBLISHED AHD VALUE OF 42.826m.
<sup>ечер</sup> NS 26-10-16	THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE OF		DEFINITION OR INFORMATION SHOWN HEREON. LEVELS ARE BASED ON AHD DERIVED FROM SURVEY MARK
			CERTIFIED SURVEY PLANS MAY ALTER THE BOUNDARY





Wright Street looking South

Wright Street looking North

Wright Street looking East



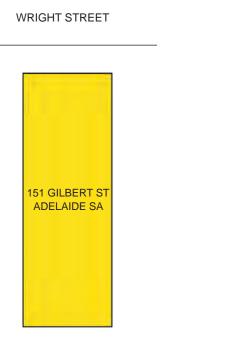
Wright Street looking West

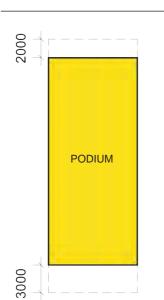


02.06.17

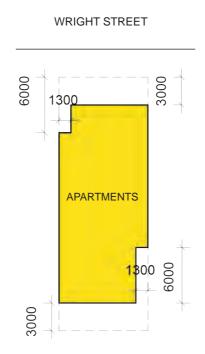
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A1.05 [A1]





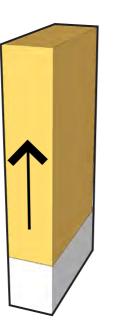
WRIGHT STREET

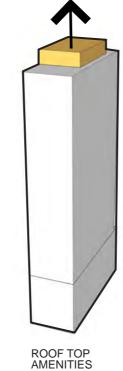


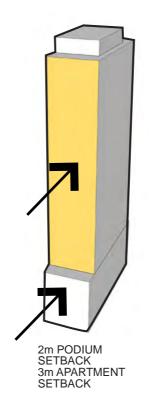
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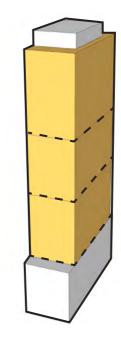
VIEWS

Plan Setback Diagrams









BREAKING UP LINEAR FORM INTO 3 BLOCKS

151 GILBERT ST ADELAIDE SA

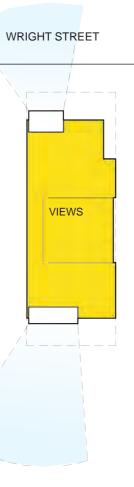
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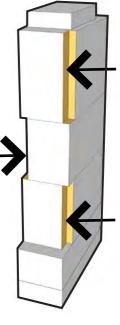
PODIUM

APARTMENTS

Building Mass Diagrams

BUILD 29



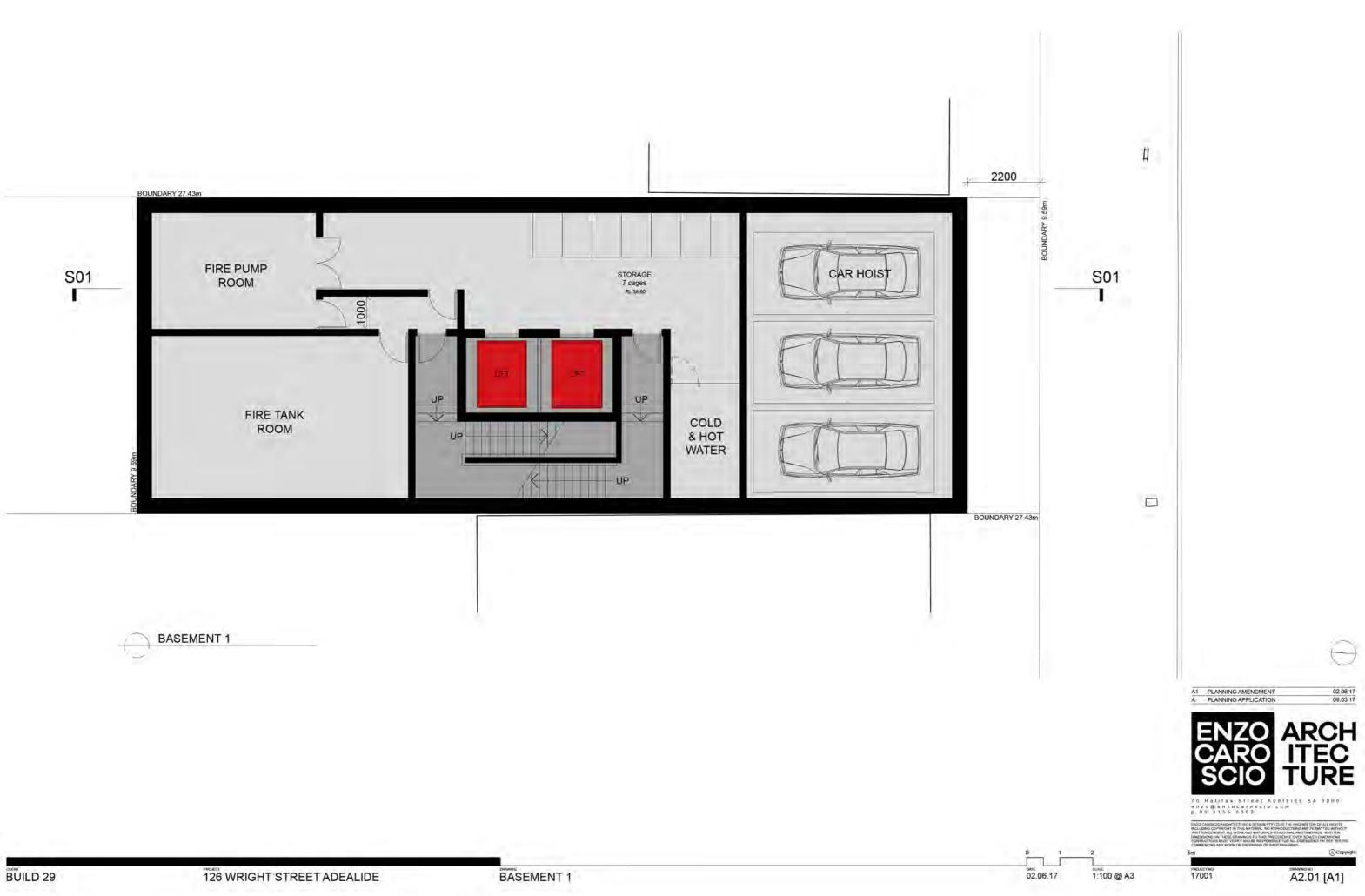


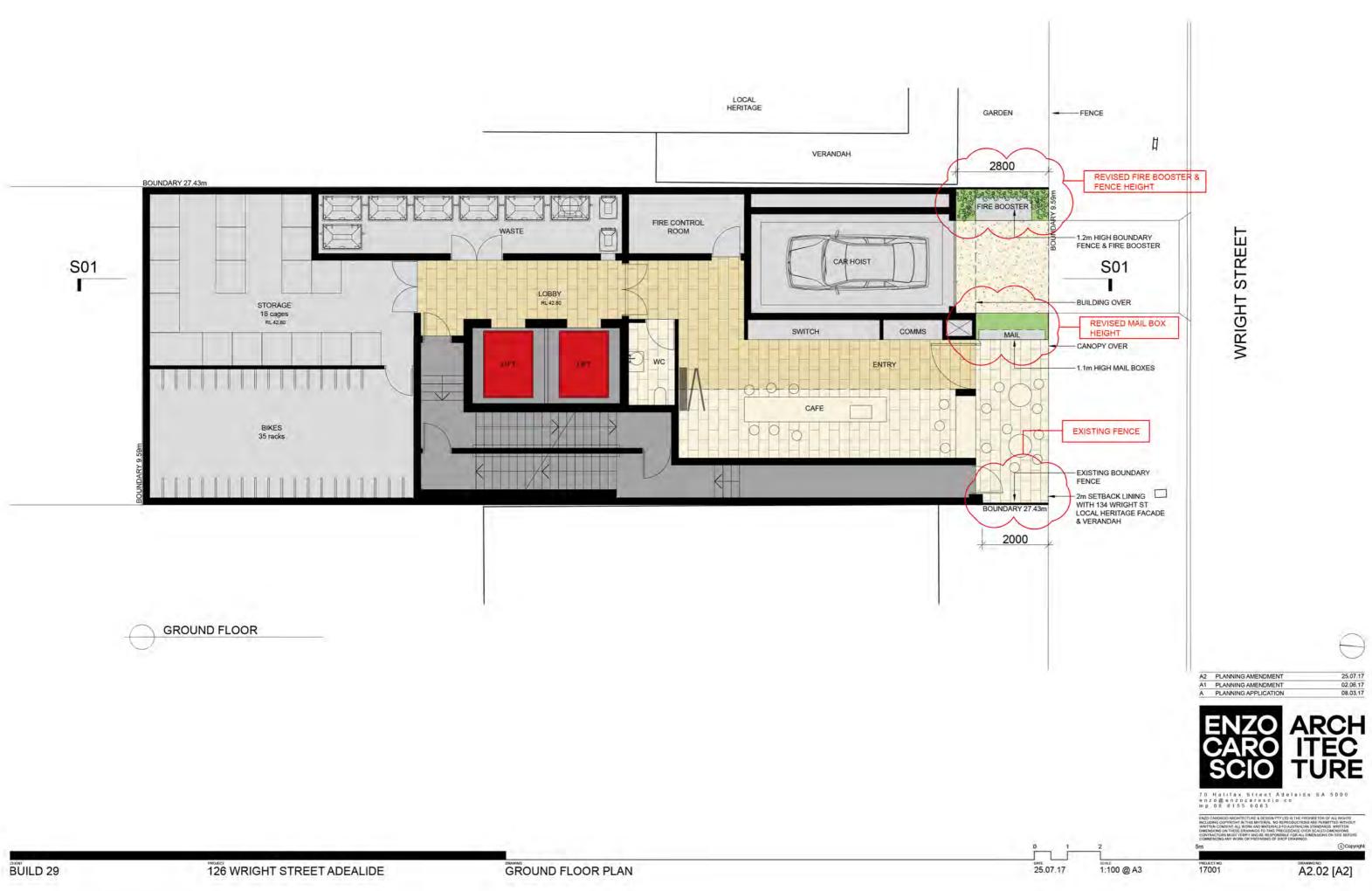
PUSH & PULL TO ARTICULATE STREET SCAPE FACADE

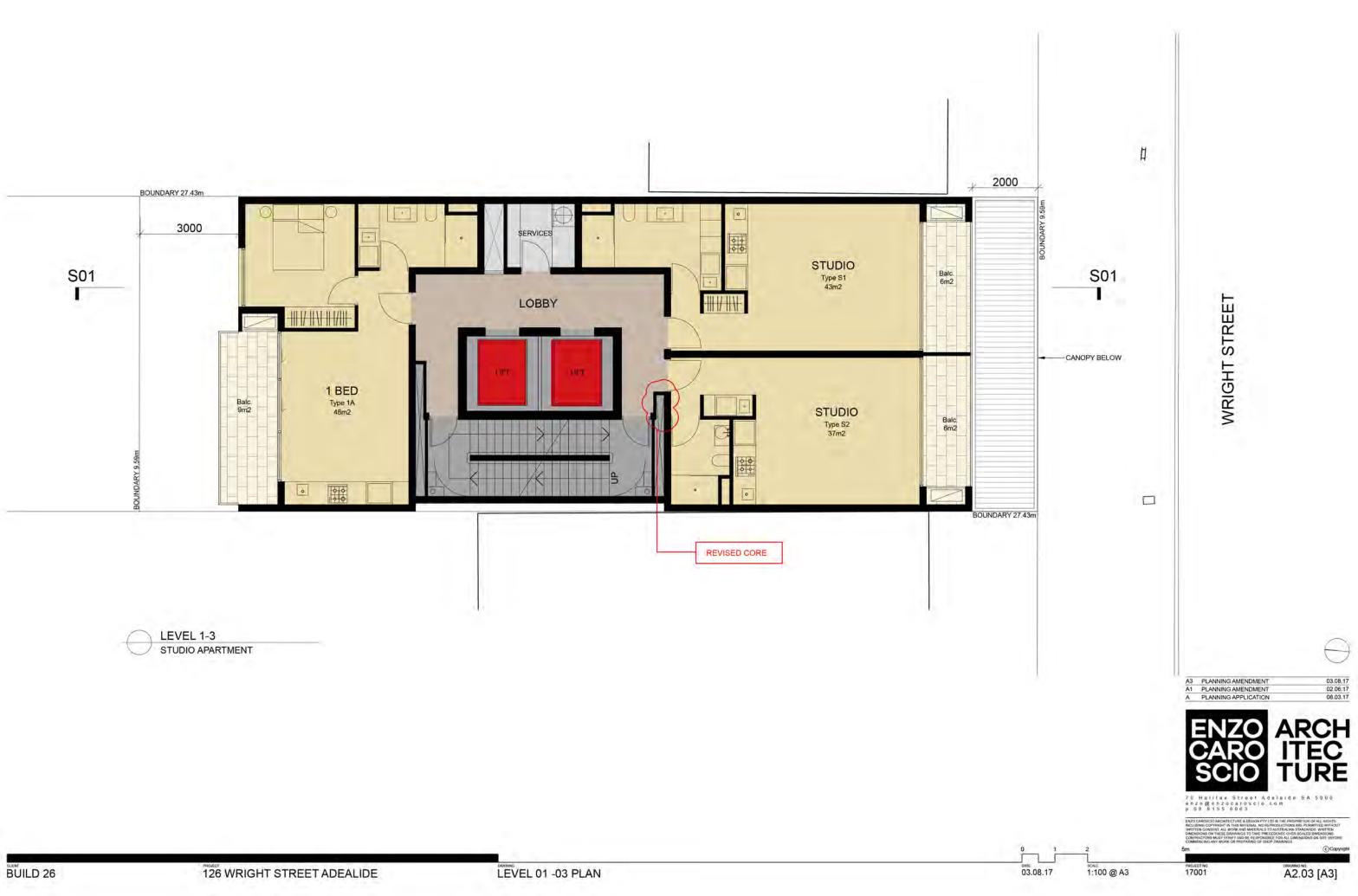


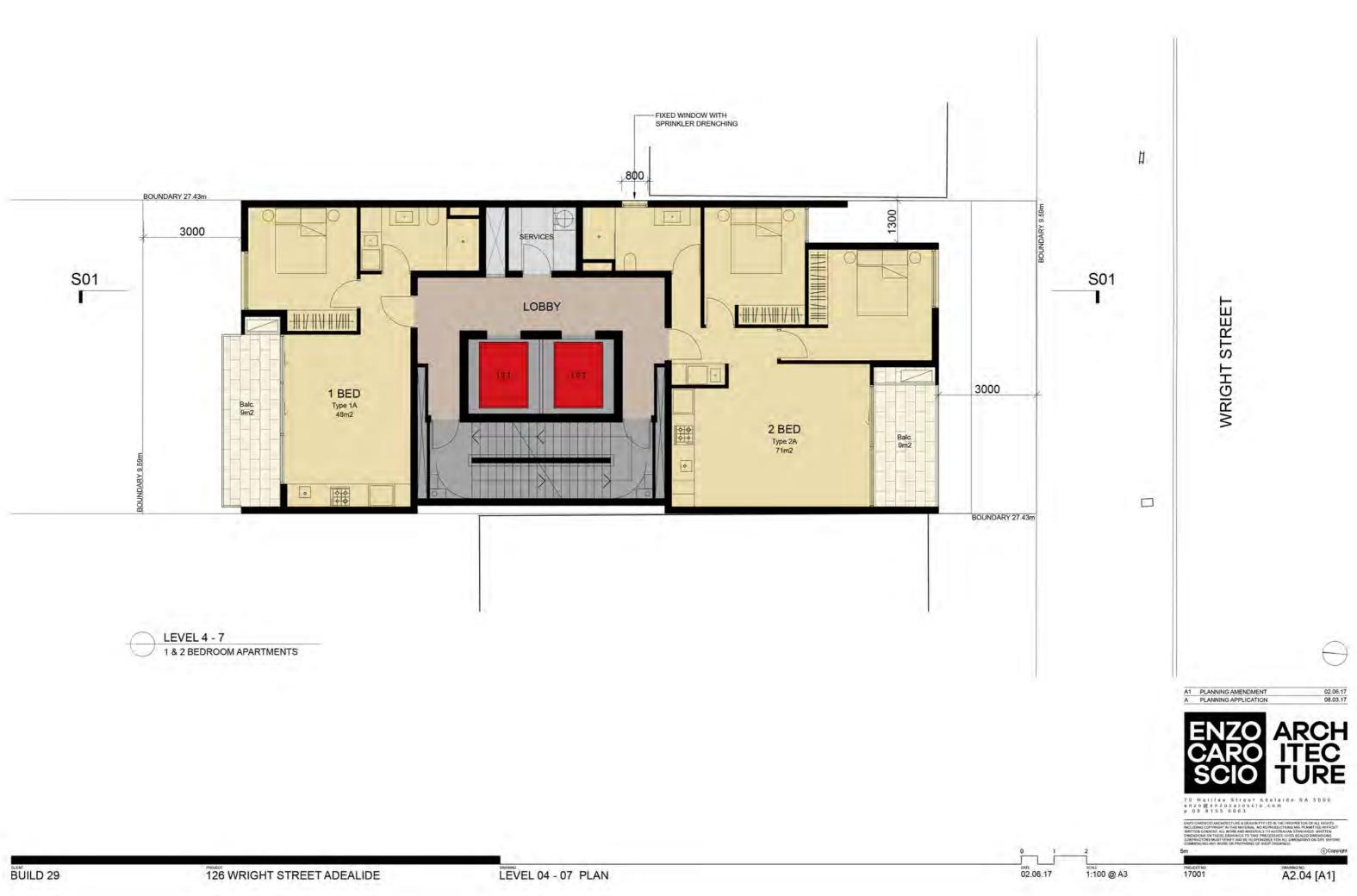
DATE 02.06.17 SCALE NTS

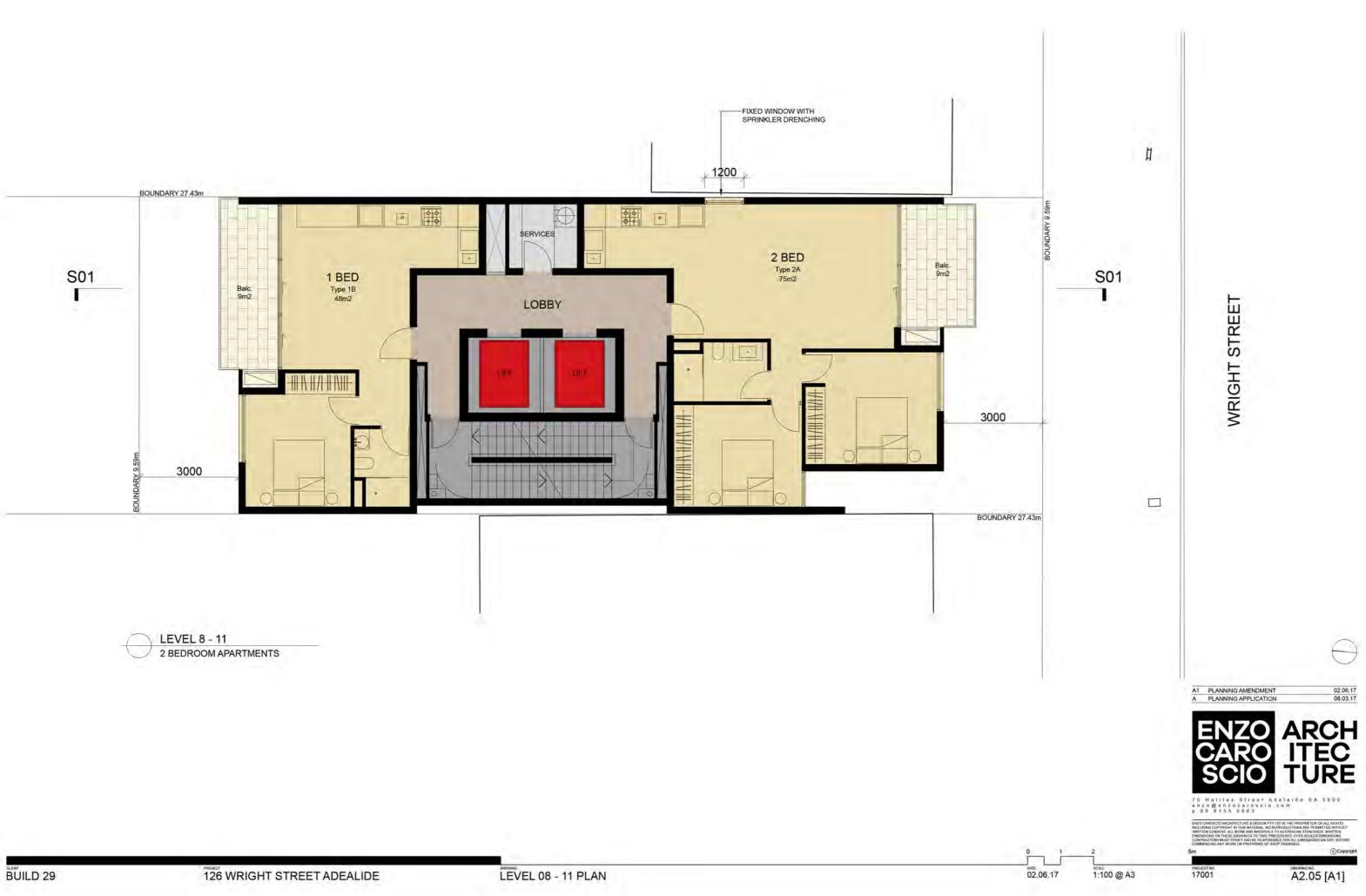


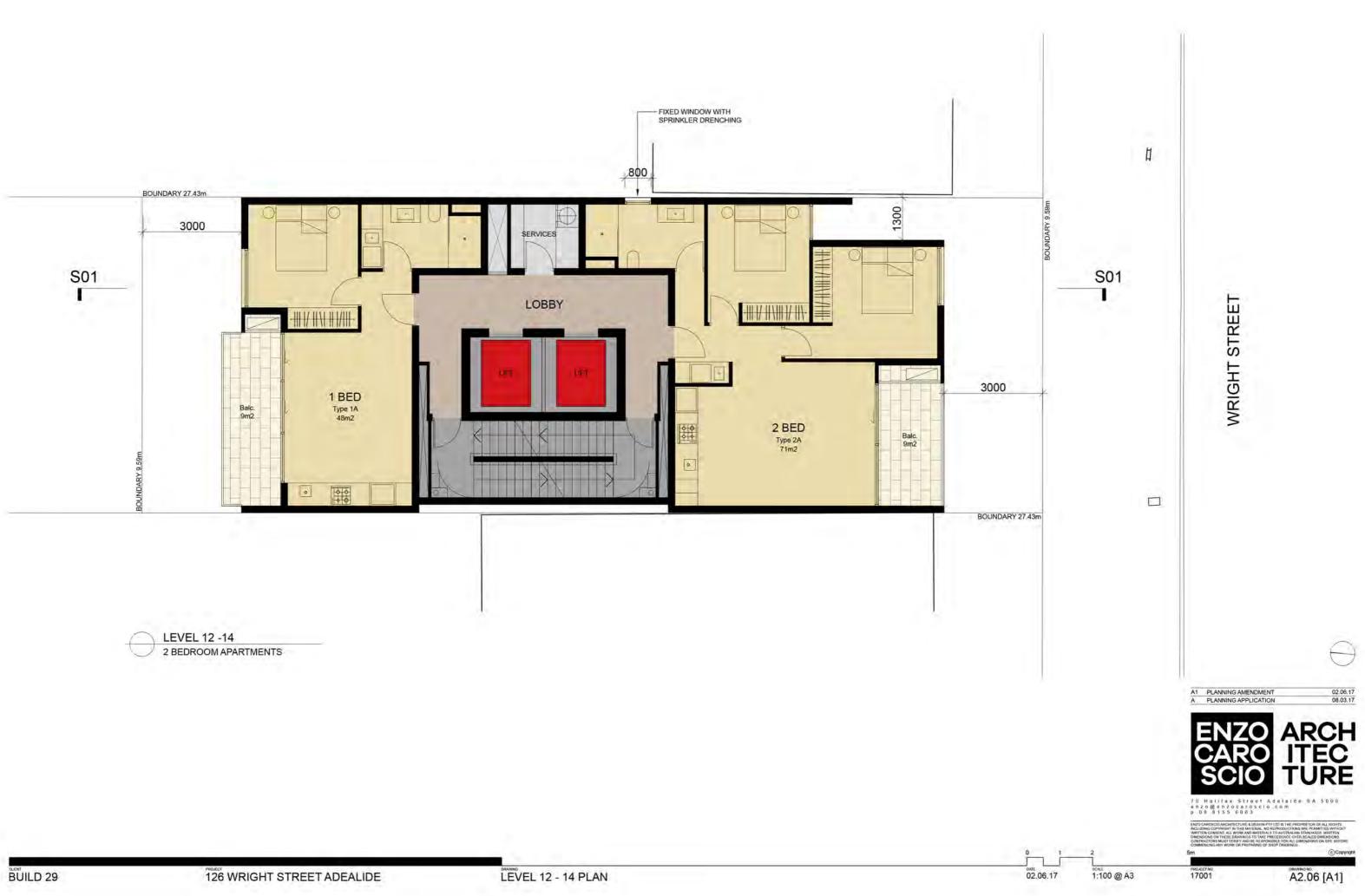


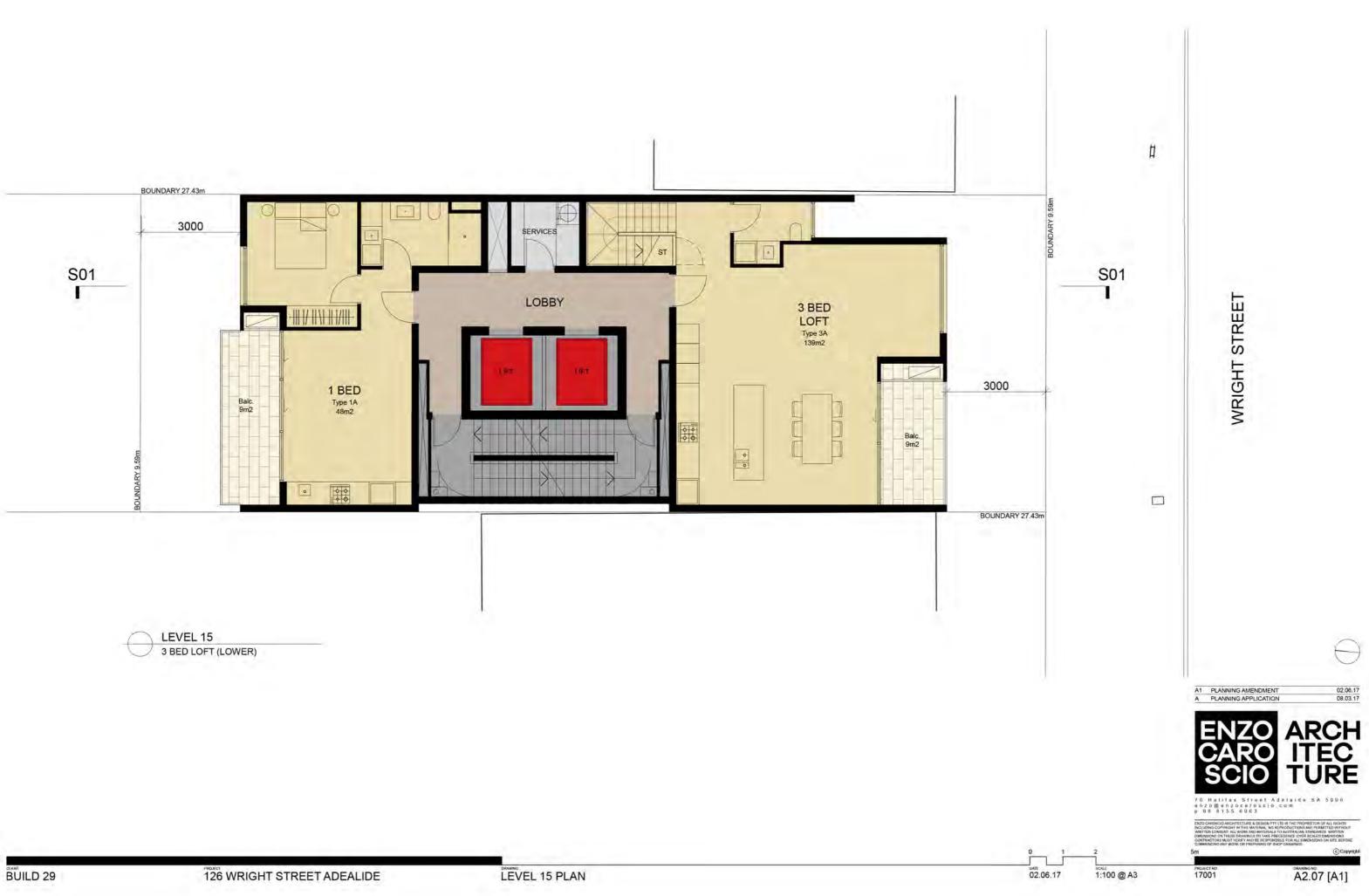


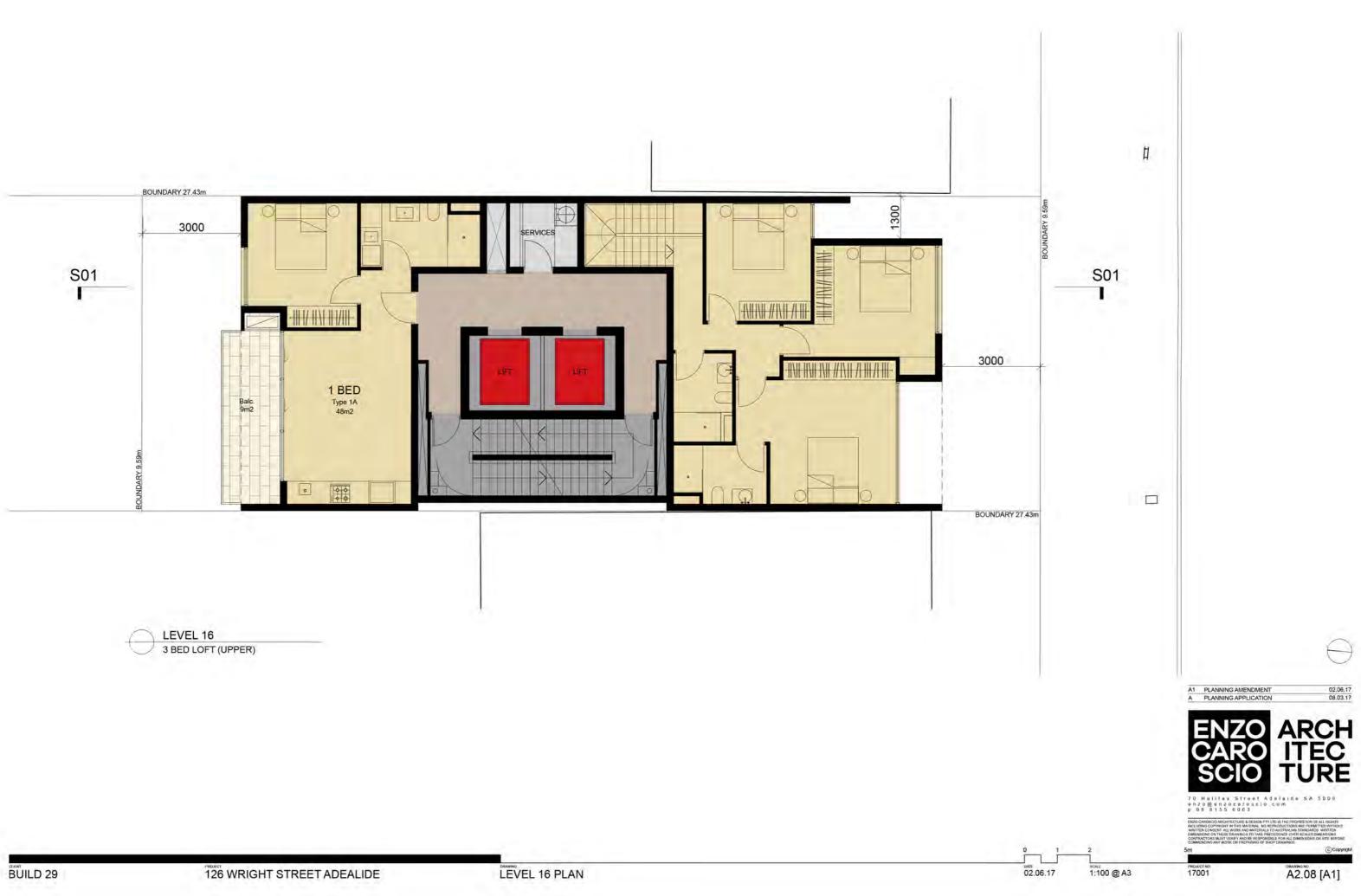


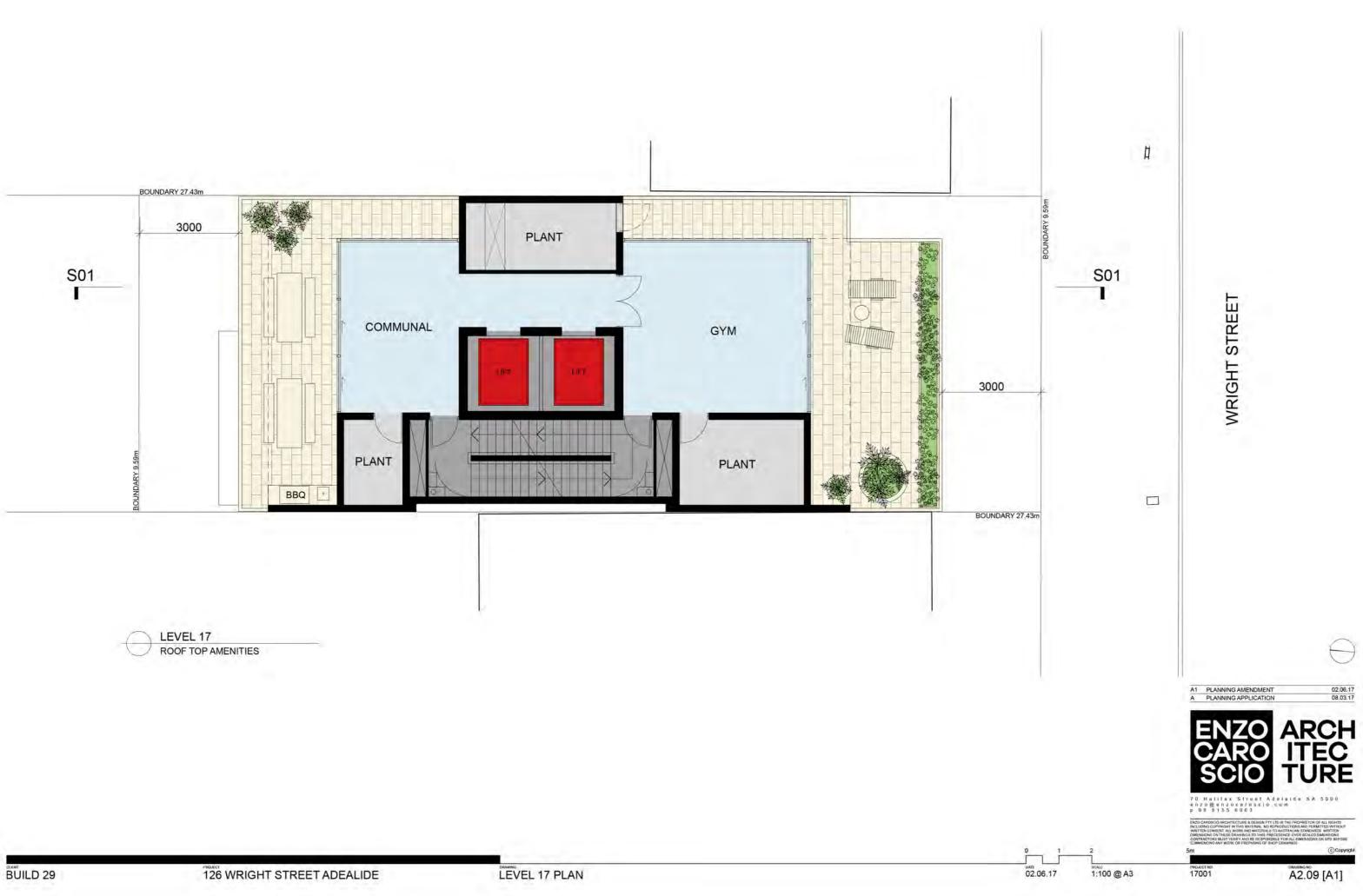


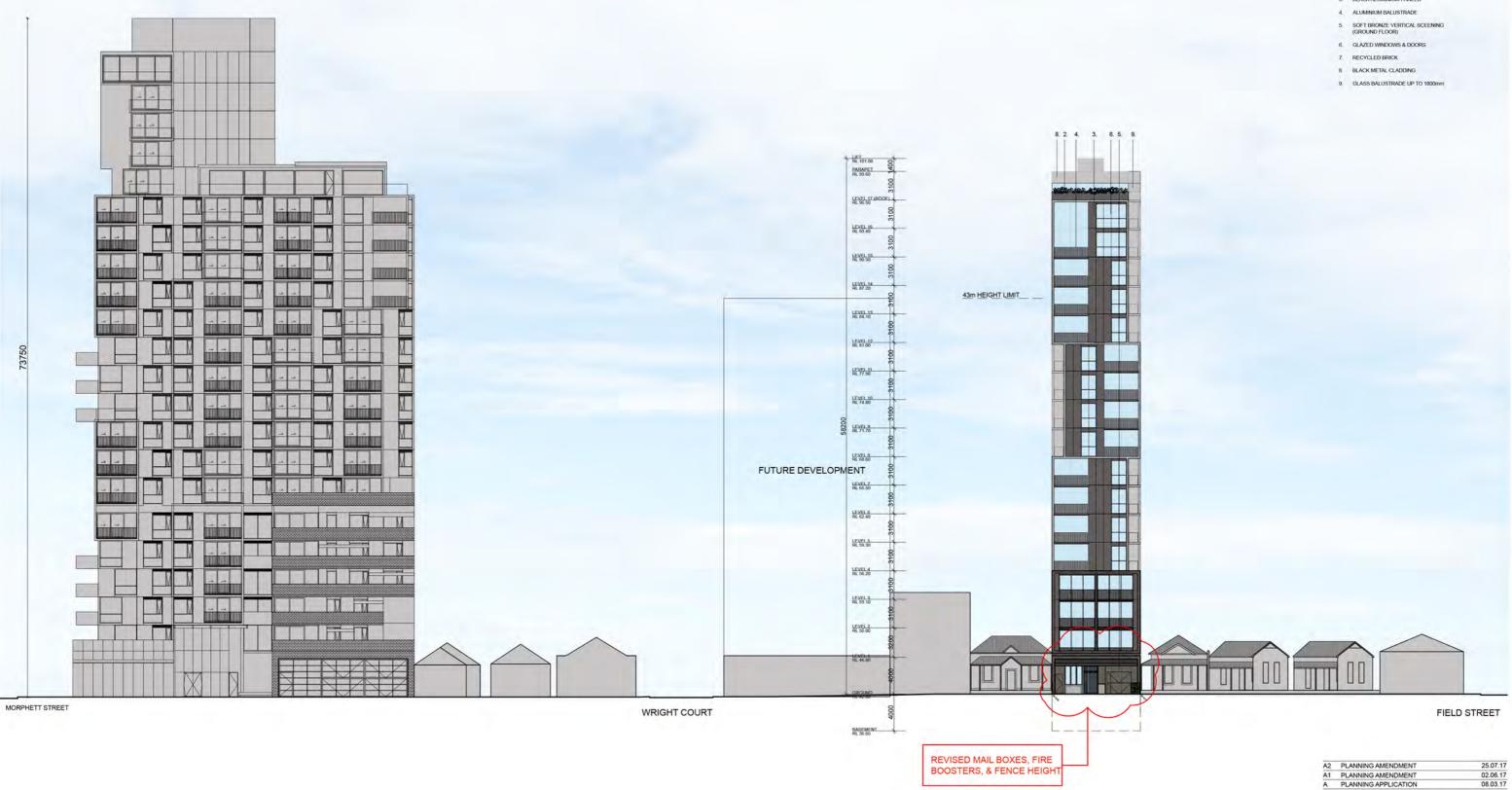










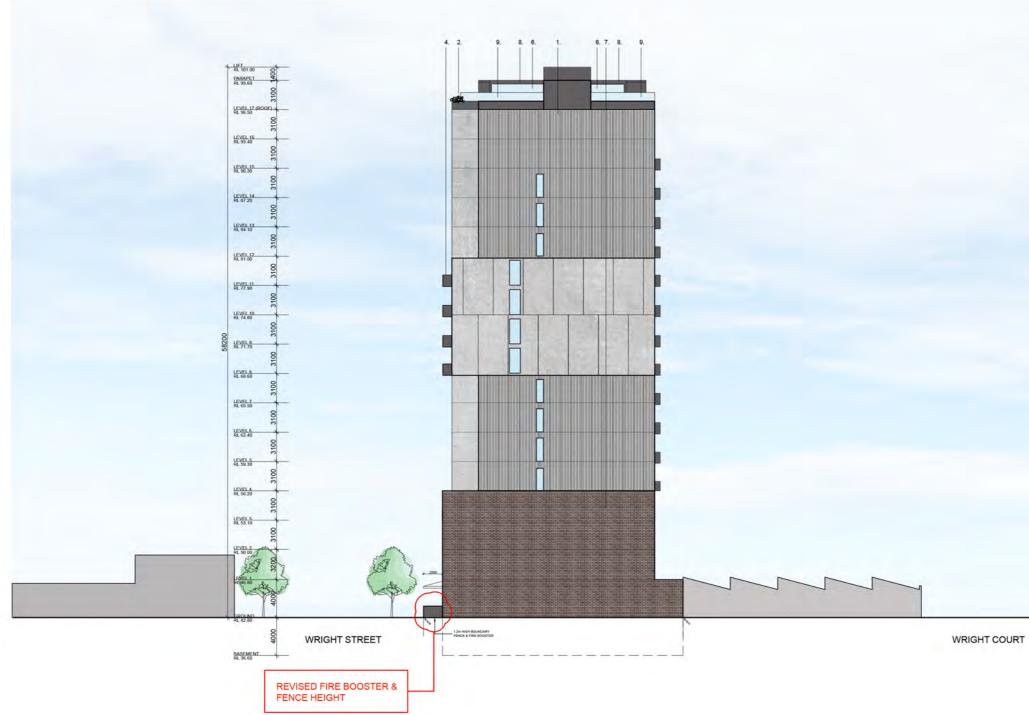


BUILD 29

#### FINISHES

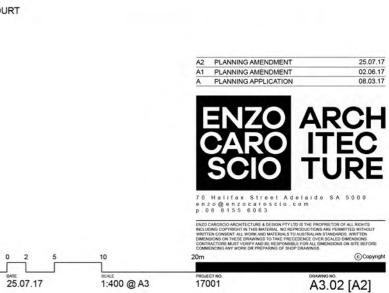
- 1 PRECAST CONCRETE PANELS
- 2. METAL PLANTER BOX
- 3. BLACK ALUMINIUM PANELS

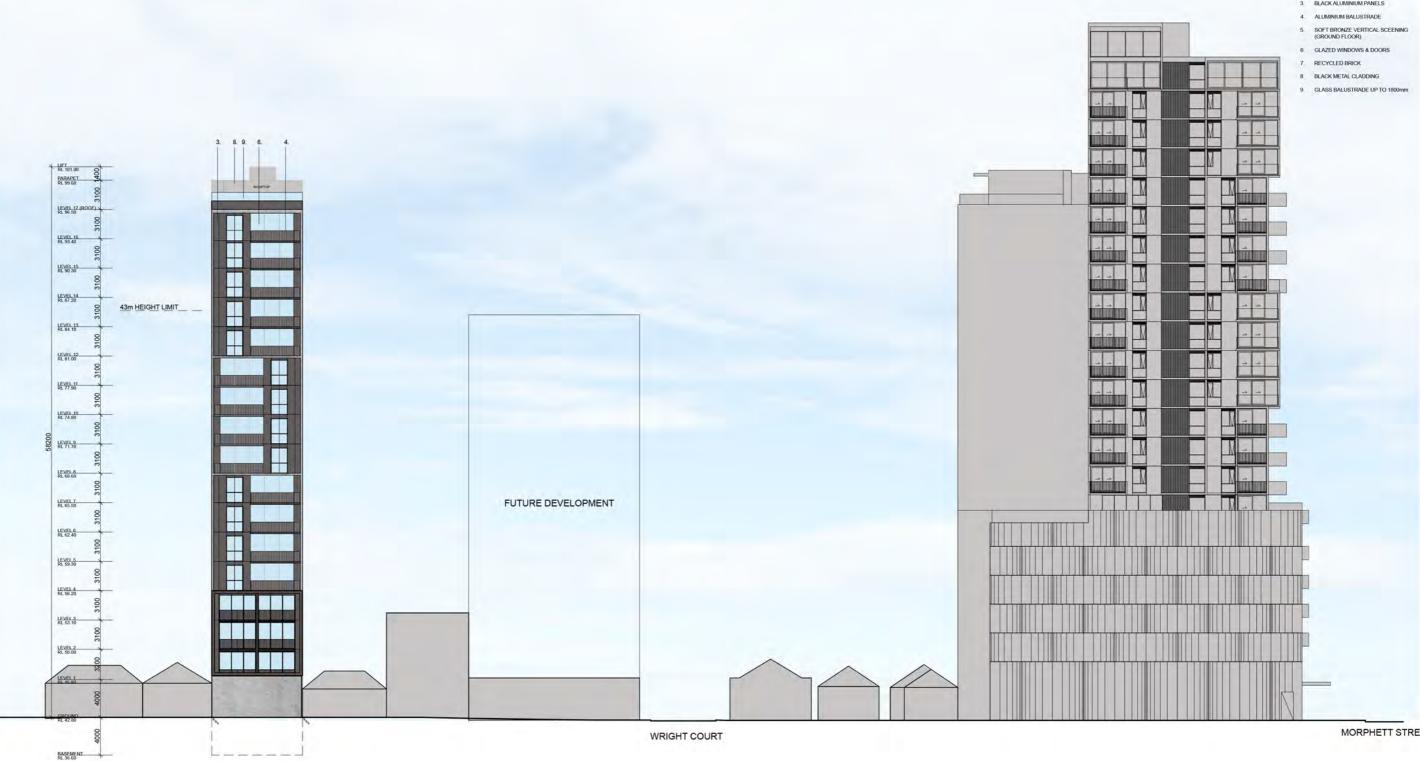




### FINISHES :

- 1. PRECAST CONCRETE PANELS
- 2. METAL PLANTER BOX
- 3. BLACK ALUMINIUM PANELS
- 4. ALUMINIUM BALUSTRADE
- 5. SOFT BRONZE VERTICAL SCEENING (GROUND FLOOR)
- 6. GLAZED WINDOWS & DOORS
- 7. RECYCLED BRICK
- 8. BLACK METAL CLADDING
- 9. GLASS BALUSTRADE UP TO 1800m



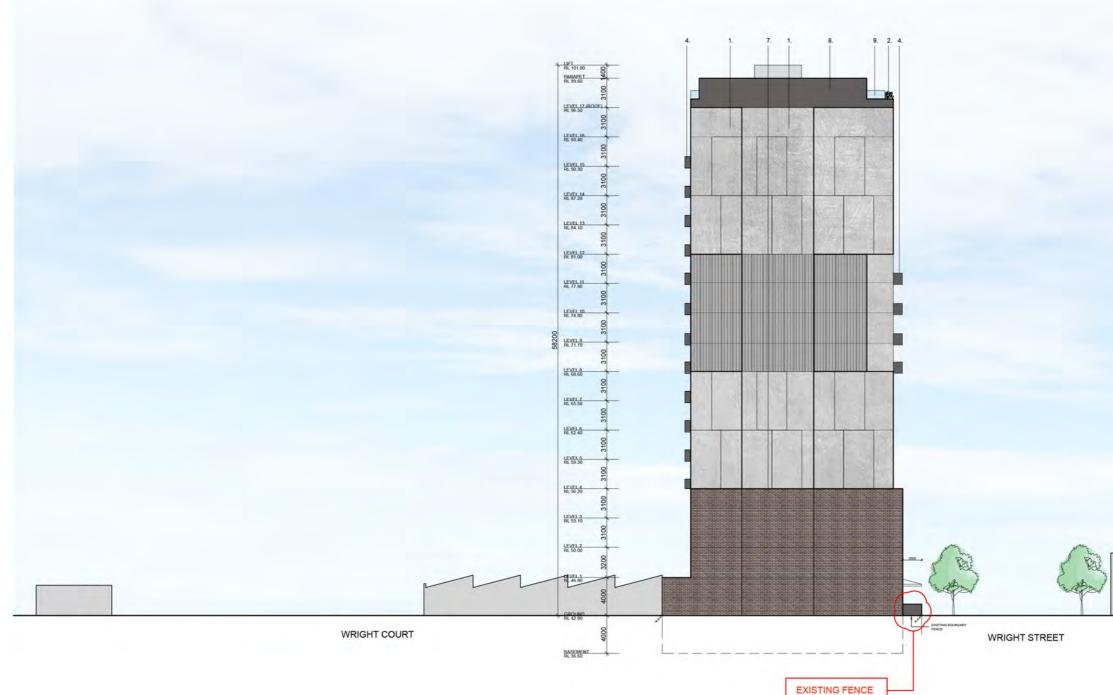


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- 2. METAL PLANTER BOX
- 3 BLACK ALUMINIUM PANELS

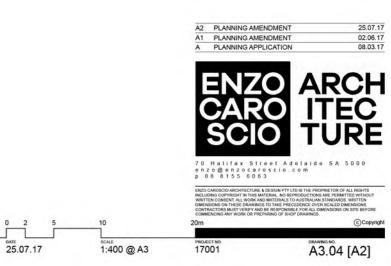
## MORPHETT STREET



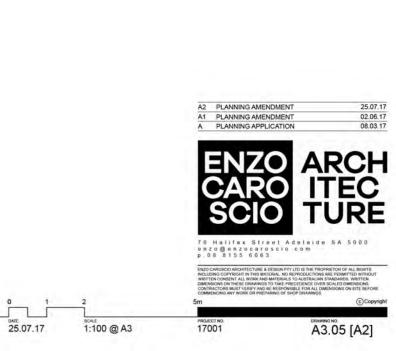


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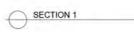
- 1. PRECAST CONCRETE PANELS
- 2. METAL PLANTER BOX
- 3. BLACK ALUMINIUM PANELS
- 4. ALUMINIUM BALUSTRADE
- 5. SOFT BRONZE VERTICAL SCEENING (GROUND FLOOR)
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- 9. GLASS BALUSTRADE UP TO 1800mm

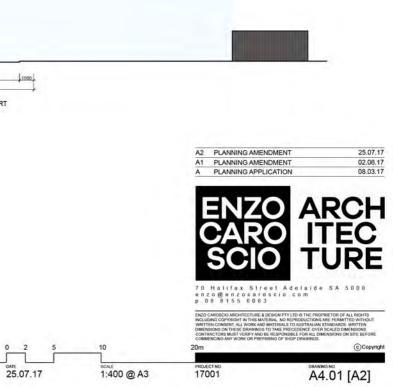












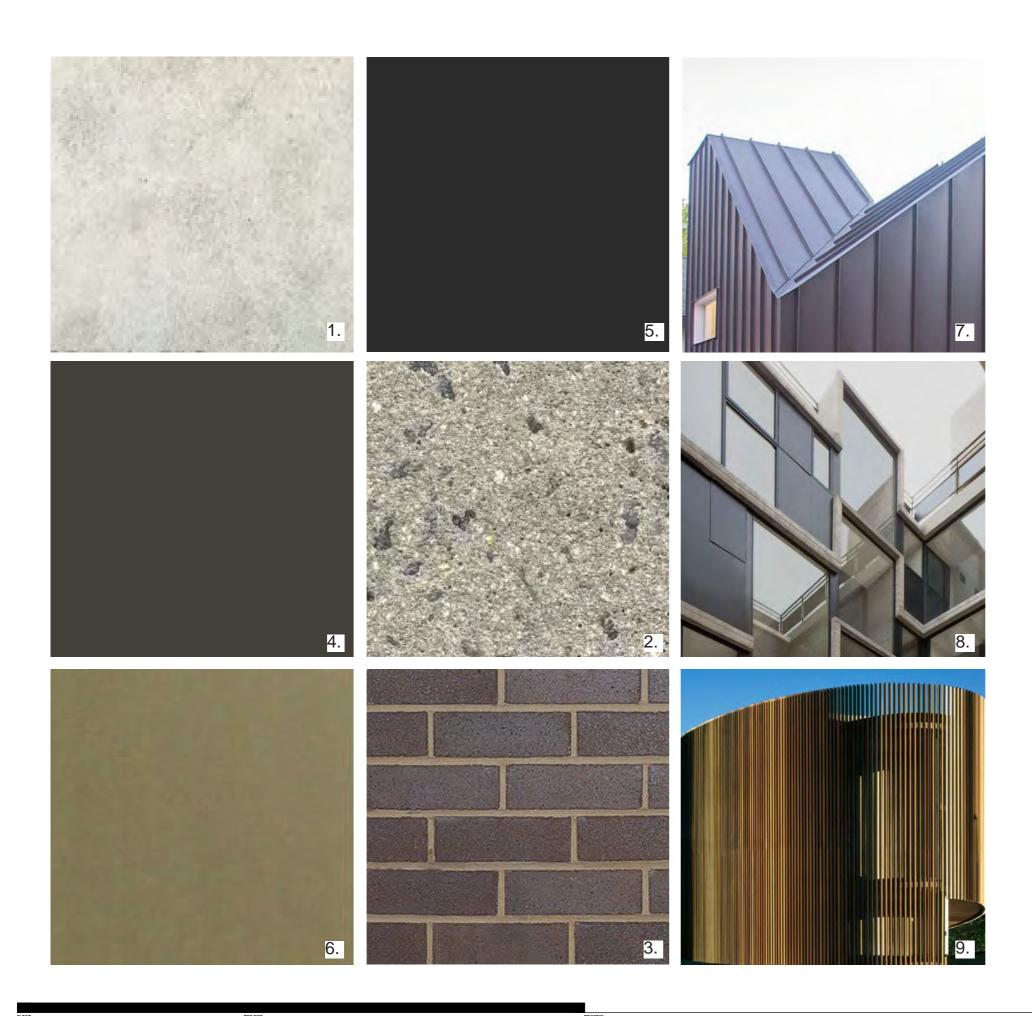






SCALE NTS PROJECT NO. 17001 A8.01 [A1]

Copyright



1.

2. 3. 4. 5. 6. 7. 8. 9.

## **External Material Finishes**

Pre-cast Concrete Panels (Type 1) Grey

Pre-cast Concrete Panels (Type 2) Grey Sandblasted

Bowral Blue brick (or similar)

Anodized Aluminium cladding (Alucobond C34)

Dulux Powder-coating to Aluminium framed glazing (colour: Black Ace)

Anodized Aluminium finish vertical batten screens (Pale Bronze)

Reference image of metal roof top cladding & roofing

Reference image of Aluminium window framing

Reference image of Aluminium battens to Ground Floor











NTS

PROJECT NO. 17001

A9.01 [A2]





A9.02 [A1]

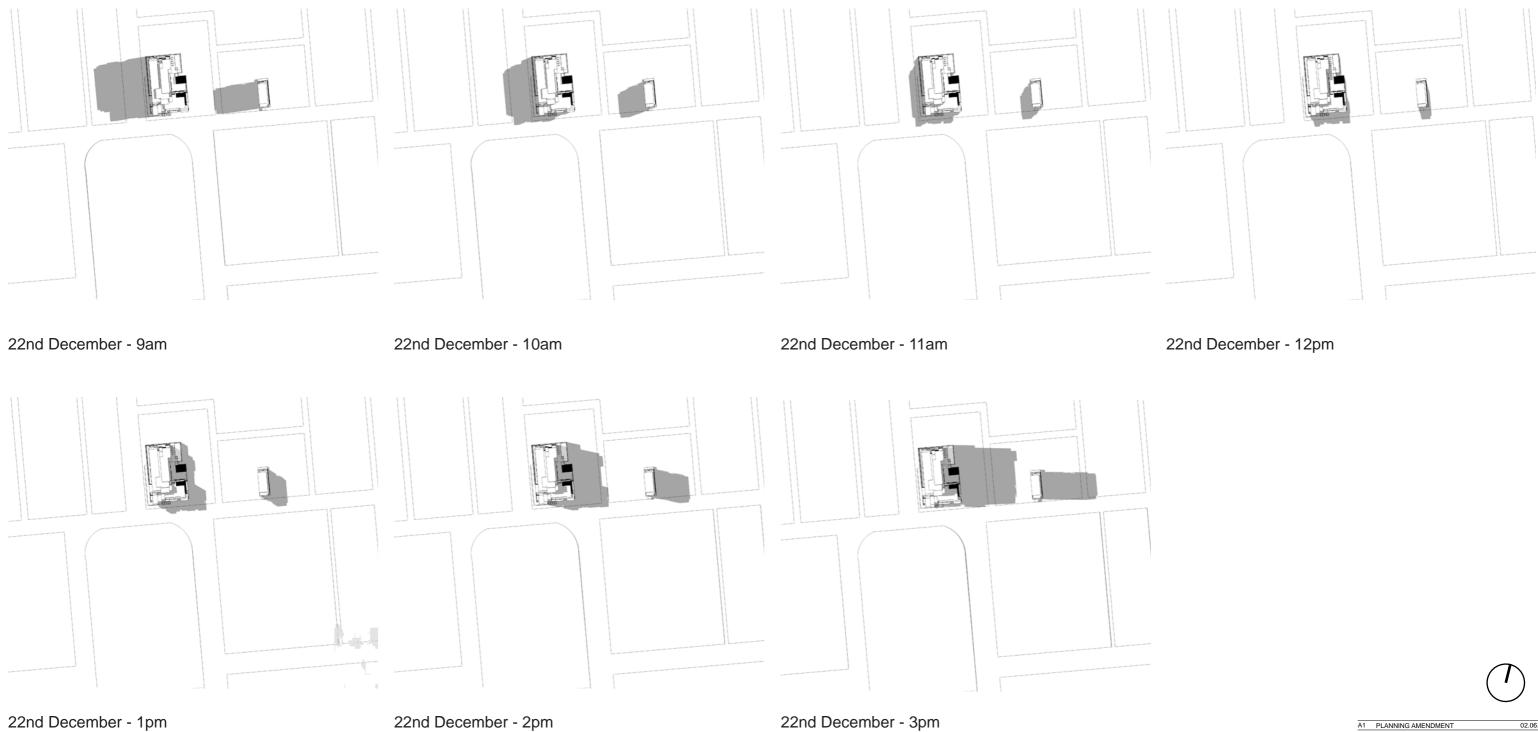
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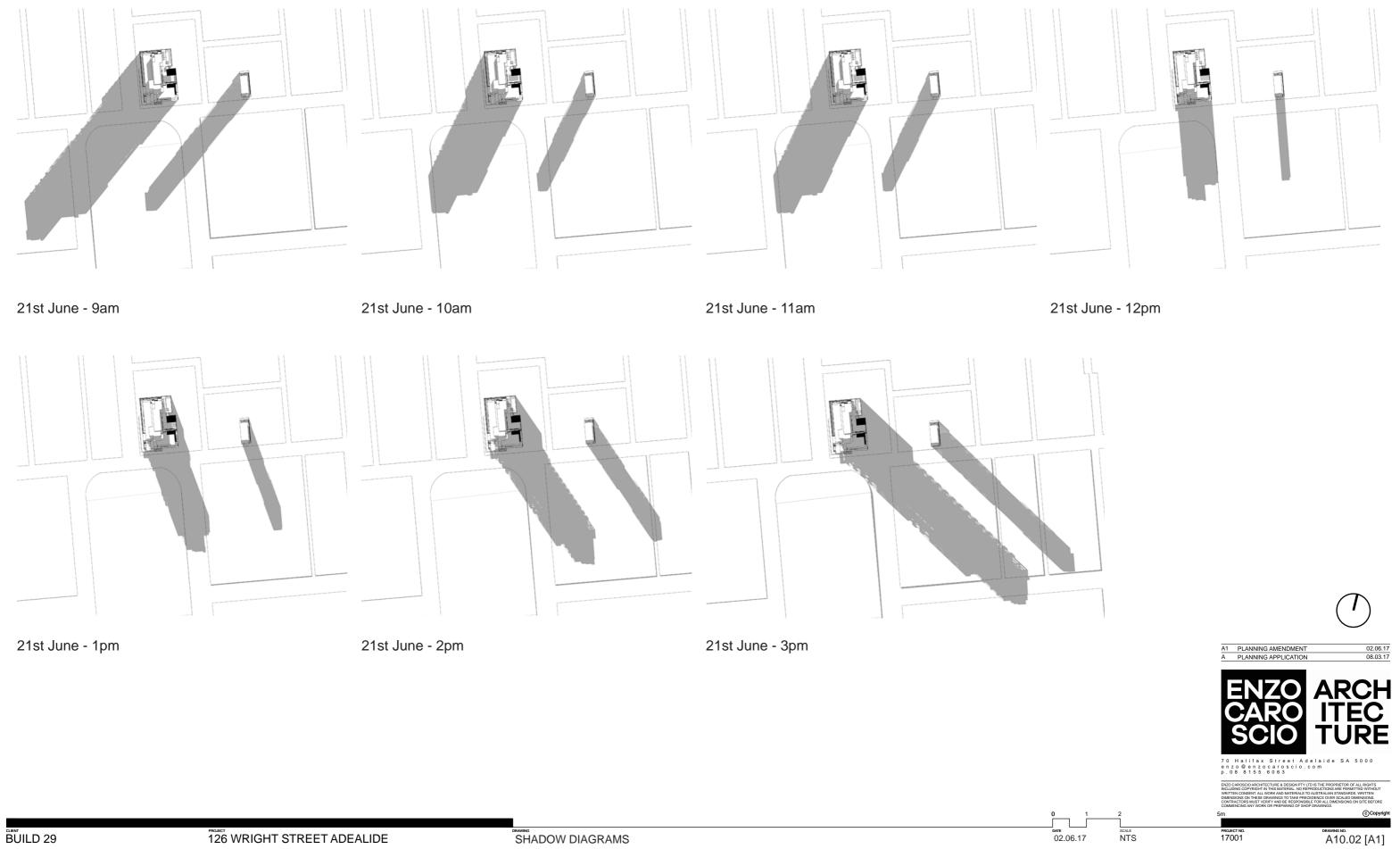


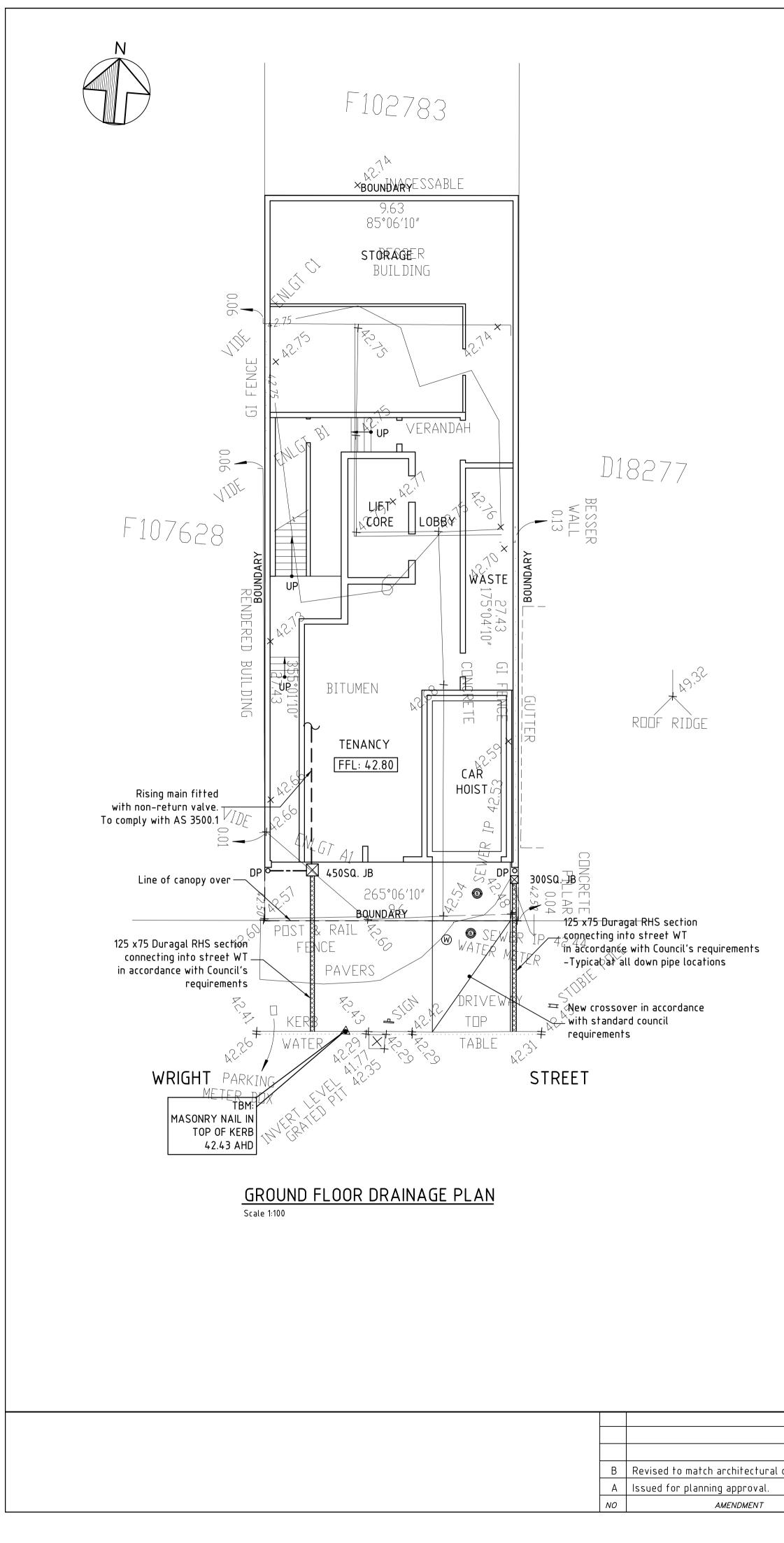
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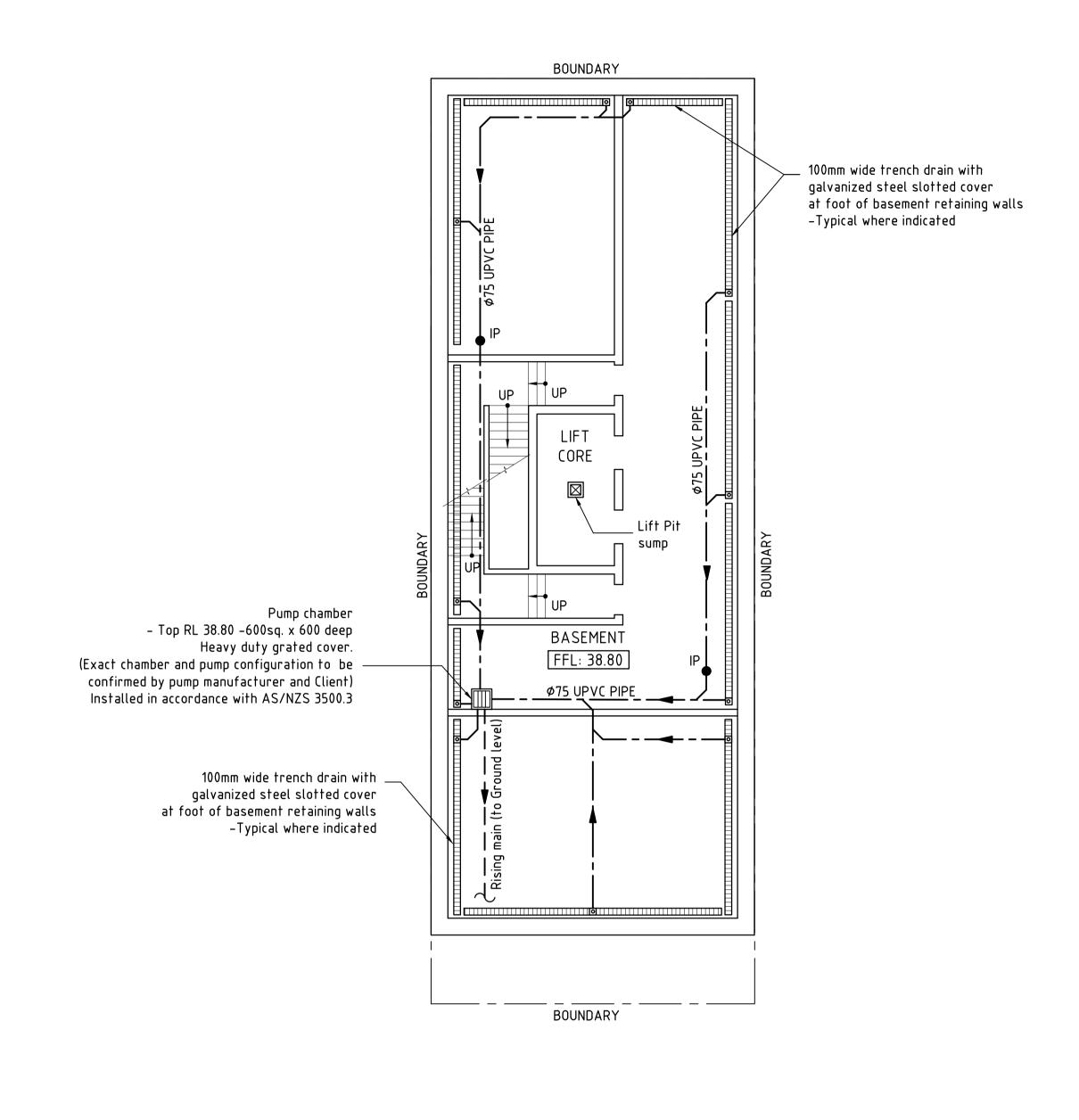
PROJECT NO. 17001











BASEMENT DRAINAGE PLAN Scale 1:100

			SHEET TITLE	SITE &	DRAINAGE PLAN	CLIENT	Build 29	
changes.	29.03.17	NP				SITE		 ABN Civil 40
	22.12.16 <i>DATE</i>						126 Wright Street ADELAIDE	Ade Phoi Ema

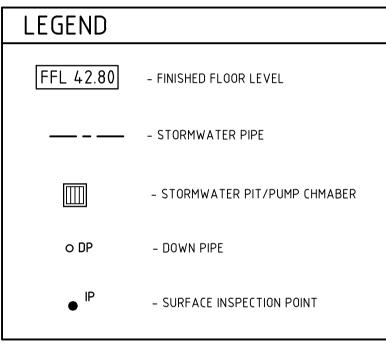
# GENERAL NOTES:

- G1. These drawings shall be read in conjunction with the Architect's drawings and specification. Any discrepancies between drawings, specification or site condition shall be reported to the Engineer and resolved before proceeding. Refer to Architectural drawings for setout dimensions of roadway and buildings.
- Extent of earthworks shown indicative only. Do not scale drawing.G2. The Contractor shall be responsible for the location of all existing services on site prior to excavation. All trenching to be reinstated to the satisfaction of the relevant authorities.
- G3. The Contractor shall locate and verify the value of the TBM before the start of construction.
- G4. All services, or conduits for servicing shall be installed prior to commencement of pavement construction.
- G5. No work is permitted within adjoining properties without written permission from the owners or responsible authority.G6. Existing site levels supplied by others.

DRAINAGE NOTES:

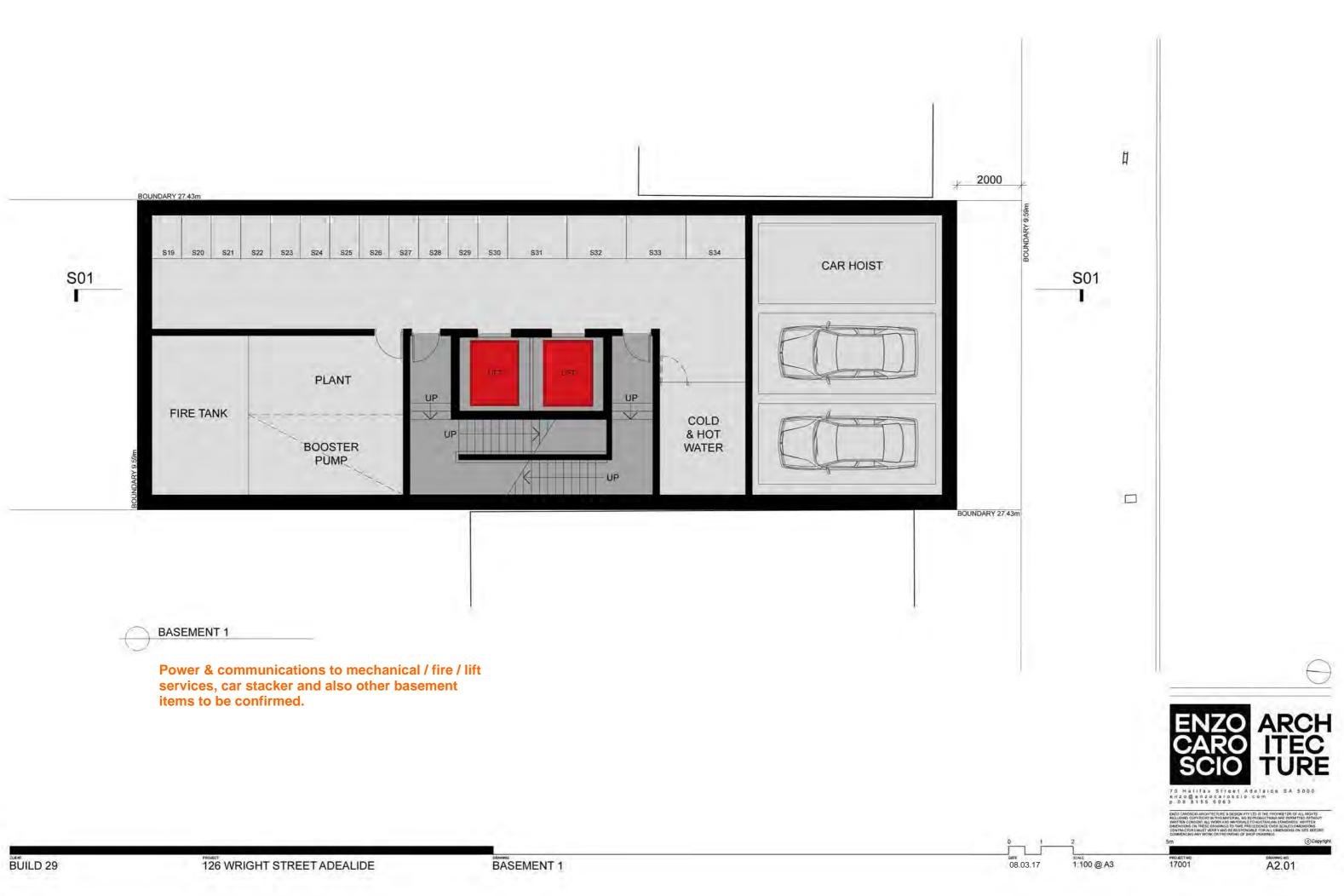
- D1. All drainage outlet levels shall be confirmed on site, prior to construction
- D2. All pipes within the property to be min. 100 Dia. UPVC at 1% min. grade Unless noted otherwise.
- D3. All pits within the property are to fitted with 'Gatic' or approved equivalent grates
   Light duty for landscaped areas
   Heavy duty where subjected to vehicular traffic.
- D4. Pits within the property may be contructed as: 1) Precast stormwater pits 2) Cast insitu reinforced concrete
- D5. Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the Engineer. All invert levels are to be achieved.

NOTE:
The CONTRACTOR is responsible for locating and depthing of ALL existing services prior to any construction commencing. All trenching to be reinstated to the satisfaction of the relevant authorities.



NOTE: ALL PVC PIPES TO BE SEWER GRADE (SH).

LIO BIBBO PTY LTD	<i>design</i> NP	<i>DATE</i> 14.12.16
220 634 822 158	<i>draw</i> NP	<i>SCALE</i> 1:100
- Structural - Soil Testing Franklin Street	REF. NO	SHEET NO B
aide S.A. 5000 e 8212 7966 Fax 8212 4911 I - engineering@leliobibbo.com.au	161212	C1





## **POWER INFRASTRUCTURE**

This arrangement is based on SAPN LV power supply to the development. No transformer on site. This remains to be confirmed by SAPN.

Main Switchboard based on allowance for all energy meters to be located on this ground floor. Submains to be run up Electrical Services Riser direct connect into each Apartment and field distribution board.

Risk item: Main Switchboard provides power supply to Emergency Services and is therefore required to be a Fire Rated room or enclosure. Any doors must swing outwards in direction of travel.

## **COMMUNICATIONS INFRASTRUCTURE**

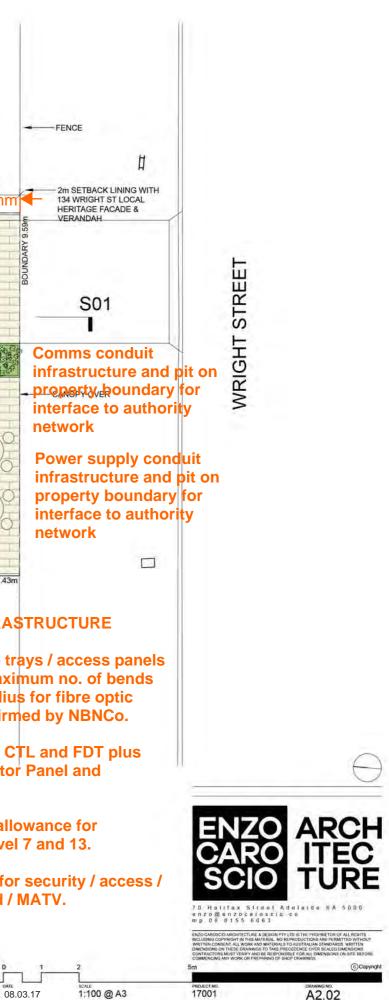
All NBN pathways / cable trays / access panels and / or conduits with maximum no. of bends and required bending radius for fibre optic cables remain to be confirmed by NBNCo.

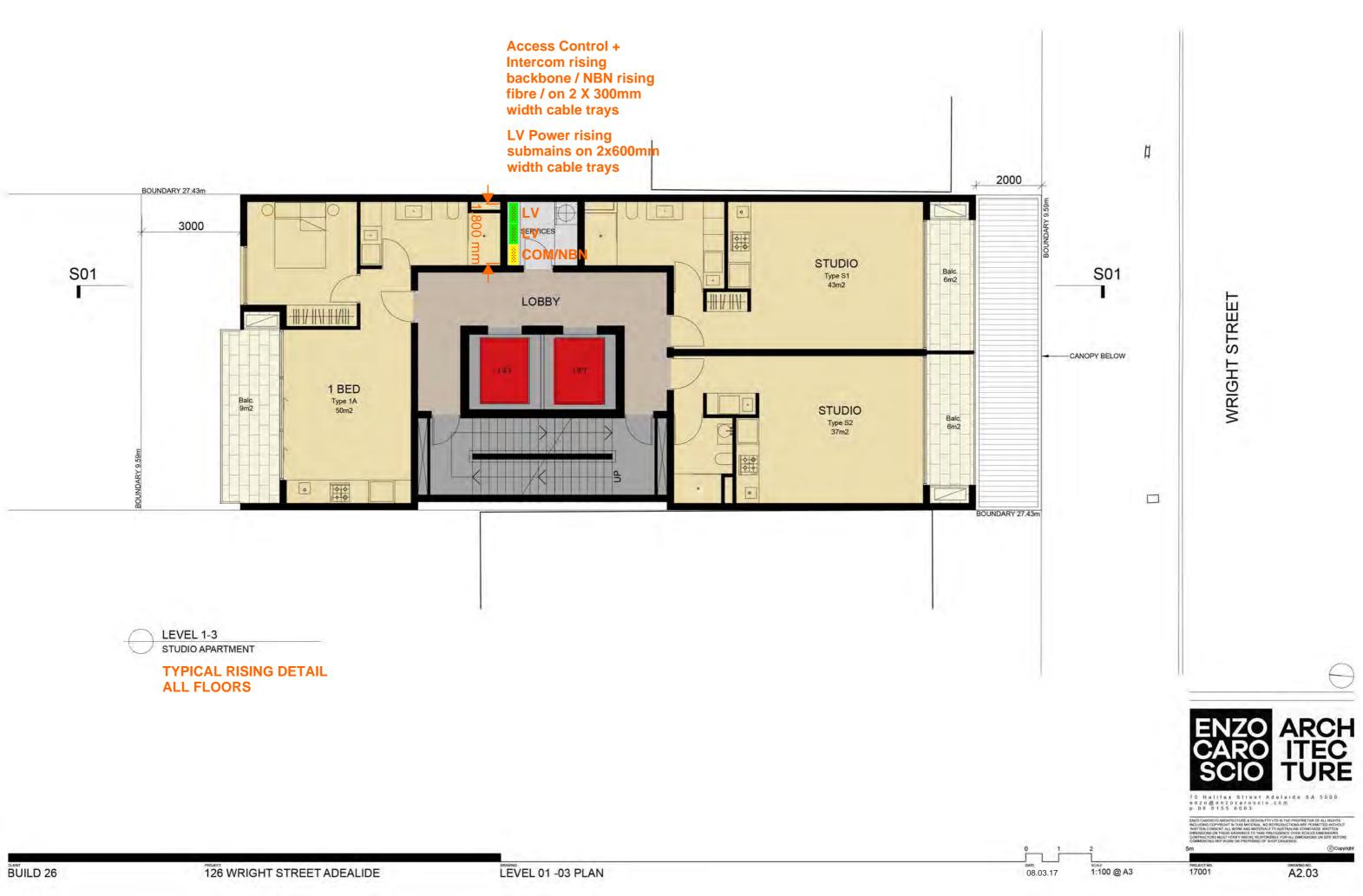
Closet provision for NBN CTL and FDT plus NTDs for Lift / Fire Indicator Panel and Security.

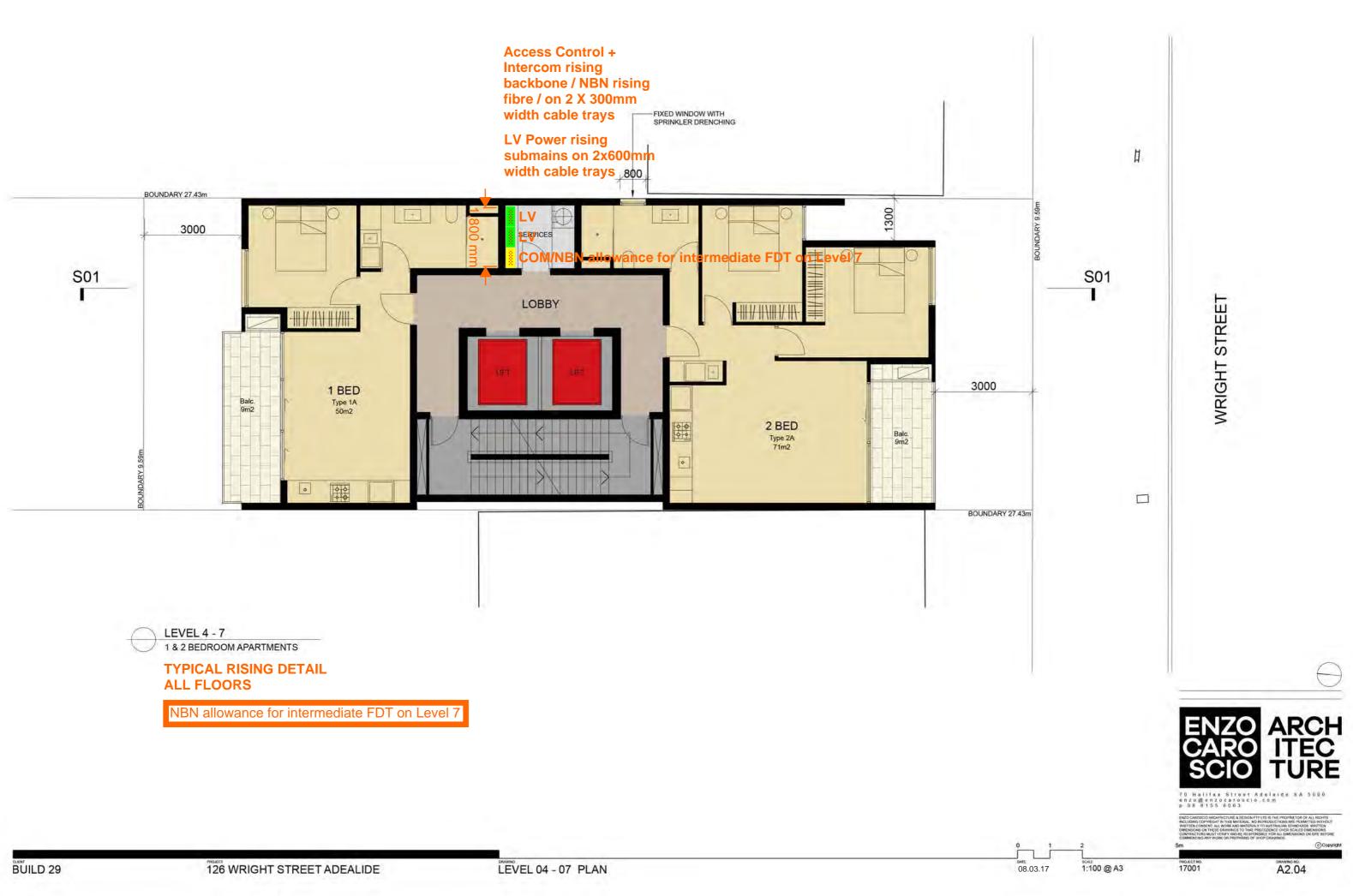
This design is based on allowance for intermediate FDTs on Level 7 and 13.

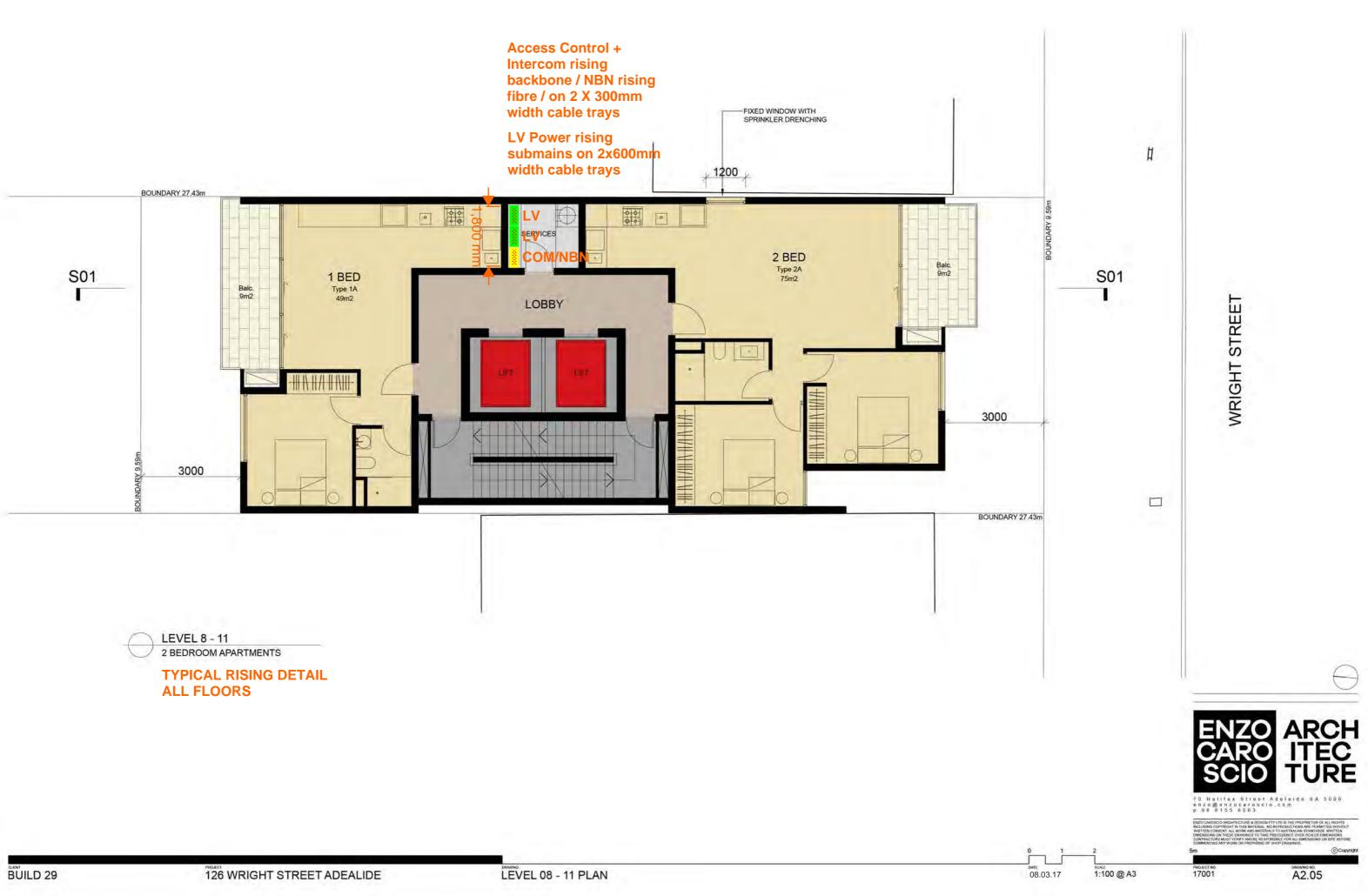
Also closet to be shared for security / access / control / CCTV if required / MATV.

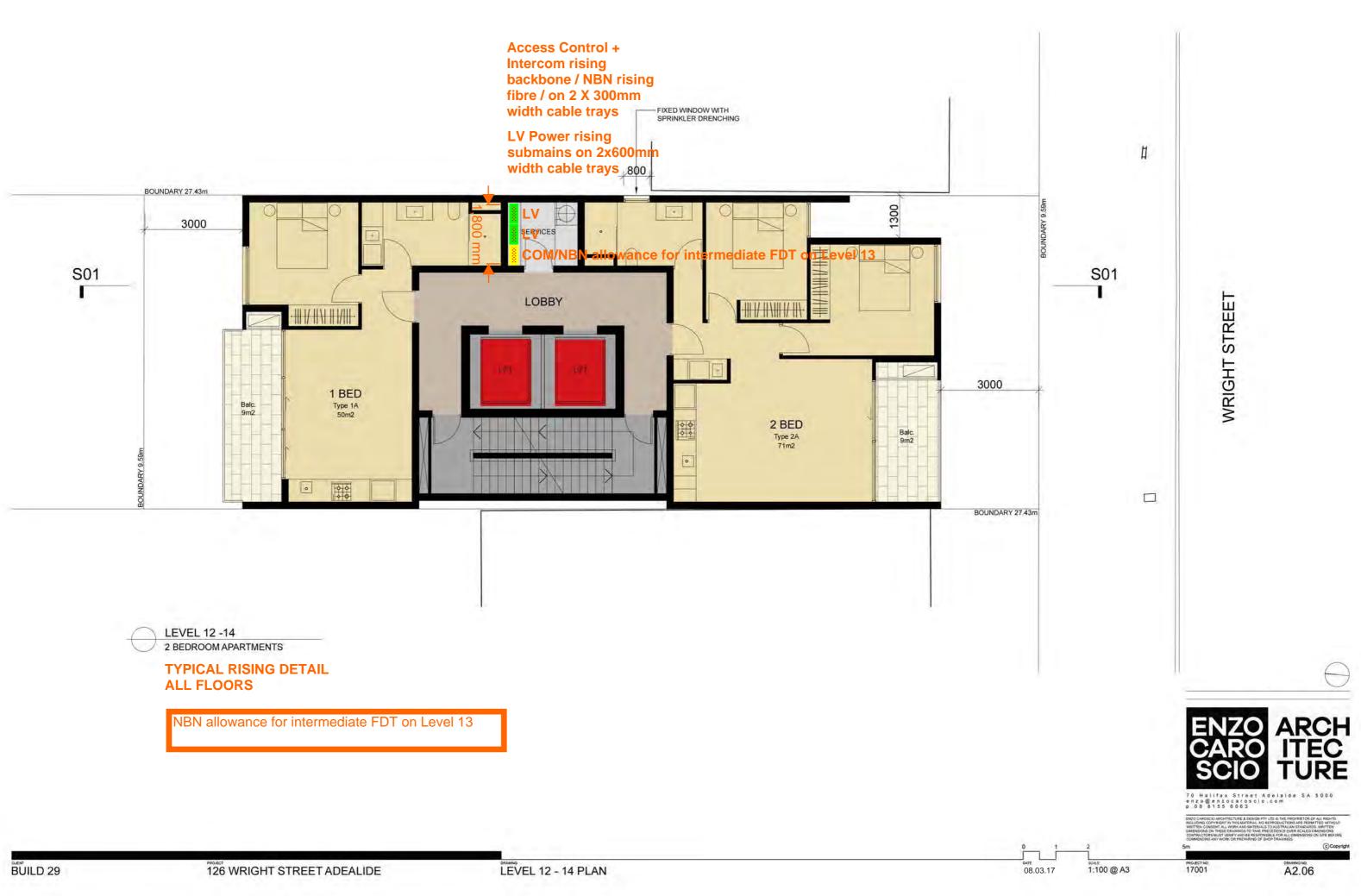


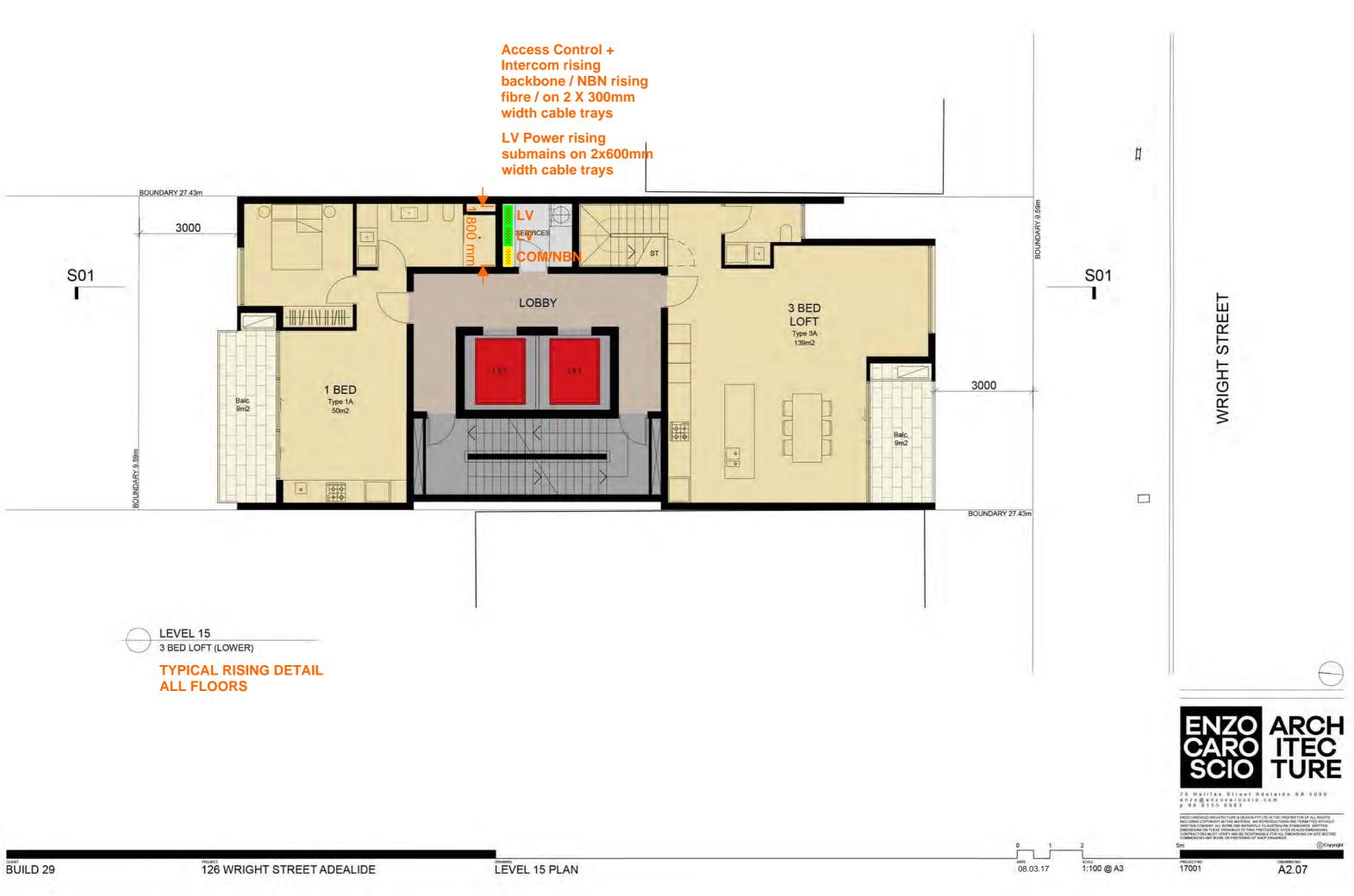


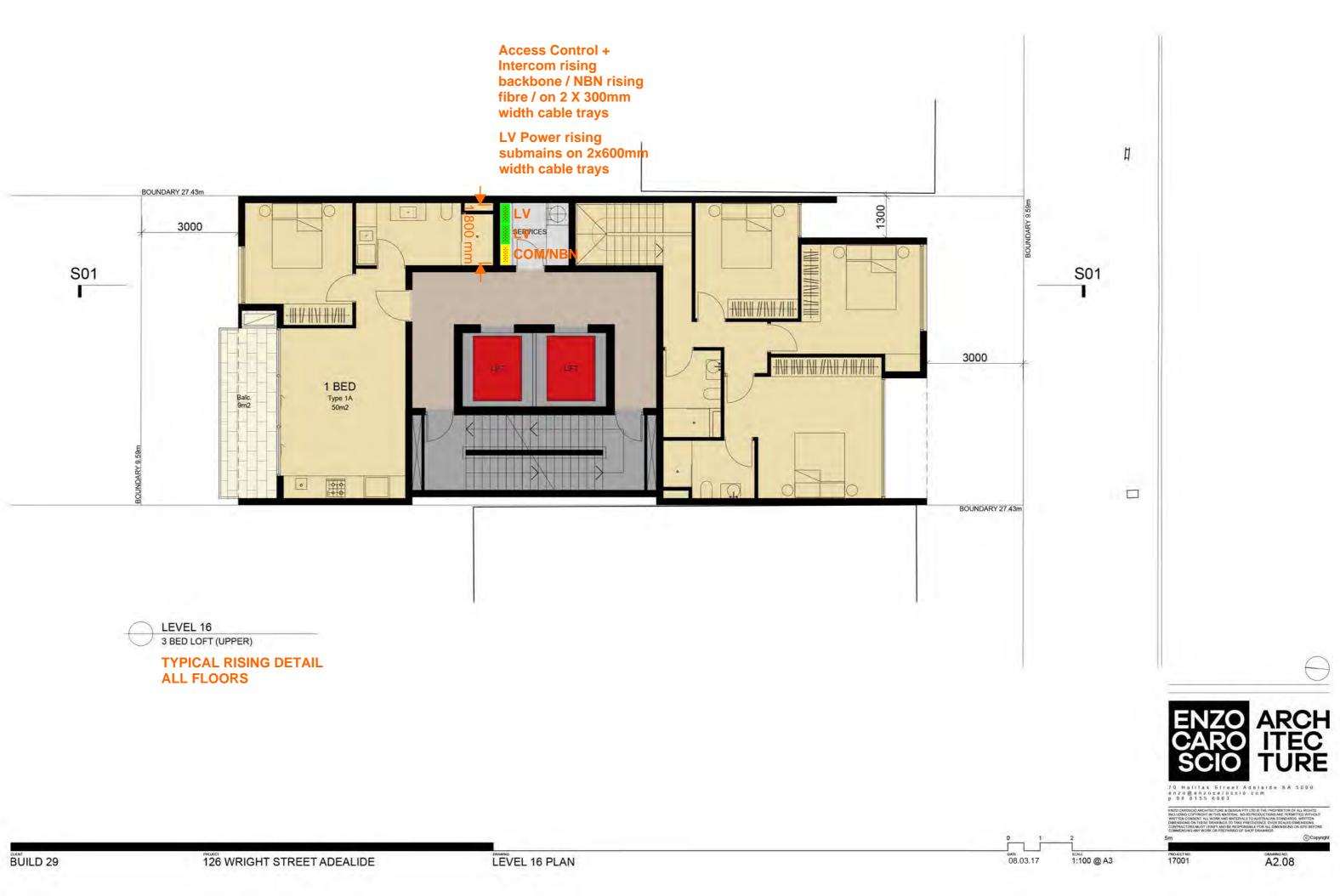


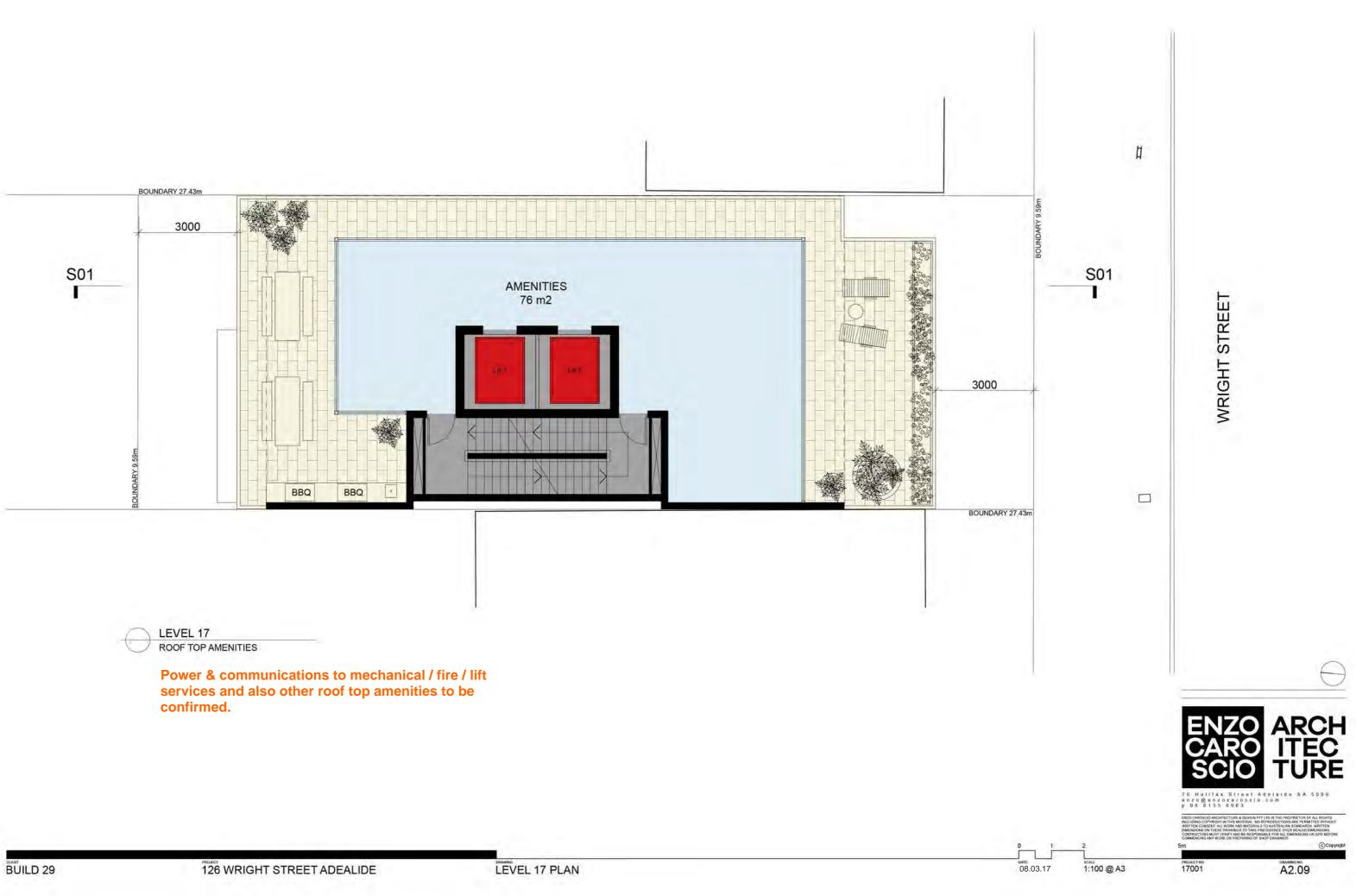


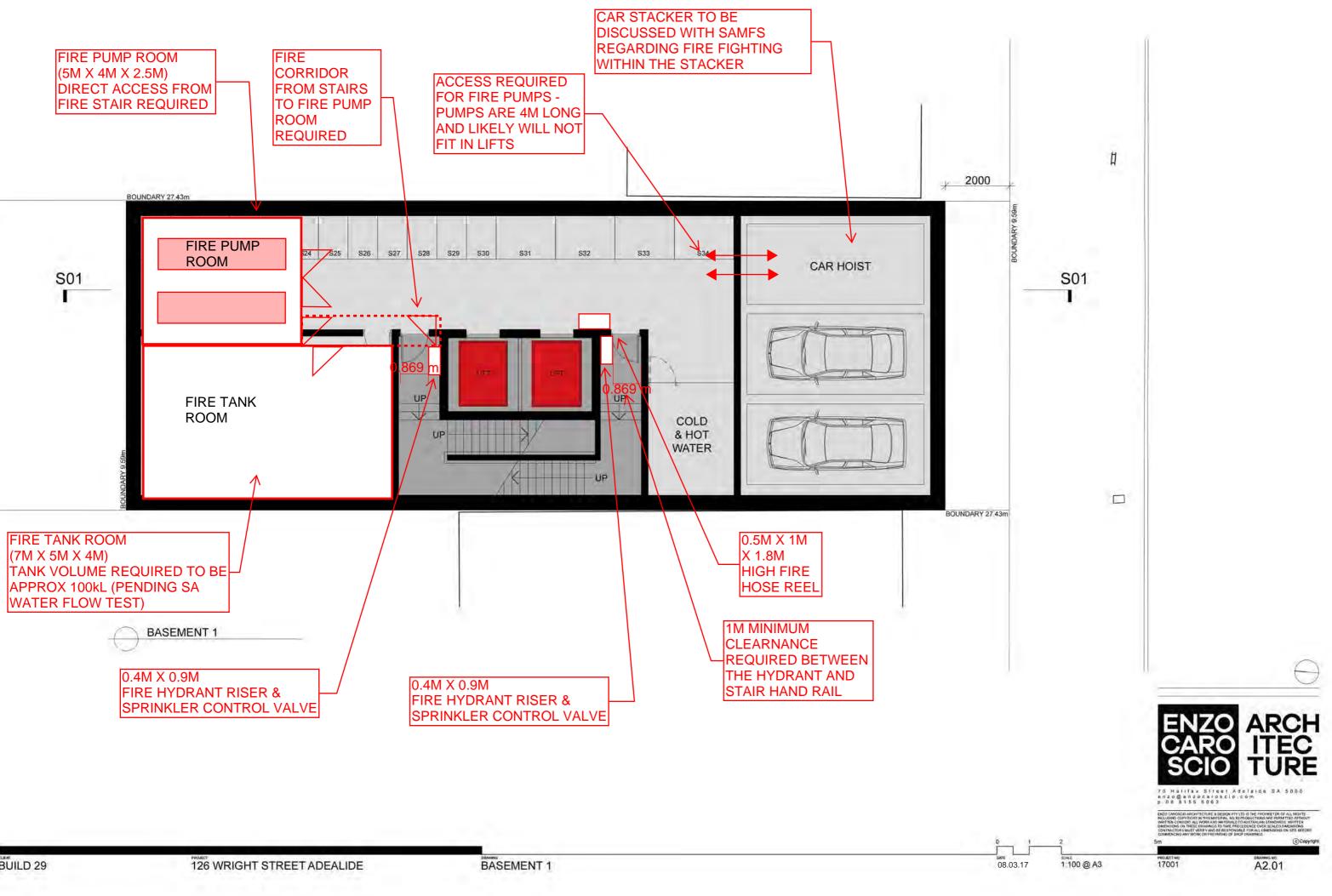


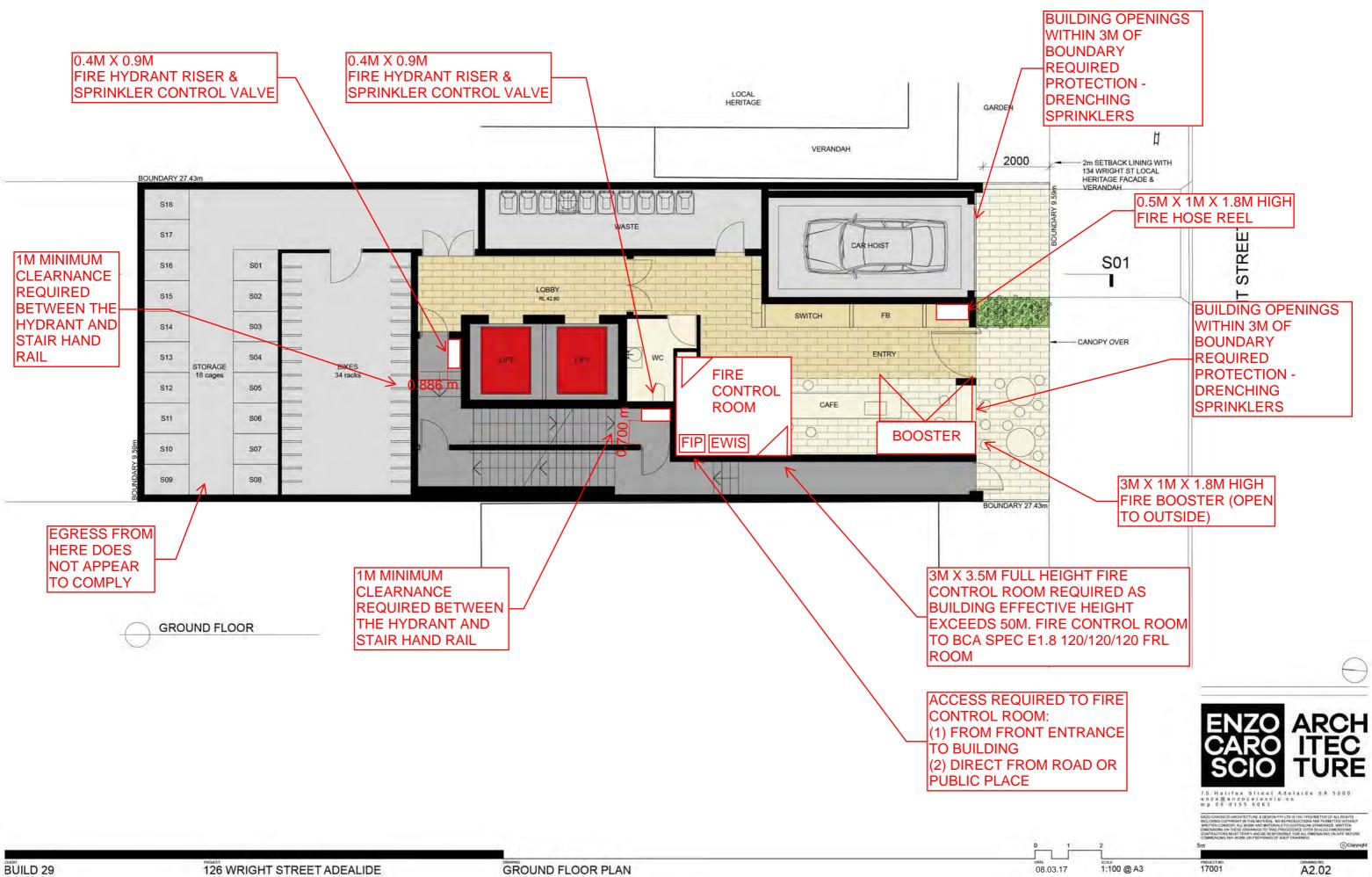


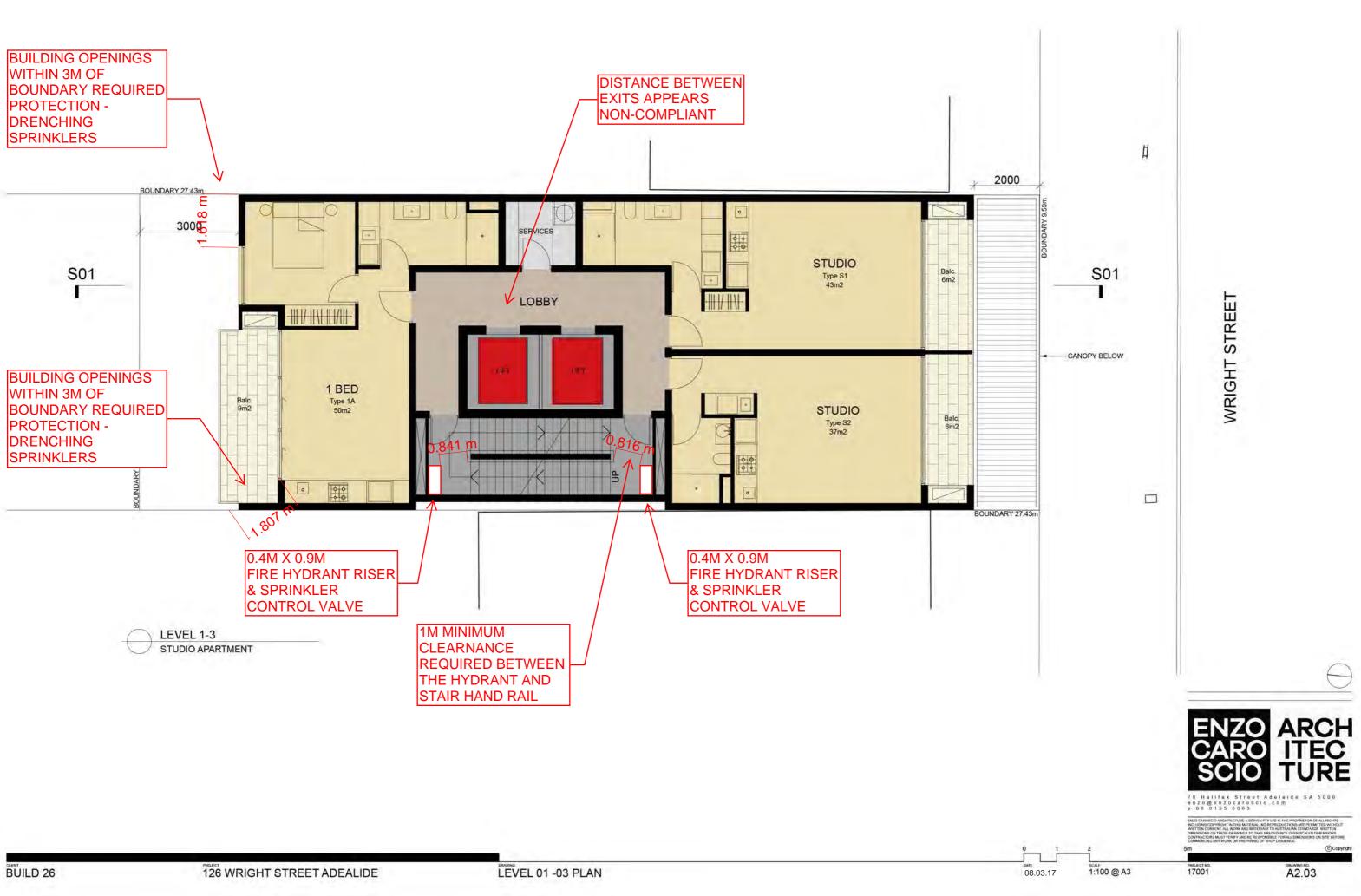


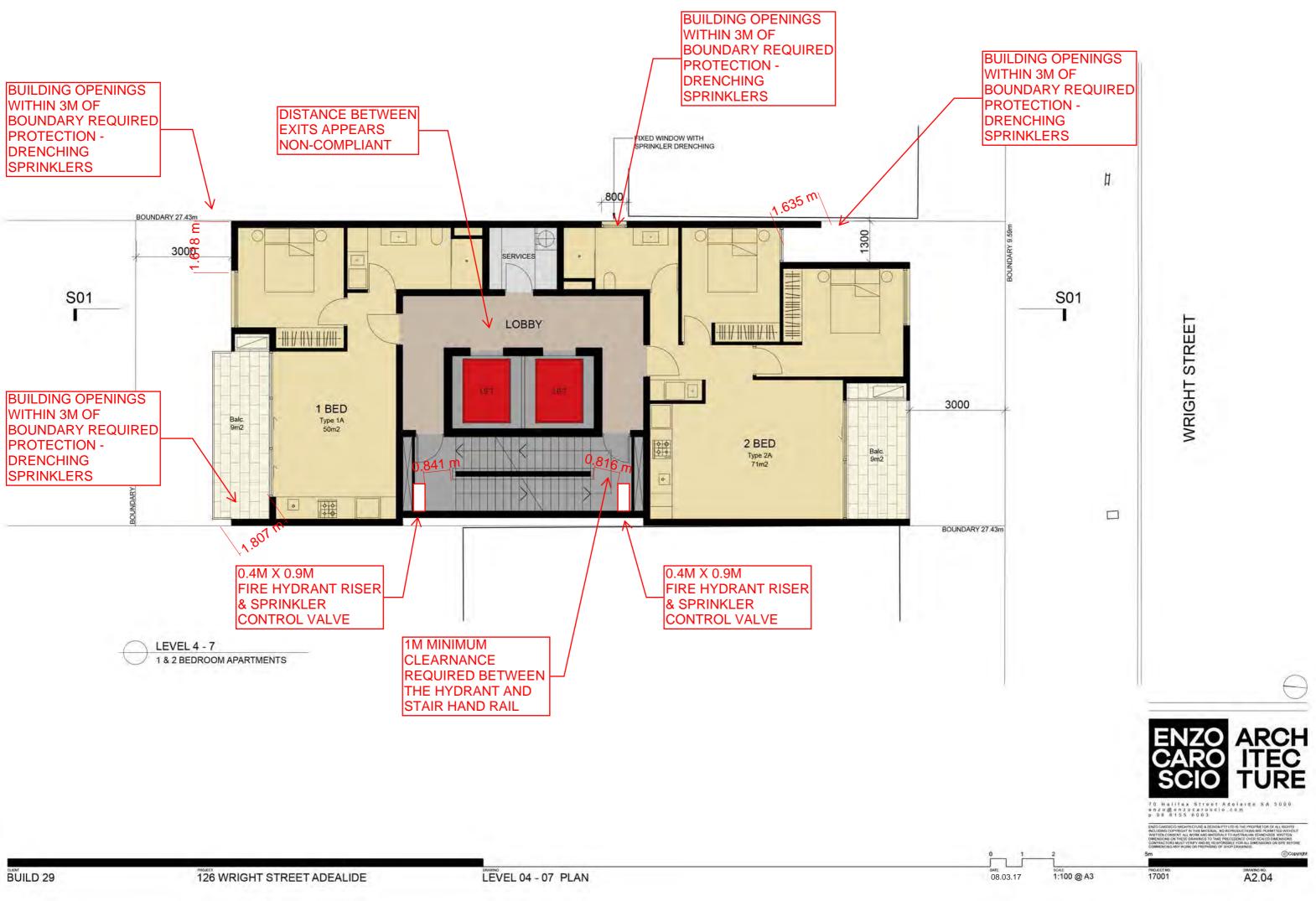


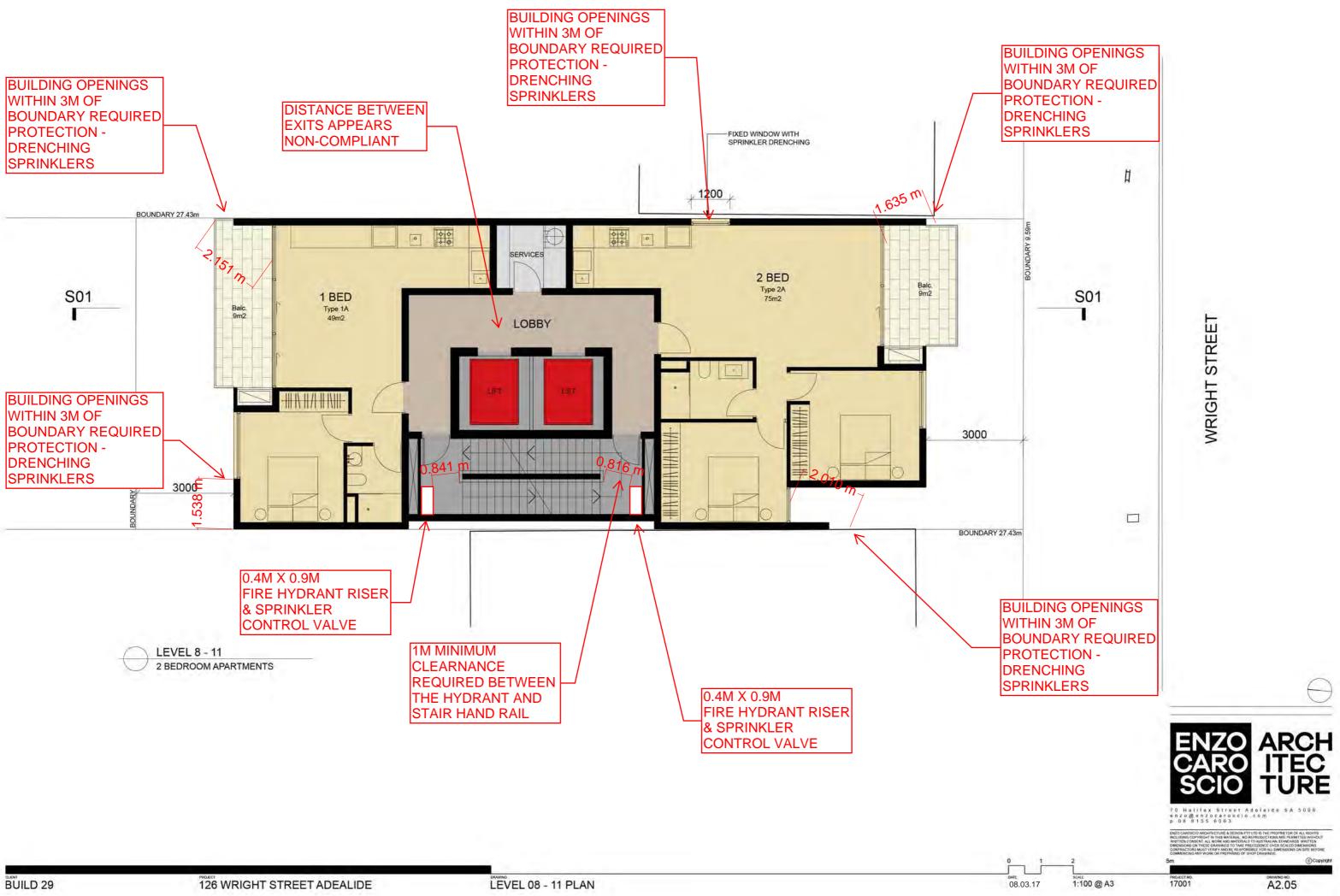


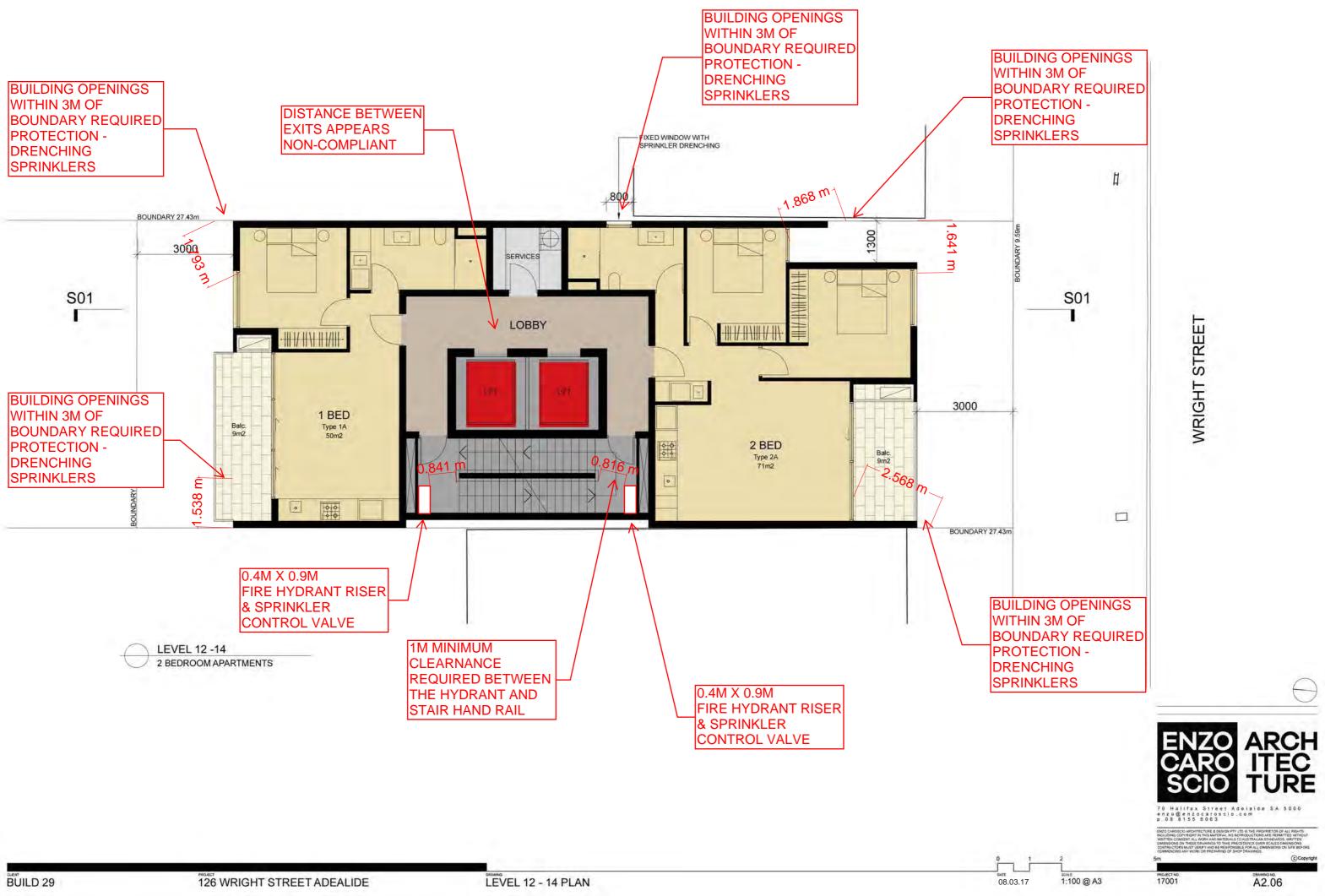


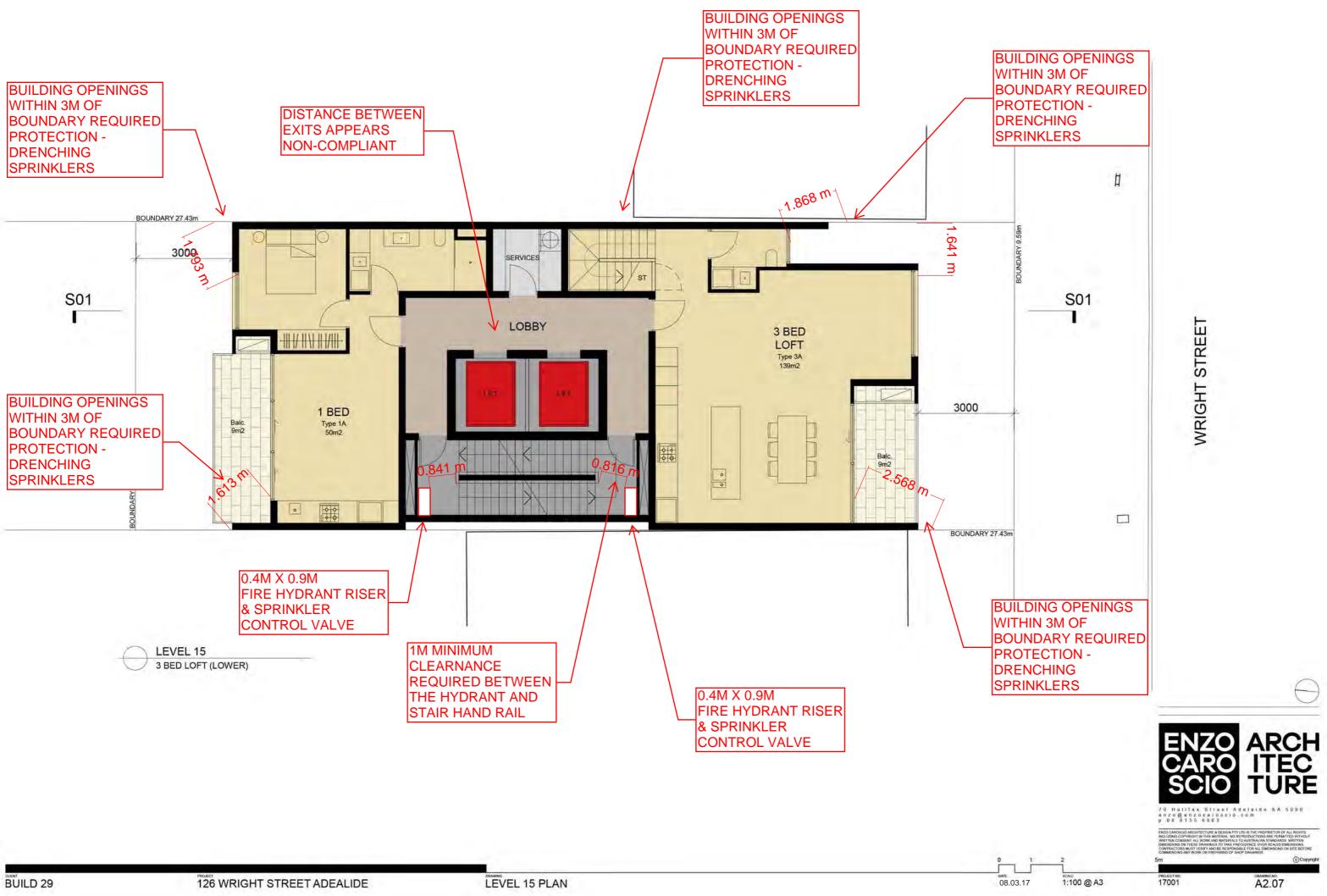


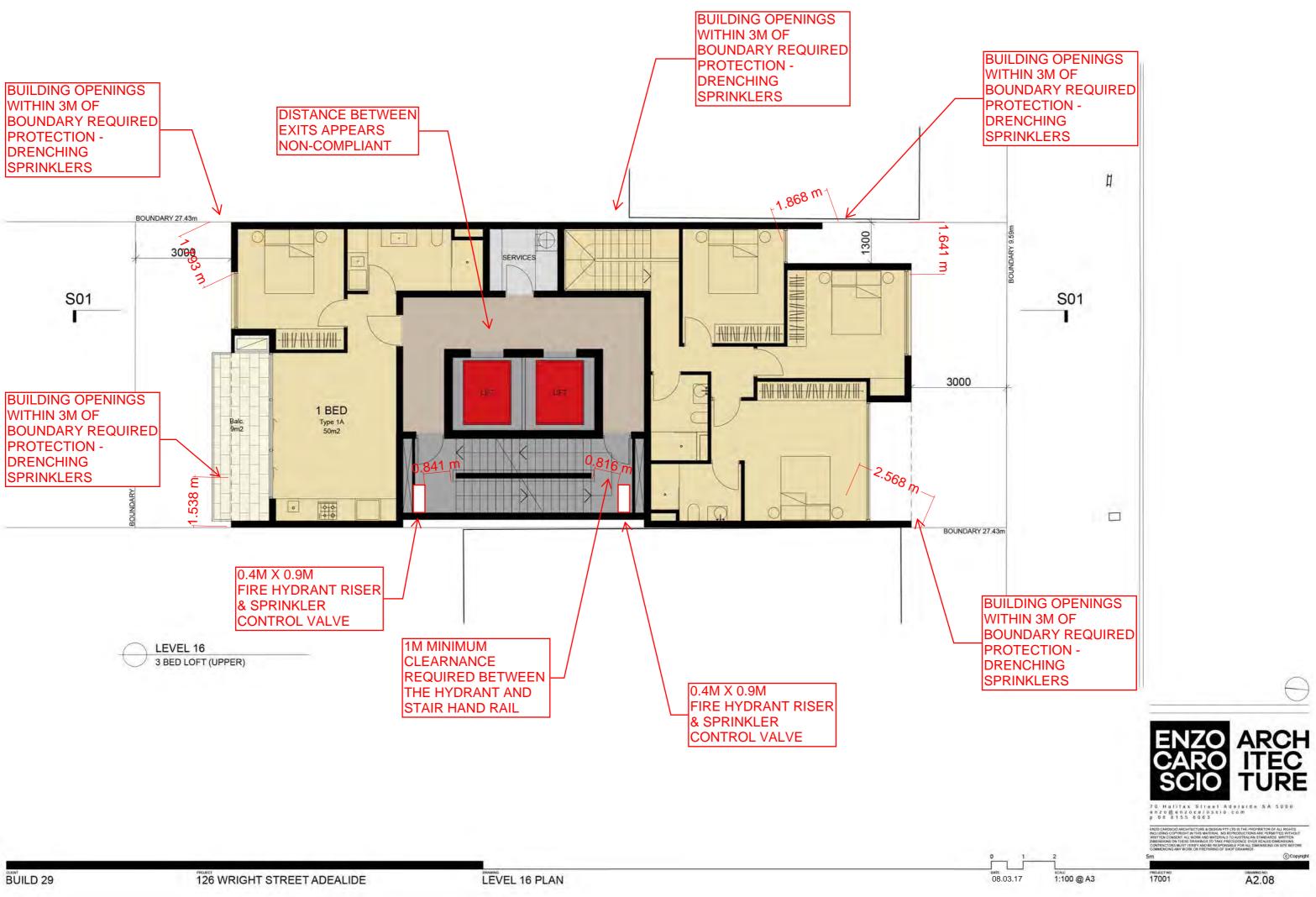


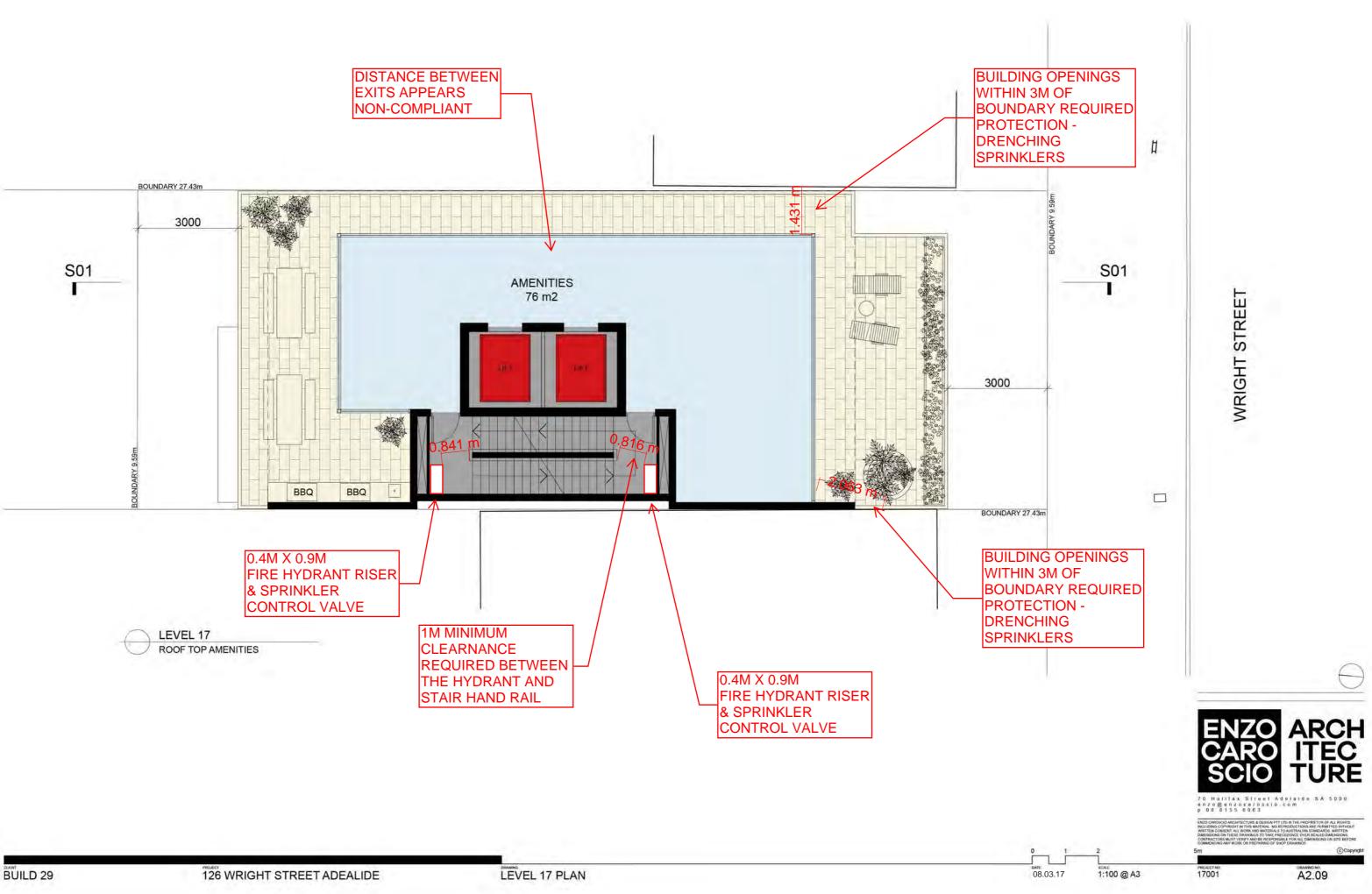


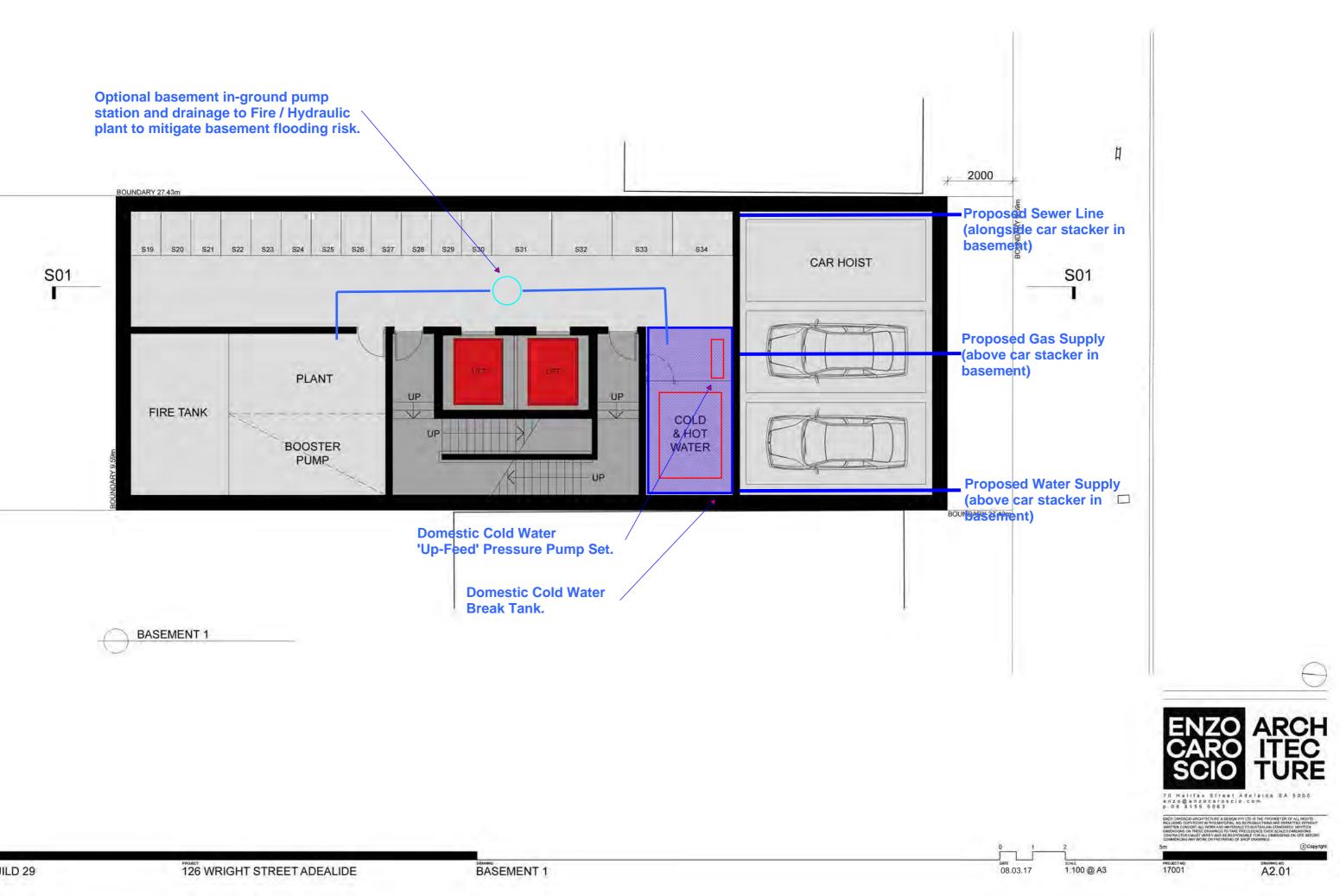


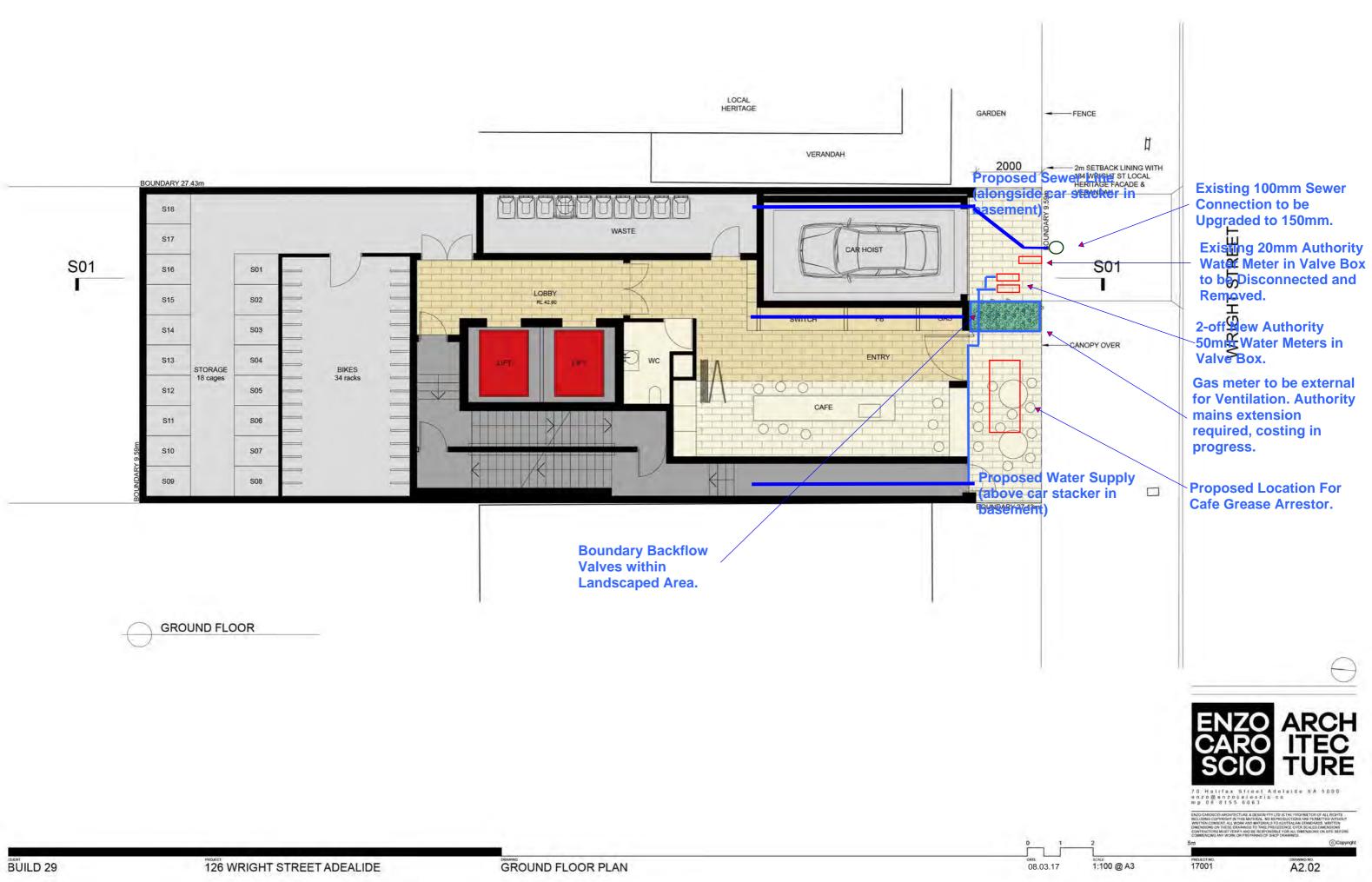


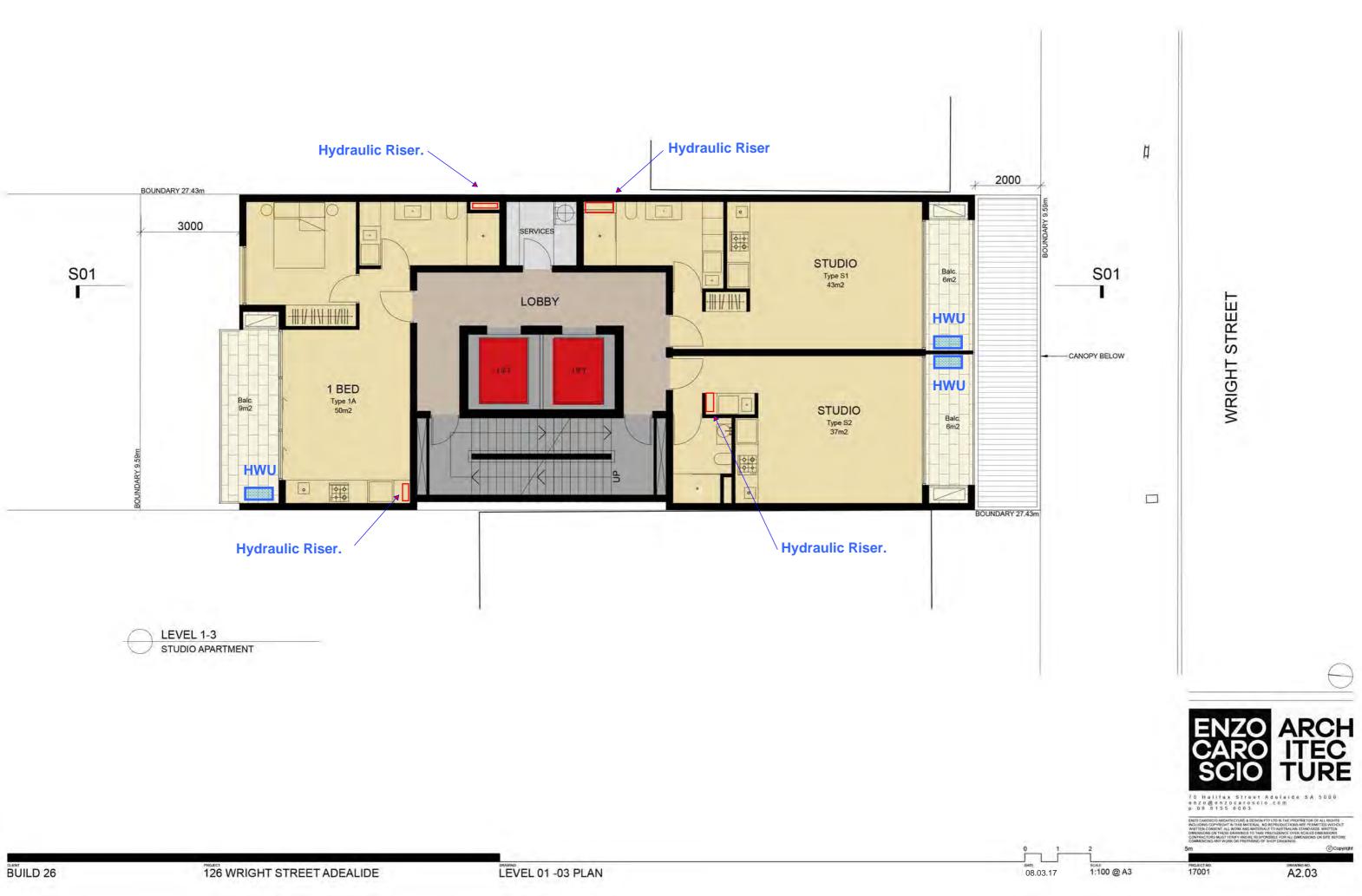


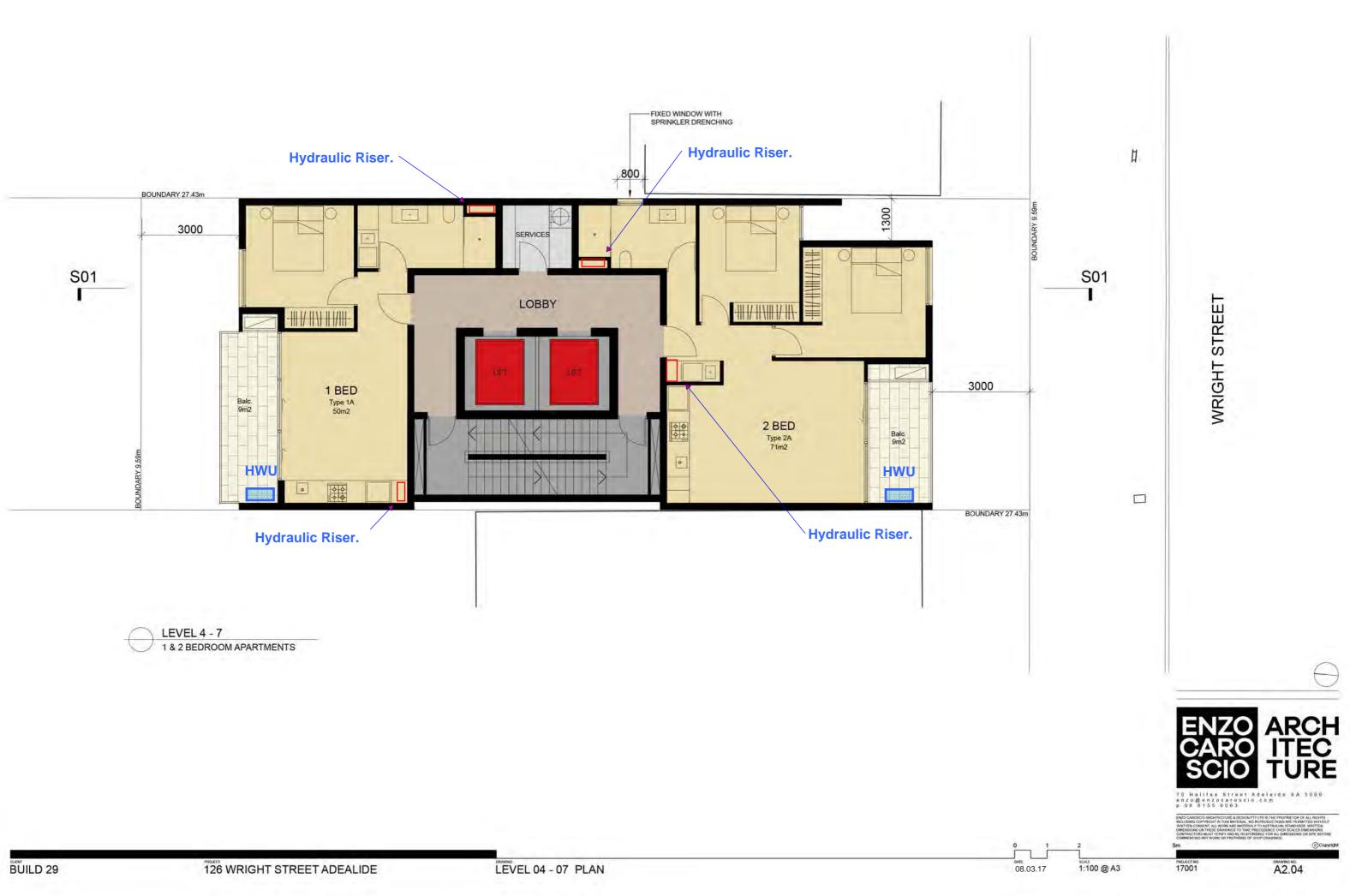




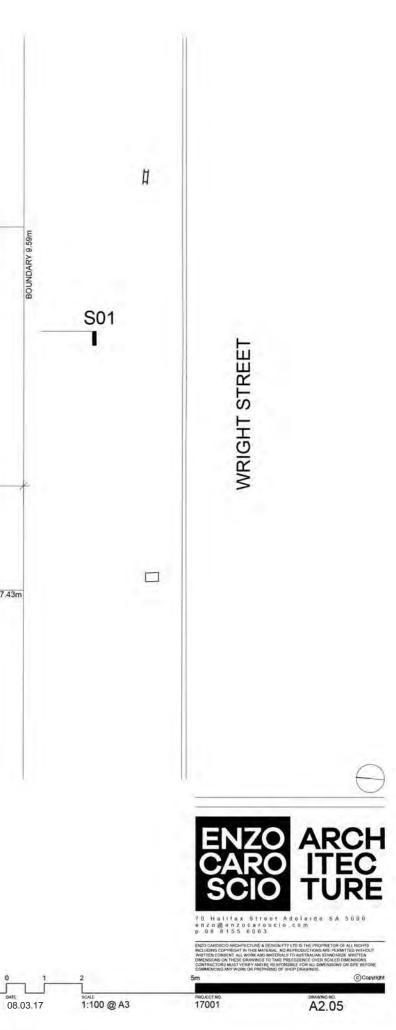


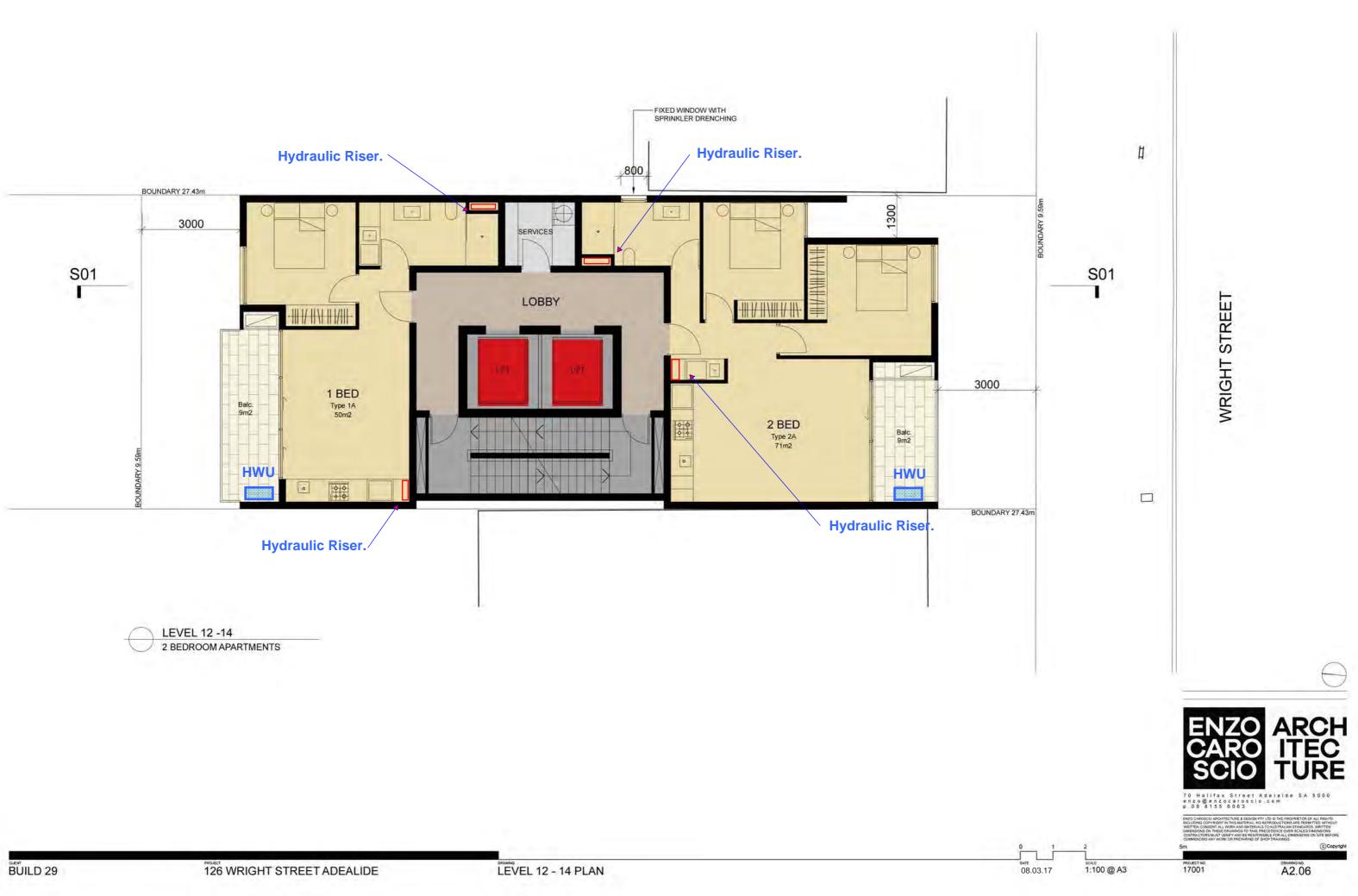


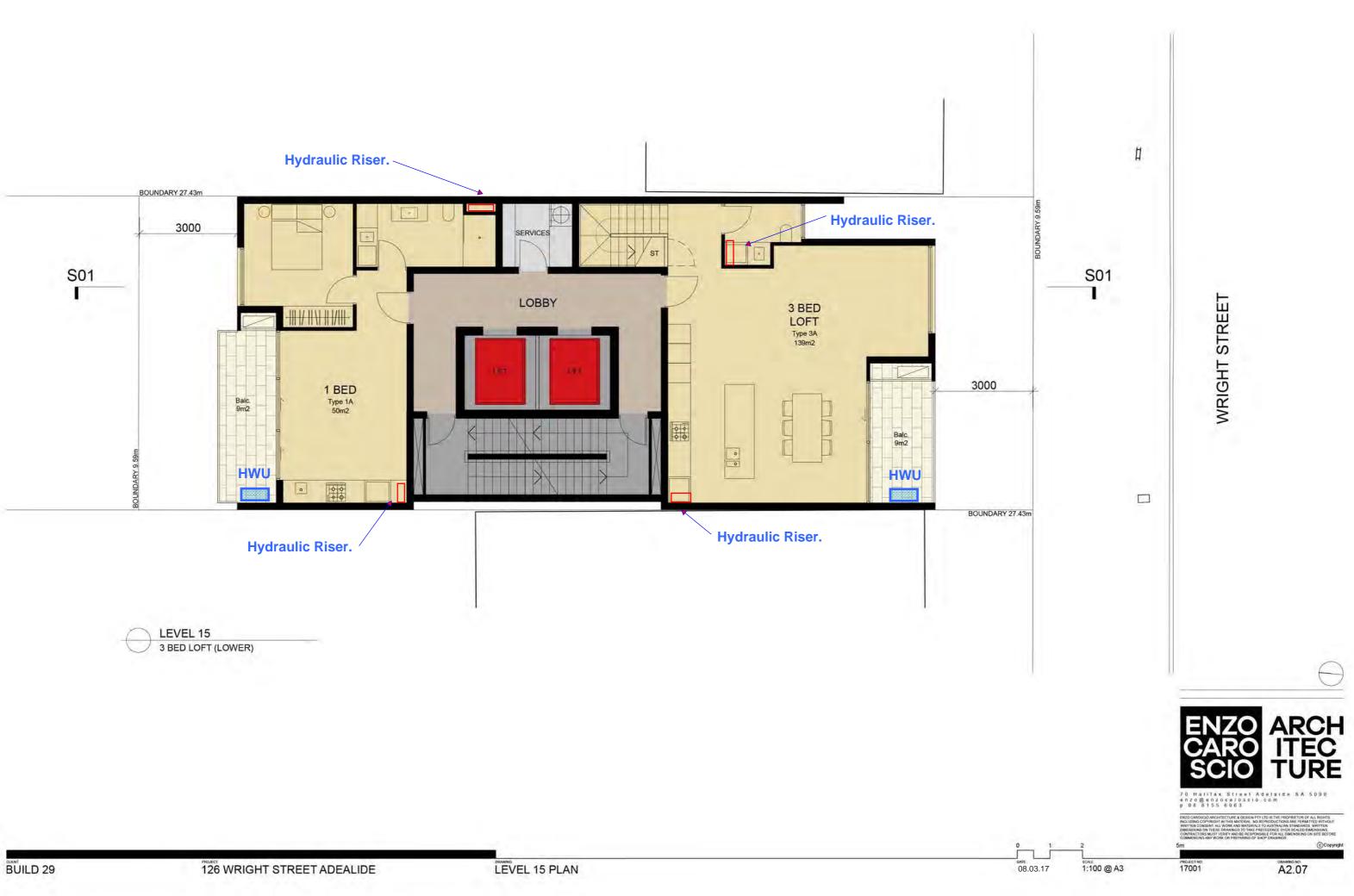


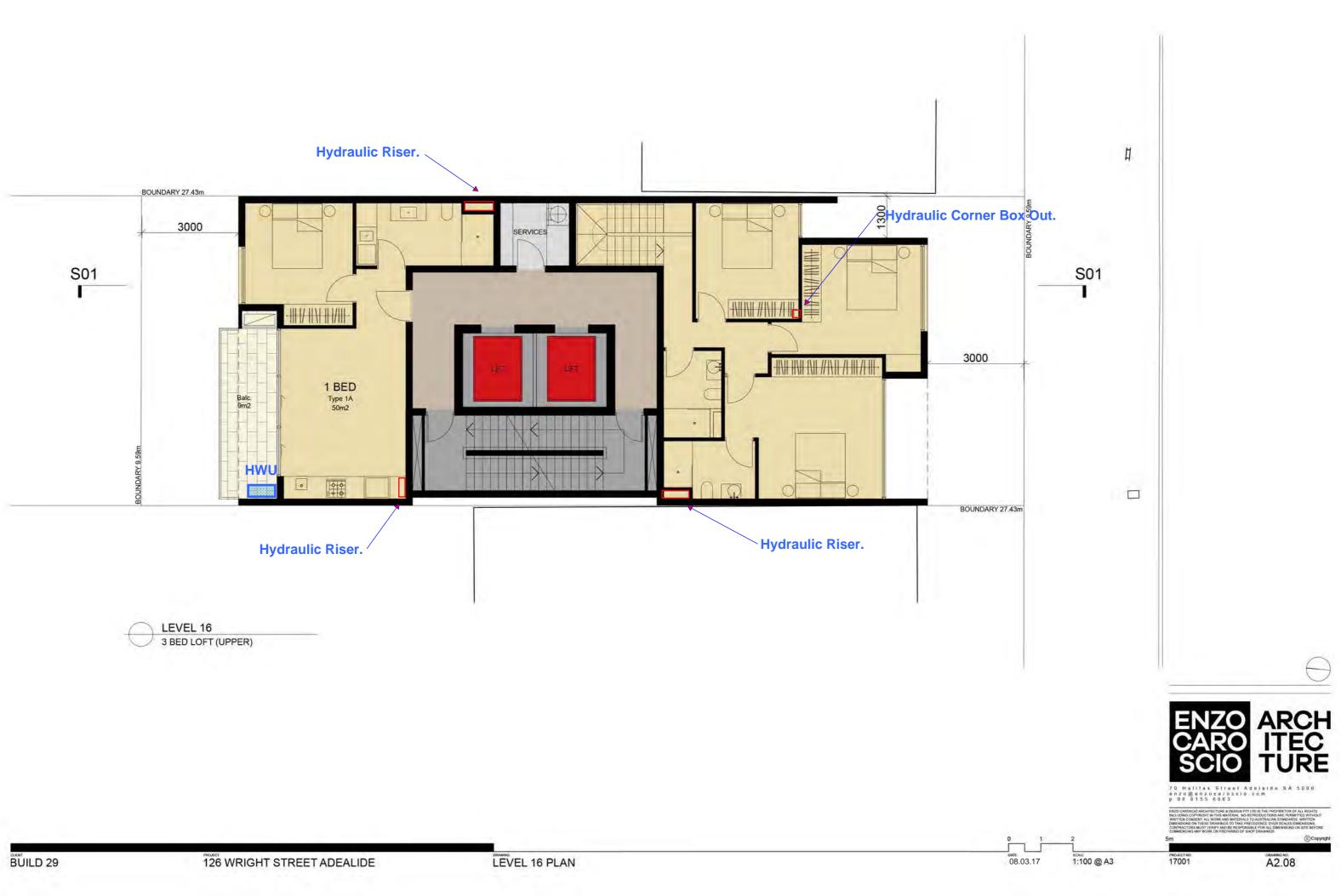


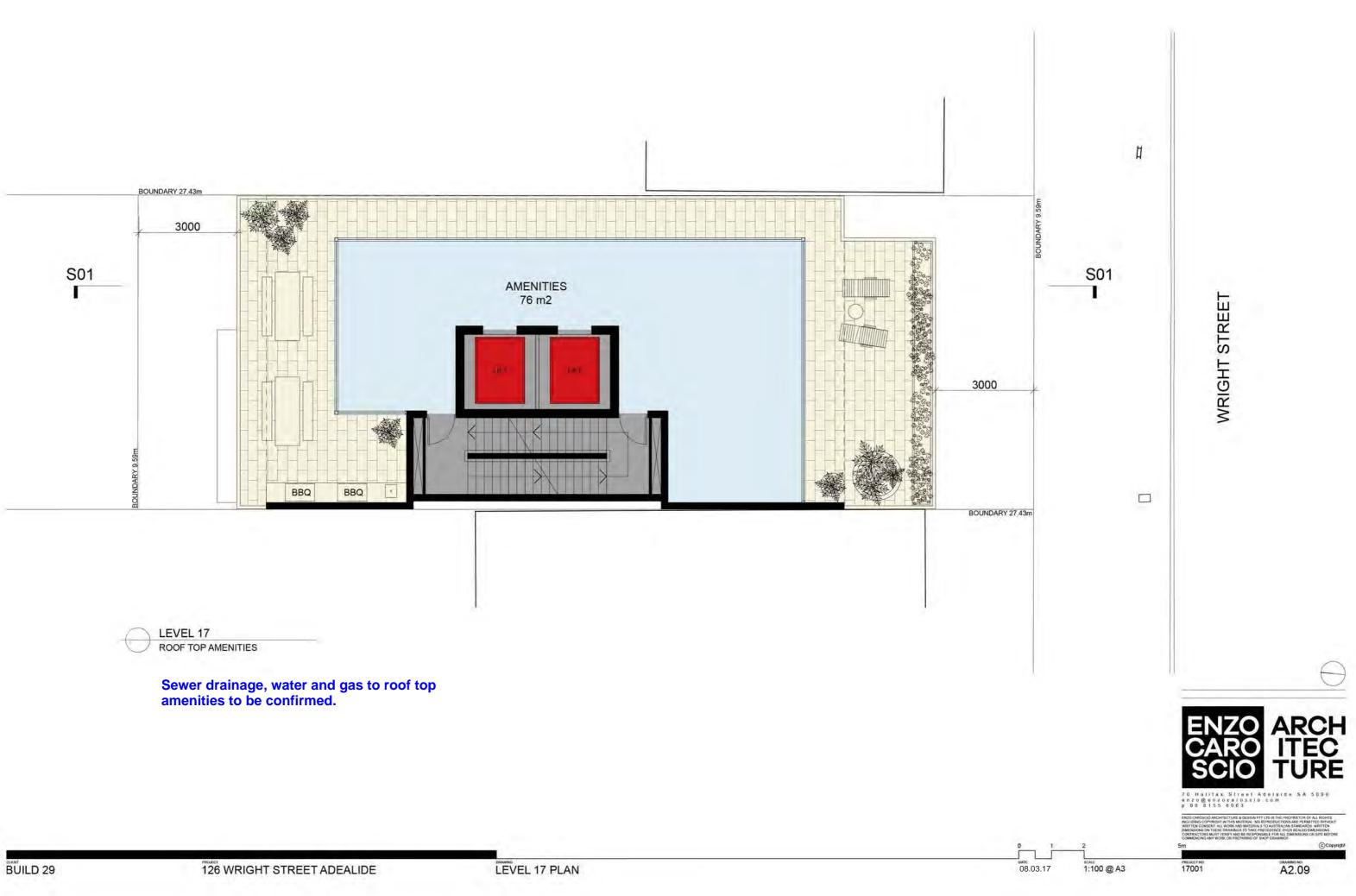


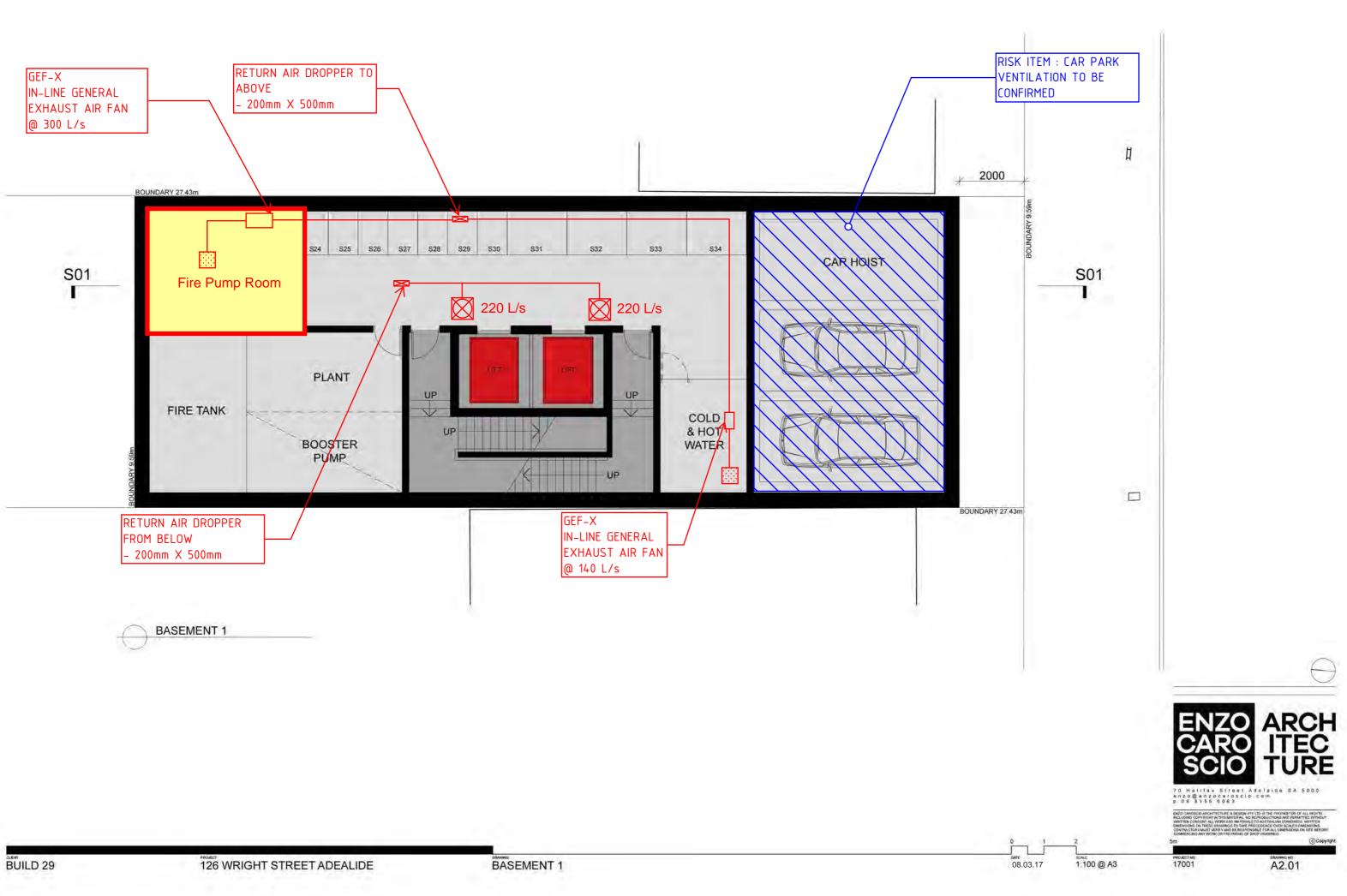


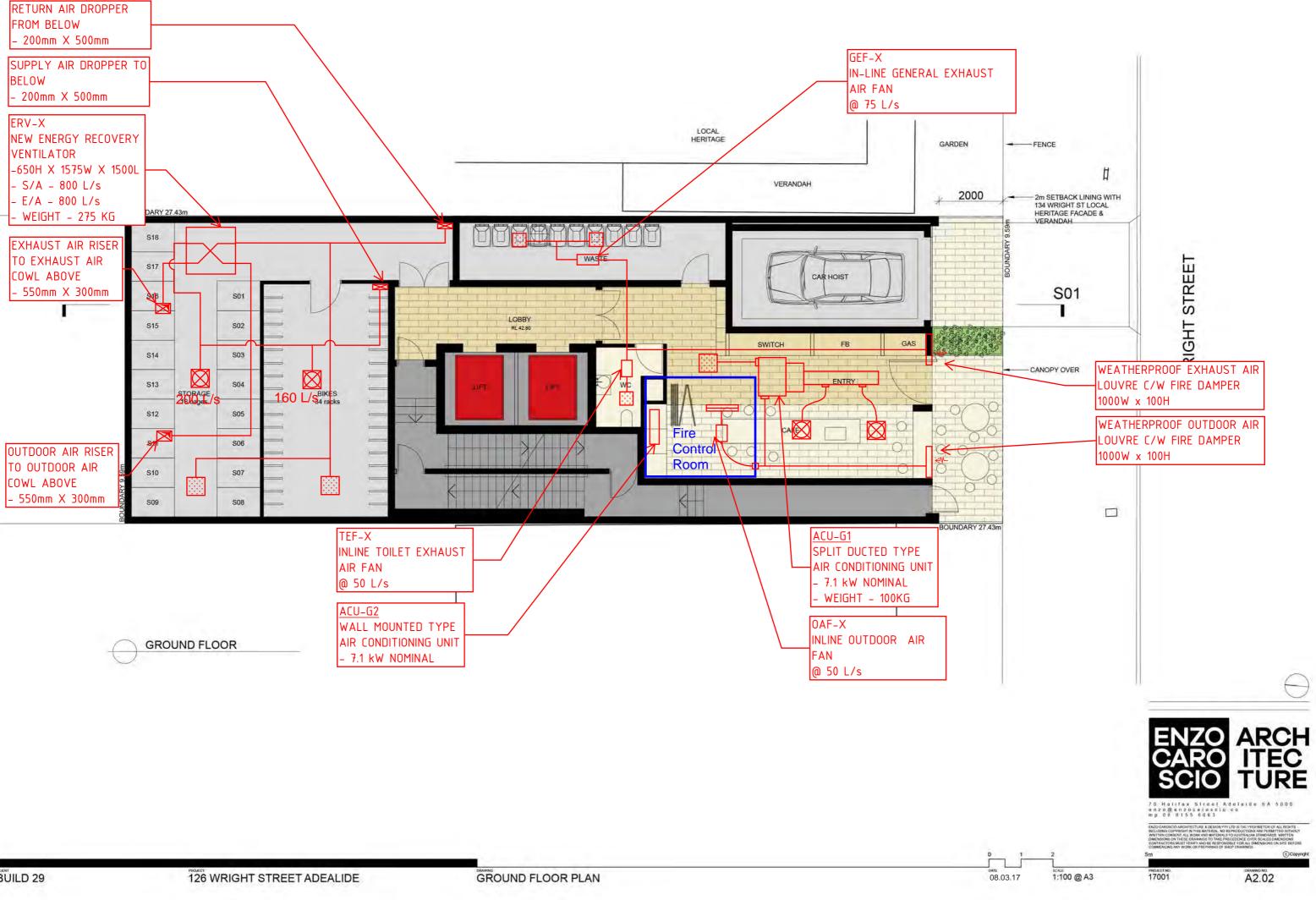


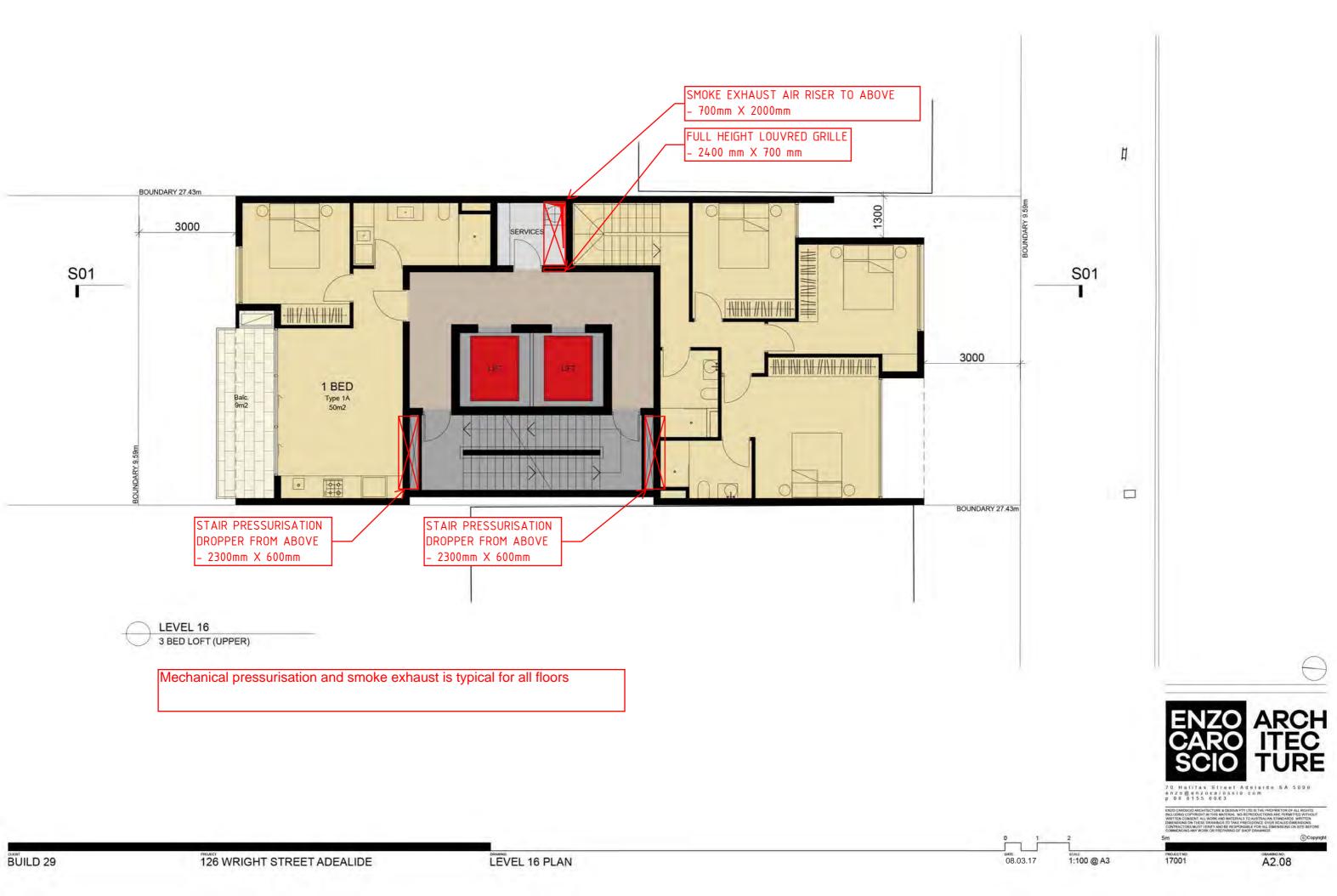


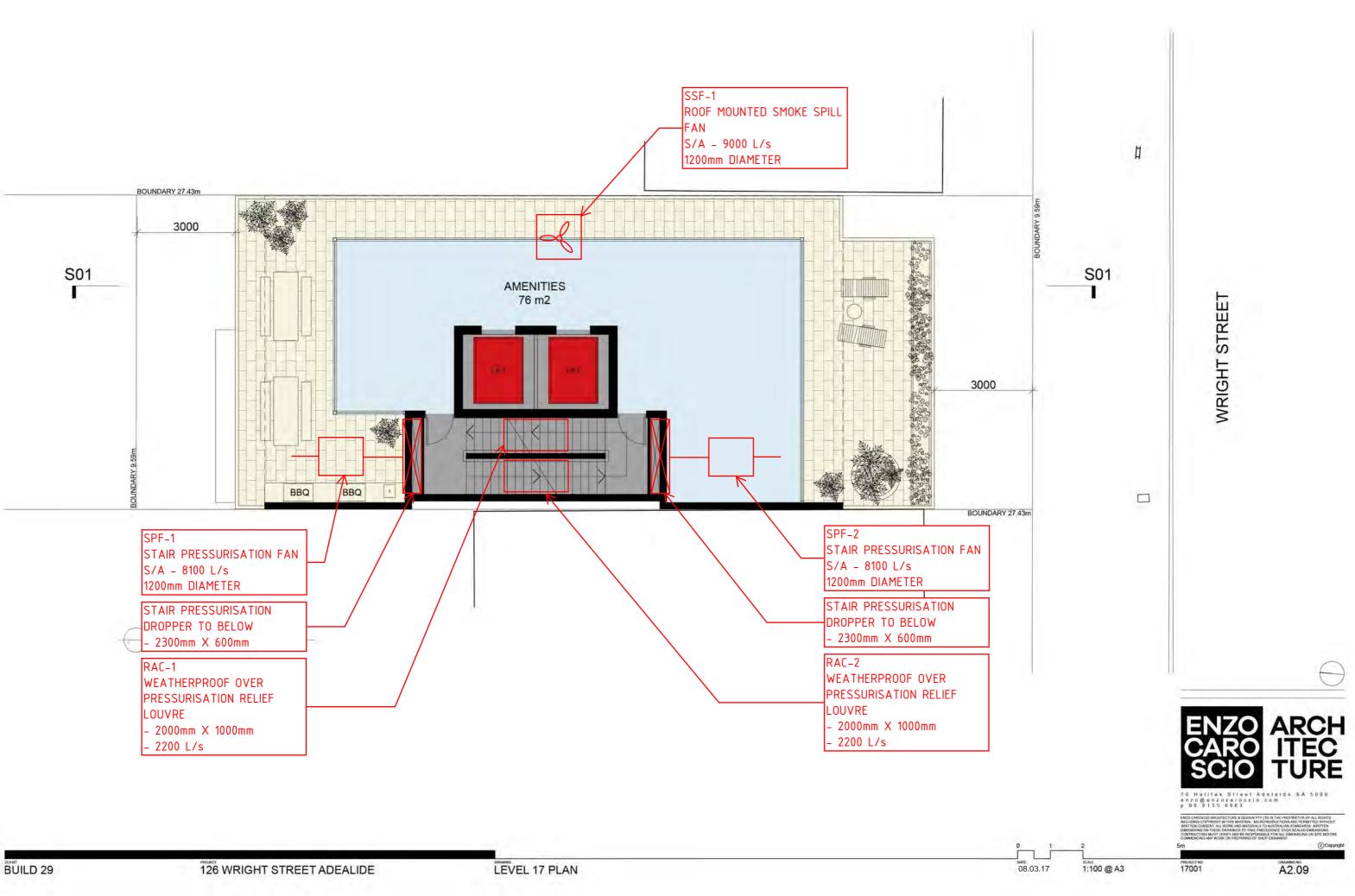


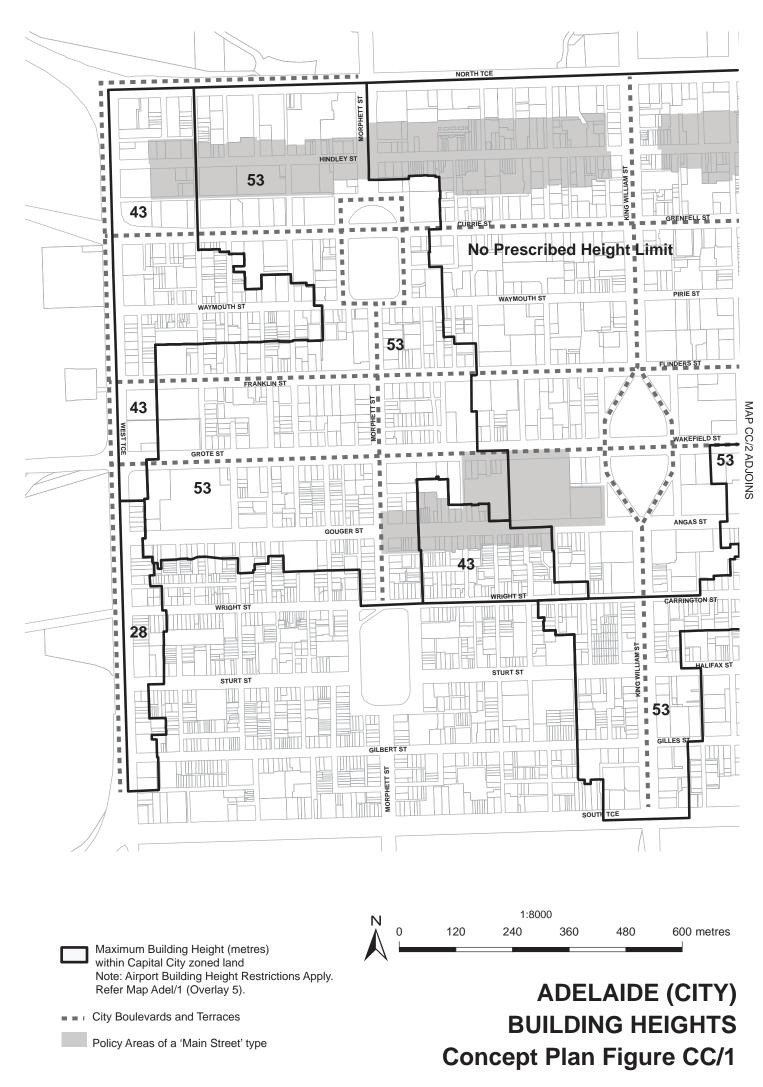














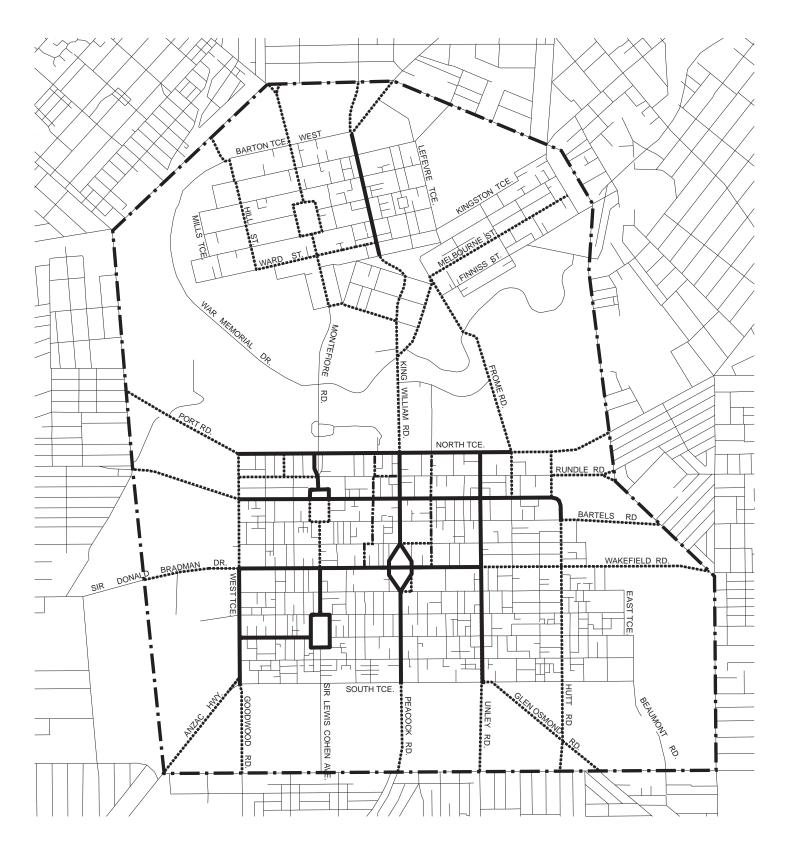
Primary City Access
 Secondary City Access
 Local Connector

Development Plan Boundary



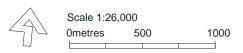
# ADELAIDE (CITY) CITY ROAD NETWORK MAP Adel/1 (Overlay 1)

Consolidated - 24 September 2015



High Concentration Public Transport RoutePublic Transport Pedestrian Route

Bus Route



# ADELAIDE (CITY) PUBLIC TRANSPORT NETWORK MAP Adel/1 (Overlay 4)



# ADELAIDE (CITY) ZONES MAP Adel/24

Zone Boundary Development Plan Boundary



• State Heritage Place

- Local Heritage Place
- Policy Area Boundary

Maximum height of 2 storeys

••••••• Existing Pedestrian Link Proposed Pedestrian Link

# ADELAIDE (CITY) POLICY AREAS MAP Adel/55

#### Site Photographs



Subject land – looking north

Wright Street – looking west



Wright Street – looking east

Wright Street - looking south



Neighbouring site – western side



Neighbouring properties (LH) – eastern side



Whitmore Square – looking northeast to Looking west – LH properties subject site





The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Registrar-General

# Certificate of Title - Volume 5185 Folio 557

 Parent Title(s)
 CT 2371/157

 Dealing(s)
 CONVERTED TITLE

 Creating Title
 06/05/1994

4



Title Issued 06/05/1994

Edition Issued 02/08/2016

# **Estate Type**

FEE SIMPLE

L dion

## **Registered Proprietor**

VICTOR HARBOR 2013 PTY. LTD. (ACN: 164 313 286) OF B BATTISTELLA & ASSOCIATES L 1 141 O'CONNELL STREET NORTH ADELAIDE SA 5006

# **Description of Land**

ALLOTMENT 6 FILED PLAN 107633 IN THE AREA NAMED ADELAIDE HUNDRED OF ADELAIDE

### **Easements**

NIL

## Schedule of Dealings

Dealing Number	Description
12553608	MORTGAGE TO WESTPAC BANKING CORPORATION (ACN: 007 457 141)
12555378	CAVEAT BY CEG DIRECT SECURITIES PTY. LTD. (ACN: 150 878 587)
12594707	MORTGAGE TO CEG DIRECT SECURITIES PTY. LTD. (ACN: 150 878 587)

## Notations

**Dealings Affecting Title** 

NIL



Register Search 27/02/2017 12:33PM

20170227006313 \$27.75

#### **Priority Notices**

NIL

Notations on Plan

NIL

**Registrar-General's Notes** 

NIL

**Administrative Interests** 

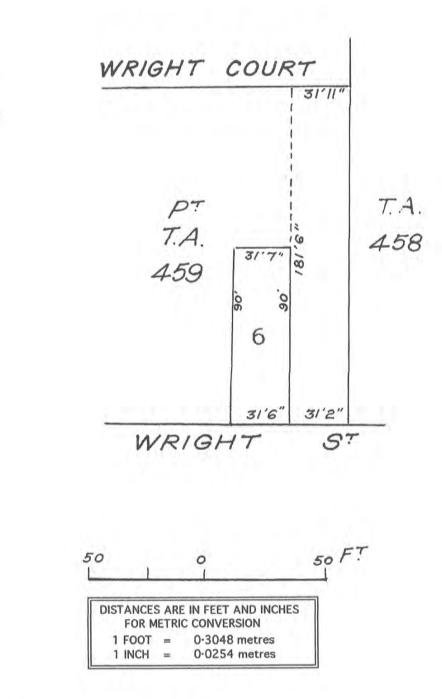
NIL

Land Services

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Product	Register Search	
Date/Time	27/02/2017 12:33PM	
Customer Reference		
Order ID	20170227006313	
Cost	\$27.75	
	Date/Time Customer Referer Order ID	

This plan is scanned from Certificate of Title 2371/157



Note : Subject to all lawfully existing plans of division



# **Mixed Use Development**

# **126 Wright Street, Adelaide**

**Planning Statement** 

Prepared on behalf of Built 29



March 2017

# **Contents Page**

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# 1.0 INTRODUCTION AND BACKGROUND

#### 1.1 Introduction

This Statement has been prepared by Town Planning Advisors in relation to a proposal to develop a mixed use development at 126 Wright Street, Adelaide.

Proposal is for the construction of a mixed use development containing a café, parking for 5 car spaces utilising a car hoist system, 34 apartments consisting of 6 x studio apartments, 16 x one bedroom apartments, 11 x two bedroom apartments, 1 three bedroom apartment and upper level enclosed amenities area with roof garden including bbqs and landscaping.

The total building height will be 56.8 metres.

This report sets out the nature of the site and locality and provides a description of the proposed development and an assessment of the proposal against the most relevant provisions of the Adelaide (City) Development Plan as Consolidated 24 September 2015.

#### 1.2 Background

The original proposal for a mixed use development was reviewed through the Pre lodgement Process on two occasions and by the Office for Design and Architecture (ODASA) on 26 October 2016.

Given the significant issues raised by ODASA the applicant appointed Enzo Caroscio Architects to redesign the proposal in line with comments from both the PLP and ODASA.

As a result, a second ODASA Design Review was held on 1<sup>st</sup> March 2017, and further comments were provided from ODASA on 09 March 2017. (Attachment A)

The current plans accompanying this planning report along with the following comments constitute Enzo Caroscio Architects response to ODASA's comments dated 09 March 2017.

#### Building height;

- The proposed building height to Wright Street is 54.7m (top of balustrade planter) with the top floor build form setback a further 3m with a parapet height of 56.8m.
- The proposed building is 18 storeys with Ground to level 3 setback 2m from The Wright St boundary, level 4-16 setback 3m from the Wright street boundary, and level 17 setback 6m from the Wright Street boundary.

- The building form is expressed as 4 parts of 4 and 5 storey forms sitting on one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the building mass and reduce the scale of the facade.
- A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building
- The overall height of the building relates to the building height of 150 Wright Street's lower building form which front Wright Street which is similar in height with 17 storeys and a setback 18th storey above.
- The height of the building should be considered within the future development of the Capital City zone on Wright St with proposed future developments occurring at 134 Wright St, 128 Wright St and the Wright St Hotel site.

In relation to over height provisions subject to apartment amenity;

- All apartments are designed at or above the minimum size requirements with open kitchen and living areas directly adjacent large external balconies.
- All bedrooms have direct access to natural light, ventilation and views.
- Access to bedrooms and bathrooms are from circulation spaces allowing privacy and separation to living areas.
- Storage is provided in kitchens, laundry cupboards and robes to all bedrooms.
- 2.7m ceiling heights proposed to all living areas.
- Floor to ceiling windows are proposed to maximise views and increase daylight penetration.
- 2 to 4 apartments per floor accessed from 2 lifts allow added privacy and security.
- A designated service room and waste chute to each floor provides a quality lobby and amenity to each apartment.
- 8 apartment types of studio, 1 bed, 2 bed, and 2 and 3 bedroom loft apartments offer variety of dwellings.
- 34 apartments overall with 2 to 4 apartments served off each lobby creates a unique boutique residential offering.

#### Scale of the Podium and Wright Street frontage;

• The Ground floor and 3 floors above have been revised with a 2m setback from the Wright Street boundary to follow the street pattern of heritage buildings setback from boundary. The 2m relates to the heritage facade and veranda of No. 134 with a 2m setback and transitions between the 3m setbacks of the cottages to the east of the site and the 3 storey building build to street boundary on the west of the site

- the continuous angled metal canopy which projects 2m outwards creates the single storey form the the streetscape similar to that of the local heritage places.
- The width of the proposed site is approximately 9.6m and consistent with the existing street pattern and the proposed setback allows for some vegetation and outdoor seating to Wright Street.
- The podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth.
- Vertical metal articulated facade treatments to balconies as well as the ground floor facade relate to the vertical metal street fences and of the adjacent cottages.
- The access to the car hoist door fronting Wright St is expressed with a vertical louvred screen to animate the streetscape and allow partial view in and out increasing pedestrian safety.

#### Air-conditioning to balconies;

- The proposed design has individual air conditioning units located within purpose build cupboards on each apartment balcony.
- The cupboards are integrated within the facades to the street so the units are not visible with a louvred screen adjacent the balcony allows for air flow.
- due to the relatively small building footprint, and the proposed setbacks to the building form a floor by floor plant was considered but not proposed due to lose of amenity to the apartments facades.

#### Roof top amenity

- A proposed communal rooftop area is proposed with an glazed built form setback from three sides to minimise bulk and height from the street.
- The communal rooftop provided additional amenity to the occupants with a shared indoor and outdoor gym area, bbq areas with undercover terrace and a communal internal lounge.
- Roof overhangs to the recessed form provide undercover external areas, solar protect to the north and east glazing as well as articulate the building top.

#### Building articulation;

- the building form and articulation to Wright Street (South) is broken up into 4 forms of 4 and 5 storey which shift between one another and create varying floor plans and alternating balconies. The unit plans to the North have been revised to achieve a similar articulation between forms with balconies alternating to opposite sides.
- The design proposes the building form to be built to boundary along the west and east boundaries with varying setbacks and textures and colours to the masonry. The east boundary wall has been revised to include further articulation with windows to the boundary wall. This provides additional amenity to the apartments and will need to be treated to achieve the fire code requirements with minimal risk of being build out due to the adjacent local heritage places.

#### **1.3 Design Statement**

The following Design statement was provided by Enzo Caroscio Architecture.

"Wright Street Apartments located at 126 Wright St Adelaide aims to create an exclusive and boutique development of 34 apartments with a variety of types with either city skyline or Whitmore Square park views.

The 260 square meter rectangular site with 9.6 m frontage is located on the northern side of Wright Street, near the north east corner of Whitmore Square. The scale and narrowness of the site has progressed the design to be a tall slender building with a unique offering of predominantly 2 apartments per floor, each with a full facade to the street or the north boundary.

The building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe.

From level 4 and above the building is setback 3m from both the north and south boundaries. Each level has 2 apartments serviced from a side core. A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building with 1 bedroom apartments facing north and 2 bedroom apartments facing Wright Street.

Apartment layouts are designed at or above the minimum size requirements with open kitchen and living areas directly adjacent large external balconies. All bedroom have direct access to natural light, ventilation and views, and access to bedrooms and bathrooms are from circulation spaces allowing privacy and separation to living areas. Seven apartment types of studios, 1 bed, 2 bed, and a 3 bedroom loft apartment offer a variety of dwelling types. A communal rooftop garden is also proposed at the top of the building which will provided additional amenity to the occupants with a shared indoor and outdoor gym, undercover barbecue and terrace area and a communal internal lounge.

From street level, the building forms alternating between one another are further articulated by a variety of materials and window treatments. The podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth. Detailed brickwork as well as a continuous street canopy and vertical metal articulated treatments to the ground floor façade provide a more human scale to the street. Above the forms are expressed in either a white textured

concrete surround or a vertical timber board-form grey concrete. Together with the variations of large floor to ceiling window openings, bronze metal in-fill cladding and vertical expressed metal balustrades, creates a visually interesting building addition to the street." (ATTCHMENTB)

### 2.0 DESCRIPTION OF PROPOSAL

The proposal is for the construction of a mixed use development containing a café, parking for 5 car spaces utilising a car hoist system, 34 apartments consisting of 6 x studio apartments, 16 x one bedroom apartments, 11 x two bedroom apartments, 1 three bedroom apartment and upper level enclosed amenities area with roof garden including barbeques, landscaping.

The total building height will be 56.8 metres.

More specifically the proposal includes:

Basement Level 1 - Parking area associated with the car hoist

Access to 2 lifts, pedestrian stairs,

Storage lockers (16 cages)

Plant equipment and fire tank/ booster pump

Ground Floor – Café with access to Wright Street with outdoor seating with canopy over,

Pedestrian access point from Wright Street,

Vehicular access to Car Hoist from Wright Street

Waste storage area

Bike parking for 34 bicycles

Storage lockers (18 cages)

Levels 1 to 31 bedroom apartment with open plan kitchen/living area, bathroom and balconywith area of 9 square metres with an area of 50 square metres

1 Studio Apartment with open living room and bathroom and balcony with area of 6 square metres with an area of 37 square metres.

1 Studio Apartment with open living room and bathroom and balcony with area of 6 square metres with an area of 43 square metres.

Lobby area with access to lifts, stairs and services

Levels 4-7 1 bedroom apartment with kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 50 square metres

2 bedroom apartment with open plan kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 71 square metres

Lobby area with access to lifts, stairs and services

Levels 8 – 11 1 bedroom apartment with kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 49 square metres

2 bedroom apartment with open plan kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 75 square metres

Lobby area with access to lifts, stairs and services

Levels 12 – 14 1 bedroom apartment with kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 50 square metres

2 bedroom apartment with open plan kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 71 square metres

Lobby area with access to lifts, stairs and services

Level 15 - 1 bedroom apartment with kitchen/living area, bathroom and balcony with area of 9 square metres with an area of 50 square metres

Bottom floor of 3 bedroom loft including open plan kitchen/living area, bathroom, stairs and balcony with area of 9 square metres

Lobby area with access to lifts, stairs and services

Level 161 bedroom apartment with kitchen/living area, bathroom and balcony with areaof 9 square metres with an area of 50 square metres

Upper floor of 3 bedroom loft including three bedrooms, bathrooms and stairs

Lobby area with access to lifts, stairs and services

Level 17 Upper level enclosed amenities area with roof garden including bbqs, landscaping,

All apartments will be accessed from internal foyer/corridor areas with entry from the internal lifts and stairs.

The building presents an articulated built form to the Wright Street frontage with the use of recycled brick and glass windows and vertical screening at the ground floor level. The building incorporates a podiums design for the first three stories with a recessed upper storey from the front boundary. The remainder of the building will be constructed of a mix of precast concrete panels, black aluminium panels, glazed windows and black metal cladding assisting in creating a dynamic and appealing façade, strengthened through deep reveal windows and blackness.

The change in materials and the proposed setback from boundaries for upper stories of the building will assist in visually softening the upper storey when viewed from surrounding properties.

The proposal is as detailed in the accompanying reports and proposal plans:

- Proposal Plans and design statement prepared by Enzo Caroscio Architecture dated 08.03.2017
- Waste Management Report prepared by Rawtec (ATTACHMENT C)
- Energy Efficiency Report prepared by BCA Engineers (ATTACHMENT D)
- Details of the Flurparker 570 Car Stacking System. (ATTACHMENT E)
- Services report prepared by BCA Engineers (ATTACHMENT F)
- Stormwater management Plan prepared by Lelio Bibbo (ATTACHMENT G)

It is our opinion that the proposed development has been designed to satisfy the intent of the relevant provisions of the Development Plan and will complement the appearance of the development in the immediate locality.

This will be explored within the content of this supporting statement.

## 3.0 THE SUBJECT LAND AND LOCALITY

#### 3.1 Subject Land



Figure 1 Aerial view of the subject land

The subject land is a relatively flat rectangular shaped allotment with an approximate site area of 260 square metres and a frontage of approximately 9.6 metres to Wright Street.

The site currently contains a single storey building to the rear of the site (northern section) which is constructed of a mix of besser block and colorbond sheeting with a verandah attached to the front of the building.

The remainder of the site is bituminised and is utilised for informal carparking and used for storage of materials.

There is limited vegetation on the site with the exception of a tree located in the south western corner which is not considered regulated or significant.

The site currently has a vehicular crossover in the south eastern corner.

The subject land has connection to all services (power, water, gas, electricity, telephone).



Images 1 and 2 - the subject land when viewed from Wright Street.

#### 3.2 Locality



Figure 2- Aerial View of the locality (Locality shown in yellow. Subject land shown in red)

The extent of the locality is identified in Figure 2 above which extends to the east and west of the subject land along both sides of Wright Street between Morphett Street and Field Place, and development along the southern side of Wright Court to the north.

The immediate locality consists of a mix of residential, commercial, hotel, offices, car parking and medical/consulting rooms which reflects the zoning of the immediate locality.

The land abutting the subject land to the east contains single storey detached dwellings and further single storey detached dwellings to the west. The dwellings to the east at 122 – 124 Wright Street are identified as local heritage places. A three storey building used for hotel/short term accommodation (the Wright Street Lodge), and further single storey offices are located to the west.

A 22 level mixed use development, containing two retail tenancies and a total of 223 apartments is located on the corner of Morphett Street and Wright Street to the west which is currently under construction. There are further single and two storey offices to the east and the Wright Street Hotel on the corner of Wright Street and Field Street as well as other restaurants and cafes.

Development on the southern side of Wright Street contains a mix of single storey detached dwellings, offices and of both single and two storey dwellings which have been converted into offices.

The land to the north of the the subject land along Wright Court contains a mix of uses including carparking, three storey residential flat buildings, single storey row dwellings, offices and buildings associated with the Angelakis Brothers Seafood Markets. There are also examples of restaurants/shops to the east. The central markets and other restaurants are located to the north along Gouger Street. There are other three and four storey residential flat buildings located to the south east of the subject land.





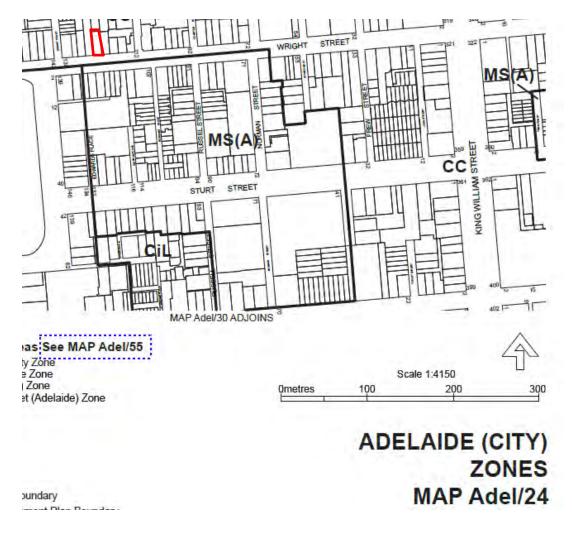
Images 3 to 13 - Mix of development in the immediate locality.

## 4.0 PLANNING ASSESSMENT

#### 4.1 Zoning

The subject land is contained within the Capital City Zone of the Adelaide (City) Development Plan Consolidated 24 September 2015. The subject land is not located within a Policy Area.

The subject land is contained in Zone Map Adel/24 as shown below.



#### 4.2 Kind of Development

The proposal constitutes a 'consent on merit' form of development in the Capital City Zone of the Adelaide (City) Development Plan Consolidated 24 September 2015.

In our view the proposal is acceptable when balanced against all the relevant provisions of the Development Plan and the overall intent of the zone which states

This will be explored within the content of this report.

#### 4.3 DEVELOPMENT PLAN ASSESSMENT

#### 4.3.1 Capital City Zone

#### **Desired Character**

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

There will also be a rich display of art that is accessible to the public and contextually relevant.

Exemplary and outstanding building design is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development. It is our opinion that the proposal satisfies the intent of the Desired Character Statement of the Capital City Zone in that the proposal will provide a mixed use development with additional high quality residential apartments in conjunction a small commercial tenancy.

The proposal will provide appropriate land uses which will be consistent and compatible with the surrounding land uses along Wright Street and surrounds. The proposal presents a podium design to for the first three storeys with materials which reflect the adjoining materials associated with the dwellings creating an interesting pedestrian environment and human scale at ground level of the site.

The proposed design with the upper storey being set in from the front boundary will be constructed of a range of lightweight materials will present a contemporary articulated built form to the street. The form is also consistent with the 22 Storey mixed use development to the West on the corner of Morphett Street and Wright Street which is under construction.

The building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe.

From level 4 and above the building is setback 3m from both the north and south boundaries. Each level has 2 apartments serviced from a side core. A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building with 1 bedroom apartments facing north and 2 bedroom apartments facing Wright Street.

From street level, the building forms alternating between one another are further articulated by a variety of materials and window treatments. The podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth. Detailed brickwork as well as a continuous street canopy and vertical metal articulated treatments to the ground floor façade provide a more human scale to the street. Above the forms are expressed in either a white textured concrete surround or a vertical timber board-form grey concrete. Together with the variations of large floor to ceiling window openings, bronze metal in-fill cladding and vertical expressed metal balustrades, creates a visually interesting building addition to the street.

On this basis it is considered that the proposal appropriately satisfies the intent of the Desired Character Statement of the Zone.

- Objective 2: A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.
- Objective 3: Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.
- Objective 4: City streets that provide a comfortable pedestrian environment.
- Objective 5: Innovative design approaches and contemporary architecture that respond to a building's context.
- Objective 6: Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.
- Objective 8: Development that contributes to the Desired Character of the Zone.

In our opinion, the proposal achieves all relevant objectives for the following reasons:

- The proposed development will offer a range of dwelling types which provide a more affordable housing product in the city compared with traditional dwellings,
- The proposal will provide an increase in dwelling densities on a underutilised site in a prominent location in the city close to Whitmore Square which provides open space and is also a high concentration public transport route,
- The proposal provides additional residential development at medium to high-densities in conjunction with the proposed non-residential development at ground level which is consistent with other non-residential land uses along Wright Street which have an acceptable minimal impact on the environmental quality and amenity of living conditions in the locality, and
- Will provide a built form which will present a well-designed building along Wright which is compatible with existing development and development which is currently under construction/approved for development on the corner of Wright Street and Morphett Street.
- The proposal provides a suitable architectural response on the smaller allotment;
- The building results in a development which contributes to the Desired Character of the Zone

There are also a number of Principles of Development Control of the City Living Zone that are particularly relevant.

These are identified and followed by an assessment below.

Form of Development

# Principle of Development Control 1 The following types of development, or combinations thereof, are envisaged: Residential flat building, Shop or group of shops

The proposed development comprises a mix of residential apartments and a non-residential land use which are envisaged within the Capital City Zone. Residential Flat Buildings and Shops are envisaged in the Zone. The proposal has been designed to satisfy the requirements of the Zone and this will be explored further in the report. On this basis it is considered that the proposal satisfies the requirements of the above Principle of Development Control.

Principle of Development Control 3 Non-residential land uses should be limited to land lawfully used for non-residential purposes and should comprise land uses more in conformity with the intended residential amenity, except where envisaged in the relevant Policy Area. Non-residential land uses should be of a scale and role to not prejudice the envisaged development of non-residential zones.

The proposed small commercial tenancy has been designed to complement the existing mix of nonresidential land uses along Wright Street at ground floor level. The immediate locality includes a range of consulting rooms, offices, other non-residential land uses and the small commercial land use will complement the existing uses along Wright Street aiding in creating vibrancy to the locality. On this basis it is considered that the proposal satisfies the requirements of the above Principle of Development Control.

## Principle of Development Control 4 Development listed as non-complying is generally inappropriate.

The proposal is a merit form of development pursuant to Section 35(5) of the Development Act 1993 and therefore satisfies the above Principle of Development Control.

## Form and Character

Principle of Development Control 5 Development should be consistent with the Desired Character for the Zone.

## Design and Appearance

Principle of Development Control 6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.

Principle of Development Control 7 Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.

Principle of Development Control 8 The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.

Principle of Development Control 10 Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.

Principle of Development Control 11 Other than in the Central Business Policy Area, buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:

(a) relates to the width of the street and achieves a suitable level of enclosure to the public realm;(b) provides a human scale at street level;

(c) creates a well-defined and continuity of frontage;

(d) gives emphasis and definition to street corners to clearly define the street grid;

(e) contributes to the interest, vitality and security of the pedestrian environment;

(f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).

The proposal has been designed to satisfy the intent of the above Principles of Development Control in that the mixed use building has been designed to complement and respect the architectural integrity of adjoining development and provides a development which maximises the development potential of the subject land providing a high quality mixed use development which will provide a positive contribution to the public life of the city. The proposal provides an active street frontage to the cafe, with an architectural form which presents a podium style development which sits comfortably on the site. The design of the building suitably relates to the width of Wright Street, provides a human scale at street level, creates a well-defined frontage to the building, contributes to the interest, vitality and security of the pedestrian environment and achieves pedestrian comfort by minimising micro climatic impacts. On this basis it is considered that the proposal satisfies the intent of the above Principles of Development Control.

Principle of Development Control 13 Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.

Principle of Development Control 14 Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.

With regard to the above Principles of Development Control, the proposal will present a co-ordinated appearance to the Wright Street frontage with well-defined pedestrian and vehicular access points and access to the café at ground. From street level, the building forms alternating between one another are further articulated by a variety of materials and window treatments. The podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth. Detailed brickwork as well as a continuous street canopy and vertical metal articulated treatments to the ground floor façade provide a more human scale to the street. Above the forms are expressed in either a white textured concrete surround or a vertical timber board-form grey concrete. Together with the variations of large floor to ceiling window openings, bronze metal in-fill cladding and vertical expressed metal balustrades, creates a visually interesting building addition to the street. The appropriate use of colours and materials take cues from development in the immediate and wider locality and is consistent with the development on the corner of Wright Street and Morphett Street which is under construction.

#### **Building Height**

Principle of Development Control 19 Development should generally be compatible with the overall desired city form and not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2; unless it meets one or more of the following:

(a) the proposed building is located in one of the following areas:

(i) fronting North Terrace, West Terrace or East Terrace and/or at the junction of two City boulevards shown in Concept Plan Figures CC/1 and 2;

(ii) on an allotment with frontage to Light Square;

(iii) within 200 metres of a high concentration public transport route identified on Map Adel/1 (Overlay 4);

(b) the site area is greater than 1500 square metres and has side or rear vehicle access;

(c) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;

(d) the proposal incorporates the retention and conservation of a character building.

Principle of Development Control 20 Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:

(a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;

(b) the site is adjacent to the City Living Zone or the Adelaide Historic (Conservation) Zone and a lesser building height is required to manage the interface with low-rise residential development;

(c) the site is adjacent to a heritage place, or includes a heritage place;

The above Principles of Development Control provide guidance in relation to building heights. These Principles of Development Control should be considered in the context existing development and development which is currently under construction/approved for development in the immediate and wider locality.

With a maximum proposed height of 56.8 metres the proposal exceeds the 43 metre height shown within the concept plan *CC/1* for the Capital City Zone. The site is not greater than 1500 m<sup>2</sup> and as such the proposal is not considered to satisfy the criteria within point b) of Zone PDC 19 above. The site however is located within 200 metres of a high concentration public transport route and as such qualifies for consideration of additional height under point a) (iii).

The height of the building should be considered within the future development of the Capital City zone on Wright St with proposed future developments occurring at 134 Wright St, 128 Wright St and the Wright St Hotel site. The overall height of the building relates to the building height of 150 Wright Street's lower building form which front Wright Street which is similar in height with 17 storeys and a setback 18th storey above.

The proposal will provide development which is designed to be set away from boundaries as much as possible due to design constraints and has been constructed of lightweight materials to minimise visual impacts and minimise the building bulk. The articulated built form of the proposed building will provide a contemporary built form which provides a high quality public realm at street level whilst providing a well-designed building above.

It is considered that the proposal has been designed to satisfy the intent of the above Principles of Development Control.

## Movement

Principle of Development Control 25 Development should ensure existing through-site and on-street pedestrian links are maintained and new pedestrian links are developed in accordance with Map Adel/1 (Overlay 2A).

The proposal will not alter the existing footpaths and will also maintain the location of the existing crossover to the proposed carparking entry from Wright Street. On this basis it is considered that the proposal will maintain the existing pedestrian links along Wright Street in accordance with the above Principle of Development Control.

Principle of Development Control 26 Car parking should be provided in accordance with Table Adel/7.

Principle of Development Control 29 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:

(a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;

(b) complement the surrounding built form in terms of height, massing and scale; and

(c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

The subject site is located at 126 Wright Street within the Capital City Zone and does not generate a minimum car parking requirement. The proposal will provide a total of 5 car parking spaces utilising a stacker system (details of the car stacker system is contained in **ATTACHMENT E**) as well as additional 34 bicycle parking spaces at ground level. Access to both the car parking area and bicycle storage area will be from Wright Street in keeping with the intent of the above Principle of Development Control. The design of the built form results in a development which maximises and addresses the Wright Street frontage and the location and use of the existing crossover will result in suitable traffic generation which will not impact on residential amenity.

Any additional traffic generated by the proposed development will not compromise the safety or function of the surrounding road network. This will be explored in more detail within the report but it is considered that the proposal satisfies the requirements of the above Principles of Development Control relating to access to parking and service areas.

## Advertising

Principle of Development Control 30 Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.

Principle of Development Control 31 In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.

Principle of Development Control 32 There should be an overall consistency achieved by advertisements along individual street frontages.

With regard to the above Principles of Development Control relating to advertising on the subject land, the proposal does not include the provision of signage or advertisements to the proposed commercial tenancy. A separate application will be lodged with Council and assessed on its merits at a later date should the application be approved.

# 4.3.2 COUNCIL WIDE ASSMENT

The following section will assess the relevant Council Wide provisions of the Development Plan which relate to the proposed development.

# **City Living**

Objective 6: A variety of housing options which supplement existing types of housing and suit the widely differing social, cultural and economic needs of all existing and future residents.

Principle of Development Control 5 Development should comprise of a range of housing types, tenures and cost, to meet the widely differing social and economic needs of residents.

Principle of Development Control 7 Residential development should be designed to be adaptable to meet people's needs throughout their lifespan to ensure that changes associated with old age, special access and mobility can be accommodated.

It is considered that the proposal satisfies the above Objectives and Principles of Development Control in that:

- The proposed development will provide 36 apartments made up of a mix of studio and single bedroom apartments through to three bedrooms apartments. The apartment mix provides a range of apartment floor areas ranging from 37 square metres to 139 square metres.
- Whilst the development does not cater for 'affordable' housing, the development offers a mix of apartments which will provide more affordable options when compared with traditional residential allotments in the immediate locality. The variety of the apartments will accommodate the differing social and economic needs of a range of residents.

- The proposal will provide a small commercial activity at ground level which will service the local residents and wider community.
- The proposal will provide high quality apartments with well-designed floor layouts providing appropriately sized living areas and balconies to each apartment with adequate provision of car parking (where allocated), storage areas and bicycle parking.
- The proposed development will add to the variety of housing options within the City and is consistent with the requirements of the Development Plan.
- Further each of the apartments are considered to satisfy the intent of Council Wide Principle 7 in that each of the dwellings is of a sufficient size and configuration to meet people's needs throughout their lifespan.
- Each dwelling is provided with access from an internal lift and stars which allows for ease of access and mobility.

## Objective 13: Building set-backs that complement the prevailing set-backs in the street.

Principle of Development Control 22 To reinforce the pattern and character of individual streets, setbacks of low scale residential development should be consistent with the prevailing set-back in the locality in relation to:

- (a) street frontages; and
- (b) side and rear boundaries.

With regard to the above Objective and Principle of Development Control, the design of the building has been amended to reflect the front building setbacks of adjoining properties along Wright Street. The building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe. On this basis we consider that the proposal satisfies the intent of the above Principle of Development Control.

Objective 22: Medium to high scale residential (including student accommodation) or serviced apartment development that:

(a) has a high standard of amenity and environmental performance;(b) comprises functional internal layouts;

# (c) is adaptable to meet a variety of accommodation and living needs; and(d) includes well-designed and functional recreation and storage areas.

The proposed development will provide a high standard of amenity for its residents. The range of apartment types will provide functional layouts with private balconies and dedicated storage areas in the basement and ground floor, bike parking in the ground floor of the building and dedicated vehicle parking (where allocated) in the stacker system accessed from the ground level. The proximity of the site to the open space in Whitmore Square will also add to the amenity of the residents. Apartment layouts are designed at or above the minimum size requirements with open kitchen and living areas directly adjacent large external balconies. All bedrooms have direct access to natural light, ventilation and views, and access to bedrooms and bathrooms are from circulation spaces allowing privacy and separation to living areas. Seven apartment types of studios, 1 bed, 2 bed, and a 3 bedroom loft apartment offer a variety of dwelling types. A communal rooftop garden is also proposed at the top of the building which will provided additional amenity to the occupants with a shared

The design of the buildings will include functional internal layouts and will is adaptable to meet a variety of accommodation and living needs. On this basis we consider that the proposal satisfies the intent of the above Objective.

## **Building Entrances**

Principle of Development Control 48 Entrances to medium to high scale residential or serviced apartment development should:

- (a) be oriented towards the street;
- (b) be visible and easily identifiable from the street; and
- (c) provide shelter, a sense of personal address and transitional space around the entry.

Principle of Development Control 49 Entrances to individual dwellings or apartments within medium to high scale residential or serviced apartment development should:

(a) be located as close as practical to the lift and/or lobby access and minimise the need for long access corridors;

- (b) be clearly identifiable; and
- (c) avoid the creation of potential areas for entrapment.

The proposal provides a clearly defined and covered entry point to the building that is directly orientated and accessible from the Wright Street frontage. The proposed entrance will not create any potential areas for entrapment and the pedestrian entrance provides a sense of personal address and transitional space around the entry point. Further access is gained from the café from Wright Street.

Entry to each apartment is provided as near as practical to the lift and stairwell. It is considered that the length and configuration of internal halls are appropriate given they are unlikely to create entrapment areas given the access restrictions within the building.

Accordingly, we are of the view that the proposed development sufficiently accords with Council Wide Principles 48 and 49.

## Daylight, Sunlight and Ventilation

Principle of Development Control 50 Medium to high scale residential or serviced apartment development should be designed to maximise opportunities to facilitate natural ventilation and capitalise on natural daylight and minimise the need for artificial lighting during daylight hours.

Principle of Development Control 51 Medium to high scale residential or serviced apartment development should be designed and located to maximise solar access to dwellings and communal open space on the northern facade.

Principle of Development Control 52 Ceiling heights that promote the use of taller windows, highlight windows, fan lights and light shelves should be utilised to facilitate access to natural light, improve daylight distribution and enhance air circulation, particularly in dwellings with limited light access and deep interiors.

Principle of Development Control 53 All new medium to high scale residential or serviced apartment development should have direct ventilation and natural light.

Principle of Development Control 54 The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8 metres.

Principle of Development Control 56 Medium to high scale residential or serviced apartment development should be designed to ensure living areas, private open space or communal open space, where such communal open space provides the primary area of private open space, are the main recipients of sunlight.

Principle of Development Control 57 Medium to high scale residential or serviced apartment development should locate living areas, private open space and communal open space, where such communal open space provides the primary area of private open space, where they will receive sunlight and, where possible, should maintain at least two hours of direct sunlight solar time on 22 June to:

(a) at least one habitable room window (excluding bathroom, toilet, laundry or storage room windows);

(b) to at least 20 percent of the private open space; and

(c) communal open space, where such communal open space provides the primary private open space for any adjacent residential development.

Principle of Development Control 58 Natural cross ventilation of habitable rooms should be achieved by the following methods:

(a) positioning window and door openings in different directions to encourage cross ventilation from cooling summer breezes;

(b) installing small low level windows on the windward side and larger raised openings on the leeward side to maximise airspeed in the room;

(c) installing higher level casement or sash windows, clerestory windows or operable fanlight windows to facilitate convective currents;

(d) selecting windows which the occupants can reconfigure to funnel breezes such as vertical louvered, casement windows and externally opening doors;

(e) ensuring the internal layout minimises interruptions to airflow;

(f) limiting building depth to allow for ease of cross ventilation; and/or

(g) draught proofing doors, windows and other openings.

With regard to the above Principles of Development Control, it is considered that each apartment will be provided with adequate access to sunlight and daylight from balconies and windows. Given the orientation of the building, the northern facing balconies will allow adequate sunlight to the habitable areas of the apartments. The southern facing apartments all have access to open windows and balconies. Each apartment will have access to windows and doors to balconies to allow for cross ventilation and access to light and given the depth and design of each apartment and all habitable rooms will have access to light. The design of the apartments will result in each dwelling being provided with adequate natural light and the use of light wells is not required.

On this basis it is considered that the proposed development is considered to provide for appropriate access to daylight and sunlight, with opportunities for passive ventilation to reduce the need for mechanical conditioning which satisfies the intent of the above Principles of Development Control.

#### Private Open Space

Principle of Development Control 59 Medium to high scale residential development and serviced apartments should provide the following private open space:

(a) studio (where there is no separate bedroom): no minimum requirement but some provision is desirable.

(b) 1 bedroom dwelling/apartment: 8 square metres.

(c) 2 bedroom dwelling/apartment: 11 square metres.

(d) 3+ bedroom dwelling/apartment: 15 square metres.

A lesser amount of private open space may be considered appropriate in circumstances where the equivalent amount of open space is provided in a communal open space accessible to all occupants of the development.

Private open space for 2 or more bedroom dwellings/apartments may be divided into different areas whilst private open space for studios or 1 bedroom dwelling/apartments should be in a single area.

Areas used for parking of motor vehicles are not included as private open space.

Principle of Development Control 60 Medium to high scale residential (other than student accommodation) or serviced apartment development should ensure direct access from living areas to private open space areas, which may take the form of balconies, terraces, decks or other elevated outdoor areas provided the amenity and visual privacy of adjacent properties is protected.

Principle of Development Control 61 Other than for student accommodation, private open space should have a minimum dimension of 2 metres and should be well proportioned to be functional and promote indoor/outdoor living.

Principle of Development Control 62 Balconies should be integrated into the overall architectural form and detail of the development and should:

(a) utilise sun screens, pergolas, shutters and openable walls to control sunlight and wind;

(b) be cantilevered, partially cantilevered and/or recessed in response to daylight, wind, acoustic and visual privacy;

(c) be of a depth that ensures sunlight can enter the dwelling below, and

(d) allow views and casual surveillance of the street while providing for safety and visual privacy.

Principle of Development Control 63 Secondary balconies, including Juliet balconies or operable walls with balustrades should be considered, subject to overlooking and privacy, for additional amenity and choice.

Principle of Development Control 65 The incorporation of roof top gardens is encouraged providing it does not result in unreasonable overlooking or loss of privacy.

The development is provided with adequate private open space in the form of balconies which are directly accessible from living areas with the larger apartments also providing additional balconies to bedrooms. The areas of the balconies range from 6 square metres for the studio apartments though to 9 square metres which is slightly less than the areas envisaged by PDC 59. This is offset by the upper storey communal area with a total area of approximately 150 square metres which adds to the areas of open space available to the occupants of the building.

The balconies are integrated within the architectural form of the built form and have been designed to be accessible from main living areas and bedrooms. No sun screens have been incorporated into the design of the balconies however the location and design of the balconies and windows will allow for winter sun into bedrooms and living areas. The balconies have been designed to maintain visual privacy for residents of adjoining sites. Should the details of screening to balconies be required, we request that this be treated as a reserved matter and details be provided prior to the issuing of Development Approval.

On this basis it is considered that the proposal provides adequate private open space in the form of private balconies and communal areas in accordance with the intent of the above Principles of Development Control.

## Visual Privacy

Principle of Development Control 66 Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.

Principle of Development Control 67 A habitable room window, balcony, roof garden, terrace or deck should be set-back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.

The proposed development has been designed to minimise overlooking to adjoining properties with no windows along the western facade and some windows to the upper storey of the western side of the proposed building. The windows along the eastern façade are associated with the bathrooms in levels 4 -7 and 12 -14. The other windows are associated with the bedrooms. It should be noted that whilst there are guidelines to minimise overlooking for low and medium scale development, the guidelines for overlooking from medium and high scale development are less strict. For medium to high scale development, overlooking to habitable rooms is to be minimised, whereas there is no requirement to minimise overlooking of private open space.

It is considered that the impacts to adjoining properties in terms of overlooking would be acceptable based on the above provisions relating to visual privacy.

Whilst Principle of Development Control 67 recommends a setback of 3 metres for all balconies and habitable room windows from boundaries, the proposal provides a rear setback (northern setback) of 3 metres to the built form with some slight intrusion of balconies in this setback. The minor variance from the recommended setback in this instance provides sufficient setback from the northern boundary to not restrict the development of the adjoining site with the provision of open balconies and an articulated built form which does not present a bulky appearance. The building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another.

Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe.

From level 4 and above the building is setback 3m from both the north and south boundaries. Each level has 2 apartments serviced from a side core. A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building with 1 bedroom apartments facing north and 2 bedroom apartments facing Wright Street

Further the proposal maintains the development pattern of boundary to boundary development to side boundaries which is prevalent in the immediate locality and will result in an acceptable impact on the adjoining properties in terms of loss of light, privacy and outlook. Given the proposal will have an acceptable impact in terms of loss of amenity and privacy; it is considered that this variance from the recommended setback is appropriate and satisfies the intent of the above Principles of Development Control.

#### Noise and Internal Layout

Principle of Development Control 68 Medium to high scale residential or serviced apartment development close to high noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.

Principle of Development Control 69 Attached or abutting dwellings/apartments should be designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.

The development will provides for reasonable levels of amenity for future residents with respect to impacts from adjoining properties to ensure the lawful operation of adjoining non-residential land uses in the immediate locality.

Appropriate treatment measures will be undertaken to ensure that the residential apartments will have adequate acoustic treatment to windows and sliding doors to minimise any impacts from the traffic and adjoining non-residential land uses proposed on the site and surrounding the subject land in the locality. The building will be constructed to minimise the transmission of sounds between apartments in accordance with Part F5 of the Building Code of Australia. The final detailed design of the proposal will be submitted at the Building Rules Consent stage of the development.

The proposed non-residential land uses on the site at ground level of the building will satisfy the requirements of the Environmental Protection Agency (EPA) Noise Protection Policy and hours of operation can be conditioned should this be required to ensure compliance with this Policy.

All plant equipment associated with the proposal will be designed and appropriately managed to ensure there is an acceptable impact on the amenity of the adjoining land owners.

## Minimum Unit Sizes

Principle of Development Control 70 Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:

(a) studio (where there is no separate bedroom): 35 square metres.

(b) 1 bedroom dwelling/apartment: 50 square metres

(c) 2 bedroom dwelling/apartment: 65 square metres

(d) 3+ bedroom dwelling/apartment: 80 square metres plus an additional 15 square metres for every additional bedroom over 3 bedrooms.

Note: Dwelling/apartment "unit size" includes internal storage areas but does not include balconies or car parking as part of the calculation.

The proposed development provides a range of apartment types and sizes with the smallest studio apartments having a floor area of 43 square metres through to the largest three bedroom apartment having a floor area of 139 square metres All apartments have a floor area that exceeds the minimum floor area recommended by Principle of Development Control 70.

Principle of Development Control 71 Internal structural columns should correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.

The internal structural columns have been designed to be incorporated within the internal walls to ensure that the space inside the apartments is useable in accordance with Principle of Development Control 71.

## Adaptability

Principle of Development Control 72 Within medium to high scale residential or serviced apartment development, dwelling/apartment layouts should be adaptable to accommodate:

(a) a range of activities and privacy levels between different spaces;

(b) flexible room sizes and proportions;

(c) efficient circulation to optimise the functionality of floor space within rooms; and

(d) the future reuse of student accommodation as residential apartments through a design and layout that allows individual apartments to be reconfigured into a larger dwelling or other alternative use.

Each apartment has been designed with a useable floor layout with all apartments providing an open kitchen/living/dining areas and separate bedrooms with ensuite accessed from the main living areas.

The larger apartments provide a more flexible floor layout which provides larger rooms which allow for a range of flexible uses in keeping with the intent of the above Principle of Development Control.

## Outlook

Principle of Development Control 73 All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.

Note: Outlook is a short range prospect and is distinct from a view which is more extensive and long range to particular objects or geographic features.

Principle of Development Control 74 Light wells may be used as a source of daylight, ventilation, outlook and sunlight for medium to high scale residential or serviced apartment development provided that:

(a) living rooms do not have lightwells as their only source of outlook;

(b) lightwells up to 18 metres in height have a minimum horizontal dimension of 3 metres or 6 metres if overlooked by bedrooms; and

(c) lightwells higher than 18 metres in height have a minimum horizontal dimension of 6 metres or 9 metres if overlooked by bedrooms.

Each apartment has been designed with an optimised outlook from internal living areas and balconies. Each apartment features windows and an open balcony which provides an external outlook.

The development does not rely on light-wells to achieve an appropriate outlook, with the development's aspect and design taking advantage of the site's location near Whitmore Square and proximity to the City Centre. For these reasons, each of the apartments is considered to have an appropriate outlook consistent with the above Principles of Development Control.

## **On-Site Parking and Fencing**

Objective 23: Safe and convenient on-site car parking for resident and visitor vehicles.

Principle of Development Control 75 - To ensure an adequate provision of on-site parking, car parking should be provided for medium to high scale residential (other than student accommodation) or serviced apartment development in accordance with Table Adel/7.

The subject site is located at 126 Wright Street within the Capital City Zone and does not generate a minimum car parking requirement. The proposal will provide a total of 5 car parking spaces utilising a stacker system as well as additional 34 bicycle parking spaces at ground level.

The Flurparker 570 carparking system is a fully automated system for parking of vehicle and allows for stacked parking on the lower levels of the building. Access to both the car parking area and bicycle storage area will be from Wright Street in keeping with the intent of the above Principle of Development Control. The proposal provides sufficient parking for the proposed uses on the site and on this basis satisfies the intent of the above Principle of Development Control in providing adequate parking for both bicycles and vehicles on the subject land. Further the site is located in close proximity to a range of public transport options.

Principle of Development Control 76 Garages and parking structures associated with medium to high scale residential or serviced apartment development should be located so that they do not visually dominate the street frontage.

Principle of Development Control 77 Car parking areas should be designed and located to:

- (a) be close and convenient to dwellings/apartments;
- (b) be lit at night;
- (c) be well ventilated if enclosed;
- (d) avoid headlight glare into windows; and
- (e) clearly define visitor parking.

Principle of Development Control 78 Where garages are located within a basement or undercroft:

(a) the width of access driveways should be kept to a minimum and should not detract from the streetscape;

(b) driveways should be designed to ensure safe and convenient access and egress;

(c) access should be restricted to one driveway or one point of access and egress;

(d) vehicles should be able to safely exit in a forward direction and should not compromise pedestrian safety or cause conflict with other vehicles; and

(e) the height of the car park ceiling should not exceed one metre above the finished ground floor level to ensure minimal impact on the streetscape.

The proposed development provides car parking incorporating the Flurparker 570 carparking system accessed from Wright Street utilising the existing crossover point. The design of the building results access to the parking area being integrated into the building design and will not dominate the Wright Street streetscape. The proposal will provide appropriate access and egress to the car stacker system utilising the existing crossover to the site. On this basis it is considered that the location and design of the carpark is considered appropriate in line with the development plan requirements.

## Storage Areas

Principle of Development Control 80 Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:

(a) a common mail box structure located close to the main pedestrian entrance;
(b) areas for the storage and collection of goods, materials, refuse and waste including facilities to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view; and

(c) external clothes drying areas for residential dwellings that do not incorporate ground level open space.

Principle of Development Control 81 Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:

- (b) 1 bedroom dwelling/apartment: 8 cubic metres
- (c) 2 bedroom dwelling/apartment: 10 cubic metres
- (d) 3+ bedroom dwelling/apartment: 12 cubic metres

50 percent of the storage space should be provided within the dwelling/apartment with the remainder provided in the basement or other communal areas.

With regard to the above Principles of Development Control, the development provides access to the waste disposal area on the ground floor as well as internal storage areas for each apartment at ground level and in the basement. External clothes drying areas for each dwelling will be within the balconies for each apartment.

In relation to storage, each apartment is provided with adequate internal space for storage within bedrooms (with either built-in or walk-in robes), study/office areas, kitchens and bathrooms. Each apartment has also been provided with a storage area on the ground floor and in the basement. Further the storage of bicycles will be accommodated in the allocated bike cage accessed from the ground level. It considered that the proposal provides adequate storage within the apartments and in the storage lockers in accordance with the intent of the above Principle of Development Control.

## Crime Prevention through Urban Design

Objective 24: A safe and secure, crime resistant environment that:

(a) ensures that land uses are integrated and designed to facilitate natural surveillance;

(b) promotes building and site security; and

(c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

Principle of Development Control 82 Development should promote the safety and security of the community in the public realm and within development. Development should:

(a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:
(i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;

(ii) avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;

(iii) arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;

(iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;

(v) creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity; (vi) locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;

(vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and

(viii) ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff e.g. by surveillance of lift and toilet areas within car parks.

(b) provide access control by facilitating communication, escape and path finding within development through legible design by:

(i) incorporating clear directional devices;

(ii) avoiding opportunities for concealment near well-travelled routes;

(iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;

(iv) use of devices such as stainless steel mirrors where a passage has a bend;

(v) locating main entrances and exits at the front of a site and in view of a street;

(vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and

(vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.

(c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:

*(i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;* 

(ii) dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and

(iii) locating main entrances and exits at the front of a site and in view of a street.

(d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:

*(i)* avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;

(ii) using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;

(iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;
(iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;

(v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and

(vi) use of robust and durable design features to discourage vandalism.

Principle of Development Control 83 Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.

# Principle of Development Control 84 To maximise security and safety, buildings should be designed to minimise access between roofs, balconies and windows of adjacent buildings.

In relation to the above Principles of Development Control relating to Crime Prevention through Urban Design the proposal uses both passive and active methods to provide surveillance of the site through the casual surveillance at street level with the development addressing the Wright Street frontage of the site.

The proposed commercial use in addition to the vehicular and pedestrian entrances to the building will provide activation of the Wright Street frontage with activity on the site occurring in the mornings, evenings and weekends. Further the balconies of the upper storey apartments will provide casual surveillance of the subject land and surrounding locality.

Appropriate lighting will be provided to the site and front entrance of the building to provide building and site security and will not create entrapment spots which will allow for permeable views to and from the site.

No details have been provided in relation to the use of surveillance cameras, however it is envisaged that the building will be provided with surveillance cameras at the entrance which can be directly connected to apartments through intercom systems in accordance with the Development Plan requirements.

Access control escape and path finding within development is managed through a range of options including providing clear sightlines for both pedestrian and vehicle movement pathways, providing minimal opportunities for concealment within the main building. The pedestrian entrance to the building is located in clear view of the street. The proposal provides pedestrian access from Wright Street and provides multiple options to access and exit the site. The main lifts and stairwells are located within the ground floor pedestrian hallway with direct access and view through to Wright Street.

No details have been provided in relation to the use of physical access control restrictions but it is envisaged that entry to the foyer and lifts as well as parking area will be restricted through the use of swipe/ access cards to provide secure access for residents. It is also common for apartments to have an intercom or video intercom system directly fed into the apartments to allow for secure visitor access. Should this information be required, the final details of any physical access control restrictions and camera surveillance systems of this can be conditioned accordingly to satisfy the requirements of the Development Plan. The design and siting of the proposed building results in legible and permeable areas that allow residents and visitors to the access the site with clear sightlines and the ability to assess surroundings in accordance with the above Development Plan requirements.

The design of the building will ensure that access between roofs, balconies and windows of adjacent buildings will not be possible.

Further all materials that are presented to the street are robust and durable, and will be maintained to a high standard to assist in the discouragement of vandalism.

For all of the reasons outlined above, the proposed development is considered to sufficiently satisfy the Principles relating to Crime Prevention through Urban Design and promotes safety and security of the community in the public realm.

## Noise.

#### **Noise Emissions**

Objective 26: Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.

#### **Noise Sources**

Principle of Development Control 89 Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.

Principle of Development Control 90 Development of licensed premises or licensed entertainment premises or similar in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone should include noise attenuation measures to achieve the following when assessed at the nearest existing or envisaged future noise sensitive development:

(a) the music noise (L10, 15 min) is:

*(i)* less than 8 dB above the level of background noise (L90, 15 min) in any octave band of the sound spectrum; and

(ii) less than 5 dB (A) above the level of background noise (LA 90, 15 min) for the overall (sum of all octave bands) A-weighted level.

Objective 27: Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

Principle of Development Control 93 Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed

(a) 55 dB(A) during daytime (7.00 am to 10.00 pm) and 45 dB(A) during night time (10.00 pm to 7.00 am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

(b) 50 dB (A) during daytime (7.00 am to 10.00 pm) and 40 dB (A) during night time (10.00 pm to 7.00 am) in or adjacent to a City Living Zone, the Adelaide Historic (Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

Principle of Development Control 94 To ensure minimal disturbance to residents:

(a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:

(i) after 10.00 pm; and

(ii) before 7.00 am Monday to Saturday or before 9.00 am on a Sunday or Public Holiday.

(b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00 pm as defined by the limits recommended by the World Health Organisation.

## **Noise Receivers**

Principle of Development Control 95 Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.

Principle of Development Control 96 Noise sensitive developments in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.

Principle of Development Control 97 Noise sensitive developments adjacent to noise sources should include noise attenuation measures to achieve the following:

(a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;

(b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 - 'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors'; and

(c) noise level in any bedroom, when exposed to music noise (L10) from existing entertainment premises, being:

(i) less than 8 dB above the level of background noise (L90, 15 min) in any octave band of the sound spectrum; and

(ii) less than 5 dB (A) above the level of background noise (LA90, 15 min) for the overall (sum of all octave bands) A-weighted levels.

Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate. Principle of Development Control 98 Attached dwellings/serviced apartments should be designed to minimise the transmission of sound between dwellings/serviced apartments and should particularly protect bedrooms from possible noise intrusion.

Principle of Development Control 99 The number of dwellings/serviced apartments within a development sharing a common entry should be minimised to limit noise generation in internal access ways.

With regard to the above Objectives and Principles of Development Control, specific treatment measures will be required to ensure that the residential apartments proposed will have adequate acoustic treatment to windows and sliding doors to minimise any impacts from traffic and adjoining non-residential land uses proposed on the site and surrounding locality.

The building will be constructed to minimise the transmission of sounds between apartments in accordance with Part F5 of the Building Code of Australia. The final detailed design of the proposal will be submitted at the Building Rules Consent stage of the development.

The proposed non-residential land use on the site at ground level of the building will comply with the requirements of the Environmental Protection Agency (EPA) Noise Protection Policy and hours of operation can be conditioned should this be required to ensure compliance with this Policy.

All plant equipment associated with the proposal will be designed and appropriately managed to ensure there is an acceptable impact on the amenity of the adjoining land owners.

Hours of deliveries to the site and hours for waste collection can be conditioned to satisfy the above requirements prescribed by the Development Plan.

For all of the reasons outlined above, the proposed development is considered to sufficiently satisfy the Principles relating to Noise.

## Waste Management

Objective 28: Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.

Principle of Development Control 101 A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.

Principle of Development Control 102 A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.

Principle of Development Control 104 Development should not result in emission of atmospheric, liquid or other pollutants, or cause unacceptable levels of smell and odour which would detrimentally affect the amenity of adjacent properties or its locality. Land uses such as restaurants, shops, cafés or other uses that generate smell and odour should:

(a) ensure extraction flues, ventilation and plant equipment are located in appropriate locations that will not detrimentally affect the amenity of adjacent occupiers in terms of noise, odours and the appearance of the equipment;

(b) ensure ventilation and extraction equipment and ducting have the capacity to clean and filter the air before being released into the atmosphere; and

(c) ensure the size of the ventilation and extraction equipment is suitable and has the capacity to adequately cater for the demand generated by the potential number of patrons.

A waste management report has been prepared by Rawtec. (ATTACMENT C)

Based on the calculations and methodology presented in the report from Rawtec in relation to waste generation and collection at the proposed high density residential development at 126 Wright Street, Adelaide the following can be concluded:

To achieve effective waste and recycling management at the site, the table below outlines the recommended waste and recycling services that should be collected from the development. These recommended services include the waste and recycling services that were indicated as preferred by the Client, as well as, additional services that are required/desired in the policy, design guidelines, and/or operational requirements.

	WMS Step	WMS Notes*
Waste storage and transfer pathways for: • General Waste • Co- mingled Recycling • Organics (Food) Recycling	Step 1 – User storage	All residential apartments would have small-medium bins (with bags if required) to sort, dispose and store waste. For example: • A 20-40L general waste bin (with bin bag);
		A 20-40L litre comingled recycling bin; and
		<ul> <li>A 6 litre organics bench-top or kitchen caddy (with a compostable bag).</li> <li>General waste and co-mingled recycling</li> </ul>
	Step 2 – Transfer pathway to common disposal area	Single chute with diverter with chute disposal locations on each level.     Organics (food) recycling
		<ul> <li>Drop-off point via an in-wall waste chute on Ground Floor Bin Storage Room which is adjacent to the lifts.</li> </ul>
		<ul> <li>The Ground Floor area would also contain a pigeonhole/storage shelf for the temporary storage of the kitchen caddies, for when residents have dropped-off their organics waste as they are leaving the building and intended on collecting the caddy on their way back up to their apartment upon their return, minimizing trips up and down the lifts for waste and recycling disposal.</li> </ul>
	Step 3 – Aggregation and Storage	General waste and co-mingled recycling
		<ul> <li>Waste and recycling travels down a single chute, diverts (via the attached diverter) into either a large (660L) waste bin or a large (660L) co-mingled recycling bin, within the Bin Storage Room.</li> <li>Organics (food) recycling</li> </ul>
		<ul> <li>Organics (in compostable bags) dropped off into the in-wall waste chute, would then be deposited into a 240L organics (food) recycling bin.</li> </ul>
	Step 4 – Bin presentation and Collection	<ol> <li>The Waste and Recycling Collection Provider would park their collection vehicle in a designated on-street loading zone in front of the development on Wright Street.</li> </ol>
		<ol><li>Bins would be collected directly from within the Bin Storage Room and would be emptied into the collection vehicle.</li></ol>
		3. The collection contractor would then return the bins to the Bin Storage Room.

The proposed number of bins are deemed sufficient and the waste storage area proposed on the ground floor is deemed sufficient for the proposed development. The proposal incorporates a dedicated area for waste collection at ground level which will allow for the on-site collection and sorting of recyclable materials and refuse for all occupants of the building.

Construction waste will be minimised through the construction of the building through the use of prefabricated items that reduce the need to cut material on site. All construction waste will be sorted to enable the recycling of construction waste in accordance with the requirements of Principle of Development Control 102. Therefore, it is considered that the proposal satisfies the intent of the above Principles of Development Control relating to waste management.

## **Energy Efficiency**

Objective 30: Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

Principle of Development Control 106 Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:

(a) providing an internal day living area with a north-facing window, other than for minor additions\*, by:

(*i*) arranging and concentrating main activity areas of a building to the north for solar penetration; and (*ii*) placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.

(b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;

(c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;(d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;

(e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;

(f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;

(g) providing an external clothes line for residential development; and

(h) use of landscaping.

Principle of Development Control 107 All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.

Principle of Development Control 108 Energy reductions should, where possible, be achieved by the following:

(a) appropriate orientation of the building by:

(i) maximising north/south facing facades;

(ii) designing and locating the building so the north facade receives good direct solar radiation;

(iii) minimising east/west facades to protect the building from summer sun and winter winds;

(iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or

(v) minimising the ratio of wall surface to floor area.

(b) window orientation and shading;

(c) adequate thermal mass including night time purging to cool thermal mass;

(d) appropriate insulation by:

(i) insulating windows, walls, floors and roofs; and

(ii) sealing of external openings to minimise infiltration.

(e) maximising natural ventilation including the provision of openable windows;

(f) appropriate selection of materials, colours and finishes; and

(g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration\*, wind power, fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

Principle of Development Control 109 Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.

Principle of Development Control 110 Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.

Principle of Development Control 111 New buildings should be readily adaptable to future alternative uses.

Principle of Development Control 112 Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.

## **Residential Development**

Principle of Development Control 113 New residential development and residential extensions should be designed to minimise energy consumption and limit greenhouse gas emissions.

Principle of Development Control 114 Development is encouraged to avoid heat loss by incorporating treatments, such as double glazing of windows along the southern elevation, or by minimizing the extent of windows facing south.

The proposed development has been designed to exceed the minimum requirements of the Building Code of Australia. With regard to the above Principles of Development Control, the building utilises both passive and active design techniques to ensure appropriate thermal comfort for occupants of the development. The design of the building provides a range of techniques incorporated into the building. This includes designing the location of windows (and balconies) to minimise summer sun and maximise winter sun, allowing natural ventilation and sunlight into all living areas and bedrooms, provision of high performance insulation and glazing, and full compliance with Section J Energy Efficiency of the Building Code of Australia. **(Refer to ATTACHMENT D)** 

Further design features which will be incorporated include zoning of air conditioning within the units, energy efficient hot water services, low energy lighting with energy efficient controls and timers and high efficiency elevators.

The design of the roof will allow for provision of some photovoltaic cells which may be used to assist in powering common areas such as lobby lighting, ventilation and air conditioning in accordance with Principle of Development Control 109.

On this basis, it is considered that the proposal satisfies the requirements of the Development Plan in relation to energy efficiency with the final details of the design to be provided at the Building Rules Consent stage.

## Micro-climate and Sunlight

Objective 33: Buildings which are designed and sited to be energy efficient and to minimise microclimatic and solar access impacts on land or other buildings.

Objective 34: Protection from rain, wind and sun without causing detriment to heritage places, street trees or the integrity of the streetscape.

Principle of Development Control 119 Development should be designed and sited to minimise microclimatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.

Principle of Development Control 120 Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.

Principle of Development Control 121 Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent Residential Zones.

Principle of Development Control 122 Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.

Principle of Development Control 124 Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.

Principle of Development Control 125 Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

Shadow diagrams have been provided as part of the application documentation which demonstrates the impacts on the adjoining properties.

The shadow diagrams demonstrates the worst case scenario of overshadowing during the winter solstice to the adjoining properties. The diagrams demonstrate that the adjoining properties will have direct access to sunlight during different periods of the day.

The relevant provisions of the Development Plan relating to daylight and sunlight aim to protect access to daylight and sunlight and the amenity of neighbouring premises. Further the provisions relating to microclimate and sunlight envisage that development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.

Based on the shadow diagrams provided, in the worst case scenario of the winter solstice, it is considered that the proposal has been designed and site to allow adequate and appropriate access of adjoining properties to sunlight for the majority of the day based on the Development Plan requirements.

It is considered that the proposal satisfies the intent of the above Objectives and Principles of Development Control relating to micro climate and sunlight in that

- The proposal provides covered balconies to each apartment to provide protection from rain wind and sun.
- The shadow diagrams provided indicate that the proposal will provide an adequate level of daylight to adjoining properties, whilst minimising overshadowing of adjoining buildings and public and private outdoor spaces. It should be noted that there are no quantitative overshadowing guidelines for medium and high scale development. The shadow diagrams indicate that the design of the proposed development is considered to sufficiently maintain an appropriate level of daylight and sunlight to neighbouring buildings.

 Whilst the development will provide shadowing onto adjoining properties during certain periods of the day, given the location of the building, the proposed development will predominately cast a shadow to the south of the subject land and it is considered that the proposal will not detrimentally impact on the amenity of adjoining properties.

On this basis it is considered that the proposal satisfies the requirements of the above Objectives and Principles of Development Control relating to micro climate and sunlight.

#### Stormwater Management

Objective 35: Development which maximises the use of stormwater.

Objective 36: Development designed and located to protect stormwater from pollution sources.

Objective 37: Development designed and located to protect or enhance the environmental values of receiving waters.

Objective 38: Development designed and located to prevent erosion.

Objective 39: Development designed and located to prevent or minimise the risk of downstream flooding.

Principle of Development Control 126 Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.

Principle of Development Control 127 Development affecting existing stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.

Principle of Development Control 128 Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.

Principle of Development Control 129 Development should incorporate appropriate measures to minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria and litter and other contaminants to the stormwater system and may incorporate systems for treatment or use on site.

Principle of Development Control 130 Development should not cause deleterious affect on the quality or hydrology of groundwater.

Principle of Development Control 131 Development should manage stormwater to ensure that the design capacity of existing or planned downstream systems are not exceeded, and other property or environments are not adversely affected as a result of any concentrated stormwater discharge from the site.

A roof water/ stormwater management concept will be designed to satisfy the requirements of the Development Plan. The report philosophy behind the future roof water/ stormwater management design will be to provide effective treatment, reuse and disposal of stormwater is essential for safeguarding the environment and assuring a sustainable environmental future.

Stormwater from the site will be managed through the standard process of effective treatment, reuse where possible and disposal. Stormwater will be collected from the site and will undergo a filtration process via approve separators/systems before being discharged into the main stormwater system at a controlled flow rate. Where possible, Water Sensitive Urban Design (WSUD) measures will be provided. The final detailed design of the roof water/ stormwater management plan will be designed in accordance with Council requirements and we request that this final detail be reserved and provided prior to the issuing of Development approval. This information could be considered as a reserved matter or be conditioned accordingly.

For the reasons mentioned above, it is considered that an appropriately designed stormwater system will be able to be designed which satisfies the intent of the relevant Provisions of the Development Plan relating to stormwater management.

#### Infrastructure

Objective 40: Minimisation of the visual impact of infrastructure facilities.

Objective 41: Provision of services and infrastructure that are appropriate for the intended development and the desired character of the Zone or Policy Area.

Principle of Development Control 132 Provision should be made for utility services to the site of a development, including provision for the supply of water, gas and electricity and for the satisfactory disposal and potential re-use of sewage and waste water, drainage and storm water from the site of the development.

Principle of Development Control 133 Service structures, plant and equipment within a site should be designed to be an integral part of the development and should be suitably screened from public spaces or streets.

Principle of Development Control 134 Infrastructure and utility services, including provision for the supply of water, gas and electricity should be put in common trenches or conduits.

Principle of Development Control 135 Development should only occur where it has access to adequate utilities and services, including:

- (a) electricity supply;
- (b) water supply;
- (c) drainage and stormwater systems;
- (d) effluent disposal systems;
- (e) formed all-weather public roads;
- (f) telecommunications services; and
- (g) gas services.

A Services report has been prepared by BCA Engineers (ATTACHMENT F).

The report reveals that the proposal achieves the requirements of the relevant Objectives and Principles of Development Control relating to infrastructure in that; the proposed development has access to and will provide a water supply, sewage connection, gas and electricity.

Further, the proposal has designed the plant and equipment into the design of the building, forming an integral part of the development which is suitably screened from view from public spaces or streets.

## Built form and building design

Objective 46: Reinforcement of the city's grid pattern of streets through:

- (a) high rise development framing city boulevards, the Squares and Park Lands
- (b) vibrant main streets of a more intimate scale that help bring the city to life
- (c) unique and interesting laneways that provide a sense of enclosure and intimacy.

Objective 47: Buildings should be designed to:

(a) reinforce the desired character of the area as contemplated by the minimum and maximum building heights in the Zone and Policy Area provisions;

(b) maintain a sense of openness to the sky and daylight to public spaces, open space areas and existing buildings;

(c) contribute to pedestrian safety and comfort; and

(d) provide for a transition of building heights between Zone and Policy Areas where building height guidelines differ.

*Objective 48: Development which incorporates a high level of design excellence in terms of scale, bulk, massing, materials, finishes, colours and architectural treatment.* 

## Height, Bulk and Scale

Principle of Development Control 167 Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:

(a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;

(b) the less intense and more informal groupings of buildings set within the landscaped environment of the Institutional Zones;

(c) the historic character of the Adelaide and North Adelaide Historic (Conservation) Zones and groups of historic housing within the City Living Zone; and
(d) the open landscape of the Park Lands Zone.

Principle of Development Control 168 The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on Map Adel/1 (Overlay 1).

Principle of Development Control 169 The height, scale and massing of buildings should reinforce:

(a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:

(i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;

(ii) reflecting the prevailing pattern of visual sub-division of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and
 (iii) avoiding massive unbroken facades.

(b) a comfortable proportion of human scale at street level by:

- (i) building ground level to the street frontage where zero set-backs prevail;
- (ii) breaking up the building facade into distinct elements;
- (iii) incorporating art work and wall and window detailing; and
- (iv) including attractive planting, seating and pedestrian shelter.

Principle of Development Control 170 Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.

The reasoning behind the proposed design and height of the building has been addressed in the Zone and Policy Area section earlier in the supporting statement.

In determining the appropriateness of the building height for the site consideration was given to the existing mix of development in the immediate and wider locality and development which is currently under construction/approved for development in the immediate and wider locality. The proposal will provide development which is greater than the building height envisaged by the Development Plan, but provides an upper storey component which is designed to be set away from rear boundaries and has been constructed of lightweight materials to minimise visual impacts and minimise the building bulk. The overall height of the building relates to the building height of 150 Wright Street's lower building form which front Wright Street which is similar in height with 17 storeys and a setback 18th storey above. The height of the building should be considered within the future development of the Capital City zone on Wright St with proposed future developments occurring at 134 Wright St, 128 Wright St and the Wright St Hotel site

As previously mentioned, the building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe.

From level 4 and above the building is setback 3m from both the north and south boundaries. Each level has 2 apartments serviced from a side core. A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building with 1 bedroom apartments facing north and 2 bedroom apartments facing Wright Street.

The articulated built form of the proposed building will provide a built form which provides a high quality public realm at street level whilst providing a well-designed building above. Further the height of the building is consistent with the building on the corner of Wright Street and Morphett Street to the west.

For these reasons and the reasons addressed previously within the report, we are of the opinion that the proposed development provides an appropriate building height and design which is consistent with the above Objectives and Principles of Development Control in relation to building height on the subject land.

## Landscaped Open Space

Principle of Development Control 176 Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount. Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in-ground planting is appropriate.

The proposed development with a proposed built form which maximises the development potential of the site with boundary to boundary development allows for some landscaping on the site at the ground floor and on the upper storey deck. This is consistent with development in the immediate and wider locality which does not provide landscaping/limited landscaping opportunities. The proposed articulated built form will provide an attractive appearance to the street consistent with the form of development in the immediate locality. It is considered that the proposal satisfies the intent of the above Principle of Development Control and is consistent with development with little to no landscaping.

## **Composition and Proportion**

Principle of Development Control 179 Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:

(a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and

(b) clearly defining ground, middle and roof top levels.

Principle of Development Control 180 Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:

- (a) frontages creating clearly defined edges;
- (b) generating new compositions and points of interest;
- (c) introducing elements for future neighbouring buildings; and
- (d) emphasising the importance of the building according to the street hierarchy.

## Articulation and Modelling

Principle of Development Control 181 Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.

Principle of Development Control 182 Balconies should be designed to give shelter to the street or public space at first floor levels.

Principle of Development Control 183 Balconies should:

(a) respond to the street context and building orientation; and

(b) incorporate balustrade detailing to reflect the balcony type and location and the materials and detail of the building facade.

Principle of Development Control 184 No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.

Principle of Development Control 185 Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.

In our opinion, the proposal achieves all relevant provisions above relating to composition and proportion and articulation for the following reasons:

- the proposed development proposes a built form which has been designed to address the Wright Street frontages with a well-designed and articulated built form.
- the proposal provides an articulated design with horizontal and vertical elements and incorporates the use of a range of materials and building forms including balconies which have been carefully considered in the context of the surrounding built form; and
- the proposal has been designed to screen and incorporate services into the design of the building without compromising the external appearance of the built form.

## Materials, Colours and Finishes

Principle of Development Control 186 The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.

Principle of Development Control 187 Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape

Principle of Development Control 188 Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.

Principle of Development Control 189 Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

The proposal provides a range of colours and materials within the proposal.

From street level, the building forms alternating between one another are further articulated by a variety of materials and window treatments. As indicated by Enzo Caroscio Architecture, the podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth. Detailed brickwork as well as a continuous street canopy and vertical metal articulated treatments to the ground floor façade provide a more human scale to the street. Above the forms are expressed in either a white textured concrete surround or a vertical timber board-form grey concrete. Together with the variations of large floor to ceiling window openings, bronze metal in-fill cladding and vertical expressed metal balustrades, creates a visually interesting building addition to the street

The proposed building will provide a range of materials which will sit comfortably within the Wright Street Streetscape. The form, colour, texture and quality of materials of the proposed building will be of high quality. The materials proposed will be durable and in our opinion will contribute to the desired character of the locality and also complements the appearance of the building under construction on the corner of Morphett Street and Wright Street.

On this basis, it is considered that appropriate colours and materials have been provided in accordance with the above requirements of the Development Plan.

#### Sky and Roof Lines

Objective 49: Innovative and interesting skylines which contribute to the overall design and performance of the building.

Principle of Development Control 191 Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.

Principle of Development Control 192 Buildings should be designed to incorporate well-designed roof tops that:

(a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;

(b) enhance the skyline and local views;

(c) contribute to the architectural quality of the building;

(d) provide a compositional relationship between the upper-most levels and the lower portions of the building;

(e) provide an expression of identity;

(f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;

(g) respond to the orientation of the site; and

(h) create minimal glare.

Principle of Development Control 193 Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:

(a) be designed to minimise the visual impact; and

(b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.

Principle of Development Control 194 Roof design should facilitate future use for sustainable functions such as:

(a) rainwater tanks for water conservation;

(b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or(c) "green" roofs (i.e. roof top gardens structurally capable of supporting vegetation) or water features.

In our opinion, the proposal achieves all relevant provisions above relating to sky and roof line for the following reasons:

- the proposed development will provide a new and interesting built form along Wright Street
- The proposed building features a contemporary flat roof form with articulation provided through the use of horizontal elements. This roof form is consistent with other recent development of a contemporary nature in the immediate locality.
- The flat roof forms are appropriate within the zone and locality and given the scale of the proposed building, utilising more traditional roof forms would add further bulk and height, while also affecting the contemporary appearance and design of the development.
- All plant has been incorporated into the design of the built from and will not be visible from adjoining properties.
- Stormwater will be collected from roofs for reuse and the roof will be able to accommodate some solar panels.

## Active Street Frontages

Objective 50: Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality's desired character.

Objective 51: Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:

(a) enlivening building edges;

- (b) creating welcoming, safe and vibrant spaces;
- (c) improving perceptions of public safety through passive surveillance; and

(d) creating interesting and lively pedestrian environments.

Principle of Development Control 195 Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.

Principle of Development Control 197 Commercial buildings should be designed to ensure that ground floor facades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.

Principle of Development Control 198 Residential development should be designed to create interesting pedestrian environments and resident surveillance of any street, access way and driveway.

As aforementioned the proposal has been designed to ensure that the proposal provides active street frontages to Wright Street. The Wright Street frontage will promote pedestrian activity and provide a high quality experience for City residents, workers and visitors. The proposal is considered to satisfy the above requirements relating to active street frontages.

## Landscaping

Objective 55: Water conserving landscaping that enhances the local landscape character and creates a pleasant, safe and attractive living environment.

Principle of Development Control 206 Landscaping should:

(a) be selected and designed for water conservation;

(b) form an integral part of the design of development; and

(c) be used to foster human scale, define spaces, reinforce paths and edges, screen utility areas and enhance the visual amenity of the area.

Principle of Development Control 207 Landscaping should incorporate local indigenous species suited to the site and development, provided such landscaping is consistent with the desired character of the locality and any heritage place.

Principle of Development Control 208 Landscaping should be provided to all areas of communal space, driveways and shared car parking areas.

## Principle of Development Control 209 Landscaping between the road and dwellings should be provided to screen and protect the dwellings from dust and visual impacts of the road.

The proposed development with a proposed built form which maximises the development potential of the site with boundary to boundary development along the side boundaries with setbacks from the front and rear boundaries which allows for some landscaping on the site. This is consistent with development in the immediate and wider locality which does not provide any landscaping. The proposed articulated built form will provide an attractive appearance consistent with the character of the immediate locality. It is considered that the proposal satisfies the intent of the above Principle of Development Control and is consistent with development with little to no landscaping.

#### **Transport and Access**

## Pedestrian Access

Objective 61: Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.

Objective 62: Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.

Objective 63: Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

Principle of Development Control 225 Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within Map Adel/1 (Overlay 2) by ensuring:

(a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and

(b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.

Principle of Development Control 227 Development should provide and maintain pedestrian shelter, access and through-site links in accordance with the walking routes identified within Map Adel/1 (Overlays 2, 2A and 3) and the provisions of the Zone or Policy Area in which it is located. Such facilities should be appropriately designed and detailed to enhance the pedestrian environment, have regard to the mobility needs of people with disabilities, and be safe, suitable and accessible.

Principle of Development Control 229 Permanent structures over a footpath should have a minimum clearance of 3.0 metres above the existing footpath level, except for advertisements which should have a minimum clearance of 2.5 metres and temporary structures and retractable canopies which should have a minimum clearance of 2.3 metres above the existing footpath level.

Principle of Development Control 231 Access for people with disabilities should be provided to and within all buildings to which members of the public have access in accordance with the relevant Australian Standards. Such access should be provided through the principal entrance, subject to heritage considerations and for exemptions under the relevant legislation.

The proposal will not create any additional vehicle crossover points to the Wright Street frontage and will utilise the existing vehicle access point to the premises. All vehicular activity will be directed along Wright Street. The proposed activation of the Wright Street frontage will result in a safe secure and attractive environment for pedestrian movement and social interaction and will increase the permeability of the pedestrian network.

Access for people with disabilities to the site is provided to the commercial tenancy and primary entrance point to the apartment building at grade level and the proposal will comply with all Australian Standards and Disability Discrimination Act (DDA) requirements.

For the above reasons it is considered that the proposal provides appropriate pedestrian access for residents and visitors to the non-residential land use on the site and will not impact on the pedestrian movements along Wright Street. Therefore the proposal satisfies the intent of the above Objectives and Principles of Development Control relating to pedestrian movement.

## **Bicycle Access**

Objective 64: Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.

Objective 65: Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

Principle of Development Control 232 Development should have regard to the bicycle routes identified within Map Adel/1 (Overlay 3) by:

#### a) limiting vehicular access points; and

(b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.

Principle of Development Control 233 An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in Table Adel/6.

Principle of Development Control 234 Onsite secure bicycle parking facilities for residents and employees (long stay) should be:

- (a) located in a prominent place;
- (b) located at ground floor level;
- (c) located undercover;
- (d) located where passive surveillance is possible, or covered by CCTV;
- (e) well lit and well signed;
- (f) close to well used entrances;
- (g) accessible by cycling along a safe, well lit route;
- (h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and
- (i) in the case of a cage have an access key/pass common to the building access key/pass.

Principle of Development Control 235 Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:

- (a) directly associated with the main entrance;
- (b) located at ground floor level;
- (c) located undercover;
- (d) well lit and well signed;
- (e) located where passive surveillance is possible, or covered by CCTV; and
- (f) accessible by cycling along a safe, well lit route.

Principle of Development Control 236 Access to bicycle parking should be designed to:

(a) minimise conflict with motor vehicles and pedestrians;

(b) ensure the route is well signed and well lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and

(c) ensure the route is unhindered by low roof heights.

Principle of Development Control 237 To facilitate and encourage the use of bicycles and walking as a means of travel to and from the place of work, commercial and institutional development should provide on-site shower and changing facilities.

A total of 34 bicycle parking spaces are proposed within the proposal for use by residents and employees. Further, the storage of bicycles will be accommodated in a dedicated storage area accessed from the ground floor. It is considered that the provisions relating to bicycle access have been appropriately addressed by the proposal and satisfy the intent of the requirements of the Development Plan.

## Public Transport

Objective 66: Development that promotes the use of sustainable transport consistent with State Government objectives and initiatives.

Objective 67: Accessible public transport for all metropolitan residents and visitors and safe and attractive facilities for public transport users.

Principle of Development Control 238 Development along a high concentration public transport route should be designed to ensure that activity and interest for public transport passengers is maximised through the incorporation of active street frontages.

Principle of Development Control 239 Development along high concentration public transport routes identified in Map Adel/1 (Overlay 4) should:

(a) ensure there are pedestrian links through the site if needed to provide access to public transport;

(b) provide shelter (e.g. verandahs) for pedestrians against wind, sun and rain;

(c) provide interest and activity at street level; and

(d) where possible, avoid vehicle access across high concentration public transport routes identified in Map Adel/1 (Overlay 4). Where unavoidable, vehicle access should be integrated into the design of the development whilst retaining active street frontages.

The subject land is located in close proximity to public transport options. Several bus and Tram services operate from Whitmore Square and surrounding streets in walking distance from the proposed development. These services offer a high level of connectivity to the Adelaide CBD and greater metropolitan regions. The proposal provides and active street frontage to ensure there is activity and visual interest for users of public transport. On this basis it is considered that the proposal allows appropriate access to public transport options in accordance with the above requirements of the Development Plan.

## Traffic and Vehicle Access

Objective 68: Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).

Objective 70: Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.

Principle of Development Control 240 Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.

Principle of Development Control 241 Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.

Principle of Development Control 242 Where practicable, development sites should contain sufficient space for the location of construction equipment during the course of building construction, so that development does not rely on the use of Council road reserves to locate such equipment.

Principle of Development Control 243 Vehicular access to development located within the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlay 2A) should be limited and designed to minimise interruption to street frontages.

Principle of Development Control 244 Where vehicular access to a development is gained by an existing crossing in the Core Pedestrian Area identified in Map Adel/1 (Overlay 2A), there should be no increase in the number of parking spaces served by the crossing, nor any increase in the number of existing crossings serving that development.

Principle of Development Control 247 Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).

Principle of Development Control 248 Access roads within residential development should:

(a) provide convenient access for emergency vehicles, visitors and residents;

(b) enable vehicles to enter and leave a site in a forward direction;

- (c) provide a comfortable and safe pedestrian environment; and
- (d) be well lit.

Principle of Development Control 249 Access roads within residential development for older people and people with disabilities should:

(a) include platforms across roadways at pedestrian crossing points;

- (b) not have steep gradients; and
- (c) have level surface passenger loading areas.

The proposed access to the ground floor carpark utlsiing the existing crossover along Wright Street, will allow safe and convenient access to the site which will minimise conflict points with pedestrians on the footpath and parking on the street. The resultant traffic movements from the proposal can be accommodated by Wright Street.

The subject site is located at 126 Wright Street within the Capital City Zone and does not generate a minimum car parking requirement. The proposal will provide a total of 5 car parking spaces utilising a stacker system as well as additional 34 bicycle parking spaces at ground level.

The Flurparker 570 carparking system is a fully automated system for parking of vehicle and allows for stacked parking on the lower levels of the building. Access to both the car parking area and bicycle storage area will be from Wright Street in keeping with the intent of the above Principle of Development Control. The proposal provides sufficient parking for the proposed uses on the site and on this basis satisfies the intent of the above Principle of Development Control in providing adequate parking on the subject land. Further the site is located in close proximity to a range of public transport options. It is considered that the proposed access to the site along Wright Street is suitable and provides safe and convenient access to the site in keeping with the requirements of the Development Plan.

## Car Parking

Objective 71: To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.

Principle of Development Control 250 Car parking areas should be located and designed to:

(a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;

(b) include adequate provision for manoeuvring and individually accessible car standing areas;

(c) enable, where practical, vehicles to enter and leave the site in a forward direction;

(d) minimise interruption to the pattern of built form along street frontages;

(e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;

(f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;

(g) minimise loss of existing on-street parking spaces arising through crossovers and access;

(*h*) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and

(i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

Principle of Development Control 251 All development should provide car parking spaces for people with disabilities in accordance with the requirements in the Building Code of Australia (BCA). For classes of buildings not covered by the requirements of the BCA, the number of spaces should be provided in accordance with Table Adel/7 and such car parking spaces should comply with Australian Standard 2890.1: 'Parking Facilities - Off-street Car Parking'.

Principle of Development Control 252 Within the City Living Zone, Adelaide Historic (Conservation) Zone, North Adelaide Historic (Conservation) Zone, Main Street, Mixed Use and Institutional Zones:

(a) adequate car parking should be provided within the site area of the development to meet the demand generated by the development;

(b) car parking should be provided in accordance with Table Adel/7; and

(c) car parking rates lower than the minimum in Table Adel/7 may be appropriate where there is readily accessible and frequent public transport in the locality or it can be demonstrated that a lower provision is warranted, such as for the following reasons:

(i) the nature of development;

(ii) existing heritage places on or adjacent to the development site which dictates the development of the site in a manner which hampers the provision of on-site parking;

(iii) the opportunity to exploit shared car parking areas between uses based upon compatible hours of peak operation;

(iv) use of a car share scheme; or

(v) suitable arrangements for any parking shortfall to be met elsewhere or by other means.

Principle of Development Control 253 Off-street parking should:

(a) be controlled in accordance with the provisions for the relevant Policy Area;

(b) be located away from street frontages or designed as an integral part of buildings on the site. Provision of parking at basement level is encouraged; and

(c) not include separate garages or carports in front of buildings within front set-backs.

Principle of Development Control 254 Garaging and parking structures (including the width of any support structure) provided on a public street frontage or on a laneway that functions as the dwellings primary frontage should be of a width less than 50 percent of the allotment width on that frontage.

Principle of Development Control 255 Undercroft parking is not appropriate within the City Living Zone, Adelaide Historic (Conservation) Zone, North Adelaide Historic (Conservation) Zone, Mixed Use Zones or Main Street Zones.

Principle of Development Control 256 Undercroft parking should project no higher than 1 metre above ground level and should be screened from public view and designed to add interest and creativity to the street frontage.

Principle of Development Control 262 In areas outside the Core and Primary Pedestrian Areas identified in Map Adel/1 (Overlays 2, 2A and 3), car parking may be provided to serve a development within the site of the development or elsewhere. Where car parking is provided, it should be:

(a) provided with vehicle access points that do not cross major walking routes identified in Map Adel/1 (Overlay 2); and

(b) located away from frontages to major streets wherever possible.

Principle of Development Control 263 On-site parking should be provided for development in those localities close to the City Living Zone, the Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone, unless suitable parking facilities exist within the vicinity of the development, the use of which does not adversely impact on amenity in the City Living Zone, Adelaide Historic (Conservation) Zone or the North Adelaide Historic (Conservation) Zone,

Principle of Development Control 264 Car parking associated with development for older people and people with disabilities should:

(a) be conveniently located on site within easy walking distance to resident units;

(b) be adequate for residents, staff, service providers and visitors in accordance with the requirements set out in Table Adel/7;

(c) include separate and appropriately marked places for people with disabilities and spaces for small electrically powered vehicles;

As aforementioned, The subject site is located at 126 Wright Street within the Capital City Zone and does not generate a minimum car parking requirement. The proposal will provide a total of 5 car parking spaces utilising a stacker system as well as additional 34 bicycle parking spaces at ground level.

The Flurparker 570 carparking system is a fully automated system for parking of vehicle and allows for stacked parking on the lower levels of the building. Access to both the car parking area and bicycle storage area will be from Wright Street in keeping with the intent of the above Principle of Development Control. The proposal provides sufficient parking for the proposed uses on the site and on this basis satisfies the intent of the above Principle of Development Control in providing adequate parking on the subject land. Further the site is located in close proximity to a range of public transport options. It is considered that the proposal satisfies the requirements of the above Principles of Development Control relating to access to parking.

## 5.0 Conclusion

Having regard to all the relevant provisions of the Development Plan, it is our opinion that the proposal is not seriously at variance with the Adelaide (City) Development Plan as Consolidated 24 September 2015

The application seeks approval for the construction of a mixed use development containing a café, parking for 5 car spaces utilising a car hoist system, 34 apartments consisting of 6 x studio apartments, 16 x one bedroom apartments, 11 x two bedroom apartments, 1 three bedroom apartment and upper level enclosed amenities area with roof garden including bbqs and landscaping. The total building height will be 56.8 metres.

It is our opinion that the proposal satisfies the intent of the Desired Character Statement of the Capital City Zone Zone in that the proposal will provide a mixed use development with additional high quality residential apartments in conjunction a small commercial tenancy. The proposal will provide appropriate land uses which will be consistent and compatible with the surrounding land uses along Wright Street and surrounds.

The proposed development will provide a suitable development on an underutilised allotment. The proposal has been designed to complement and respect the architectural integrity of surrounding development and provides a development which maximises the development potential of the subject land providing a high quality mixed use development which will provide a positive contribution to the public life of the city. The proposal will make a positive contribution to the character of the locality and will provide a built form which will present a well-designed building on the corner site.

The proposal will provide a mixed use development with additional high quality residential apartments and the commercial tenancy at the ground level of the building will provide appropriate land uses which will be consistent and compatible with the surrounding land uses along Wright Street.

The proposal represents an appropriate form of development in the context of the Capital City Zone, the general provisions of the Adelaide (City) Council Development Plan and the unique circumstances of the subject land and locality. In our view the proposal is acceptable when balanced against all the relevant provisions of the Development Plan and the overall intent of the zone and warrants support.

Should you have any queries or require any further information or clarification with any components of this application, please do not hesitate to contact by calling me on 0478 509 777 or by email <u>bill@townplanningadvisors.com.au</u>

Yours faithfully

**Bill Stefanopoulos, MPIA** BA Planning, Grad Dip Environmental Planning





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#### Design Statement 126 Wright Street Adelaide SA

Wright Street Apartments located at 126 Wright St Adelaide aims to create an exclusive and boutique development of 34 apartments with a variety of types with either city skyline or Whitmore Square park views.

The 260 square meter rectangular site with 9.6m frontage is located on the northern side of Wright Street, near the north east corner of Whitmore Square. The scale and narrowness of the site has progressed the design to be a tall slender building with a unique offering of predominantly 2 apartments per floor, each with a full facade to the street or the north boundary.

The building form is expressed as four parts of 4 and 5 storey forms sitting on top of one another. Varying setbacks to the corners of the side boundaries as well as alternating balconies between forms articulates the facade and reduce the scale of the building form. The ground and lower 3 levels is setback 2m from the street boundary to follow the street pattern of heritage building setbacks and transitions between the 3m setbacks of the adjacent cottages to the east and the 3 storey building build to street boundary on the west of the site. This also allows for increased activation to the street with some vegetation and outdoor seating to the building entry and proposed lobby cafe.

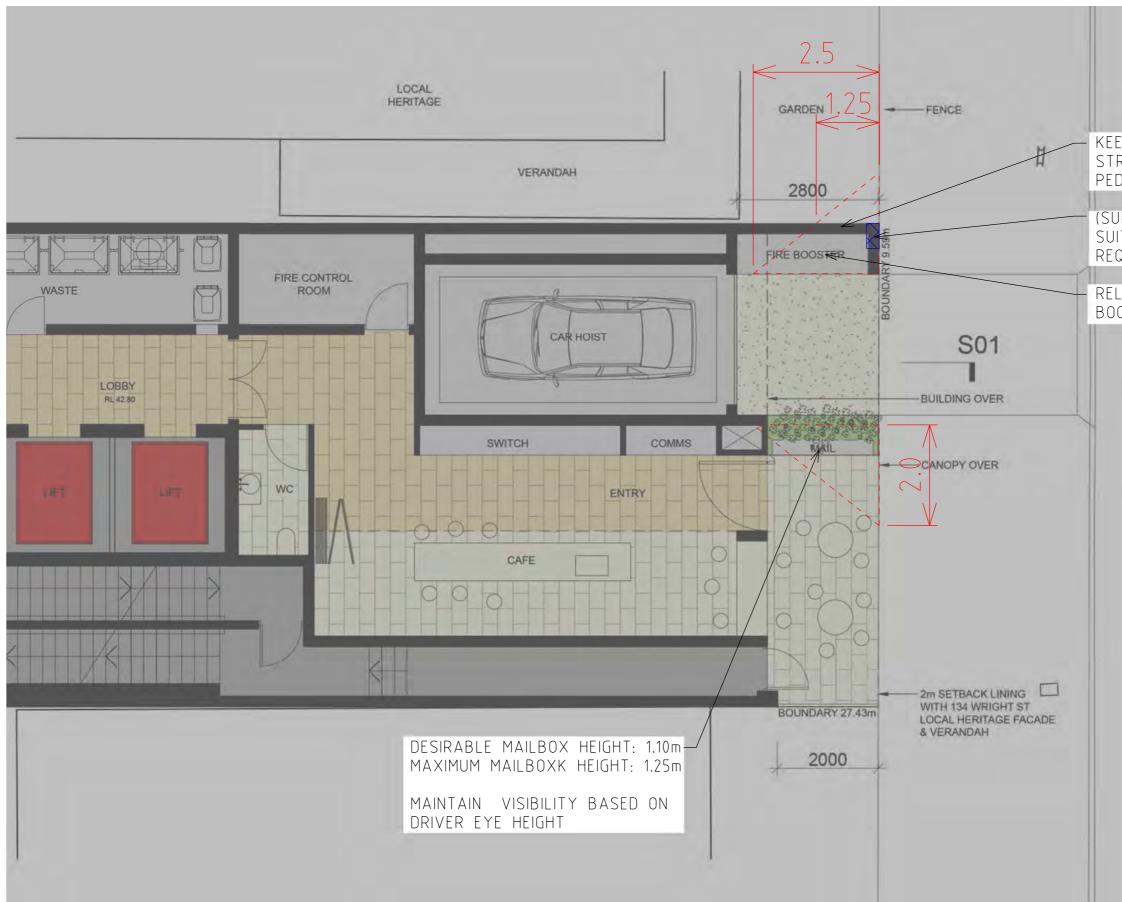
From level 4 and above the building is setback 3m from both the north and south boundaries. Each level has 2 apartments serviced from a side core. A variety of building floors rather than a repetitive floor plan creates variety and articulates the overall form and facades of the building with 1 bedroom apartments facing north and 2 bedroom apartments facing Wright Street.

Apartment layouts are designed at or above the minimum size requirements with open kitchen and living areas directly adjacent large external balconies. All bedroom have direct access to natural light, ventilation and views, and access to bedrooms and bathrooms are from circulation spaces allowing privacy and separation to living areas. Seven apartment types of studios, 1 bed, 2 bed, and a 3 bedroom loft apartment offer a variety of dwelling types. A communal rooftop garden is also proposed at the top of the building which will provided additional amenity to the occupants with a shared indoor and outdoor gym, undercover barbecue and terrace area and a communal internal lounge.

From street level, the building forms alternating between one another are further articulated by a variety of materials and window treatments. The podium form is differentiated from the above building forms by materiality with a grey/brown brick to provide texture and warmth. Detailed brickwork as well as a continuous street canopy and vertical metal articulated treatments to the ground floor facade provide a more human scale to the street. Above the forms are expressed in either a white textured concrete surround or a vertical timber board-form grey concrete. Together with the variations of large floor to ceiling window openings, bronze metal in-fill cladding and vertical expressed metal balustrades, creates a visually interesting building addition to the street.

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Enzo Caroscio Architecture



KEEP AREA CLEAR OF STRUCTURES TO MAINTAIN PEDESTRIAN VISIBILITY

(SUPPORTING COLUMMN IS SUITABLE AS INDICATED IF REQUIRED)

RELOCATE FIRE BOOSTER INTER INTER INTER



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Mr. D Sghirripa Build 29 Suite 4 / 76 Osmond Terrace NORWOOD SA 5067

## Part J – Energy Efficiency Compliance Checklist

National Construction Code Series - Building code of Australia 2016, Volume 1

Project: Wright Street Apartments 126 Wright Street, Adelaide SA 5000

#### Dear Daniel

We provide the following NCC-2016 Part J1, J2, J3, J5, J6, J7 and J8 Compliance Checklist for the Building Fabric, and Mechanical, Electrical & Hydraulic Services design associated with the above project.

#### **Review Criteria**

This checklist is based on the following:

- Classifications
   Climate Zone
   NCC year of adoption
   2016
- J1 Building Fabric
- J1.1 Application: apply to building elements forming the envelope of a Class 2 to 9 building, except for levels of insulation and glazing thermal performances for Class 2 part of the building (apartments) who are required to be determined by a NatHERS assessment as per BCA J0.2.

#### J1.2 Thermal Construction General

Item	Deemed to satisfy requirements	Outcome	
(a) Insulation materials	Complies with AS/NZS 4859.1 (i) Insulation material overlapping/ abutting (ii) forms a continuous barrier (iii) does not affect the safe or effective operation of a service or fitting	Applicable – design by others To be documented by Architect	
(b) Reflective insulation	Insulation material fitted with airspace, closely fitted, adequately supported and overlapping/taped together	Applicable – design by others To be documented by Architect	
(c) Bulk insulation	Position and thickness maintained or overlaps wall beneath by at least 50mm	Applicable – design by others To be documented by Architect	
(d) Roof, ceiling, wall and floor materials, and associated surfaces	Complies with BCA Specification J1.2	Applicable – design by others To be documented by Architect	



## J1.3 Roof and Ceiling Construction

Item	Deemed to satisfy requirements	Outcome	
(a) Minimum Total R-Value	Roof or ceiling generally Minimum Total R-value 3.2 (DOWNWARDS)	NOT APPLICABLE Note: This provision would ordinarily be applicable for Class 5 Office and 6 Retail parts of the building only (NatHERS required for Class 2 Residential Apartments), but in this case the entire ceiling of the GF is in contact with apartments above – so the ceiling/roof does not form part of the envelope	
(b) Roof, ceiling construction	Have thermal properties listed in BCA Specification J1.3	Applicable for Class 2 apartments only – design by others See explanation as per Item (a)	
(c) Adjustment of Minimum R-value for loss of ceiling insulation	ue         Roof or ceiling ADJUSTED Minimum         Applicable for Class 2           Total R-value – to be determined by         Apartments only – to l           natHERS assessment for class 2         by NatHERS assessment           building         See explanation as per		
(d) Metal roof/ceiling with lining directly fixed to structural frame	Thermal break provided R value > 0.2	Applicable for Class 2 Residential Apartments only if metal roof – design by others See explanation as per Item (a)	

## J1.4 Roof lights - NOT APPLICABLE - No roof lights provided

#### J1.5 Walls

Item	Deemed to satisfy Requirement	Outcome Applicable for Class 5 Office and 6 Retail parts of the building envelope walls (NatHERS required for Class 2 Residential Apartments) – design by others To be documented by Architect	
(a) External walls part of Building Envelope	Minimum Total R-Value (Table J1.5a) R-value 2.8		
(b) Envelope wall other than an external wall	Minimum Total R-Value (Table J1.5b) R-value 2.3	NOT APPLICABLE	
(c) Metal wall lining directly fixed to structural frame	Thermal break provided R value > 0.2	Applicable if metal wall lining used – design by others To be documented by Architect	
(d) Wall construction	Have thermal properties listed in BCA Specification J1.5	Applicable – design by others To be documented by Architect	



#### J1.6 Floors

Item	Deemed to satisfy Requirement	Outcome	
(a) Floor	Minimum Total R-Value (Table J1.6) R-value 2.0	Applicable for Class 5 Office and 6 Retail parts of the building floors that are suspended (over carpark) - design by others To be documented by Architect	
(c) Concrete slab on ground with in slab heating or cooling	See requirement insulation	NOT APPLICABLE No in-slab heating or cooling	
(f) Floor construction	Have thermal properties listed in BCA Specification J1.6	Applicable - design by others To be documented by Architect	

#### J2 External Glazing

- J2.1 Application of Part: apply to element forming the envelope of a building other than a sole-occupancy unit of a Class 2 building or Class 4 part of a building
- J2.4 Glazing Method 2: Refer to attached ABCB Glazing Calculator spreadsheets

#### J2.5 Shading

Item	Deemed to satisfy requirement	Outcome	
Required shading as per J2.4	Provided by an external permanent projection which extends horizontally on both sides of the glazing for the same projection distance P or provides equivalent shading with a reveal or the like	Applicable – design by others To be documented by Architect	

#### J3 Building sealing

Application: Apply to elements forming the envelope of a Class 2 to 9 building other than a building in climate zone 1, 2, 3 and 5 where the only means of air conditioning is by using an evaporative cooler or a permanent opening in a space where a gas appliance is located or a building where the mechanical ventilation required by part F4 provides sufficient pressurization to prevent infiltration

#### J3.2 Chimneys and flues

Item	Deemed to satisfy requirements	Outcome	
Chimneys and flues	Damper or flap provided	Applicable – design by others To be documented by Architect	



## J3.3 Roof lights - NOT APPLICABLE - No roof lights provided

#### J3.4 Windows and doors

Item	Deemed to satisfy requirements	Outcome	
Windows and doors forming part of the envelope of a conditioned space or external fabric of a habitable	Must be fitted with a seal to restrict air infiltration	Applicable – design by others To be documented by Architect	
room/public area in Climate Zones 4, 5, 6, 7 or 8	For the bottom edge of external swing door must be draft protection		
(except for (a) window complying with AS 2047 or (b)fire/smoke door or (c)security door or device)	device		
Entrance to a building leading into a conditioned space	Must have an airlock, self-closing door, revolving door or the like	Applicable – design by others To be documented by Architect	
(except for a) conditioned space floor area is not more than 50m²; or			
(b) a café, restaurant, open shop front or the like than has (A) a 3m deep un-conditioned zone between the main entrance and the conditioned space and (B) self- closing doors at all other entrances			

#### J3.5 Exhaust fans

Item	Deemed to satisfy requirements	Outcome
Exhaust Fans which serves a (a) conditioned space or (b) habitable room in climate zones 4, 5, 6, 7 or 8	Must be provided with a sealing/self-closing damper	Applicable – design by others To be designed, documented, provided and installed by specialist Mechanical Services D&C Contractor if required for Class 2 Residential Apartments

## J3.6 Construction of roofs, walls and floors

Item	Deemed to satisfy requirements	Outcome	
Roofs, ceilings, walls, floors and any opening when forming part of the envelope or the external fabric of a habitable room or a public area in climate zone 4,5,6,7 or 8	Must be constructed to minimize air leakage with construction enclosed by internal lining systems or sealed by caulking, skirting, architraves, cornices or the like	Applicable – design by others To be documented by Architect	
(do not apply to openings, grilles or the like required for smoke hazard management)			



## J3.7 Evaporative coolers

Item	Deemed to satisfy requirements	Outcome
Evaporative Coolers when serving a (a) heated space or a (b) habitable room or a public area of a building in climate zone 4,5,6,7 or 8	Must be provided with a self-closing damper or the like	NOT APPLICABLE No evaporative coolers

## J5 Air conditioning and ventilating systems

## J5.2 Air conditioning systems

Item	Criteria	Deemed to satisfy requirements		Outcome
Air conditioning unit	Control from within building or part of building served	Capable of being inactivated		Applicable – compliance shall be specified
	Motorised outside or return air dampers	Capable of being closed		Applicable – compliance shall be specified
Air conditioning supply and return air ductwork	Insulating/sealing	Insulated ar per spec 5.2		Applicable – compliance shall be specified
Air conditioning zones or areas with differentControls when serving multiple air conditioning zones or areasThermostatic temperature control in each air conditioning zone or area		e control in Iditioning	Applicable – compliance shall be specified	
		No hot/cool mix		NOT APPLICABLE No hot/cool mixture systems
		Max 7.5K rise		NOT APPLICABLE No reheat
Class 5-8 (other than a café or restaurant)	Systems over 50kWr	Outside air cycle provided		NOT APPLICABLE System < 50kWr
	Class 3 buildings	Sleep setting		NOT APPLICABLE No Class 3
Where Air flow > 1000 L/s - Maximum fan power	Sensible Heat Load (w/m2)	Maximum Fan Power (W/m2)		
(Exceptions: Outdoor Air		< 500 m <sup>2</sup>	> 500 m <sup>2</sup>	
Preconditioning Systems/Where items such as HEPA filtration	0-100	5.3	8.3	NOT APPLICABLE No applicable systems
adopted/Power for Misc. Exhaust Systems complying with J5.5)	101-150	9.5	13.5	NOT APPLICABLE No applicable systems
	151-200	13.7	18.3	Applicable – compliance shall be specified for ACU



			GF-1 and ACU-GF-2
201-300	22.2	28.0	Applicable – compliance shall be specified for ACU- GF-2, ACU-GF-4 and ACU- GF-5
301-400	30.0	37.0	NOT APPLICABLE No applicable systems
401 +	See Table	9 J5.2	NOT APPLICABLE No applicable systems

## J5.2 Ventilation systems

Item	Criteria	Deemed to satisfy requirements	Outcome
Mechanical Ventilation System	Control from within bldg or part	Capable of being inactivated	Applicable – compliance shall be specified
	Serving conditioned space (refer to Clause J5.2 (b)(ii))	Mechanical vent limited to < 50% of the Part F4 requirements	NOT APPLICABLE No applicable systems
Where Air flow > 1000 L/s	Maximum fan motor shaft power/ air flow rate ratio, or	Table J5.2 compliant	Applicable – compliance shall be specified for CPEF-1, CPSAF-1, SPF-1, SPF-2, SSF-X-X
	Maximum fan motor input power/ air flow rate ratio	Table J5.2 compliant	Applicable – compliance shall be specified for CPEF-1, CPSAF-1, SPF-1, SPF-2, SSF-X-X
Class 9b	Conditioned space where area p/person is 1 per m <sup>2</sup> as per D1.13	Energy reclaiming system that pre-conditions outside air	NOT APPLICABLE No Class 9b
		Automatically modulates the ventilation system in proportion of the number of occupants	NOT APPLICABLE No Class 9b



#### J5.3 Time switch

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Item	Criteria	Deemed to satisfy requirements	Outcome
Power supply	Air-con > 10kWr	Time switch as per Spec	Applicable – compliance
	Ventilation > 1000 L/s	J61	shall be specified

## J5.4 Heating and chilling systems

Item	Criteria	Deemed to satisfy requirements	Outcome
Piping, vessels, heat exchangers or tanks containing heated or chilled fluids	Insulated	As per Spec J5.4	Applicable – compliance shall be specified
Heating or cooling for air conditioning systems where water pumped >	A/C pump total shaft power	Where bldg < 500m <sup>2</sup> achieve < 3 W/m <sup>2</sup>	NOT APPLICABLE No pumps
2L/s		Where bldg > 500m <sup>2</sup> achieve < 4 W/m <sup>2</sup>	NOT APPLICABLE No pumps
	Variable speed pumps	Required when either > 3,500 hr/year or > 11 KW motor shaft power	NOT APPLICABLE No pumps
Multiple boiler, chiller or coil		Provision to stop flow to those not operating	NOT APPLICABLE No heating or chiller systems
Packaged a/c equipment	Split unit and heat pump	Energy efficiency ratio as per Table J5.4b	Applicable – compliance shall be specified
Refrigerant chiller	>125 kWr capacity	Energy efficiency ratio as per Table J5.4c	NOT APPLICABLE No heating or chiller systems
Air cooled condenser fan motor (not in a packaged a/c unit)		< 15W Motor shaft power for each KW heat rejected refrigerate	NOT APPLICABLE No heating or chiller systems
Boilers	Thermal efficiency	Thermal efficiency ratio as per Table J5.4a	NOT APPLICABLE No heating or chiller systems
Cooling tower fan	Propeller or axial fan	<310W motor shaft power per L/s circulated cooling water	NOT APPLICABLE No heating or chiller systems
	Centrifugal fan	< 590W motor shaft power per L/s circulated cooling water	NOT APPLICABLE No heating or chiller systems
Closed circuit cooler fan	Propeller or axial fan	< 500W motor shaft power	NOT APPLICABLE



	-	per L/s circulated cooled fluid	No heating or chiller systems
	Centrifugal fan	< 670W motor shaft power per L/s circulated cooled fluid	NOT APPLICABLE No heating or chiller systems
Evap condenser fan	Propeller or axial fan	< 18W motor shaft power per kW heat rejected	NOT APPLICABLE No heating or chiller systems
	Centrifugal fan	< 22W motor shaft power per kW heat rejected	N NOT APPLICABLE No heating or chiller systems
Spray water pump closed circuit/evaporative condenser		< 150W pump motor shaft power per L/s of spray water circulated	NOT APPLICABLE No heating or chiller systems

#### J6 Artificial lighting and power

#### J6.2 Artificial lighting

Application: Do not apply to Emergency lighting in accordance with Part E4, fixed signage and display lighting, lighting for accommodation within the residential part of a detention centre, a heater when the heater also emits light, lighting of a specialist process nature or performances, lighting for the permanent display and preservation of works of art or objects in a museum or gallery.

Item	Deemed to satisfy requirements	Outcome
(a) Illumination Power Density in a Sole occupancy unit of a Class 2 building or Class 4 part of a building	Illumination power density <5W/m² in sole occupancy unit, including adjustment factor if applicable	Applicable – design by others Luminaire selection and plan layout for Class 2 Residential Apartments by Client or Architect
	Illumination power <4W/m <sup>2</sup> on verandah or balcony or the like, including adjustment factor if applicable	Applicable – design by others Luminaire selection and plan layout for Class 2 Residential Apartments by Client or Architect
	Halogen lamps separately switched from fluorescent lamps	NOT APPLICABLE No halogen lamps
(b) Illumination Power Density in other than a sole occupancy unit of a Class 2 building or Class 4 part of a building	Aggregate DIPL < Σ/IPDAF	Applicable – compliance shall be specified

DIPL = Design Illumination Power Load;

Σ = Sum of, allowances in Table J6.2a times area of each space;

IPDAF = Illumination Power Density Adjustment factor in Table J6.2b.

J6.1 Application: J6.2, J6.3 and J6.5 (a)(ii) do not apply to a Class 8 electricity network substation – NOT APPLICABLE



## J6.3 Interior artificial lighting and power control

Application: do not apply to emergency lightings in accordance with Part E4 and where artificial lighting is needed for 24 hours occupancy

Item	Deemed to satisfy requirements	Outcome
(a) Artificial lighting of a room or space	Individually operated by a switch or other control device	Applicable – compliance shall be specified
(b) Control device for artificial lighting in Sole occupancy unit of a Class 3 building, other than disability or aged care accommodation	Occupant activated device in accordance with Specification J6 to cut power to artificial lighting, air- conditioning, exhaust fans and bathroom heater when the sole occupancy unit is unoccupied	NOT APPLICABLE No Class 3
(c) Artificial lighting switch or other control device	(i)Must be located in a visible position in the room or adjacent room	Applicable – compliance shall be specified
	(ii)(A)Not operate lighting for an area >250m2 if in a Class 5 building or Class 8 laboratory	Applicable – compliance shall be specified
	Not operate lighting for (aa) an area >250m <sup>2</sup> in space <2000m <sup>2</sup> or (bb)>1000m <sup>2</sup> in a space >2000m <sup>2</sup> if in a Class 3, 6, 7, 8(not laboratory) or 9 building, unless a single functional space	Applicable – compliance shall be specified
(d) Lights fittings in a building or storey of building >250m <sup>2</sup> other than Class 2 or 3 or a Class 4 part of building	95% of light fittings must be controlled by; a time switch in accordance with Specification J6; or an occupant sensing device	Applicable – compliance shall be specified
(e) Artificial lighting in natural lighting zone adjacent to windows in a Class 5, 6 or 8 building of >250m <sup>2</sup>	Separately controlled from artificial lighting not in natural lighting zone in the same storey, except where; (i) the room containing the natural lighting zone <20m <sup>2</sup> or (ii) the room 's natural lighting zone contains less than 4 luminaires or (ii) >=70% of luminaires in room are in the natural lighting zone	Applicable – compliance shall be specified

## J6.4 Interior decorative and display lighting

Item	Deemed to satisfy requirements	Outcome
(a) Interior decorative and display lighting	(i)Must be controlled separately from other artificial lighting, and by a manual switch for each area unless they have the same operating times, and time switch in	If Applicable – compliance shall be specified



	accordance with Specification J6 if display lighting is >1kW	
(b) Window display lighting	Must be controlled separately from other display lightings	If Applicable – compliance shall be specified

#### J6.5 Artificial lighting around the perimeter of a building

Application: do not apply to emergency lightings in accordance with Part E4 and to lighting around a detention centre

Item	Deemed to satisfy requirements	Outcome
(a) Artificial lighting around perimeter of a building	(i) Controlled by daylight sensor or time switch capable of variable pre- programmed times and days	Applicable – compliance shall be specified
	(ii) when lighting load exceeds 100W, must have a light source efficacy >60Lumens/W; or be controlled by a motion detector	
	(iii) when used for decorative purposes, must have a separate time switch	

#### J6.6 Boiling water and chilled water storage units

Item	Deemed to satisfy requirements	Outcome
Power supply to a boiling water or chilled water storage unit	Must be controlled by a time switch in accordance with Specification J6	

#### J7 Hot water supply and swimming pool and spa pool plant

#### J7.2 Heated water supply

Item	Deemed to satisfy requirements	Outcome
The design and installation of heated water services	Must be designed and installed in accordance with Part B2 of NCC Volume 3 – Plumbing Code of Australia	Applicable – compliance shall be specified

J7.3 Swimming pool heating and pumping – IF APPLICABLE – shall be designed, documented, provided and installed by specialist Pool D&C contractor

J7.4 Spa pool heating and pumping – IF APPLICABLE – shall be designed, documented, provided and installed by specialist Pool D&C contractor

#### J8 Access for maintenance

J8.1 Application: Do not apply to sole occupancy unit of a class 2 building or a class 4 part of a building or to a class 8 electricity network substation



#### J8.2 Access for maintenance

Item	Deemed to satisfy requirements	Outcome
Access for maintenance	Access to all prescribed plant, equipment and components	Applicable – compliance shall be specified

## J8.3 Facilities for Energy Monitoring

Item	Deemed to satisfy requirements	Outcome
(a) Building or sole occupancy unit with a floor area >500m² <sup>-</sup> Energy Monitoring	must have facility to record consumption of gas and electricity	Applicable – compliance shall be specified
(b) Building with a floor area >2500m <sup>2</sup> - Energy Monitoring (Except Class 2 building with a floor area of more than 2500 m <sup>2</sup> with total common area <500 m <sup>2</sup> )	Must have facilities to record individually the energy consumption of; (i) air conditioning (ii) artificial lighting (iii) appliance power (iv) central hot water supply (v) internal transport devices (vi) ancillary equipment	NOT APPLICABLE

III BIBBU Consulting Engineers Pty Ltd

Structural & Civil

**Drainage Strategy** 

Wright Street Apartments

## 126 Wright Street, Adelaide, SA 5000

## **Existing Site Condition**

The existing site currently consists of a single low rise blockwork building located along the northern boundary with areas of concrete and bitumen paving fronting Wright Street. The site is considered to be currently 100% impervious.

## **Overall Drainage Concept**

It is intended that the proposed new apartment building will cover the entire site.

No landscaping areas are proposed.

All stormwater from the upper level roof areas will be collected and directed by stormwater pipes directly to the street water table. Drainage trenches and stormwater pipes will be included at the basement level to collect any water seepage. This water will be pumped to ground level and discharged to the street water table.

It is not expected that there will be any increase in direct stormwater run-off from the developed site.

Given the limited available storage area and constraints of the site, no allowance has been made for the collection and re-use of stormwater run-off within the proposed development.

Yours faithfully,

PP Lelio Bibbo <u>CHARTERED ENGINEER</u>

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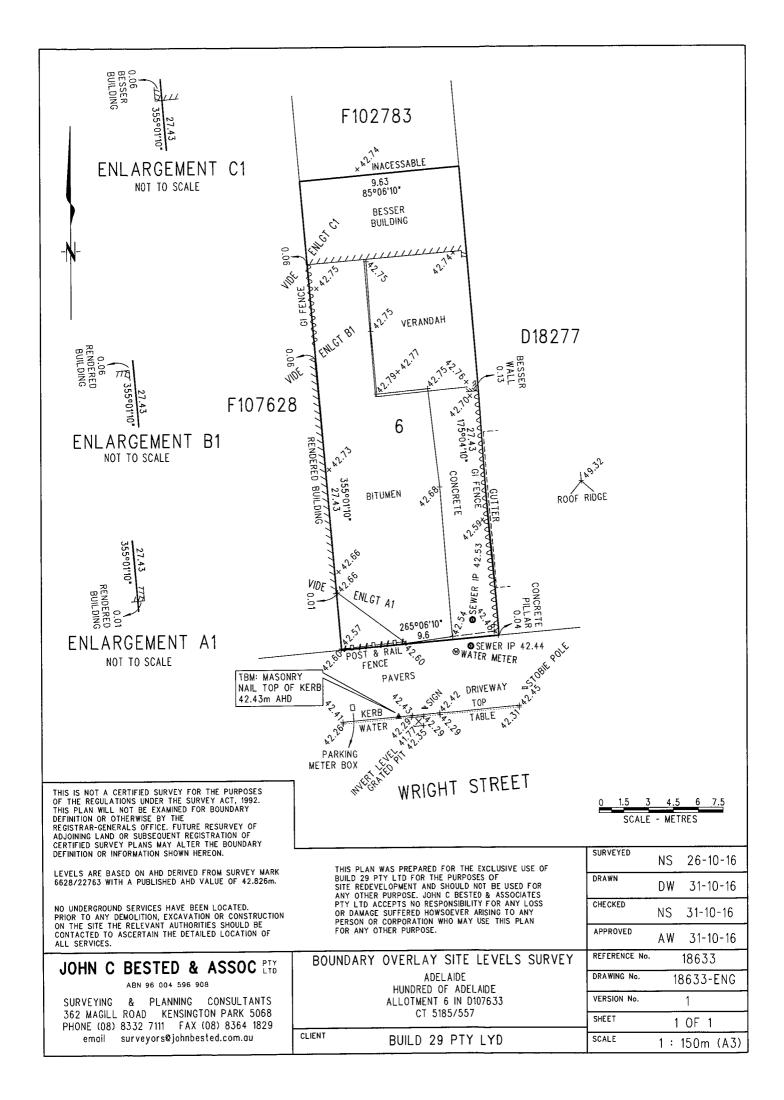
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# Build 29 Wright St Apartments Development

# Waste Management Plan

February 2017

#### - IMPORTANT NOTES-

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Date	Version	Title	Prepared by	Approved by
08/09/2016	Preliminary Report	Build – Wright St Apartment Development Preliminary Waste Report	Jarvis Webb	Mark Rawson
28/02/2017	Draft Waste Management Plan	Build – Wright St Apartment Development Waste Management Plan	Jarvis Webb	Kat Heinrich
28/02/2017	Final Waste Management Plan	Build – Wright St Apartment Development Waste Management Plan	Jarvis Webb	Kat Heinrich

#### Document verification

## 1. Introduction

## 1.1 Purpose

This document provides a waste management plan (WMP) for the proposed development identified in Table 1 below. This WMP will be included with building plans for the development to obtain Development Approval. The WMP outlines the proposed waste management system (WMS) for the development at high-level, which demonstrate that successful management of waste can be achieved at the site.

## Table 1: Development details

Site Location	126 Wright Street, Adelaide	
Development Project	Wright Street Apartments	
Client	Build 29	
Project Architect	Enzo Caroscio Architecture & Design	
Traffic Consultant	GTA	

## 1.2 What this WMP contains

This WMP contains the information summarised in the Table 2 below.

## Table 2: WMP overview

Section 2 – Description of Development	Provides details of the development relevant to the WMP preparation	
Section 3 – Design Approach & Assumptions	Sets out the design approach and assumptions that have been used in preparing this WMP.	
Section 4 – Waste Services, Volumes and Estimated Collection Frequency	Indicates the waste and recycling collection services proposed for the development, and provides estimates of the waste and recycling volumes likely to be generated at the site which will require collection and disposal.	
Section 5 – Waste Management System	Provides an overview of the proposed WMS for the development, including the main elements and important design requirements, and how these systems should operate. The WMS outlines how waste w be stored, transferred and collected at the site.	
Section 6 – Collection Requirements	This section includes relevant information on collection requirements including provision for access and manoeuvrability for waste collection vehicles.	
Section 7 – Supporting Documentation & Design Details	This section outlines the required supporting documentation & design details that need to be confirmed in addition to the WMS outlined in this WMP.	
Appendix 1 – Indicative Size of Waste Room(s)	This appendix provides an indicative drawing of the minimum size for the proposed waste rooms, which shows one potential bin configuration example.	
Appendix 2 – Estimated Waste Generation Volumes by Land Use & Waste Stream	This appendix shows the estimated waste and recycling volumes generated by individual land uses and waste streams across the development, used in the preparation of the WMP.	

## 1.3 WMP Status

#### 1.1.1 Currently proposed WMS & WMP

This WMP has been developed for the planning stage of this development. It provides a preliminary design for the WMS for this site and is intended to demonstrate that successful management of waste can be achieved at the site. To support this WMP, the Client will need to provide the additional documentation or details on their plans as listed in Section 7.

#### 1.1.2 Further development of WMS & finalisation of WMP

The suggested arrangements in this WMP are preliminary and reflect one possible configuration for the WMS at this site. These arrangements could evolve and be refined before detailed design/construction takes place. This may affect the WMP for the site, which should be updated accordingly.

## 1.4 Important Note

This WMP has been developed in conjunction with the Client and the Project Architect, who have indicated the intended site uses of the development, occupancy data, and requirements for how waste should be managed. If future proposed uses and waste management arrangements for the development are altered, the WMP may need to be reconsidered.

### 2. Description of the Development

#### 2.1 Land Uses & Occupancy Data

Based on the following information provided by the Project Architect and the Client, we have allocated waste generation rates to the assigned land uses and areas, which can be found in Table 3 below.

#### Table 3: Land use and occupancy overview

Development Land Use*	Assumed Waste Resource Generation Rate Land Use	Estimated Occupancy Data
Residential Apartments Over 16 Floors	Residential (High Density)	47 bedrooms

\* Please note that this waste management plan is based on the development not including any commercial tenancy (e.g. café) as discussed with the Client. If a commercial tenancy is included in the final design, then the waste management plan and waste management system, including storage areas, would need to be revisited and revised.

#### 2.2 Site Requirements

The following waste management & operational requirements in Table 4 below, were indicated for the site by the Client and the Project Architect. These arrangements have been considered when developing the design of the proposed waste management system (WMS), and the information contained in the waste management plan (WMP).

#### Table 4: Site requirements summary

Waste Management Requirement	Description
Waste Disposal & Storage Areas	<ul> <li>A Bin Storage Room located in the development will have provisions for the storage of larger (660L) waste and recycling bins. Waste and recycling from the residential apartments would be aggregated within these bins.</li> <li>A waste chute system would transport waste and recyclables from the residential apartment levels. This chute system would include 1 chute with an attached diverter, for disposing general waste and recycling via the same chute.</li> </ul>
Building Services/ Management	<ul> <li>Cleaners and/or maintenance contractors are to manage waste at the development, such as hard waste collections and swapping over bins (e.g. full with empty) from under the chute system in the <b>Bin Storage Room</b>.</li> </ul>
Collection Service Types	<ul> <li>Collection would occur by Council or a commercial waste and recycling collection contractor.</li> <li>Collection types are to align with the services recommended/ required within the applicable local council or state government guidelines and policies.</li> </ul>
Collection Point	<ul> <li>All waste collection would occur directly from the Bin Storage Room.</li> <li>Collection vehicles would park their vehicle in the on-street loading zone on Wright St near the development, and collect and return bins from the Bin Storage Room.</li> </ul>

Build 29: Wright St Apartments Development - Waste Management Plan

### 3. Design Approach & Assumptions

#### 3.1 Overarching Approach

The proposed waste management system (WMS) for this development has been prepared with the following policy, design, and/or operational requirements for waste management in mind.

- South Australian Better Practice Guide Waste Management in Residential or Mixed Use Developments (Zero Waste SA, 2014)
  - Identifies need (among others) for areas to store waste and recyclable materials appropriate to the size and type of development, screened from public, which minimises disturbance to surrounding residents and users and provides for service vehicle access.
- The South Australian Environment Protection (Waste to Resources) Policy 2010 (W2REPP) (Government of South Australia, 2011)
  - This policy requires that waste is subject to resource recovery processes, which can include source separation, before disposal to landfill.
- Adelaide City Council (ACC) Design Guide for Residential Recycling (2013)
  - Provides guidance on design of waste management systems for medium to high density residential and mixed use developments.
- Adelaide City Council Operating Guideline Waste & Recycling Services (Adelaide City Council, 2014)
  - Set outs Council's proposed basic and enhanced services for collection of waste and recycling from high density and mixed use developments and businesses.

#### 3.2 Estimating Waste & Recycling Services, Volumes and Sizing Storage Areas

This waste management plan (WMP) includes an estimate of waste & recycling volumes likely to be generated by the development, which can be found in Section 4 below. The estimation of waste and recycling volumes is based on:

- The proposed land use data;
- Client, regulatory, and/or Council expected services for different land uses in the development; and
- Waste generation metrics found in:
  - South Australian Better Practice Guide Waste Management in Residential or Mixed Use Developments (Zero Waste SA, 2014)
  - Commercial waste and recycling generation splits developed by Rawtec, which are based on previous waste audits, industry knowledge and experience.

### Waste and Recycling Services, Volumes, Estimated Collection Frequency, and Storage Areas

#### 4.1 Waste and Recycling Services

To achieve effective waste and recycling management at the site, Table 5 below outlines the recommended waste and recycling services that should be collected from the development. These recommended services include the waste and recycling services that were indicated as preferred by the Client, as well as, additional services that are required/desired in the policy, design guidelines, and/or operational requirements found in Section 3 above. Table 5: Recommended waste & recycling services for the development

	Required/Desired Waste and Re	ecycling Collection
	Land Use	Residential
Service type	Development Land Uses	Residential Apartment
	Waste and Recycling Streams	
Routine collection (e.g. rear-lift collection)	General Waste	x
	Co-mingled Recycling	X
	Organics (Food) Recycling	X
	Hard Waste	х
*On-call collection (pick-up by contractor) or	E-waste	X
(by residents or building services)	CFL/Lighting	x
	Printer Cartridges	x
	Batteries	х

Notes: 'X' indicates required or desired as per The South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Zero Waste SA, 2014).

Please note that *hard waste and e-waste (including batteries, light globes and printer cartridges etc.)* will not be included within the waste management system (WMS) within this waste management plan (WMP). These waste and recycling streams would either be temporarily stored within residential apartments and dropped-off at an appropriate external location (e.g. local recycling depot or office supply store) by residents when required, or managed through an external contractor (e.g. for carpark lighting replacement).

#### 4.2 Estimated Waste and Recycling Volume Generation

In order to achieve effective waste and recycling management at the site, Table 6 below outlines the:

- Recommended waste and recycling services that should be collected from the development;
- Estimates for the total waste and recycling volumes generated by each land use;
- Nominated bin sizes for each waste stream;
- Proposed collection frequency;
- Number of bins required, proposed waste collection service provider; and
- Location where bins are presented for collection.

#### Table 6: Preliminary volume estimates, no. and size of bins and collection details

Proposed Waste	Estimated Waste		Prop	osed Services		Value of the second second
and Recycling Streams Collected from the Development	and Recycling Volume	Bin Size(s) (Litres)	Collection Frequency	Estimated No. Bins Required	Proposed Waste Collection Service Provider	Proposed Location Where Bins/Waste Is Presented for Collection
General Waste	1,500	660	1 x per week	3 + spare for under chute during collection	Council or Commercial Provider Waste and Recycling Collection	
Comingled Recycling	1,300	660	1 x per week	2 + spare for under chute during collection		On-property presentation within the Waste Room
Organics (Food) Recycling	500	660	1 x per week	2		
Hard Waste/ E-Waste	500	e.	On-call Pull-in/Pull- out	-	Conection	Temporary Storage within dwellings of residential apartments and/or the storage cages on the Ground Floor
Total (Whole Development)	3,800	÷	-	9		

\*Note: Totals have been rounded to better reflect estimation of the volumes and may not equate

A table showing estimated waste and recycling volumes generated by individual land uses can be found in Table 10 in Appendix 2.

#### 4.3 Waste Storage Areas

An indicative drawing of the development's waste rooms can be found in Appendix 1. These drawings also show the estimated minimum area required and one example of bin configuration.

#### 4.4 Bin Washing

The site would benefit from having waste contractor be contracted to provide regular bin washing services to the development (either on-site or off-site).

### 5. Waste Management System

#### 5.1 Overview of System

The sections below give an overview of the main elements of the proposed WMS for the development based on the required services and waste and recycling volumes generated for each land use, and the required/desired services found in Table 5 and Table 6 above. Table 7 below gives a breakdown the waste management systems for the individual land uses that form the development's WMS. Also indicated below, are the waste streams managed by the waste management systems.

#### Table 7: Waste Management Systems and Waste Streams

Sub Section	WMS	Waste Streams
5.2	Residential Apartments (Table 8)	<ul> <li>General Waste</li> <li>Co-mingled Recycling</li> <li>Organics (Food) Recycling</li> </ul>

Some of the waste streams managed in the proposed WMS have been broken into a series of steps to better describe the waste management requirements and transfer pathways from user storage to collection. These steps have been adapted for this particular development from the waste management steps recommended in the South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments (Zero Waste SA, 2014).

### 5.2 Residential Apartments

#### Table 8: Residential Apartments Waste Management System (WMS)

	WMS Step	WMS Notes*
	Step 1 – User storage	<ul> <li>All residential apartments would have small-medium bins (with bags if required) to sort, dispose and store waste. For example:</li> <li>A 20-40L general waste bin (with bin bag);</li> <li>A 20-40L litre comingled recycling bin; and</li> <li>A 6 litre organics bench-top or kitchen caddy (with a compostable bag).</li> </ul>
Waste storage and transfer pathways for:	Step 2 – Transfer pathway to common disposal	<ul> <li>General waste and co-mingled recycling <ul> <li>Single chute with diverter with chute disposal locations on each level.</li> </ul> </li> <li>Organics (food) recycling <ul> <li>Drop-off point via an in-wall waste chute on Ground Floor Bin Storage Room which is adjacent to the lifts.</li> <li>The Ground Floor area would also contain a pigeonhole/storage shelf for the temporary storage of the kitchen caddies, for when residents have</li> </ul> </li> </ul>
General Waste Co-	area	dropped-off their organics waste as they are leaving the building and intended on collecting the caddy on their way back up to their apartment upon their return, minimizing trips up and down the lifts for waste and recycling disposal.
mingled Recycling • Organics (Food) Recycling	Step 3 – Aggregation and Storage	<ul> <li>General waste and co-mingled recycling</li> <li>Waste and recycling travels down a single chute, diverts (via the attached diverter) into either a large (660L) waste bin or a large (660L) co-mingled recycling bin, within the Bin Storage Room.</li> <li>Organics (food) recycling</li> <li>Organics (in compostable bags) dropped off into the in-wall waste chute , would then be deposited into a 240L organics (food) recycling bin.</li> </ul>
	Step 4 – Bin presentation and Collection	<ol> <li>The Waste and Recycling Collection Provider would park their collection vehicle in a designated on-street loading zone in front of the development on Wright Street.</li> <li>Bins would be collected directly from within the Bin Storage Room and would be emptied into the collection vehicle.</li> <li>The collection contractor would then return the bins to the Bin Storage Room.</li> </ol>

### 6. Collection Requirements and Vehicle Movements

#### 6.1 Collection Vehicles

The collection vehicles expected for waste collection at this development would generally be:

- Rear-lift trucks: For collection of 240L and 660L waste & recycling bins
- Pan-tech trucks, flat-bed trucks or small utility vehicles: For collection of at-call pullin/pull-out hard waste collection

Examples of the likely truck dimensions are provided in the Table 9 below to assist the Traffic Engineer/Consultant in ensuring that the suitable **on-street loading zone** can accommodate the waste and recycling collection vehicles, and that vehicles can enter and exit the area safely.

In addition to the truck length, the parking area will need to accommodate at least 2m behind collection vehicles for waste bin loading.

Table 9: Likely dimensions and turning radius of waste collection vehicles that would be required to access to the on street loading zone.

Likely	/ dimensions and turning circles of w	aste collection trucks	
	Rear-lift truck (to collect 660L bins)*	Pan-tech/flat-bed (to collect hard waste/E-waste)*	
Dimensions	Up to 4.5m (h) x 2.5m (w) x 8.8m (l)	Up to 4.5m (h) x 2.5m (w) x 8.8m (l)	
Vehicle height in operation	Up to 4.5m	Up to 4.5m	
Vehicle turning radius	10m	10m	

\*Note: Vehicle dimensions are based on Australian MRV standard specifications - AS 2890.2-2002

#### 6.2 Estimated number of waste vehicle movements per week.

We have estimated that there would be approximately **3 waste and recycling collections** per week at the site, depending on the service week. This is based on the estimated waste and recycling volumes and service frequency described in Section 4 above, and does not include on-call pull-in/pull-out collection services.

#### 6.3 Waste and Recycling Collection Time

Collection for **all waste and recycling streams** would occur within the nominated times for the assigned **on-street loading zone** on Wright St adjacent to the development (i.e. between 7am and 7pm), to prevent the loading zone from not being accessible due to parked cars.

### 7. Supporting Documentation & Design Details

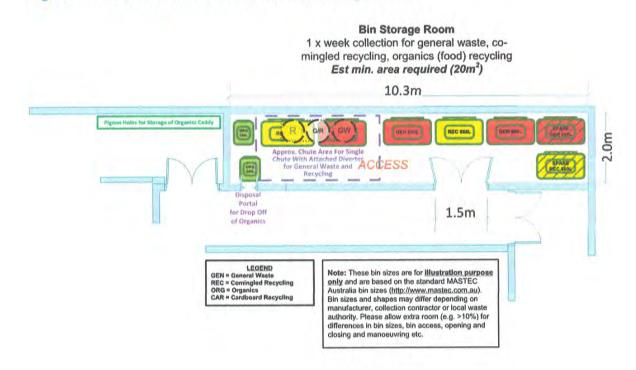
This report should be read and assessed in conjunction with:

- The Architectural Plans Confirming the size and layout of the Bin Storage Room, chute system, drop-off wall chute for organics (food) recycling) and pigeon holes for temporary storage of the kitchen caddies for residents.;
- A Traffic Impact Assessment/Report Confirming parking, loading/unloading area and zones, manoeuvring for waste and recycling collection vehicles, and the distance of the waste and recycling collection loading area from the **Bin Storage Room**.

### Appendix 1: Indicative Size of Waste Rooms

The figure below is an indicative drawing of the minimum size required for the development's waste and recycling bin storage area (**Bin Storage Room**), containing the required number of bins, including one example of bin configuration.

Figure 1: Indicative illustration of the Bin Storage Room



### Appendix 2: Estimated Waste Generation Volumes by Land Use & Waste Stream

Table 10 Estimated waste and recycling volumes by collection service and land use (litres per week)

	Estimated Waste Generation Volumes (Litres Per Week) by Land Use & Waste Stream (All Land Uses)					
	Land Use	Residential	Residential	Residential	Residential	Totals
	Development Land Use	Studio	1 Bed	2 Bed	3 Bed	(Litres Per
Ī	WRGR Classification	Residential (High Density)	Residential (High Density)	Residential (High Density)	Residential (High Density)	Week)
	General Waste	200	500	700	90	1,500
WE	Co-mingled Recycling	200	400	600	80	1,300
Waste	Organics (Food) Recycling	60	200	200	30	500
Str	Hard Waste	40	100	200	20	400
	E-waste	7	20	30	4	100
Tot	tal Site Volume (Litres per Week)	500	1,200	1,700	200	3,800

\*Note: Totals have been rounded to better reflect estimates and may not equate



126 Wright Street Apartments Planning Stage Acoustic Report

> Report Date: Thursday, 11 May 2017 Reference: A17322RP1, Revision 0



#### **Document Information**

Project	126 Wright Street Apartments	
Client	Build 29	
Report title	Planning Stage Acoustic Report	
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#### **Revision Table**

Report revision	Date	Comments
0	10 May 2017	First Issue



# Glossary

A-weighting	A spectrum adaption that is applied to measured noise levels to represent human hearing. A-weighted levels are used as human hearing does not respond equally at all frequencies.
Characteristic	Associated with a noise source, means a tonal, impulsive, low frequency or modulating characteristic of the noise that is determined in accordance with the Guidelines for the use of the Environment Protection (Noise) Policy (Noise EPP) to be fundamental to the nature and impact of the noise.
Continuous noise level	A-weighted noise level of a continuous steady sound that, for the period over which the measurement is taken using fast time weighting, has the same mean square sound pressure as the noise level which varies over time when measured in relation to a noise source and noise-affected premises in accordance with the Noise EPP
Day	Between 7 am and 10 pm as defined in the Noise EPP
dB	Decibel—a unit of measurement used to express sound level. It is based on a logarithmic scale which means a sound that is 3 dB higher has twice as much energy. We typically perceive a 10 dB increase in sound as a doubling of that sound level.
dB(A)	Units of the A-weighted sound level.
Frequency (Hz)	The number of times a vibrating object oscillates (moves back and forth) in one second. Fast movements produce high frequency sound (high pitch/tone), but slow movements mean the frequency (pitch/tone) is low. 1 Hz is equal to 1 cycle per second.
Indicative noise level	Indicative noise level determined under clause 5 of the Noise EPP.
L <sub>90</sub>	Noise level exceeded for 90 % of the measurement time. The $L_{90}$ level is commonly referred to as the background noise level.
L <sub>eq</sub>	Equivalent Noise Level—Energy averaged noise level over the measurement time.
L <sub>max</sub>	The maximum instantaneous noise level.
Night	Between 10.00 p.m. on one day and 7.00 a.m. on the following day as defined in the Noise EPP



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126 Wright Street Apartments Planning Stage Acoustic Report A17322RP1 Revision 0



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## 1 Introduction

This report outlines the acoustic assessment of the proposed multi-storey residential development at 126 Wright Street, Adelaide.

This development is required to comply with the requirements in the Adelaide (City) Development Plan in relation to noise emission and noise intrusion. The potential noise emissions from the development and noise intrusion from the existing noise environment have been assessed against the requirements of the Adelaide Council Development Plan.



# 2 Proposed development

#### 2.1 Location

The proposed development located at 126 Wright Street is a 17-storey building and comprises of residential units. The principal sources of daily noise affecting this proposed development will be from road traffic and pedestrian noise on Wright Street and Whitmore Square. Furthermore, the proposed development is located near a number of restaurants on Field Street which operate typically between 10am – 11pm all week. The location of the proposed development on Wright Street is shown in Figure 1.



Figure 1 Proposed development



The potential noise emission sources associated with this development are from mechanical plant serving the residences and the car lift. The closest noise sensitive receivers that may be impacted by the noise from the development are the residential properties located directly to the east and west on Wright Street.

This assessment is based on the drawings 17001 A1.00 – 3.10 by Enzocaroscio Architecture dated 27 February 2017.



## 3 Development Plan

#### 3.1 Principles of Development Control

The proposed development is located within the Adelaide City Council area and should conform to the Principles of Development Control (PDCs) within the Adelaide (City) Development Plan (DP), and in particular the Council-wide provisions for noise emission and noise intrusion control. The relevant Principles of Development Control for noise sources are:

**89** Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.

**93** Mechanical plant or equipment, should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed:

(a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

94 To ensure minimal disturbance to residents:

(a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:

- (i) after 10.00pm; and
- (ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.

(b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

The relevant Principles of Development Control for noise receivers are:

**95** Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.

**96** Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.

**97** Noise sensitive development adjacent to noise sources should include noise attenuation measures to achieve the following:

(a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;



(b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 - 'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors';

(c) noise level in any bedroom, when exposed to music noise (L10) from existing entertainment premises, being:

(i) less than 8 dB above the level of background noise (L90,15 min) in any octave band of the sound spectrum; and

(ii) less than 5 dB(A) above the level of background noise (LA90,15 min) for the overall (sum of all octave bands) A-weighted levels.

Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate. Unless otherwise demonstrated, the minimum background noise to be used will be:

Octave Band Centre Frequency (Hz)	Minimum Background Noise Level, (L <sub>A90,15</sub> ) dB(A)
63	10
125	12
250	14
500	14
1000	12
2000	10
4000	8
Overall sum	21

On the bases of the windows being closed for the noise sensitive development and any existing entertainment premises complying with the relevant legislation relating to noise emission.

**98** Attached dwellings/serviced apartments should be designed to minimise the transmission of sound between dwellings/serviced apartments and should particularly protect bedrooms from possible noise intrusion.

**99** The number of dwellings/serviced apartments within a development sharing a common entry should be minimised to limit noise generation in internal access ways.

#### 3.2 Sleep disturbance criterion discussion

The sleep disturbance criteria outlined in PDC 94(b) and 97(a) are based on the World Health Organisation (WHO) sleep disturbance noise levels at which 'effects' on sleep have been observed. These 'effects' occur at a much lower level than sleep awakening, and are a very conservative noise goal.

The WHO sleep disturbance levels are:

- Internal noise level of Leq 30 dB(A) and Lmax 45 dB(A); OR
- External noise level of L<sub>eq</sub> 45 dB(A) and L<sub>max</sub> 60 dB(A).

The intent of PDC 97(a) is to reference the internal  $L_{max}$  criterion to be used in conjunction with the  $L_{eq}$  internal noise criterion provided in AS/NZS 2107.



#### 3.3 Summary of relevant noise criteria

A summary of the applicable noise criteria for the proposed development is provided in Table 1.

Noise type		PDC	Noise criteria, dB(A)		
			Day, 7 am to 10 pm	Night, 10 pm to 7 am	
Noise emissions	Mechanical	93	External L <sub>eq</sub> 55	External L <sub>eq</sub> 45	
	Car park	94(b)		External L <sub>eq</sub> 45 & L <sub>max</sub> 60	
Noise intrusion	General (traffic)	95, 97(a), 97(b)	Living room—Internal L <sub>eq</sub> 45	Bedroom—Internal L <sub>eq</sub> 40 & Internal L <sub>max</sub> 45	
Internal separation	-	99, 100	Compliance with Part F5 of the BCA		

#### Table 1 Summary of applicable noise criteria



# 4 Noise emission & internal separation

#### 4.1 Mechanical services noise and car parking and

The main noise sources that will affect the noise emission from the proposed site are mechanical services noise and noise from car parking activity.

At this stage of the planning process, detailed information on the air conditioning and ventilation equipment is not available. However, noise emissions from all mechanical plant will be assessed and designed to comply with the design criteria outlined in PDC 93, that is  $L_{eq}$  55 dB(A) during the day (7 am to 10 pm) and  $L_{eq}$  45 dB(A) at night (10 pm to 7 am).

Appropriate noise mitigation treatments may include the use of acoustic louvres for the plant rooms, inclusion of acoustic absorption within the plant room, selection of low noise equipment, use of inline fan attenuators etc. Acoustic treatment of mechanical services, including the car lift, will be addressed during the detailed design stage of the project.

#### 4.2 Internal separation

The internal separation will be assessed and designed during detailed design stage of the project to ensure compliance with Part F5 of the BCA.



# 5 Noise intrusion assessment

#### 5.1 Noise Monitoring

Background noise monitoring was carried out at 121 Wright Street from 1 pm on Tuesday the 2<sup>nd</sup> May 2017 until 11 am on Monday the 8<sup>th</sup> May 2017. This location was chosen as it was secure and provided a representative location of the most exposed facade of the proposed development. The location of the noise logger in relation to the proposed development is presented in Figure 2.



Figure 2 Noise monitoring location



#### Instrumentation

The noise measurements were taken with a calibrated Brüel & Kjær 2250 sound level meter, which is a Type 1 instrument suitable for field and laboratory use. The sound level meter was calibrated both before and after the measurements using a Type 1 Brüel & Kjær 4231 sound level calibrator, and the calibration was found to have not drifted. Both the sound level meter and calibrator carry current calibration certificates from a NATA accredited laboratory. Copies of the calibration certificates are available on request.

#### Procedure

Noise measurements were undertaken in accordance with the following:

- The microphone of the sound level meter was at a height of approximately 1.2 metres above the ground.
- A wind shield was used during all measurements
- Noise measurements were undertaken continuously over 15 minute periods.

#### Results

The results of the noise monitoring are shown in Appendix A.

#### 5.2 Traffic noise intrusion – varying with height

The principal source of noise affecting the amenity of the residences in the development on Wright Street is road traffic noise from the adjacent road network.

We have undertaken computational noise modelling using SoundPlan version 7.4 to determine the variation in noise levels from road traffic due to height of the facade.

The inputs included in the three-dimensional SoundPlan noise models were:

- ground absorption coefficient of 0 which represents hard ground
- building footprints and heights obtained from Enzocaroscio Architecture



# 6 External facade requirements

This section presents the minimum construction requirements to achieve the relevant internal noise criteria. A detailed design of the external building fabric is not available at this stage of the project. However we understand that the walls will be constructed as follows:

- precast concrete panels with steel frame
- acoustic insulation in cavity
- internal lining e.g. 13mm Fyrchek

The following acoustic design advice is based on the highest noise levels at the worst affected facades. The construction requirements for the northern facade may be reduced as noise levels incident on this facade, however this can be finalised during the detailed design phase of the project

#### 6.1 External Facade – Level 1 - 3

The night time  $L_{Amax}$  criterion is the most onerous internal noise criterion applicable to this development (for sleeping areas) and therefore the following external facade design advice is based on achieving an internal  $L_{Amax}$  noise level of 45 dB(A). The adopted noise levels presented in Table 2.

Time Period	Adopted external noise level dB(A)	Internal Noise Criteria dB(A)	Noise Reduction Required dB(A)	
Night L <sub>Max</sub>	81	45	36	
Night L <sub>eq</sub>	62	40	22	
Day L <sub>eq</sub>	66	45	21	

#### Table 2 Adopted external noise levels

We recommend the following or acoustically equivalent construction:

- External Sliding Door Minimum R<sub>W</sub> + C<sub>tr</sub> 32 such as Capral 10.5 mm VLam glazed 584 sliding door, two sash guide buttons per panel with QL48510 INTERLOCK MULLION SEAL and 310037 FINSEAL
- External Fixed Glazing Minimum R<sub>W</sub> + C<sub>tr</sub> 33, which can be achieved using a glazing suite incorporating 10.38 mm laminated glass.

Note that the specified glazed door system is expected to achieve an  $R_W + C_{tr}$  32 which will not meet the required insertion loss. However it will meet the required internal  $L_{Amax}$  noise level for 80% of the time. To achieve complete compliance a double sliding door system would be required and we do not believe this to be a practical approach.

The construction requirements for the northern facade may be relaxed, however this can be finalised during the detailed design phase of the project.

#### 6.2 External Facade – Level 4 - 7

The adopted noise levels presented in Table 3.



#### Table 3 Adopted external noise levels

Time Period	Adopted external noise level dB(A)	Internal Noise Criteria dB(A)	ria Noise Reduction Required dB(A)	
Night L <sub>Max</sub>	81	45	30	
Night L <sub>eq</sub>	62	40	19	
Day L <sub>eq</sub>	66	45	18	

Based on our predictions, the internal noise criteria outlined in Table 1 can be achieved with the following or acoustically equivalent construction:

- External Glazing (Bedrooms) Minimum R<sub>W</sub> + C<sub>tr</sub> 30, which can be achieved using a fixed glazing suite incorporating 6.38 mm laminated glass. If glazing is to be operable, an awning window should be used with acoustic compression seals. An appropriate awning window would be Capral 6.38 mm laminated glazed Genesis awning window with 306906 Gasket.
- External Door (Living Area) Minimum R<sub>W</sub> + C<sub>tr</sub> 21, which can be achieved using 6.38 mm laminated glazing in an aluminium door frame. Create an airtight seal using pile weather stripping with a flexible fin such as Raven 'Glidefin' or Schlegel 'Finseal T-slot, installed on:
  - both sides of the head
  - both sides of the leading edge door jamb
  - fringe weather seals, such as Raven RPC 16.0, installed on the trailing edge of the door

The construction requirements for the northern facade on floors 4 - 17 may be relaxed, however this can be finalised during the detailed design phase of the project.

126 Wright Street Apartments Planning Stage Acoustic Report A17322RP1 Revision 0



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# 7 Conclusion

A noise impact assessment has been undertaken for the proposed development at 126 Wright Street, Adelaide.

The proposed development is a multi-storey buildings containing a mixture of commercial and residential premises (commercial at ground level and residential from level 1 to level 16).

This assessment has demonstrated that, with the noise mitigation treatments detailed in this report, the development is able to comply with the proposed internal noise criteria and intended provisions of Adelaide City Council Principles of Development Control.

On this basis the proposed developments will be able to operate to the intent of the Development Plan noise requirements.



# Appendix A – Noise Monitoring Results



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# PRELIMINARY SITE INVESTIGATION (SITE HISTORY)

# Build 29 126 Wright Street, Adelaide

May 2017 J150420 Report Version: J150420/01



#### Preliminary Site Investigation (Site History) Build 29

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126 Wright Street, Adelaide

#### **EXECUTIVE SUMMARY**

Greencap was commissioned by Build 29 to prepare a Preliminary Site Investigation (Site History) report for the site located at 126 Wright Street, Adelaide, South Australia. The purpose of this investigation was to identify potentially contaminating activities that may be associated with past and present land uses. It is understood this information will be used to inform a Development Application for the construction of a multistory residential apartment building on the site.

The available historical information indicates that the site was likely used for residential purposes and possibly a shop from the 1870s until the mid-1950s. From the mid – 1950's to the late 1980's the site was owned and occupied by Saunders Products Ltd (sheet metal fabrication). Little detail was able to be obtained relating to the use of the site from the late 1980's to the early 1990's, but from the early 1990's to present the site has been primarily utilised for maintenance works associated with Angelakis Bros Ocean Catch operations, who also occupy the land to the north and north east of the site.

The main identified potential onsite sources of contamination associated with past and present site uses include the former use of the site for metal fabrication purposes and the historical use of imported fill from unknown sources. Other potential onsite sources of contamination include the use of pest control chemicals (include termite control chemicals) and the storage and use of small quantities of chemicals associated with the maintenance of Angelakis Bros equipment.

In terms of the proposed redevelopment for high density residential land use and based on the historical review, there is considered to be a low risk of contamination being present on the site that would pose unacceptable health or environmental risks. It is noted that there are some unknowns particularly in relation to the nature of fill material present on the site (although this is likely to be of a similar nature to fill present across adjacent properties and the wider area) and the nature of the activities during the site's use by a metal fabrication company. The actual nature and extent of any impacts could only be assessed via intrusive investigations.



#### Statement of Limitations

This report has been prepared in accordance with the agreement between Build 29 and Greencap.

Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of Build 29 and any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by Greencap.



### Preliminary Site Investigation (Site History) Build 29

126 Wright Street, Adelaide

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### GREENCAP

#### May 2017

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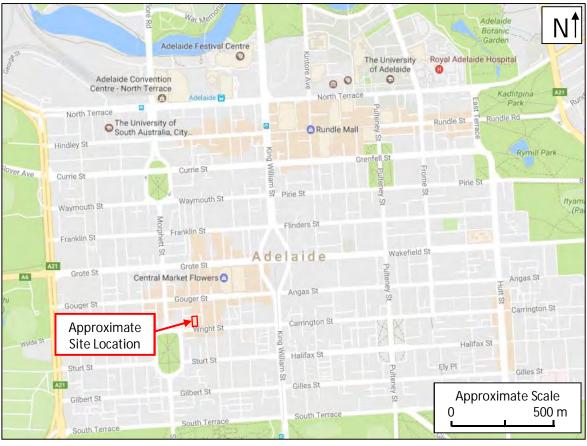
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#### 1.0 INTRODUCTION

Greencap was commissioned by Build 29 to prepare a Preliminary Site Investigation (Site History) for the site located at 126 Wright Street, Adelaide, South Australia. The purpose of this investigation was to identify potentially contaminating activities (PCAs) that may be associated with past and present land uses. It is understood this information will inform a Development Application for a multi-story residential apartment building on the site. The location of the site is presented in Figure 1.



Source: <u>http://www.google.com.au/maps</u> (viewed 4 May 2017) Figure 1: Site Location

The scope of the work has comprised:

- research of the site history;
- review of local geology and hydrogeology;
- a review of relevant government authority information;
- a site inspection, including discussions with personnel with knowledge of the site; and
- identification of potential contaminants of concern associated with current and past uses of the site.

This Preliminary Site Investigation has been prepared with reference to industry standards and guidelines including the National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) and the Australian Standard "Guide to the investigation and sampling of potentially contaminated soil": AS4482.1-2005.



#### 2.0 SITE DETAILS

#### 2.1 Site Identification and Zoning

The site is described by Certificate of Title Volume 5185, Folio 557. The legal description of the site is Allotment 6 in Filed Plan 107633, in the area named Adelaide, Hundred of Adelaide. The site is located within a Capital City zone of the Adelaide City Council.

A copy of the current Certificate of Title and council zoning information is provided in Appendix A.

#### 2.2 Proposed Development

Greencap has been provided with proposed development plans indicating that a multi storey residential building will be constructed on the site. The site will be covered with a building or sealed with paving / concrete with a single level basement carpark.

A copy of the proposed development plan provided to Greencap and dated 4 March 2016 is presented in Appendix B.

#### 2.3 Physical Setting

The site is situated in the Adelaide central business district (CBD). The nearest permanent watercourse is the River Torrens located approximately 1.4 kilometres north of the site. The Gulf of St Vincent is located approximately 9 kilometres to the west of the site. In addition, two ephemeral creeks / unlined drains are located in the southern and western parklands, approximately 1.3 km south east and 950 m west of the site, respectively. The site and surrounding areas are essentially level and the location of the site is presented in Figure 1 and 2.

#### 2.4 Site Description and Current Land Use

The site is the southern portion of a larger site used in its entirety by Angelakis Bros Ocean Catch (fish production facility, referred to as Angelakis Bros herein) (refer to Figure 2). The subject site has a total area of approximately 260 square metres (m<sup>2</sup>). The entire site is sealed and covered with either a building or hardstand. A single storey commercial type building is located on the northern portion of the site and covers approximately 90 m<sup>2</sup>. The building is currently used for the maintenance of factory equipment for the fish production facility Angelakis Bros, which operates on a larger portion of land, including the subject site (refer to Figure 2 which shows an aerial image of the site and surrounds). The southern portion of the site is used for car parking purposes (refer to Photograph 1).



May 2017



Source: http://www.google.com.au/maps (viewed 4 May 2017)

Figure 2: Aerial Image of Site and Surrounds



Photograph 1: View looking north across the site from Wright Street (2 May 2017)



#### 2.5 Surrounding Land Use

The site is bound by Wright Street to the south with residential properties adjacent to the site (east and west). Surrounding land use comprises:

- North Angelakis Bros operations including car parking, storage and a small maintenance workshop (north of the site within the saw tooth shed connected to the site).
- East Residential properties, a chartered accountant and lawyer's office (fronting Wright Street).
- South Residential properties, law practice, fancy dress shop (fronting Wright Street, opposite site).
- West A residential property (adjacent to the site), a three story building comprising a café (ground floor) and accommodation, Adelaide International House (second and third floors) (fronting Wright Street).

#### 2.6 Site Inspection for Contamination Indicators

A Greencap environmental scientist inspected the site on 2 May 2017. The objectives of the inspection were to locate and identify:

- Structures and storage areas including underground tanks, waste pits and lagoons, hazardous materials storage, electrical transformers and hydraulic equipment, asbestos products, septic tanks and drain fields.
- Obvious visual contamination indicators such as disturbed vegetation, discoloured, oily or disturbed soil and / or the presence of any odours.

Several features were observed during the inspection as presented below. It is noted that areas of the ground surface were obscured by various parked cars, bins and pallets (with stacked polystyrene boxes) (refer Photograph 2). As such, a detailed inspection of the ground surface in these portions of the site was not able to be conducted and the possibility of other features of interest being present at the site cannot be ruled out.



Photograph 2: Various site obstructions looking south across the site (2 May 2017)

Storage, use and spillage of fuels, oils and other chemicals

Small quantities (containers less than 4 litres) of chemicals including oils (engine and compressor), paints and detergents were observed during the inspection. These chemicals were stored on shelving, benches or concrete flooring. Flammable liquids were observed on the site and were appropriately stored in a designated cupboard upon a raised base (refer to photograph 3). Greencap was advised (refer Section 3.5) that these are used during routine maintenance activities (of Angelakis Bos processing equipment, etc) that are also carried out on the site, and adjacent areas to the north.

The ground surface within the site building was sealed with concrete which appeared to be in good condition. No evidence of obvious spills were observed across the site during the inspection.



Photograph 3: Chemical storage within the northern portion of the site (2 May 2017)

## Imported fill

The site is sealed with concrete and bitumen which appeared to be in good condition. It is likely that imported fill material had been used on the site historically for site levelling and as a base course under the buildings / sealed areas of the site. Furthermore, the Adelaide CBD is known to have been levelled with fill material from numerous unknown sources.

## Termite / pest treatment

A few rodent bait boxes were noted throughout the site (within the building) and it is understood that these boxes are monitored by an outsourced company. These are not considered significant as they are situated upon concrete flooring which appeared in good integrity.

## Potential Asbestos Containing Materials

In conjunction with the environmental site inspection, Greencap inspected the site for any items potentially containing asbestos material. No asbestos register was viewed during the site inspection, and Greencap understands a register may not have been prepared previously for the site. A chimney flue was suspected to comprise asbestos containing materials; however Greencap was not able to undertake a detailed inspection of this item due to the roof height. This item appeared to be in a good condition.



## 2.7 Geology and Hydrogeology

The Department of Mines and Energy Bulletin 51 'Engineering Geology of the Adelaide City Area' indicates the local near surface geology comprises a sequence of Quaternary and Tertiary sediments. Cross sections indicate that the geological sequence in the area reportedly comprises a calcareous mantle up to 2.5 metres thick overlying approximately 10 metres of high plasticity clay (Hindmarsh Clay). The Quaternary sediments overlay approximately 10 to 20 metres of Tertiary Age Carisbrooke Sand and calcareous sandstone (Hallett Cove Sandstone), and various other Tertiary sediments (sands, clays, limestones) below this.

The site is situated in the Adelaide Plains in a landform area known as the upper alluvial plain. The general geological sequence in the upper alluvial plain comprises:-

- Quaternary Age sediments of fluvial and marine origin (generally clays with sands and gravel layers) of up to 50 metres thickness. The Soil Association Map of the Adelaide Region indicates the local near surface soils are typically red brown clay soils with granular structure over clay with variable lime content.
- Tertiary sediments of marine origin (limestones, sands and sandstones) up to 150 metres thickness.
- Precambrian Age basement rock below approximately 200 metres depth.

Groundwater in the upper alluvial plain occurs in sand and gravel layers within the Quaternary sediments, and also in underlying Tertiary sediments. There are reportedly up to five distinct aquifers within the Quaternary sediments, and up to three distinct aquifers in the Tertiary sediments.

Reference to the online South Australian Resource Information Map produced by the Department of Primary Industries and Resources of South Australia indicates that the expected depth to the water table is between 10 and 20 metres below ground level (m bgl). The groundwater salinity is expected to range between 1,500 and 3,000 parts per million (ppm) expressed as total dissolved solids (TDS). Information Sheet 21 produced by the former South Australian Department of Mines and Energy indicates the regional groundwater flow direction is west to north west, however it is possible there are local variations.

Groundwater information from wells located within a 500 metre radius of the approximate centre point of the site was obtained from the Department of Environment, Water and Natural Resources (DEWNR). Results indicated approximately 150 wells are present within the search perimeter. The standing water level in shallow groundwater wells (< 25 m bgl) in this area ranged from approximately 2 to 21m bgl. The groundwater data is presented in Appendix C and a summary of the information of wells in close proximity to the site (250 m radius) is presented in Table 1 on the following page.

Location         DEVNR Well ID         Total Depth         Water Level (m) and date         Yield (L/sec)         TDS (mg/L)         Status / Purpose           - 50 m S         6628 - 27192         3.40         -         -           ./ Investigation           - 50 m S         6628 - 27190         3.40         -         -          ./ Investigation           - 50 m S         6628 - 27190         13.20         10.60 (29/01/2014)         -          ./ Investigation           - 50 m S         6628 - 27190         13.20         10.50 (30/01/2014)         -          ./ Investigation           - 130 m NW         6628 - 18418         4.50         -         -         .//         ./ Observation           - 130 m NW         6628 - 18417         4.50         -         -         .//         ./ Observation           - 130 m NW         6628 - 18416         3.80         3.32 (06/08/1996)         -         .//         .//         .//           - 140 m NW         6628 - 18419         4.50         -         .//         .//         .//         .//           - 190 m W         6628 - 18419         3.50         -         .//         .//         .//         .//		Tuc					)
- 50 m S         6628 - 27191         3.40         -         -         Image: Constraint of the second	Location	DEWNR Well ID	Depth				Status / Purpose
- 50 m S       6628 - 27190       13.20       10.60 (29/01/2014)       -       - / Investigation         - 50 m S       6628 - 27189       13.00       10.50 (30/01/2014)       -       - / Investigation         - 130 m NW       6628 - 18418       4.50       -       -       - / Observation         - 130 m NW       6628 - 18417       4.50       -       -       - / Observation         - 130 m NW       6628 - 18415       3.80       3.32 (06/08/1996)       -       - / Investigation         - 135 m NW       6628 - 27853       21.00       -       -       - / Investigation         - 140 m NW       6628 - 18416       3.80       2.18 (06/08/1996)       -       - / Observation         - 145 m NW       6628 - 20143       10.00       5.50 (17/05/2000)       0.010       - / Monitoring         - 190 m W       6628 - 18419       4.50       -       -       -       - / observation         - 220 m SE       6628 - 26446       -       -       -       -       - / observation         - 230 m SE       6628 - 3464       19.00       17.00 (14/12/2011)       -       - / Investigation         - 230 m SE       6628 - 3464       3.59       -       -       - / monitoring <td>~ 50 m S</td> <td>6628 – 27192</td> <td>3.40</td> <td>-</td> <td>-</td> <td></td> <td>- / Investigation</td>	~ 50 m S	6628 – 27192	3.40	-	-		- / Investigation
- 50 m S         6628 - 27189         13.00         10.50 (30/01/2014)         -         -         -         / Investigation           - 130 m NW         6628 - 18418         4.50         -         -         -         / Observation           - 130 m NW         6628 - 18417         4.50         -         -         / Observation           - 130 m NW         6628 - 18415         3.80         3.32 (06/08/1996)         -         - / Investigation           - 135 m NW         6628 - 27853         21.00         -         -         - / Observation           - 140 m NW         6628 - 27853         21.00         -         -         - / Investigation           - 145 m NW         6628 - 20143         10.00         5.50 (17/05/2000)         0.010         - / Monitoring           - 190 m W         6628 - 18419         4.50         -         -         -         - / observation           - 220 m SE         6628 - 26446         -         -         -         -         - / Investigation           - 230 m SE         6628 - 341         33.53         -         -         - / Investigation           - 230 m SE         6628 - 346         43.59         -         -         - / monitoring           - 230 m	~ 50 m S	6628 – 27191	3.40	-	-		- / Investigation
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- 135 m NW       6628 - 27853       21.00       -<	~ 130 m NW	6628 – 18417	4.50	-	-		- / Observation
-140 m NW6628 - 184163.802.18 (06/08/1996)-Image: Constraint of the second	~130 m NW	6628 – 18415	3.80	3.32 (06/08/1996)	-		- / Investigation
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~ 190 m W       6628 - 18419       4.50       -       -       -       -       -       -       -       -       -       -       0bservation         ~ 190 m W       6628 - 18420       3.50       -       -       -       -       -       -       0bservation         ~ 220 m SE       6628 - 26446       -       -       -       -       -       Backfilled / -         ~ 220 m SE       6628 - 26894       19.00       17.00 (14/12/2011)       -       -       -       /       Ibseckfilled / -         ~ 230 m SE       6628 - 341       33.53       -       -       929       - / -         ~ 230 m SE       6628 - 346       43.59       -       929       - / -       -         ~ 230 m SE       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~ 230 m SE       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~ 230 m SE       6628 - 26447       -       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~	~140 m NW	6628 – 18416	3.80	2.18 (06/08/1996)	-		- / Observation
~ 190 m W       6628 - 18420       3.50       -       -       -       - / observation         ~ 220 m SE       6628 - 26446       -       -       -       -       Backfilled / -         ~ 220 m SE       6628 - 26894       19.00       17.00 (14/12/2011)       -       -       - / Investigation         ~ 230 m SE       6628 - 341       33.53       -       -       929       - / -         ~ 230 m SE       6628 - 346       43.59       -       -       929       - / -         ~ 230 m SE       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~ 230 m SE       6628 - 26447       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~ 230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26495       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~ 240 m NE       6628 - 302       19.20       14.63 (20/04/1964)	~ 145 m NW	6628 – 20143	10.00	5.50 (17/05/2000)	0.010		- / Monitoring
~ 220 m SE       6628 - 26446       -       -       -       -       Backfilled / -         ~ 220 m SE       6628 - 26894       19.00       17.00 (14/12/2011)       -       -       -       -/ Investigation         ~ 230 m W       6628 - 341       33.53       -       -       -/ .       -/ .         ~ 230 m SE       6628 - 346       43.59       -       -       929       - / .         ~ 230 m SE       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~ 230 m SE       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~ 230 m SE       6628 - 26447       -       -       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26447       1       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 26495       20.00       17.50 (16/01/2012)       -       -       -       Backfilled / -         ~ 230 m SE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown / -         ~ 240 m SE       6628 - 26439       -       -       -       -       Backfilled / -	~ 190 m W	6628 – 18419	4.50	-	-	-	- / observation
~220 m SE       6628 - 26894       19.00       17.00 (14/12/2011)       -       -       - / Investigation         ~230 m W       6628 - 341       33.53       -       -       929       - / -         ~230 m SE       6628 - 346       43.59       -       -       929       - / -         ~230 m SE       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~230 m S       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~230 m SE       6628 - 26447       -       -       -       -       Backfilled / -         ~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       Backfilled / -         ~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       -       Investigation         ~240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown / -       Backfilled / -         ~240 m SE       6628 - 26439       -       -       -       -       Backfilled / -	~ 190 m W	6628 – 18420	3.50	-	-	-	- / observation
~ 230 m W       6628 - 341       33.53       -       -       -       -/-         ~ 230 m SE       6628 - 346       43.59       -       -       929       -/-         ~ 230 m SE       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       -/monitoring         ~ 230 m S       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled /-         ~ 230 m SE       6628 - 26447       -       -       -       -       Backfilled /-         ~ 230 m SE       6628 - 26447       -       -       -       -       Backfilled /-         ~ 230 m SE       6628 - 26447       -       -       -       -       Backfilled /-         ~ 230 m SE       6628 - 26495       20.00       17.50 (16/01/2012)       -       -       -       // Investigation         ~ 240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown /-         ~ 240 m SE       6628 - 26439       -       -       -       -       Backfilled /-	~ 220 m SE	6628 – 26446	-	-	-	-	Backfilled / -
~ 230 m SE       6628 – 346       43.59       -       -       929       - / -         ~ 230 m S       6628 – 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~ 230 m S       6628 – 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~ 230 m SE       6628 – 26447       -       -       -       Backfilled / -         ~ 230 m SE       6628 – 26495       20.00       17.50 (16/01/2012)       -       -       Backfilled / -         ~ 230 m SE       6628 – 26895       20.00       17.50 (16/01/2012)       -       -       -/ Investigation         ~ 240 m NE       6628 – 302       19.20       14.63 (20/04/1964)       -       Ulnknown / -         ~ 240 m SE       6628 – 26439       -       -       -       -       Backfilled / -	~220 m SE	6628 – 26894	19.00	17.00 (14/12/2011)	-	-	- / Investigation
~ 230 m S       6628 - 19241       15.00       10.17 (21/08/1998)       -       -       - / monitoring         ~230 m S       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~230 m SE       6628 - 26495       20.00       17.50 (16/01/2012)       -       -       Backfilled / -         ~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown / -         ~240 m SE       6628 - 26439       -       -       -       -       Backfilled / -	~ 230 m W	6628 – 341	33.53	-	-		- / -
~230 m S       6628 - 22130       12.00       10.20 (30/05/2005       0.000       8870       Backfilled / -         ~230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown / -         ~240 m SE       6628 - 26439       -       -       -       Backfilled / -	~ 230 m SE	6628 – 346	43.59	-	-	929	- / -
~230 m SE       6628 - 26447       -       -       -       Backfilled / -         ~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Ulnknown / -         ~240 m SE       6628 - 26439       -       -       -       Backfilled / -	~ 230 m S	6628 – 19241	15.00	10.17 (21/08/1998)	-	-	- / monitoring
~230 m SE       6628 - 26895       20.00       17.50 (16/01/2012)       -       -       - / Investigation         ~240 m NE       6628 - 302       19.20       14.63 (20/04/1964)       -       Unknown / -         ~ 240 m SE       6628 - 26439       -       -       -       Backfilled / -	~230 m S	6628 – 22130	12.00	10.20 (30/05/2005	0.000	8870	Backfilled / -
~240 m NE         6628 - 302         19.20         14.63 (20/04/1964)         -         Unknown / -           ~ 240 m SE         6628 - 26439         -         -         -         Backfilled / -	~230 m SE	6628 – 26447	-	-	-	-	Backfilled / -
~ 240 m SE 6628 – 26439 Backfilled / -	~230 m SE	6628 – 26895	20.00	17.50 (16/01/2012)	-	-	- / Investigation
	~240 m NE	6628 – 302	19.20	14.63 (20/04/1964)	-		Unknown / -
~250 m NE 6628 – 301 27.49 Unknown / -	~ 240 m SE	6628 – 26439	-	-	-	-	Backfilled / -
	~250 m NE	6628 – 301	27.49	-	-		Unknown / -

## Table 1: Local Groundwater Wells (DEWNR Records)

## 2.8 Acid Sulfate Soils

The map produced by the Australian Soil Resource Information System indicates that the potential for acid sulfate soils to exist at the site is C4 Extremely Low Probability / Very Low Confidence. A copy of the map is presented in Appendix D.

## 3.0 SITE HISTORY

## 3.1 History of Ownership

A historical ownership search was conducted for the current Certificate of Title. The sequence of ownership is summarised in Table 2 below. Greencap notes that a coach maker was recorded as a site owner from 1878 until 1919, however it is unknown whether associated works were undertaken on the site. Given the information obtained from Adelaide City Archives (Section 3.4.4), it is considered more likely that the site was residential in nature and no coach making activities were carried out on the site. A copy of the current Certificate of Title is presented in Appendix A.

## Table 2: Sequence of Ownership

Date range	Owner (occupation)
03/09/1878 – 25/08/1919	Richard Newell (Coach maker)
25/08/1919 – 12/05/1955	Mary Ann Ellen Newell (Owner: Preston Arthur Henry, Executor & Trustee Co. Ltd)
01/02/1955 – 31/10/1988	Saunders Products Ltd (Sheet metal works)
31/10/1988 – 02/05/1989	Lefkas Pty Ltd (Real estate agents and manager) (of three undivided fourth parts) and T.J. Long & Sons Pty. Ltd (of one undivided fourth part)
02/05/1989 – 12/08/1991	Theodore Xenophou (Builder)
12/08/1991 – 25/03/1994	Antonio Stabelos
25/03/1994 – 19/12/1997	Alphabet Solutions Pty. Ltd. (ACN 008 298 379) and Superior Range Pty Ltd (ACN 008 293 990)
19/12/1997 – 24/06/2016	Daniel Feltracco
24/06/2016 – Present	Victor Harbor 2013 Pty Ltd

## 3.2 History of Occupancy

A search of the Sands and McDougall South Australian Street, Trade, Professional and Municipal Directory was conducted from 1880 (in approximately 10 year intervals) up to the final edition published in 1973. The past occupancy of the site and neighboring properties are presented as a table in Appendix E. It is noted that street numbers were not listed for the 1880 and 1890 editions. For the editions from 1990 until 1920, the street numbers listed were not in the present day format. As a result, it is difficult to determine the exact site occupants from 1880 to 1920. However, generally it is noted that the occupancy records appear to be consistent with the ownership records.

## 3.3 Aerial Photographs

Aerial photographs of the site dating from 1949 in approximate 10 year intervals to present have been reviewed by Greencap. Copies of aerial photographs reviewed are presented in Appendix F.

The 1949 aerial photograph is of a poor quality and exact features of the site are difficult to determine. The photograph appears to show the land surrounding the site comprises a mixture of residential and commercial / industrial type buildings.

The 1959 aerial photograph is of better quality than the 1949 photograph and shows that the present day saw-tooth roof building / shed has been constructed on the northern portion of the site, extending offsite to the north. The southern portion of the site appears to be vacant. Various changes are also evident to surrounding properties.

The 1969 photograph does not show any significant changes to the site, but it is noted that some buildings have been demolished and the present day Wright Court now extends all the way to Field Street (to the north east of the site). A number of other buildings appear to have been demolished in the vicinity.

May 2017



The 1974 aerial photograph is of very poor quality and site features are difficult to determine, but it is possible that an additional structure has been constructed in the southern portion of the site.

The 1989 photograph is clearer than the 1974 image and shows that an additional structure (compared to 1969) has definitely been constructed on the southern portion of the site. The saw-tooth building is still present on the site extending to the north, and the present day Angelakis Bros building to the north west has now also been constructed.

The 2000 aerial photograph shows that the structure evident in the 1989 photograph in the southern portion of the site has now been demolished. This portion of the site appears to be used for car parking purposes, but a small structure (possible shipping container) is evident along the southern boundary fronting Wright Street. The site to the west appears to have been redeveloped, but there are no other significant changes to adjacent properties.

## 3.4 Government Records

## 3.4.1 EPA Section 7 Search

The South Australia Environment Protection Authority (EPA) has a statutory obligation under the *Land and Business (Sale and Conveyancing) Act, 1994* to provide information relating to environment protection. As such, a search was conducted of the EPA database for information relating to the subject land in accordance with Section 7 of the *Land and Business (Sale and Conveyancing) Act, 1994*. The EPA advised in written form of records of issues associated with:-

- particulars of mortgages, charges, prescribed encumbrances affecting the land; or
- particulars relating to environmental protection including:
  - Ø environmental assessments;
  - Ø waste depots;
  - Ø production of certain waste; and
  - Ø waste on land.

The search found the EPA holds no records of the above activities being undertaken at the sites. A copy of the EPA's written response is presented in Appendix G.

## 3.4.2 EPA Site Contamination (Groundwater Notifications) Index

A search was conducted of the EPA's on-line Site Contamination (Groundwater Notifications) Index for information relating to notifications and reports received by the EPA since 1 July 2009 under the *Environment Protection Act 1993*. The Index provides information relating to Section 83A, Audit notifications and reports that relate to specific suburbs or towns. The suburb of Adelaide was searched.

The results of the Section 83A notifications only located within an approximate 500 metre radius of the site are provided in Table 3. The full search results are provided in Appendix G.

Notification No.	Notification Type	Address	Potentially Contaminating Activity	Approximate distance and direction from site
60987 – 01	S83A Notification	172 – 190 Gawler Place	Not Recorded	300 m E
60784 – 02	S83A Notification	43 – 69 Sturt Street	Electrical or electronics component manufacture; Spray painting	320 m SE
61576 – 01	S83A Notification	200 Petronella Lane	Fill or soil importation	400 m SW

## Table 3: Summary of EPA's Site Contamination (Groundwater Notifications) Index



Notification No.	Notification Type	Address	Potentially Contaminating Activity	Approximate distance and direction from site
60418 - 01	S83A Notification	Franklin Street	Listed Substances (storage)	460 m N
61099 – 01	S83A Notification	Halifax Street and adjacent allotments	Works depots	500 m SE

## 3.4.3 Dangerous Substances Search

SafeWork SA (under the Department for Premier and Cabinet) was contacted regarding its knowledge of dangerous good storage at the site. SafeWork SA advised that they did not hold any records for current or cancelled dangerous goods licenses at the site. A copy of SafeWork SA's response is provided in Appendix G.

## 3.4.4 Adelaide Council Archives

A search was conducted of the Adelaide City Archives of the Assessment Books for information relating to the historical occupancy of the site. In addition, various plans relating to building and site alterations were reviewed.

No historical plans were observed to contain evidence of potentially contaminating activities.

The Assessment Books were reviewed in approximate 10 year intervals from the year 1850 up to 2007. The site is located in the Town Acre 459 of the Grey Ward.

Findings from the Adelaide Council Archives are summarised in Table 4 below.

Table 4:	Findings of	possible site	occupants	obtained	from the	Adelaide	Council	Archives
	1 11 10 11 193 01		occupants	obtailicu	II OIII UIC	nacialac	oounon.	

Date	Name of Occupant	Name of Occupant Name of Owner	
1852 – 53	Mr. Henry Grote	Mr. Henry Grote	Dwelling
1882	Mr. Richard Newell	Mr. Richard Newell	Dwelling
1892	Mr. Richard Newell	Mr. Richard Newell	Shop and Dwelling
1899	Mr. Richard Newell	Mr. Richard Newell	Shop and Dwelling
1919	Miss. Mary A. E. Newell	Miss. Mary A. E. Newell	Shop and Dwelling
1949	Miss Mary A. E. Newell	Preston Arthur Henry, Executor & Trustee Co. Ltd.	Shop and Dwelling
1974	Saunders Products Pty. Ltd.	Not listed	Metal Works

In addition, information was obtained suggesting historical surrounding land use included horse stables (from at least 1993 until 1920) and various residential properties.

## 3.5 Interviews

Greencap interviewed Mr Perera (employee of the current site tenants, Angelakis Bros) during the site inspection on 2 May 2017. Mr Perera provided the following information regarding the site:

- Mr Perera had been working on-site for approximately five years.
- The site is primarily utilised as a staff (Angelakis Bros) car park.



- A portion of the shed is designated to equipment maintenance for the fish factory adjacent to the site. Maintenance work includes (but may not be limited to) welding (predominately stainless steel), cleaning and repairs.
- Cleaning across the site is out sourced.
- In the last five years there have been no oil or chemical spills on the site that Mr Perera was aware of.

## 3.6 Information Sources

- · City of Adelaide Council Information on zoning, previous site developments and occupancy.
- Department of Agriculture, Fisheries and Forestry and CSIRO Provision of acid sulphate soil information.
- Department for Environment, Water & Natural Resources, South Australia Provision of aerial photographs and groundwater information.
- · Nearmap.com, Google Earth and Mapland Provision of aerial photographs.
- South Australian Resources Information Gateway Provision of geology and hydrogeology at the site.
- South Australian Environment Protection Authority Information on any known environmental issues on the site.
- Department for Planning, Transport and Infrastructure, Lands Titles Office, South Australia Provision of Certificate of Title information.
- Department for the Premier and Cabinet, SafeWork SA Provision of dangerous substance licence information.
- Adelaide Council Archives Provision of historical information and records for the site and surrounding land.
- Mr Perera (employee of current site tenants) information on past and present site uses.

## 4.0 SUMMARY OF POTENTIALLY CONTAMINATING ACTIVITIES

The historical site review and site inspection have revealed several potentially contaminating activities (PCAs). The details of each of the PCAs, contaminant persistence and mobility in soils are presented in Table 5.

PCA and likely location	Contaminants of Potential Concern	Persistence and mobility in soils	Comments with regard to the proposed high density residential redevelopment of the site
On-site PCA			
Former use of the site by Saunders Products Ltd (Sheet metal works)	Heavy metals, TRH, BTEX, PAHs, solvents	Heavy metals - Mobility = low, persistence = high TRH - Mobility = moderate, persistence = moderate BTEX – Mobility = moderate, persistence = high PAHs - Mobility = low, persistence = high Solvents - Mobility = high, persistence = high	Historical information revealed that the site was used by Saunders Products Ltd (Sheet metal works) from 1955 until 1988. However, given the nature of the site, it is likely that only small quantities of chemicals were stored, used and disposed of on-site. In addition, based on anecdotal evidence, there are no sumps or service pits present on the site and the entire site is sealed with concrete.
Historical use of imported fill from unknown sources brought onto the site for as a base course under buildings, sealed areas or for site levelling purposes.	Heavy metals, PAHs, TRH, asbestos	Heavy metals - Mobility = Iow, persistence = high PAHs - Mobility = Iow, persistence = high TPH - Mobility = moderate, persistence = moderate Asbestos – Mobility = Iow, persistence = high	The Adelaide CBD is known to have been levelled with fill material from numerous unknown sources. The extent and depth of fill material under the site is unknown, but likely to be similar in nature to fill present across adjacent properties and the wider area.
Historical use of pest control chemicals under and within buildings and in previously unsealed portions of the site.	Heavy metals and OCPs	Heavy metals - Mobility = low, persistence = high OCP - Mobility = low to moderate, persistence = high	The use of OCPs as termite control chemicals was not completely discontinued until 1995 (Australian Pesticide and Veterinary Medicines Authority). Any impacts would likely be limited to near surface soils under or adjacent to the existing buildings. A few rodent bait boxes were noted throughout the building. These sources are not considered significant as they are situated upon concrete flooring which appeared in good integrity.
Chemical use during maintenance of Angelakis Bros factory	Heavy metals, TRH and BTEX	Heavy metals - Mobility = low, persistence = high TRH - Mobility = moderate, persistence = moderate BTEX – Mobility = moderate, persistence = high	Greencap observed small quantities of chemical stored on the site. The chemicals were noted to be stored in cupboards or on shelving. The site building has a concrete sealed surface which appeared to be in good condition, and no evidence of any spills was observed during the site inspection.
Demolition of former site buildings	Asbestos	Asbestos – Mobility = Iow, persistence = high	Any impacts would likely be limited to surface soils

### Table 5: Details of Potentially Contaminating Activities

May 2017



PCA and likely location	Contaminants of Potential Concern	Persistence and mobility in soils	Comments with regard to the proposed high density residential redevelopment of the site
Contamination of groundwater from historical activities (including, but not limited to Solver Paints, other operations undertaken by Angelakis Brothers and Saunders Products (sheet metal works) who also operated on adjacent properties.	Various	Variable	In addition to the sites noted, there may be other sites within the Adelaide CBD with the potential to cause groundwater contamination. Any potential impacts from groundwater is likely to be of a similar nature to groundwater underlying adjacent sites and the wider area.
BTEX = benzene, toluene, ethylbe	enzene, xylenes OCI	P = organochlorine pesticides PAH = polycyclic aromatic	hydrocarbons TRH = total recoverable hydrocarbons



## 5.0 CONCLUSIONS

The available historical information indicates that the site was likely used for residential purposes and possibly a shop from the 1870's until the mid - 1950's. Greencap notes that a coach maker was recorded as a site owner from 1878 until 1919, however it is considered likely that the site was residential in nature and no coach making activities were carried out on the site. From the mid - 1950's to the late 1980's the site was owned and occupied by Saunders Products Ltd (sheet metal fabrication). Little detail was able to be obtained relating to the use of the site from the late 1980's to the early 1990's, but from the early 1990's to present the site has been primarily utilised for maintenance works associated with Angelakis Bros Ocean Catch operations, who also occupy the land to the north and north east of the site.

The identified potential onsite and offsite sources of contamination associated with past and present site uses include:

- Storage, use and disposal of solvents, paints and lubricants, etc associated with the site's former use for metal fabrication purposes.
- The use of imported fill from unknown sources for site levelling purposes, or as a base course under site buildings and sealed areas of the site.
- Use of pest control chemicals across the site (including termite control chemicals).
- Potential asbestos debris from demolition of former site buildings.
- Storage and use of small quantities of chemicals associated with the maintenance of Angelakis Bros equipment.

Potential contaminants of concern associated with the identified potential sources of contamination include (but may not be limited to): heavy metals, polycyclic aromatic hydrocarbons, fuel / oil related compounds, solvents, pesticides and asbestos.

In terms of the proposed redevelopment for high density land use and based on the historical review, there is considered to be a low risk of contamination being present on the site that would pose unacceptable health or environmental risks. It is noted that there are some unknowns particularly in relation to the nature of fill material present on the site (although this is likely to be of a similar nature to fill present across adjacent properties and the wider area) and the nature of the activities during the site's use by a metal fabrication company. The actual nature and extent of any impacts could only be assessed via intrusive investigations.



# Preliminary Site Investigation (Site History) Build 29

126 Wright Street, Adelaide

Appendix A: Certificate of Title & Council Zoning Information



The Registrar-General certifies that this Title Register Search displays the records maintained in the Register Book and other notations at the time of searching.



Registrar-General

## Certificate of Title - Volume 5185 Folio 557

Parent Title(s)CT 2371/157Dealing(s)CONVERTED TITLECreating Title06/05/1994Edition4



Edition Issued 02/08/2016

# Estate Type

FEE SIMPLE

## **Registered Proprietor**

VICTOR HARBOR 2013 PTY. LTD. (ACN: 164 313 286) OF B BATTISTELLA & ASSOCIATES L 1 141 O'CONNELL STREET NORTH ADELAIDE SA 5006

# **Description of Land**

ALLOTMENT 6 FILED PLAN 107633 IN THE AREA NAMED ADELAIDE HUNDRED OF ADELAIDE

# **Easements**

NIL

# **Schedule of Dealings**

Dealing Number	Description
12553608	MORTGAGE TO WESTPAC BANKING CORPORATION (ACN: 007 457 141)
12555378	CAVEAT BY CEG DIRECT SECURITIES PTY. LTD. (ACN: 150 878 587)
12594707	MORTGAGE TO CEG DIRECT SECURITIES PTY. LTD. (ACN: 150 878 587)

# **Notations**

## **Dealings Affecting Title**

NIL

Land Services



# 20170227006313

## **Priority Notices**

NIL

## **Notations on Plan**

NIL

## **Registrar-General's Notes**

NIL

## **Administrative Interests**

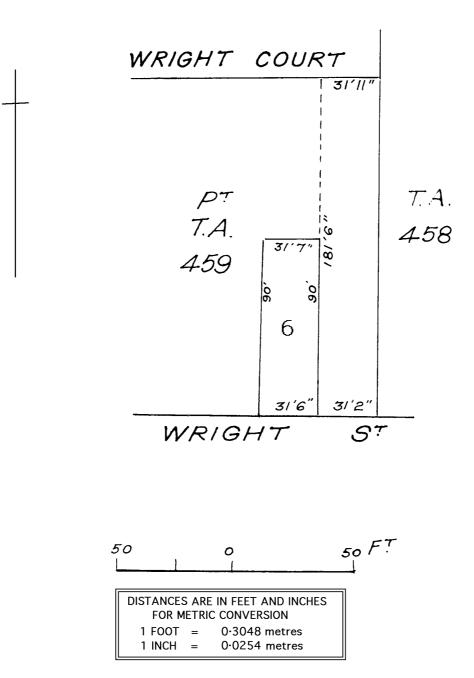
NIL

Land Services



Product Date/Time	Register Search 27/02/2017 12:33PM
Customer Reference	
Order ID	20170227006313
Cost	\$27.75

This plan is scanned from Certificate of Title 2371/157



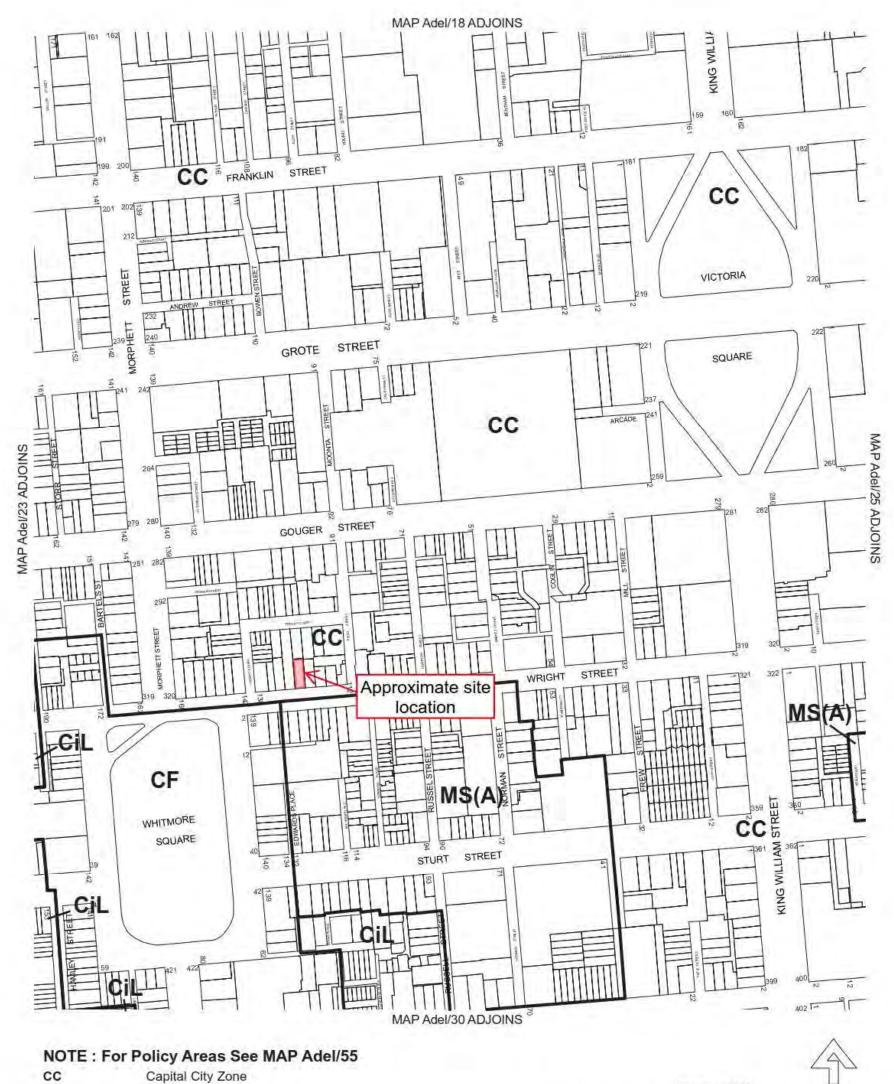
Note : Subject to all lawfully existing plans of division

Land Services

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GREENCAP

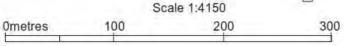
## May 2017 J150420: 126 Wright Street, Adelaide, SA



CF	City Frame Zone	
CIL	City Living Zone	
MS(A)	Main Street (Adelaide) Zone	

Zone Boundary

Development Plan Boundary



# ADELAIDE (CITY) ZONES MAP Adel/24

Consolidated - 24 September 2015

Preliminary Site Investigation (Site History) - 126 Wright Street, Adelaide, SA - (Greencap Ref: J150420)

## CAPITAL CITY ZONE

## Introduction

The Desired Character, Objectives and Principles of Development Control that follow apply in the whole of the Capital City Zone shown on <u>Maps Adel/17 to 20, 23 to 26 and 29 to 31</u>. They are additional to those expressed for the whole of the Council area and in cases of apparent conflict, take precedence over the more general provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Zone.

## **DESIRED CHARACTER**

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

There will also be a rich display of art that is accessible to the public and contextually relevant.

Exemplary and outstanding building design is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

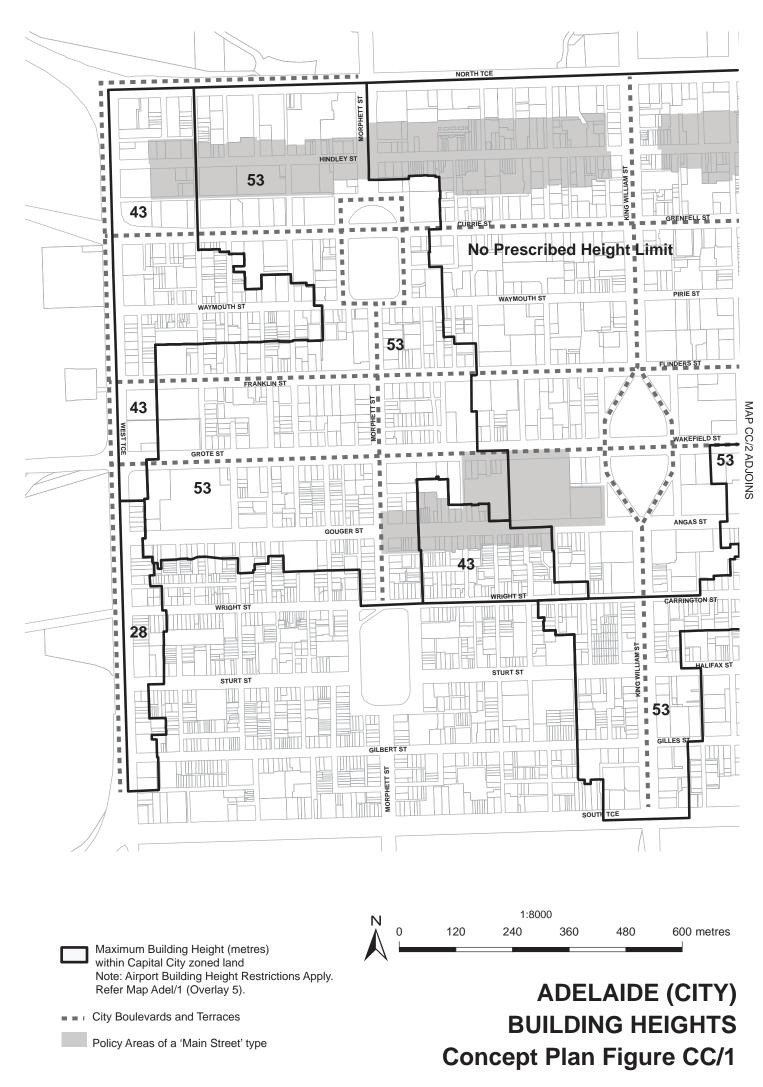
#### Adelaide's pattern of streets and squares

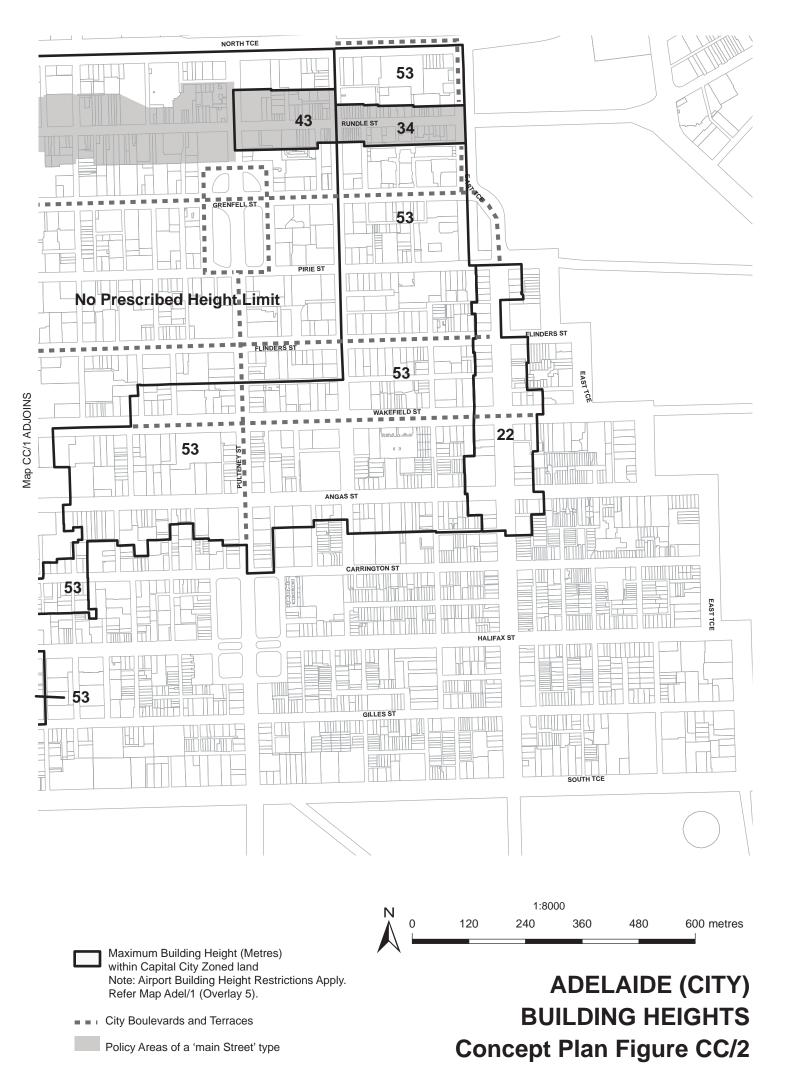
The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan Figures CC/1 and 2. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

The City's boulevards, terraces and Squares will be developed as follows:

- (a) North Terrace will be reinforced as an important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.
- (b) King William Street will be enhanced as the City's principal north-south boulevard and will be reinforced as the City's commercial spine.





- (c) Grote Street-Wakefield Street will be enhanced as the City's principal east-west boulevard and will be developed to provide a strong frame that presents a sense of enclosure to the street.
- (d) East Terrace will be characterised by buildings that maximise views through to the Park Lands and provide a distinct City edge.
- (e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.
- (f) Pulteney and Morphett streets are key north-south boulevards. A sense of activation and enclosure of these streets will be enhanced through mixed use development with a strong built form edge. Pulteney Street will include residential, office and institutional uses, and retail activities. These boulevards will become important tree-lined commercial corridors.
- (g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City. Currie and Grenfell streets will become a key focus for pedestrians, cycling and public transport. These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.
- (h) Victoria, Hindmarsh and Light Squares will have a continuous edge of medium to high-scale development that frames the Squares and increases ground level activity.

The Zone also includes a number of Main Street areas, encompassing Rundle Mall, Rundle Street, Hindley Street and Gouger Street, which are envisaged to have a wide range of retail, commercial and community uses that generate high levels of activity. These areas will have an intimately scaled built form with narrow and frequent building frontages. These areas are shown on Concept Plan Figures CC/1 and 2.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment with buildings sited and composed in a way that responds to the buildings' context. There will be a strong emphasis on ground level activation through frequent window openings, land uses that spill out onto the footpath, and control of wind impacts.

Development in minor streets and laneways with a high value character will respond to important character elements and provide a comfortable pedestrian environment, particularly in the following streets: Gray, Leigh, Union, Chesser, Coromandel, Tucker, Cardwell, Kenton, Market, Ruthven, Cannon, Tatham, Benthem streets, Murrays Lane and Wright Court.

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.

## OBJECTIVES

## General

- **Objective 1:** The principal focus for the economic, social and political life of metropolitan Adelaide and the State.
- **Objective 2:** A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.
- **Objective 3:** Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.

- **Objective 4:** City streets that provide a comfortable pedestrian environment.
- **Objective 5:** Innovative design approaches and contemporary architecture that respond to a building's context.
- **Objective 6:** Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.
- **Objective 7:** Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.
- **Objective 8:** Development that contributes to the Desired Character of the Zone.

### PRINCIPLES OF DEVELOPMENT CONTROL

#### Land Use

1 The following types of development, or combinations thereof, are envisaged:

Affordable housing Aged persons accommodation Community centre Consulting room Convention centre Dwelling Educational establishment Emergency services facility Hospital Hotel Indoor recreation centre Licensed entertainment premises Library Motel Office Pre-school Personal service establishment Place of worship Serviced apartment Restaurant Residential flat building Student accommodation Shop or group of shops Tourist accommodation

- 2 Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.
- 3 Low impact industries should be located outside the Central Business Policy Area and have minimal off-site impacts with respect to noise, air, water and waste emissions, traffic generation and movement.
- 4 Development listed as non-complying is generally inappropriate.

#### Form and Character

**5** Development should be consistent with the Desired Character for the Zone.

#### **Design and Appearance**

6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.

- **7** Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.
- 8 The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.
- **9** Providing footpath widths and street tree growth permit, development should contribute to the comfort of pedestrians through the incorporation of verandahs, balconies, awnings and/or canopies that provide pedestrian shelter.
- **10** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.
- 11 Other than in the Central Business Policy Area, buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:
  - (a) relates to the width of the street and achieves a suitable level of enclosure to the public realm;
  - (b) provides a human scale at street level;
  - (c) creates a well-defined and continuity of frontage;
  - (d) gives emphasis and definition to street corners to clearly define the street grid;
  - (e) contributes to the interest, vitality and security of the pedestrian environment;
  - (f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and
  - (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).
- **12** Buildings north of Rundle Mall, Rundle Street, Hindley Street and Gouger Street should have a built form that incorporates slender tower elements, spaces between buildings or other design techniques that enable sunlight access to the southern footpath.
- **13** Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.
- **14** Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.
- The Squares (Victoria, Hindmarsh and Light)
- **15** Outdoor eating and drinking facilities associated with cafés and restaurants are appropriate ground floor uses and should contribute to the vitality of the Squares and create a focus for leisure.
- **16** Buildings fronting the Squares should:
  - (a) provide a comfortable pedestrian and recreation environment by enabling direct sunlight to a minimum of 75 percent of the landscaped part of each Square at the September equinox; and
  - (b) reinforce the enclosure of the Squares with a continuous built-form with no upper level set-backs.

The Terraces (North, East and West)

- 17 Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.
- **18** Development along North Terrace should reinforce the predominant scale and 'City wall' character of the Terrace frontage.

## **Building Height**

- **19** Development should generally be compatible with the overall desired city form and not exceed the maximum building height shown in Concept Plan <u>Figures CC/1 and 2</u>; unless it meets one or more of the following:
  - (a) the proposed building is located in one of the following areas:
    - (i) fronting North Terrace, West Terrace or East Terrace and/or at the junction of two City boulevards shown in Concept Plan Figures CC/1 and 2;
    - (ii) on an allotment with frontage to Light Square;
    - (iii) within 200 metres of a high concentration public transport route identified on <u>Map</u> <u>Adel/1 (Overlay 4)</u>;
  - (b) the site area is greater than 1500 square metres and has side or rear vehicle access;
  - (c) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;
  - (d) the proposal incorporates the retention and conservation of a character building.
- 20 Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:
  - (a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;
  - (b) the site is adjacent to the City Living Zone or the Adelaide Historic (Conservation) Zone and a lesser building height is required to manage the interface with low-rise residential development;
  - (c) the site is adjacent to a heritage place, or includes a heritage place;
  - (d) the development includes the construction of a building in the same, or substantially the same, position as a building which was demolished, as a result of significant damage caused by an event, within the previous 3 years where the new building has the same, or substantially the same, layout and external appearance as the previous building.

## Interface

- 21 Development should manage the interface with the City Living Zone or the Adelaide Historic (Conservation) Zone in relation to building height, overshadowing, massing, building proportions and traffic impacts and should avoid land uses, or intensity of land uses, that adversely affect residential amenity.
- 22 Development on all sites on the southern side of Gouger Street Angas Street and adjacent to a northern boundary of the City Living Zone or the Adelaide Historic (Conservation) Zone should not exceed 22 metres in building height unless the Council Wide overshadowing Principles of Development Control are met.

#### Movement

- **23** Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding Zones and giving a variety of north-south and east-west links.
- 24 Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.
- 25 Development should ensure existing through-site and on-street pedestrian links are maintained and new pedestrian links are developed in accordance with <u>Map Adel/1 (Overlay 2A)</u>.
- 26 Car parking should be provided in accordance with Table Adel/7.
- 27 Multi-level car parks should locate vehicle access points away from the primary street frontage wherever possible and should not be located:
  - (a) within any of the following areas:
    - (i) the Core Pedestrian Area identified in Map Adel/1 (Overlays 2, 2A and 3)
    - (ii) on frontages to North Terrace, East Terrace, Rundle Street, Hindley Street, Currie Street, Waymouth Street (east of Light Square), Victoria Square or King William Street;
  - (b) where they conflict with existing or projected pedestrian movement and/or activity;
  - (c) where they would cause undue disruption to traffic flow; and
  - (d) where it involves creating new crossovers in North Terrace, Rundle Street, Hindley Street, Currie Street and Waymouth Street (east of Light Square), Grenfell Street and Pirie Street (west of Pulteney Street), Victoria Square, Light Square, Hindmarsh Square, Gawler Place and King William Street or access across primary City access and secondary City access roads identified in <u>Map Adel/1 (Overlay 1)</u>.
- 28 Multi-level, non-ancillary car parks are inappropriate within the Core Pedestrian Area as shown on <u>Map Adel/1 (Overlays 2, 2A and 3)</u>.
- 29 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:
  - (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
  - (b) complement the surrounding built form in terms of height, massing and scale; and
  - (c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

## Advertising

- **30** Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.
- **31** In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.
- **32** There should be an overall consistency achieved by advertisements along individual street frontages.

- **33** In Chesser Street, French Street and Coromandel Place advertisements should be small and preferably square and should not be located more than 3.7 metres above natural ground level or an abutting footpath or street. However, advertisements in these streets may be considered above 3.7 metres at locations near the intersections with major streets.
- **34** Advertisements on the Currie Street frontages between Topham Mall and Gilbert Place and its north-south prolongation should be of a size, shape and location complementary to the desired townscape character, with particular regard to the following:
  - (a) On the southern side of Currie Street, advertisements should be fixed with their underside at a common height, except where the architectural detailing of building façades precludes it. At this 'canopy' level advertisements should be of a uniform size and fixed without the support of guy wires. Where architectural detailing permits, advertisements may mark the major entrances to buildings along the southern side of Currie Street with vertical projecting advertisements 1.5 metres high by 1.2 metres wide at, or marginally above, the existing canopy level. Painted wall or window signs should be restrained.
  - (b) On the northern side of Currie Street, advertisements should be of a uniform fixing height and consistent dimensions to match those prevailing in the area.

## **PROCEDURAL MATTERS**

#### **Complying Development**

35 Complying developments are prescribed in Schedule 4 of the *Development Regulations 2008*.

In addition, the following forms of development are assigned as **complying**:

- (a) Other than in relation to a State heritage place, Local heritage place (City Significance), or Local heritage place, work undertaken within a building which does not involve a change of use or affect the external appearance of the building;
- (b) Temporary depot for Council for a period of no more than 3 months where it can be demonstrated that appropriate provision has been made for:
  - (i) dust control;
  - (ii) screening, including landscaping;
  - (iii) containment of litter and water; and
  - (iv) securing of the site.
- (c) Change in the use of land from a non-residential use to an office, shop or consulting room (excluding any retail showroom, adult entertainment premises, adult products and services premises or licensed premises).

#### **Non-complying Development**

36 The following kinds of development are **non-complying**:

A change in use of land to any of the following:

Amusement machine centre

Advertisements involving any of the following:

 (a) Third party advertising except on Hindley Street, Rundle Mall or on allotments at the intersection of Rundle Street and Pulteney Street, or temporary advertisements on construction sites;

- (b) Advertisements located at roof level where the sky or another building forms the background when viewed from ground level;
- (c) Advertisements in the area bounded by West Terrace, Grote Street, Franklin Street and Gray Street;
- (d) Animation of advertisements along and adjacent to the North Terrace, King William Street and Victoria Square frontages.

Total demolition of a State Heritage Place (as identified in Table Adel/1).

Vehicle parking except:

- (a) where it is ancillary to an approved or existing use;
- (b) it is a multi-level car park located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3); or
- (c) it is within an existing building located outside the Core Pedestrian Area as indicated on <u>Map Adel/1 (Overlay 2, 2A and 3)</u>.

### **Public Notification**

**37** Categories of public notification are prescribed in Schedule 9 of the *Development Regulations* 2008.

In addition, the following forms of development, or any combination of (except where the development is non-complying), are assigned:

(a) **Category 1**, public notification not required:

All forms of development other than where it is assigned Category 2.

(b) **Category 2**, public notification required. Third parties do not have any appeal rights.

Any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height.

Note: For Category 3 development, public notification is required. Third parties may make written representations, appear before the relevant authority on the matter, and may appeal against a development consent. This includes any development not classified as either Category 1 or Category 2.

## **Central Business Policy Area 13**

#### Introduction

The Objectives and Principles of Development Control that follow apply to the Policy Area as shown on <u>Maps Adel/49, 50, 55 and 56</u>. They are additional to those expressed for the Zone and, in cases of apparent conflict, take precedence over the Zone provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Policy Area.

#### DESIRED CHARACTER

The Central Business Policy Area is the pre-eminent economic, governance and cultural hub for the State. This role will be supported by educational, hospitality and entertainment activities and increased opportunities for residential, student and tourist accommodation.

Buildings will exhibit innovative design approaches and produce stylish and evocative architecture, including tall and imposing buildings that provide a hard edge to the street and are of the highest design quality. A wide variety of design outcomes of enduring appeal are expected. Complementary and harmonious buildings in individual streets will create localised character and legible differences between streets, founded on the existing activity focus, building and settlement patterns, and street widths.

## OBJECTIVES

- **Objective 1:** A concentration of employment, governance, entertainment and residential land uses that form the heart of the City and central place for the State.
- **Objective 2:** Development of a high standard of design and external appearance that integrates with the public realm.
- **Objective 3:** Development that contributes to the Desired Character of the Policy Area.

#### PRINCIPLES OF DEVELOPMENT CONTROL

#### Land Use

- 1 Development should contribute to the area's role and function as the State's premier business district, having the highest concentration of office, retail, mixed business, cultural, public administration, hospitality, educational and tourist activities.
- 2 Buildings should be of a height that ensures airport operational safety is not adversely affected.
- **3** To enable an activated street level, residential development or similar should be located above ground floor level.

## Main Street Policy Area 14

#### Introduction

The Objectives and Principles of Development Control that follow apply to the Policy Area as shown on <u>Maps Adel/48, 49, 50, 51 and 55</u>. They are additional to those expressed for the Zone and, in cases of apparent conflict, take precedence over the Zone provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Policy Area.

#### **DESIRED CHARACTER**

Main streets provide an important shopping, hospitality and gathering place that are a vital part of the City's identity and image.

An atmosphere of bustle, excitement and activity is created by a vibrant mixture of land uses that support a strong retail base and a continuing program of on-street arts and activities. Activities including retail, restaurants, cafés and licensed premises will contribute to the day and evening economies and be managed to ensure a positive contribution to the character of the precinct. Licensed entertainment premises, nightclubs and bars will contribute to activation during the day and evening by generally being small in scale and located above or below ground floor level.

Development will abut the footpath and continue the established width, rhythm and pattern of façades to generally support a variety of tenancies with narrow frontages. Horizontally massed buildings will be broken into smaller façade elements. Above street level fenestration, balconies, parapets, architectural detailing and ornamentation will be used to contribute to a rich visual texture.

Upper levels of buildings are to be recessed behind a moderately scaled building street wall to maintain a sense of spaciousness and openness to the sky. At lower levels, the continuity of verandahs and other canopies or pedestrian shelters, and ceiling heights is desired to maintain a sheltered, high amenity pedestrian environment at a human scale.

#### Rundle Street

Development will be consistent with the intimate scale and intricate and diverse architectural features of Rundle Street and will reinforce the existing two and three storey built scale. This is derived from buildings of relatively uniform height and scale, mostly built in the nineteenth and early twentieth century.

Existing façades typically encompass a high proportion of solid to void and a high level of architectural detail (including ornamentation and fenestration and through a combination of materials).

Horizontal emphasis is achieved through the integration of masonry coursing, parapets, verandahs and balconies. The subtle variety of scale and massing adds texture to the streetscape. Upper levels of buildings are to be recessed to maintain a sense of spaciousness and openness to the sky.

#### Rundle Mall

Rundle Mall will be enhanced as Adelaide's premier retail area incorporating a wide range of specialty and larger scale shops and mixed business. Rundle Mall will continue to grow and evolve in response to the needs of the retail and business sectors and the wider public, and enhance its iconic reputation as an important public space for a range of retail, business and cultural purposes. A range of activities will contribute to the day and evening economies.

Rundle Mall offers a strong and unique character and sense of place, established by a pedestrian space framed by a long enclosure of visual interest and vitality which is reached with a sense of arrival from King William Street and Pulteney Street and the adjoining minor streets, arcades and laneways.

#### Hindley Street

Hindley Street (east of Morphett Street) will be the City's focus for late night entertainment and will be carefully designed and managed to integrate effectively with day time and evening land use activities.

Hindley Street (west of Morphett Street) will comprise a range of mixed business, educational, cultural, hospitality and retail activities. Activities, including licensed premises, will contribute to the day and evening economies.

The refurbishment of nineteenth century buildings in Hindley Street will be complemented by sensitive new development and will provide a colourful and cohesive character and intimate, human scale.

#### Gouger Street

Gouger Street will be characterised by a mix of retail, restaurant, commercial and mixed business uses, including professional services, wholesaling and community activities. Activities including restaurants, cafés and licensed premises will contribute to the vibrancy of the street during the day and evening.

Gouger and Grote streets will continue to develop as a colourful and active restaurant and shopping precinct which complements the liveliness of the Central Market and supports the retail, community, cultural and legal functions in this part of the City. 'Chinatown' around Moonta Street will be reinforced, and opportunities for new precincts, such as in minor streets and lanes, established.

## OBJECTIVES

- **Objective 1:** Rundle Street enhanced as an important shopping, leisure and gathering place for metropolitan Adelaide.
- **Objective 2:** Rundle Mall enhanced as the State's premier shopping destination around an attractive public space.
- **Objective 3:** Hindley Street (east of Morphett Street) as the pre-eminent evening and late night entertainment hub for metropolitan Adelaide, with complementary shopping, hospitality and mixed business together with high density living.
- **Objective 4:** Hindley Street (west of Morphett Street) reinforced as a main street with a mix of retail, educational, restaurant and business uses, together with high density living.
- **Objective 5:** Gouger Street reinforced as a colourful, intimate and active restaurant and shopping street which complements the vibrancy of the Central Market and supports the retail, community and cultural functions of the area.

**Objective 6:** Development that contributes to the Desired Character of the Policy Area.

## PRINCIPLES OF DEVELOPMENT CONTROL

#### Land Use

- 1 At ground level along any main street (including Rundle Mall) and in minor streets leading to them, development should provide active and vibrant frontages that contribute to continuous interest at street level.
- 2 Land uses that add to the vitality of the area and extend activities outside shop hours are envisaged, including restaurants; educational, community and cultural facilities; and visitor and residential accommodation.
- **3** To enable an activated street level, residential development or similar should be located above ground floor level.
- 4 Licensed entertainment premises, night clubs or bars should contribute to activation during the day and evening by generally being small in scale and located above or below ground floor level.

#### **Design and Appearance**

- **5** The ground level street frontage of buildings should be designed as activate street frontages, provide pedestrian interest, and maximise passive surveillance by:
  - (a) providing at least 70 percent of the frontage as a non-residential use; and
  - (b) 50 percent of the frontage as visually permeable, transparent or clear glazed and may include an entry/foyer or display window to a shop (including a café or restaurant).

#### Form and Character

- **6** Development should conserve, enhance and complement the colourful and visually rich and intimate character of the area.
- 7 Development should include a variety of architectural expression and finishes compatible with the many existing older buildings. Verandahs, balconies, awnings and parapets should be designed to complement those existing.
- 8 Development should strengthen the established character of narrow building frontage widths, vertical massing and above street level fenestrations, balconies, parapets, architectural detailing and ornamentation.
- **9** Buildings with frontage to Gouger Street, Hindley Street or Rundle Street, west of Frome Street, should be designed to:
  - (a) reinforce the prevailing datum heights and parapet levels of the street through design elements that provide a clear distinction between levels above and below the prevailing datum line; and
  - (b) include a maximum podium/street wall height in the order of six storeys, with an upper level setback, measured from the street wall in the order of 3 metres.
- **10** Buildings with frontage to Rundle Mall should have a maximum podium/street wall height of 6 storeys with upper building levels set back from the street in the order of 3 metres.
- **11** Buildings with frontage to Rundle Street, east of Frome Street should be designed to reinforce the prevailing datum heights and parapet levels of the street through:
  - (a) a maximum podium/street wall height that is consistent with one of the adjacent buildings facing the street and does not exceed 13 metres;

- (b) an upper level setback, measured from the street wall, of at least 3 metres stepping up to a height of 6 storeys, then a further setback of at least 3 metres stepping up to the maximum overall height shown on Concept Plan <u>Figures CC/1 and 2</u>; and
- (c) design elements that create a clear distinction between the 13 metre and 22 metre datum lines.
- **12** Development of both internal and external spaces on Rundle Street should maintain an environment which is intimately scaled, intricate and diverse.

## Movement

- **13** Additional vehicle cross-overs to provide access should be avoided in Hindley Street, Bank Street and Leigh Street. Access for on-site servicing and deliveries should be from minor streets and private lanes wherever possible, rather than from Rundle Mall.
- 14 Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding areas and giving a variety of north to south routes to Rundle Mall and east to west links for people moving between buildings.





# Preliminary Site Investigation (Site History) Build 29

126 Wright Street, Adelaide

Appendix B: Proposed Development Plan

AIL AIL PFE JC1 D/2 REE

# WRIGHT STREET APARTMENTS

ADDRESS: 126 WRIGHT STREET ADELAIDE SA 5000

PREPARED FOR: BUILD 29.

JOB NO: **17001** 

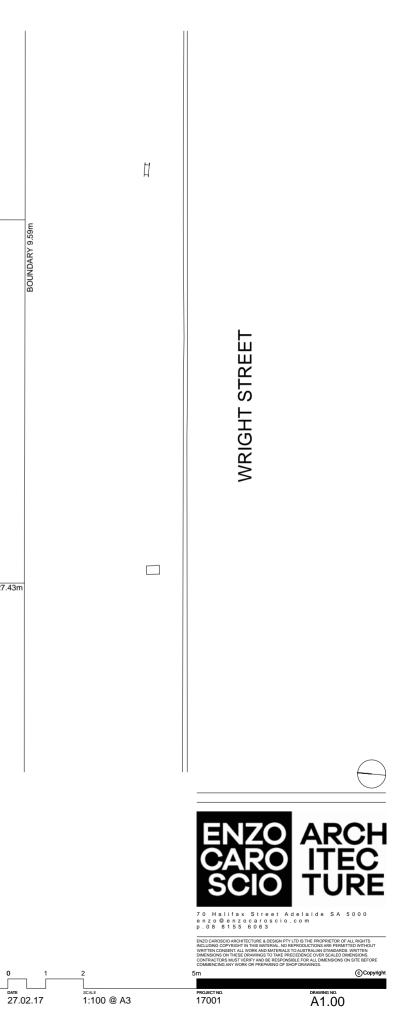
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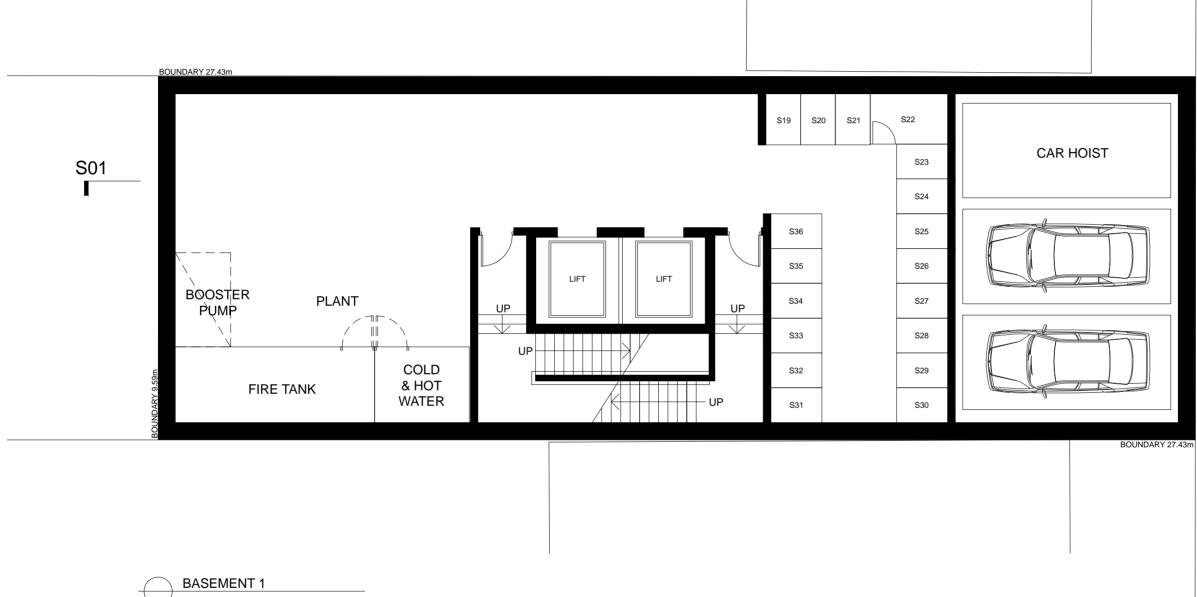
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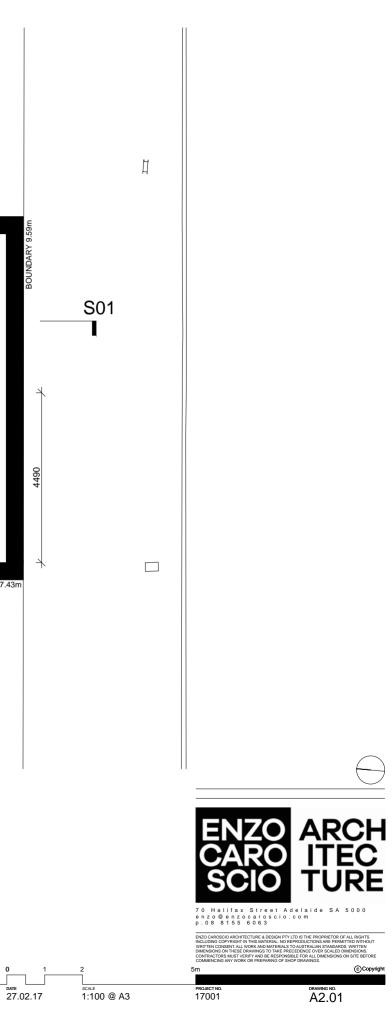
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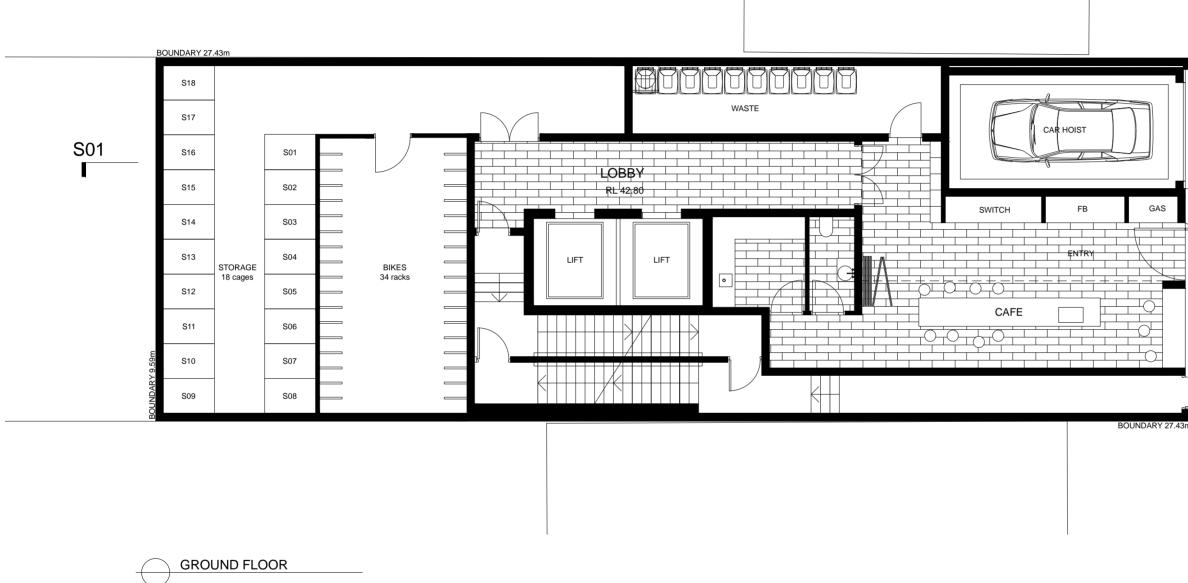
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SITE PLAN		

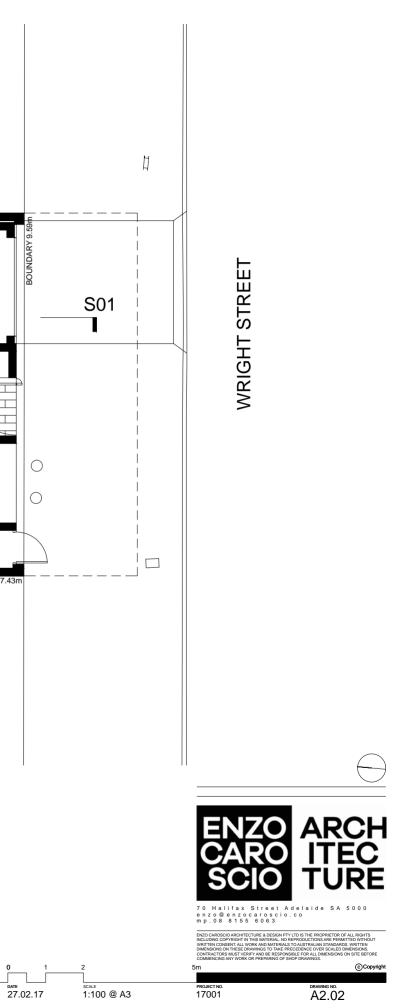


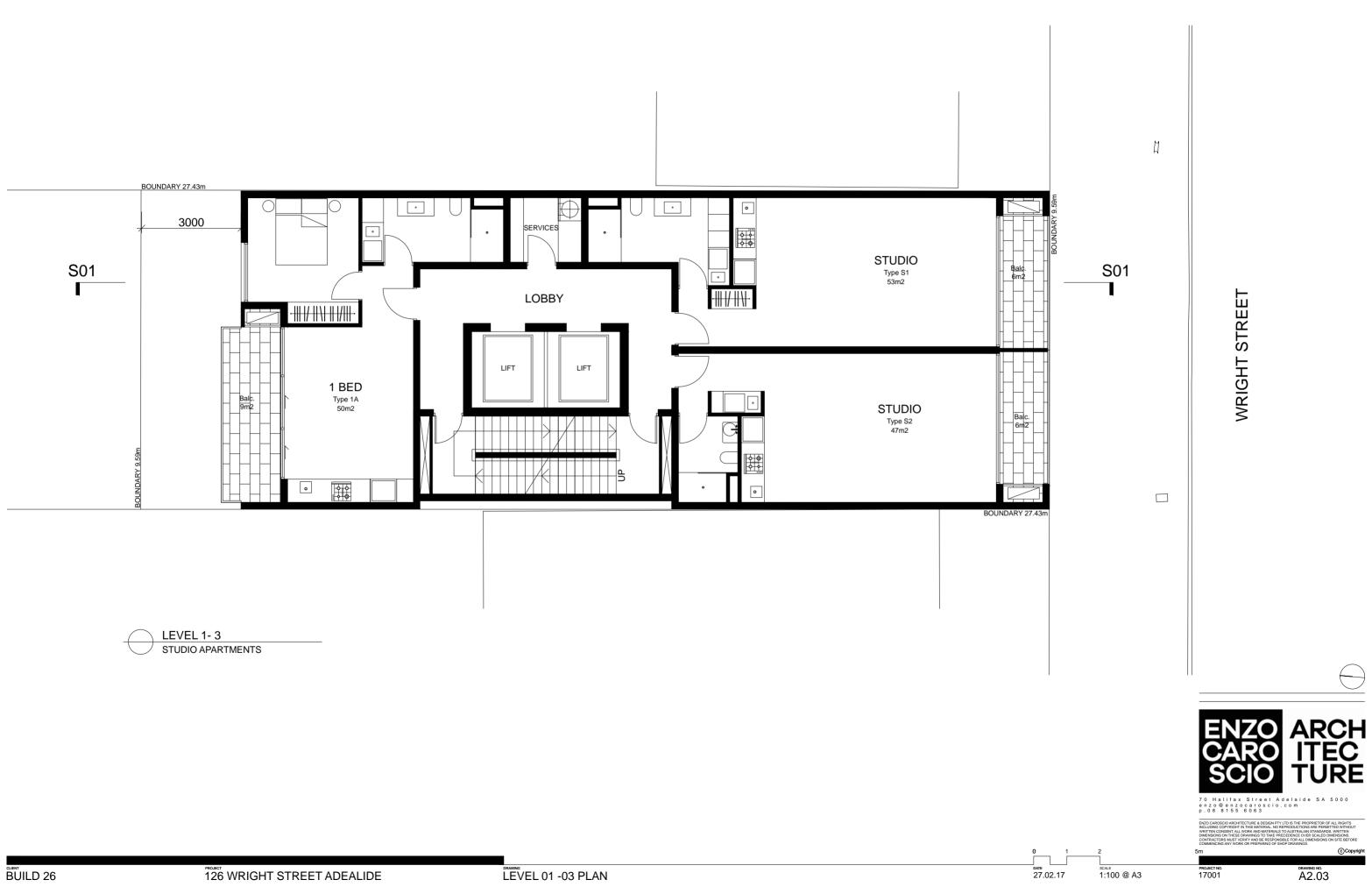


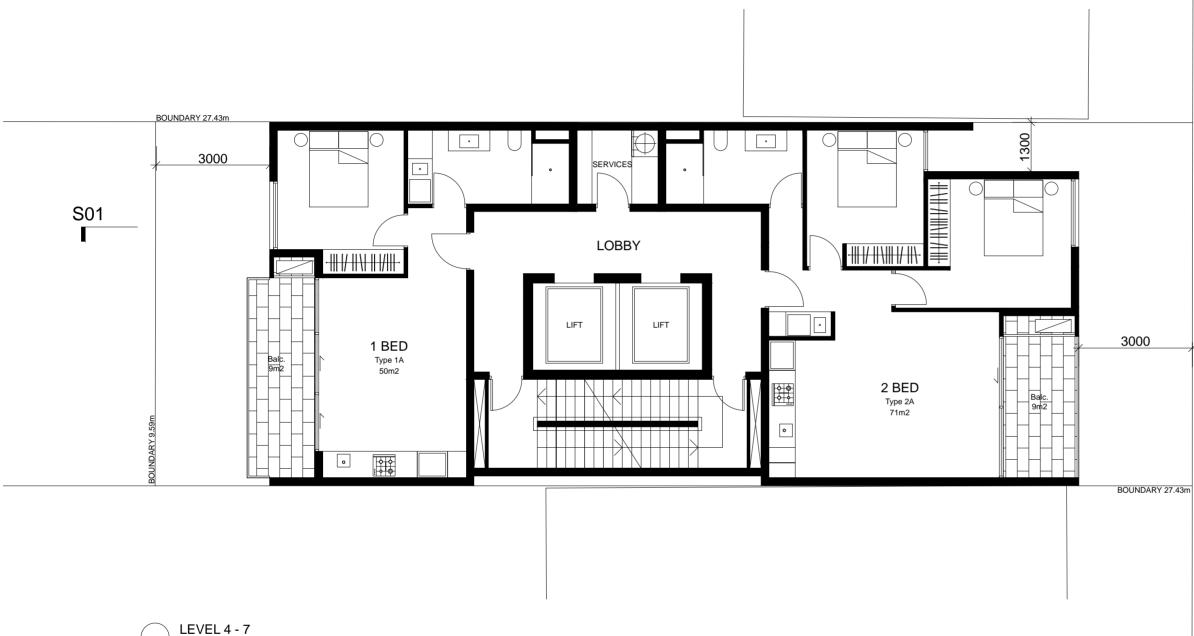




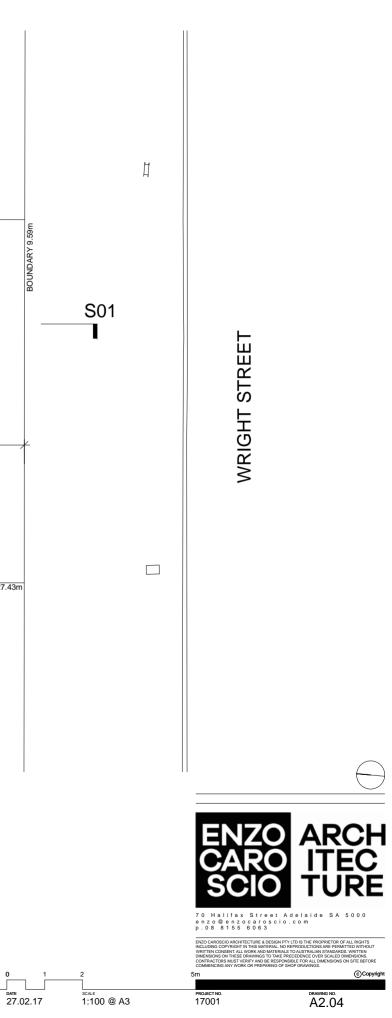


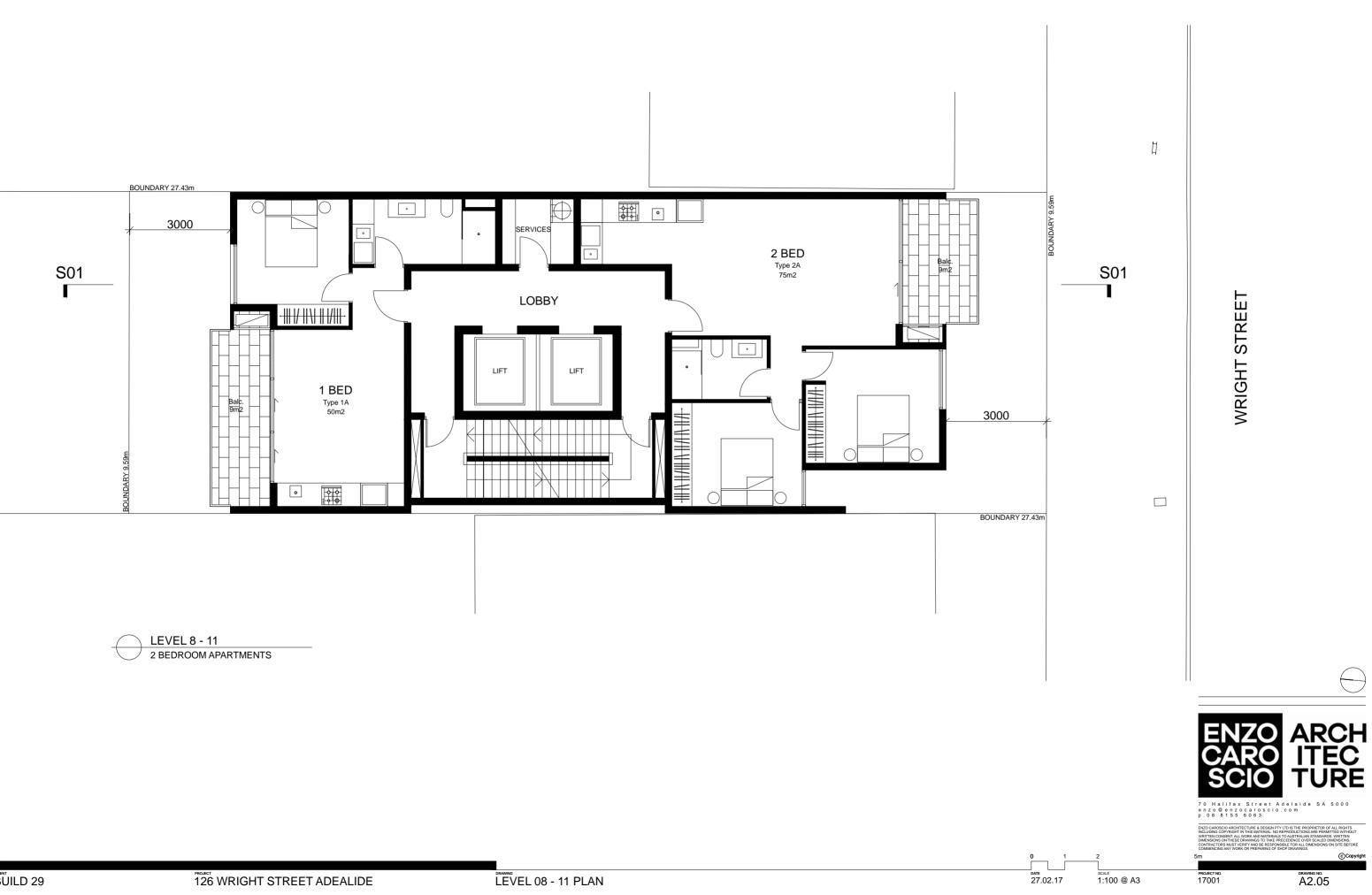






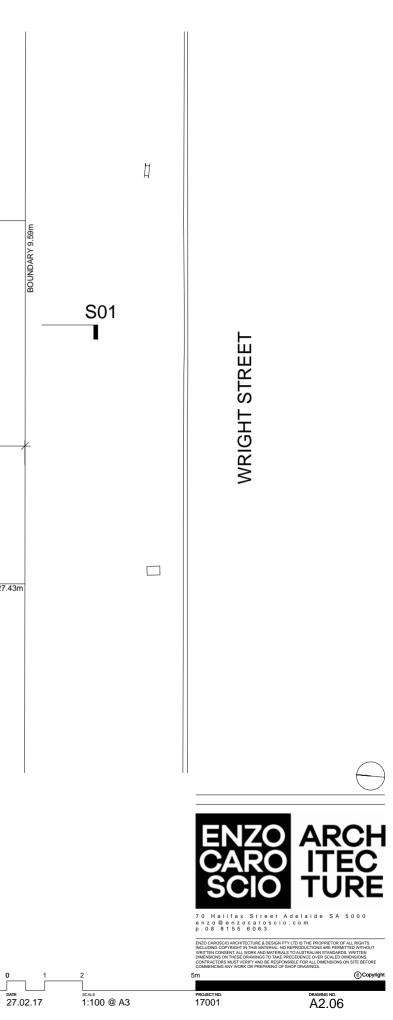
1 & 2 BEDROOM APARTMENTS

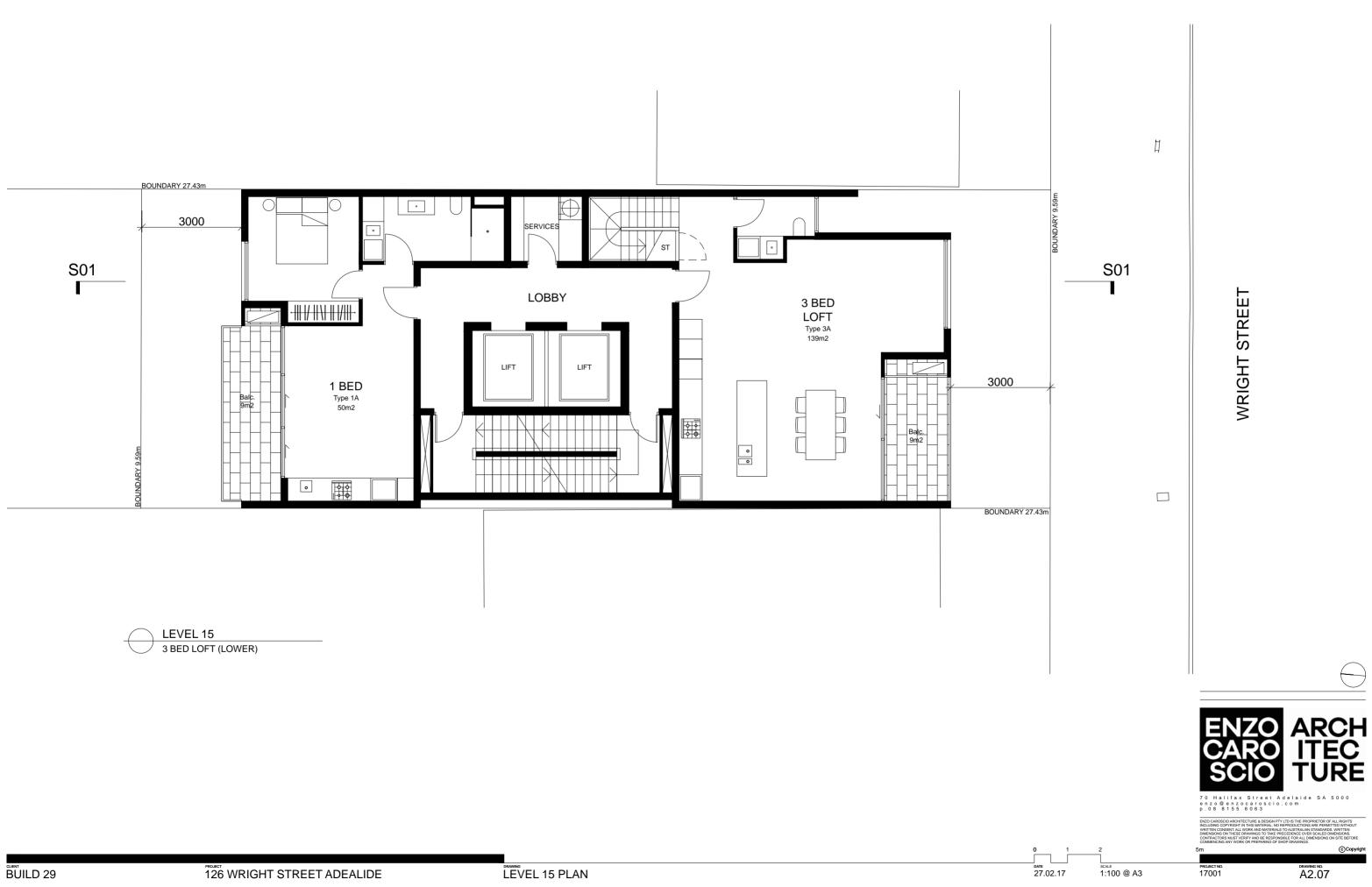


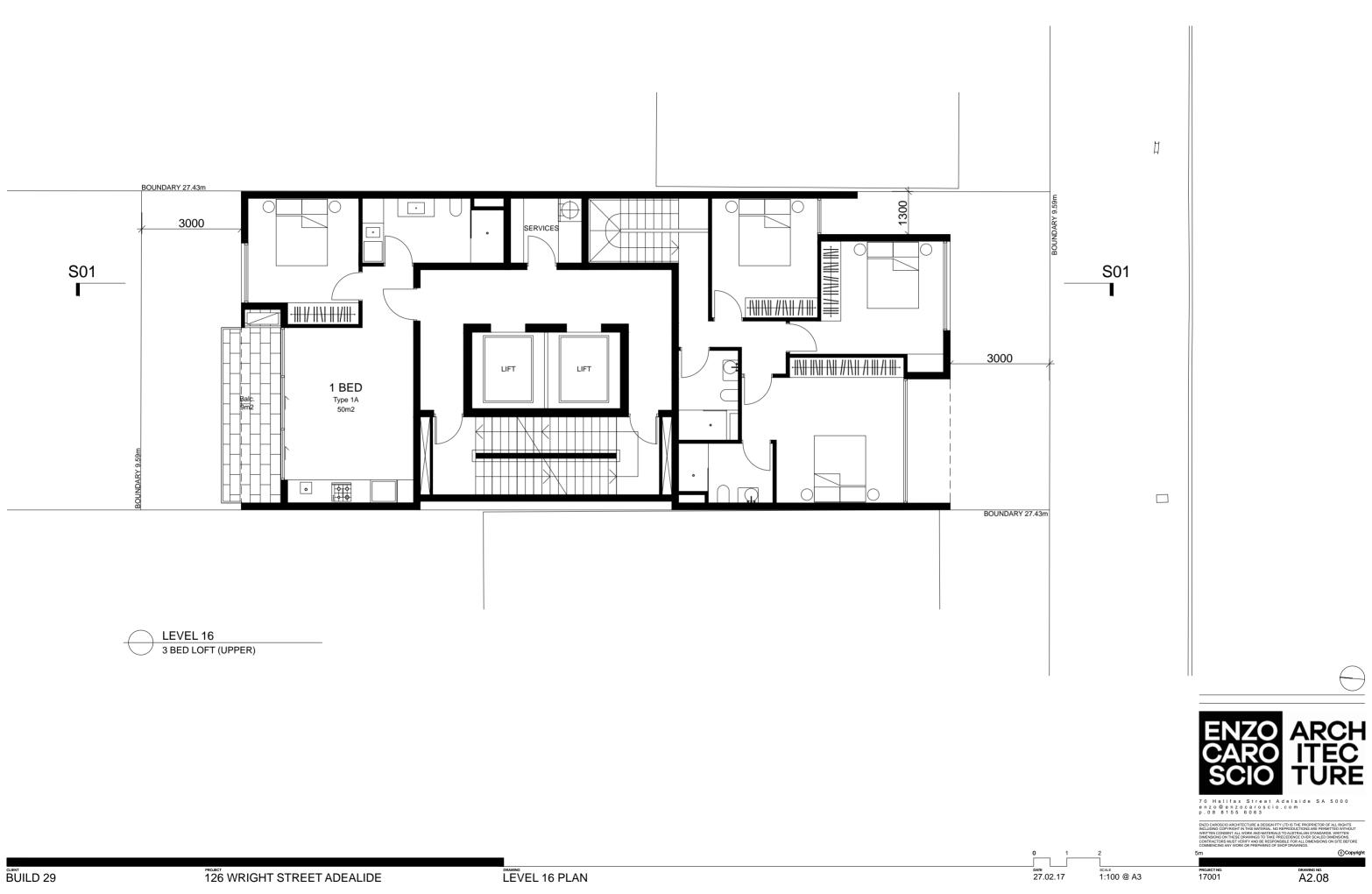


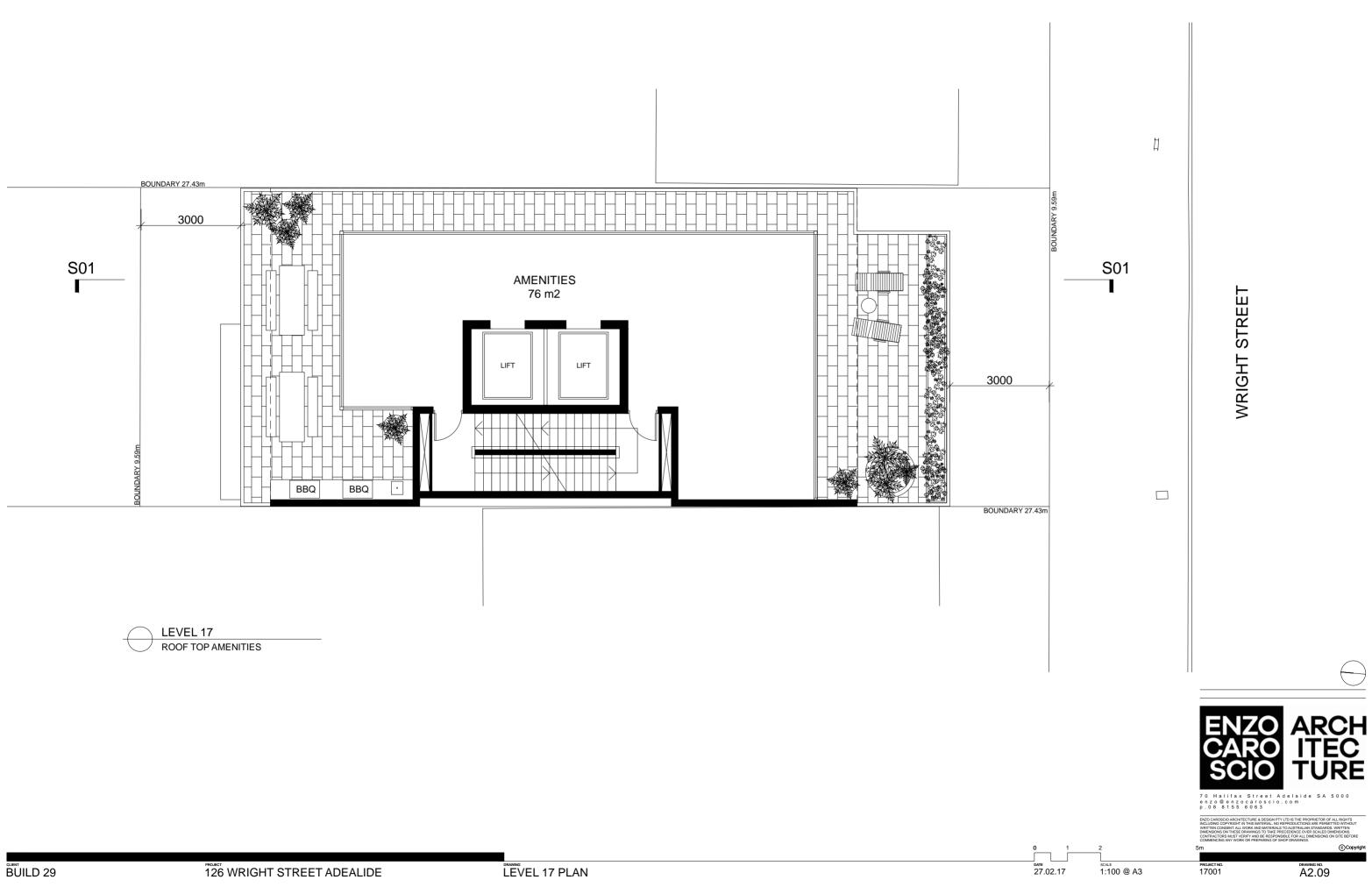


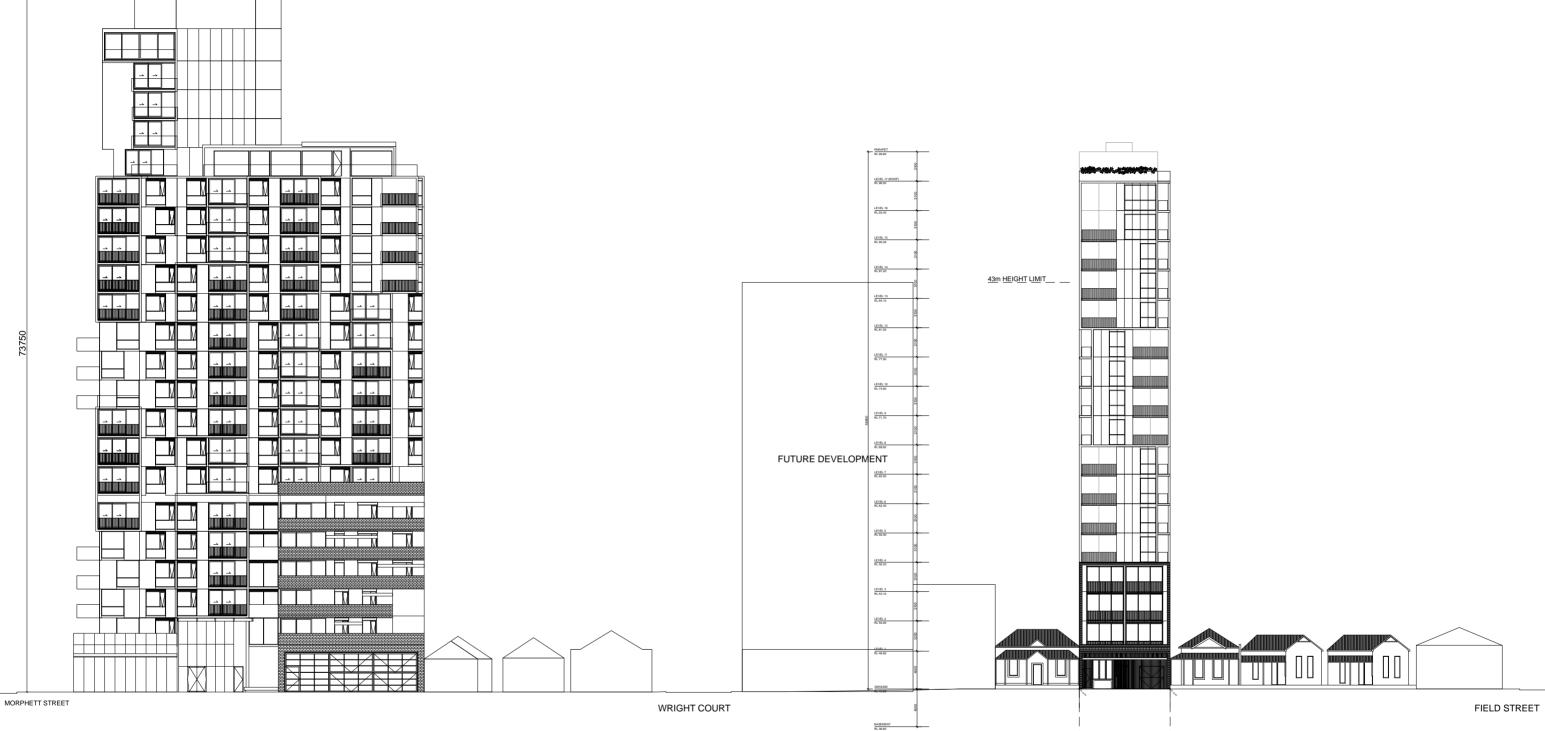
LEVEL 12 -14 2 BEDROOM APARTMENTS



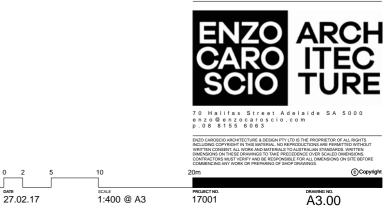


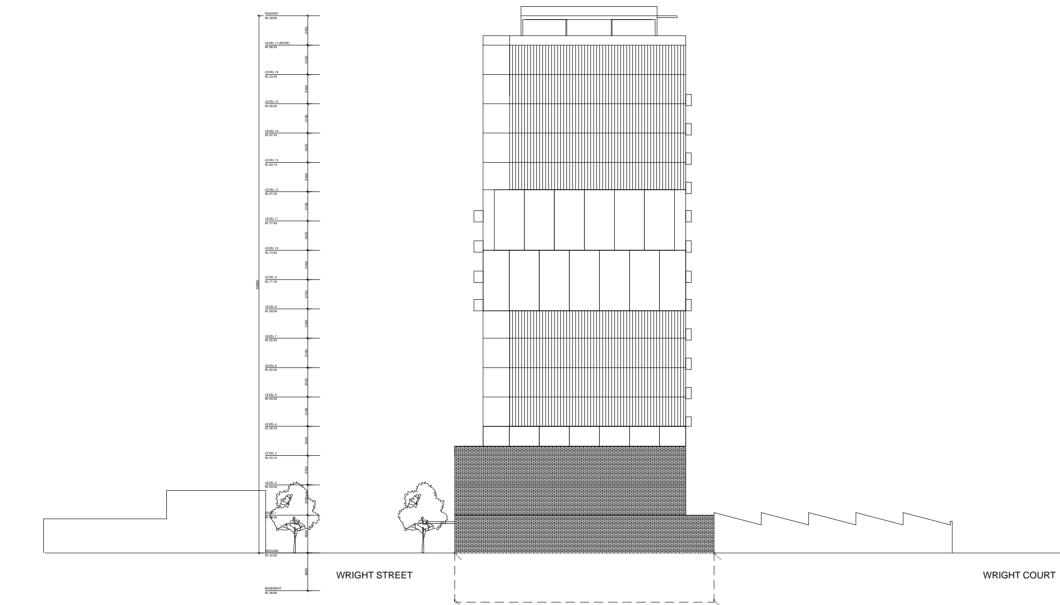




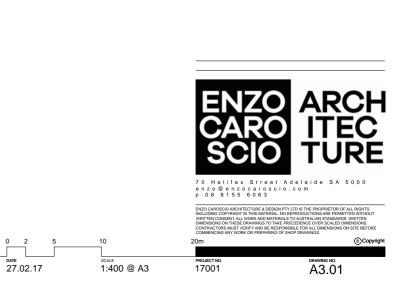


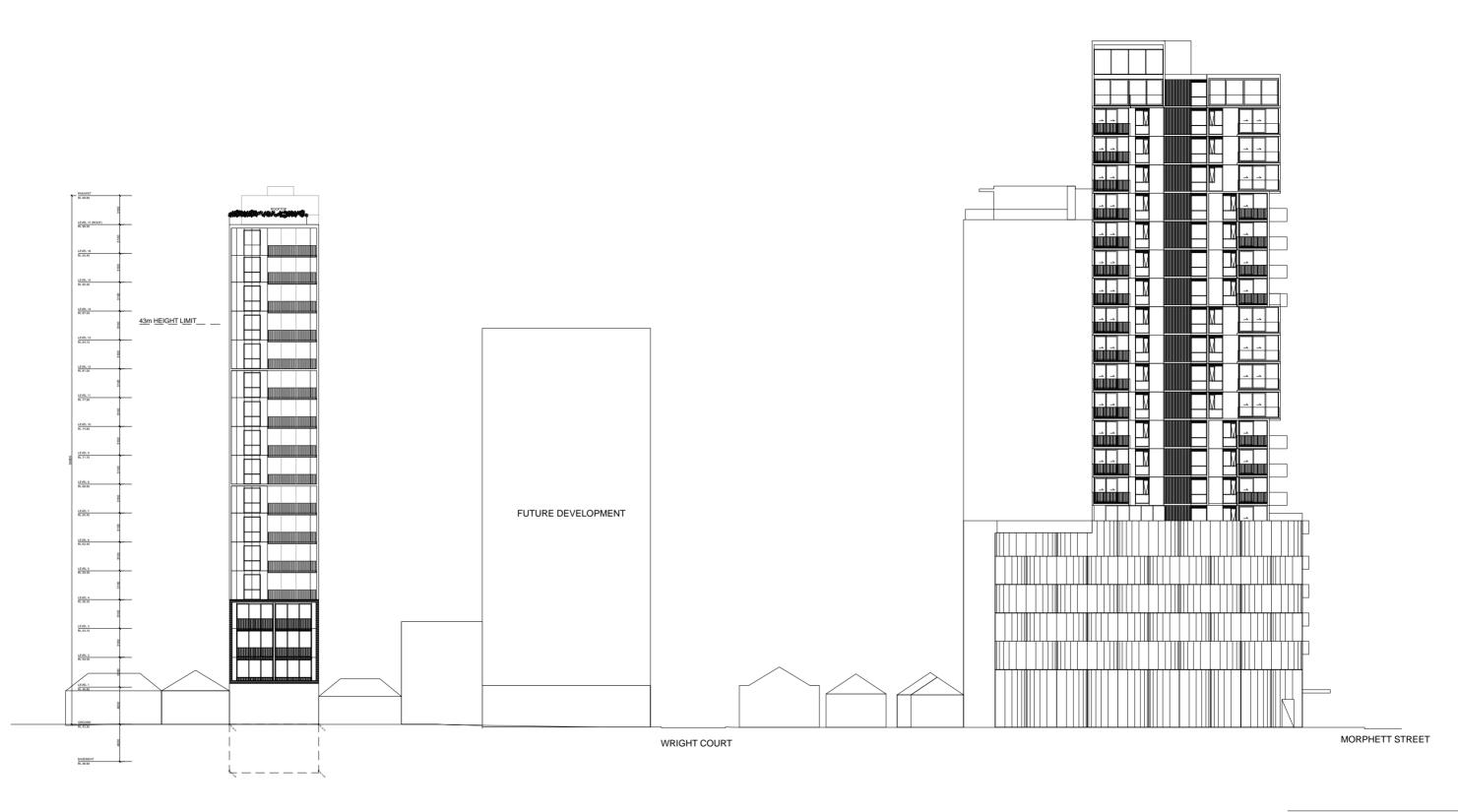








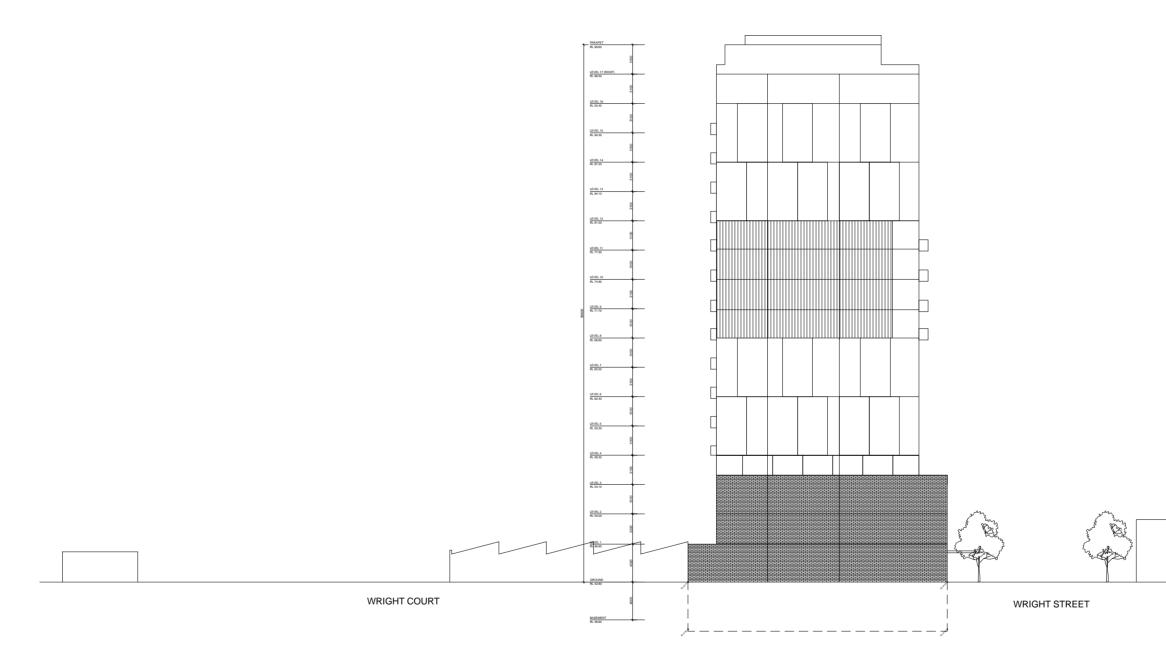


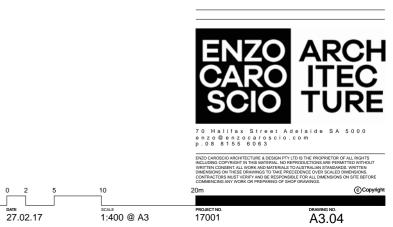


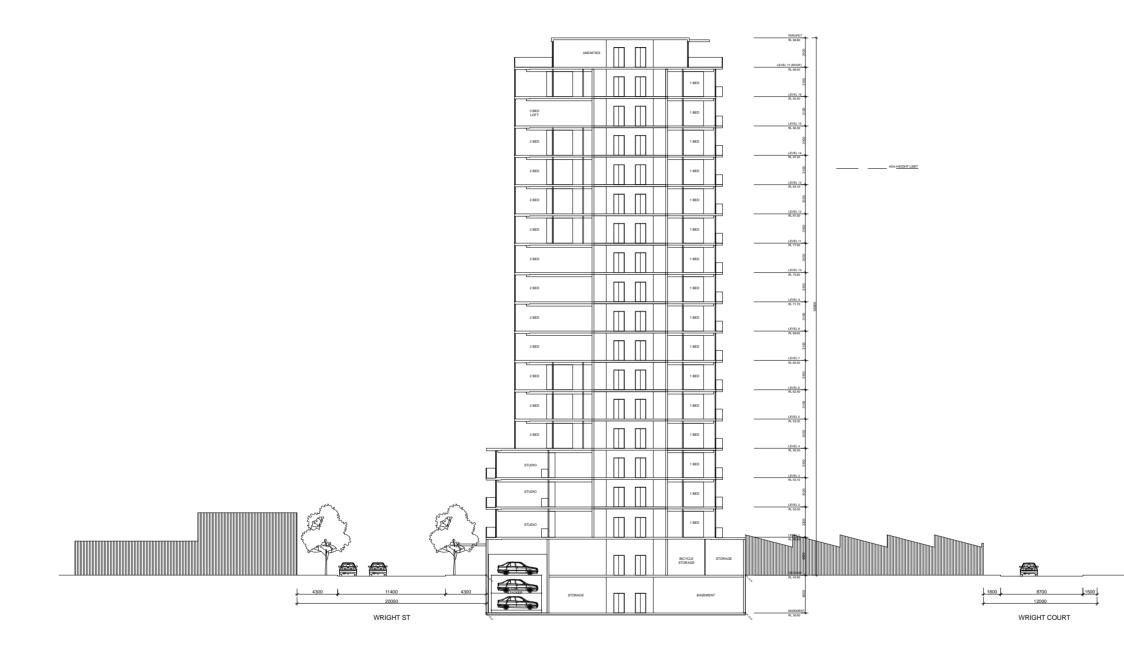








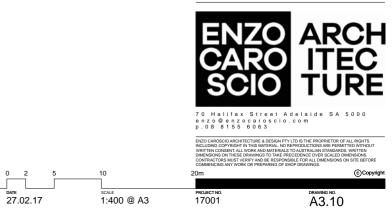






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126 Wright Street, Adelaide

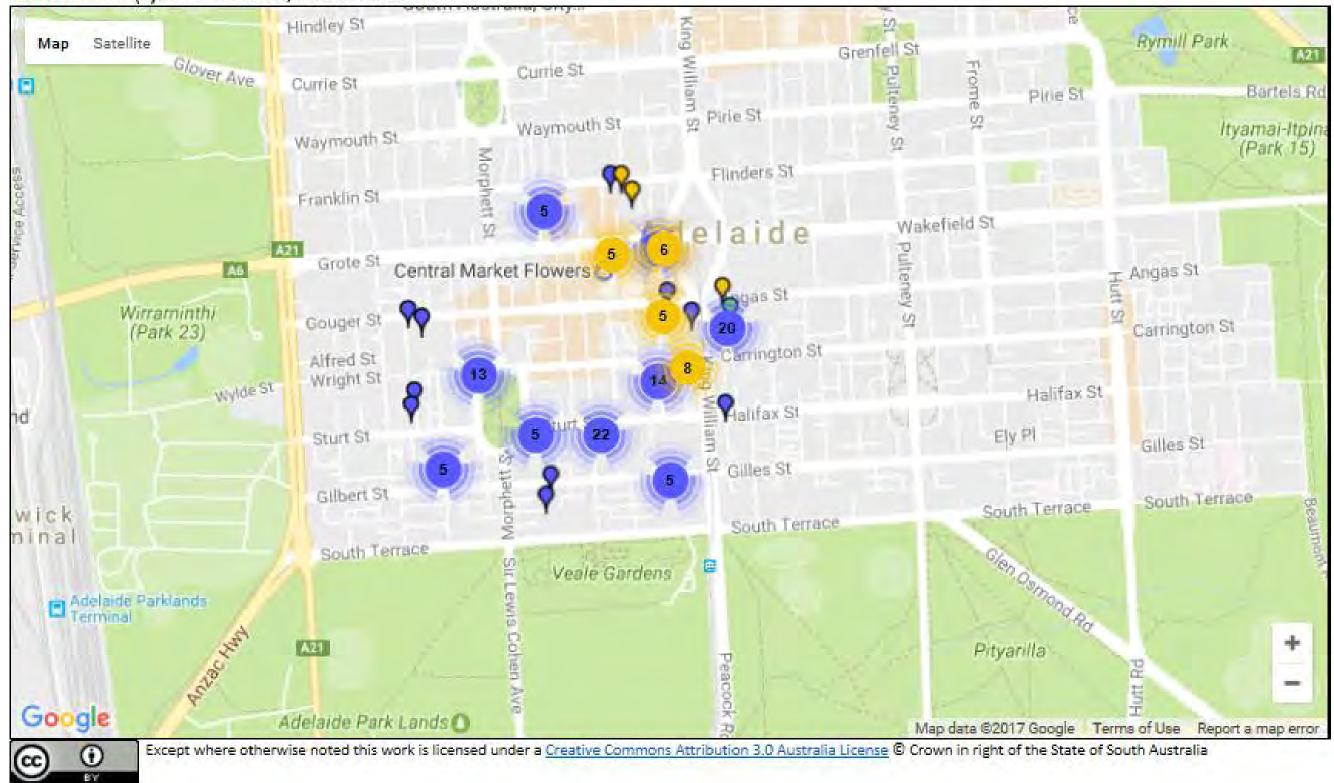
Appendix C: Groundwater Well Information

May 2017 J150420: 126 Wright Street, Adelaide



WaterConnect

Unit Number(s) 6628 - 27192, Radius .5km







# Groundwater Data Report



Unit Number(s) 6628 - 27192, Radius .5km

Unit No	Date	Max Depth (m)	Latest Depth (m)	Status	Cased To (m)	Purpose	TDS (mg/L)	TDS Date	Aquifer	Yield (L/sec)	Yield Date	SWL (m)	SWL Date	Permit No
6628-260	24/01/1957	12.8	12.8	UKN										
6628-262	12/01/1971	15.47	15.47											
6628-289	09/04/1964	18.29	18.29	UKN										
6628-290	03/04/1964	27.43	27.43	UKN										
6628-291	10/03/1970	36.42	36.42	WWT	29.26	DRN								
6628-292	02/04/1970	4.57	4.57	UKN	4.57									
6628-293	07/03/1970	30.18	30.18	WWT	28.35		1130	16/03/1970						
6628-294	16/03/1970	4.57	4.57	UKN	4.57									
6628-295	20/02/1970	24.69	24.69	WWT	22.25		2001	05/03/1970	Qpah					
6628-296	06/03/1970	4.57	4.57	UKN	4.57									
6628-297	23/02/1970	29.87	29.87	WWT	29.26		1832	11/03/1970						
6628-298	11/03/1970	4.57	4.57	UKN	4.57									
6628-300	03/10/1934	23.09	23.09				1014	06/06/2006	Qpah	0.51	03/10/1934			
6628-301	14/04/1964	27.49	27.49	UKN										
6628-302	20/04/1964	19.2	19.2	UKN					Qpah			14.63	20/04/1964	
6628-308	11/07/1972	25.8	25.8	UKN			1957	13/07/1972	Qpah	0.25	13/07/1972			
6628-309	23/08/1972	57	57	UKN			1130	24/08/1972		0.63	24/08/1972	21	24/08/1972	
6628-310	05/07/1972	34	34	UKN			10601	14/08/1972						
6628-311	03/08/1956	14.1	14.1	UKN										
6628-312	20/07/1956	30.48	30.48	UKN										
6628-313	12/04/1965	21.34	21.34			DRN			Qpah			16.76	12/04/1965	
6628-314	13/04/1965	9.45	9.45											
6628-315	04/05/1965	22.86	22.86		18.77	DRN			Qpah	0.45	04/05/1965	16.61	04/05/1965	
6628-316	15/04/1965	10.67	10.67			DRN								
6628-317	22/04/1965	21.34	21.34			DRN			Qpah			16.76	22/04/1965	
6628-318	31/05/1965	21.34	21.34		19.41	DRN			Qpah			16.46	31/05/1965	
6628-319	25/05/1965	23.47	23.47		19.2	DRN			Qpah	0.45	25/05/1965	16.46	25/05/1965	
6628-320	17/05/1965	21.34	21.34		18.69	DRN			Qpah	0.45	17/05/1965	16.76	17/05/1965	
6628-321	11/05/1965	22.86	22.86		19.2	DRN			Qpah	0.45	11/05/1965	16.56	11/05/1965	
6628-322	03/06/1965	6.1	6.1			DRN								
6628-323	03/06/1965	6.1	6.1			DRN								
6628-324	01/06/1965	6.1	6.1			DRN								
6628-325	02/06/1965	6.4	6.4			DRN								
6628-326	05/05/1965	4.88	4.88			DRN								
6628-327	07/05/1965	7.01	7.01			DRN								
6628-328	14/05/1965	6.1	6.1			DRN								
6628-329		18.82				DRN	171	01/01/1934	Qpah					

Unit No	Date	Max Depth (m)	Latest Depth (m)	Status	Cased To (m)	Purpose	TDS (mg/L)	TDS Date	Aquifer	Yield (L/sec)	Yield Date	SWL (m)	SWL Date	Permit No
6628-340	16/06/1965	0.61	0.61			DRN								
6628-341		33.53	33.53											
6628-342	08/09/1955	12.19	12.19	UKN										
6628-343	06/09/1955	12.19	12.19	UKN										
6628-344	25/05/1960	5.94	5.94											
6628-345	25/05/1960	6.1	6.1											
6628-346	24/11/1914	43.59	43.59				929	24/11/1914						
6628-351	04/01/1968	28.04	28.04	UKN										
6628-352	10/01/1968	21.51	21.51	UKN	21.34									
6628-353	10/01/1968	21.49		UKN	21.49									
6628-354	18/01/1968	19.51	19.51	UKN	19.51									
6628-506	16/06/1965	0.61	0.61			DRN								
6628-11283	09/06/1961	48.77	48.77	BKF										
6628-11726	11/05/1981	17.5	17.5	OPR	17.5	DRN	1804	11/05/1981	Qpah			15	11/05/1981	8778
6628-11727	13/05/1981	17	17	OPR	17	DRN	1810	12/05/1981	Qpah			14.5	13/05/1981	8779
6628-11728	13/05/1981		16	OPR	16	DRN	1832	12/05/1981	Qpah			13.5	13/05/1981	8780
6628-11729	13/05/1981	16.5	16.5	OPR	16.5	DRN	1832	13/05/1981	Qpah			14	13/05/1981	8781
6628-11730	13/05/1981	16	16	OPR	16	DRN	1832	12/05/1981	Qpah			13.5	13/05/1981	8782
6628-11731	12/05/1981		18	OPR	18	DRN	1832	12/05/1981				15.5	12/05/1981	
6628-11732	13/05/1981		19	OPR	19	DRN		13/05/1981				16.5	13/05/1981	
6628-11733	13/05/1981		19	OPR	19	DRN	1804	13/05/1981				16.5	13/05/1981	
6628-11734	13/05/1981		19	OPR	19	DRN		13/05/1981				16.5	13/05/1981	
6628-11735	13/05/1981		14.5	OPR	14.5	DRN		13/05/1981				12	13/05/1981	
6628-11736	13/05/1981		19	OPR	19	DRN	1810					16.5	13/05/1981	
6628-11737	13/05/1981		19.5	OPR	19.5	DRN	1815					17	13/05/1981	
6628-11738	14/05/1981		16.5	OPR	16.5	DRN		14/05/1981				14	14/05/1981	
6628-11739	14/05/1981		19	OPR	19	DRN	1776	14/05/1981				17.5	14/05/1981	
6628-11740	14/05/1981		15	OPR	15	DRN		14/05/1981				12.5	14/05/1981	
6628-11741	14/05/1981		15	OPR	15	DRN		14/05/1981				12.5	14/05/1981	
6628-11742	14/05/1981		15	OPR	15	DRN	1788	14/05/1981				12.5	14/05/1981	
6628-11743	15/05/1981		19	OPR	19	DRN	1776					16.5	15/05/1981	
6628-11744	15/05/1981	15	15	OPR	15	DRN	1776	15/05/1981				12.5	15/05/1981	8796
6628-11745	15/05/1981	15	15	OPR	15	DRN	1776	15/05/1981	Qpah			12.5	15/05/1981	8797
6628-11746	15/05/1981		15.1	OPR	15	DRN	1776	15/05/1981				12.5	15/05/1981	
6628-18415	06/08/1996		3.8		3.8	OBS			Qpah			3.32	06/08/1996	
6628-18416	06/08/1996		3.8		3.8	OBS			Qpah			2.18	06/08/1996	
6628-18417	20/03/1997		4.5		4.5	OBS								40779
6628-18418	20/03/1997		4.5		4.5	OBS								40780
6628-18419	20/03/1997		4.5		4.5	OBS								40781
6628-18420	20/03/1997		3.5		3	OBS								40782
6628-19241	21/08/1998		15		9	MON			Qpah			10.17	21/08/1998	
6628-19653	17/04/1999		10.8		10.8	MON	1		Qpah	0.02	17/04/1999		17/04/1999	

99       10.8         99       10.8         00       10         02       18         12       12         03       12         03       12         03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.2         04       12.5         05       12         15       06	10.8         10         18         12         12         12         12         12         12         12         12         12         12         12         0         19.5         0         19.7         0	BKF BKF BKF	10.8         10.8         10         13         9         9         6         9         9         10         13         10         13         9         9         16.4	MON MON DRN MON MON MON INV MON MON MON			Qpah Qpah Qpah Qpah Qpah Qpah Qpah Qpah	0.02 0.02 0.01 0.01 0.01 0.01 0.01 0.01	17/04/1999 17/04/1999 17/05/2000 14/03/2003 14/03/2003 14/03/2003 14/03/2003	9.6 5.5 10 10.6 10.6 10.6 10.6 10.6	17/04/1999 17/04/1999 17/05/2000 14/10/2002 14/03/2003 14/03/2003 14/03/2003 14/03/2003	48541 52410 59676 61445 61446 61447 61448 61449
00       10         02       18         12       12         03       12         03       12         03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	10         18         12         12         12         12         12         12         12         12         12         12         12         0         19.5         0         19.7	BKF	10 13 9 9 6 9 9 9 9	MON DRN MON MON INV MON MON MON			Qpah Qpah Qpah Qpah Qpah Qpah Qpah	0.01 0.01 0.01 0.01 0.01	17/05/2000 14/03/2003 14/03/2003 14/03/2003 14/03/2003	5.5 10 10.6 10.6 10.6 10.6 10.6	17/05/2000 14/10/2002 14/03/2003 14/03/2003 14/03/2003 14/03/2003 14/03/2003	52410 59676 61445 61446 61447 61448 61449
02       18         12       12         03       12         03       12         03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	18         12         12         12         12         12         12         12         12         12         12         12         12         0         19.5         0         19.7	BKF	13 9 9 6 9 9 9 9	DRN MON MON INV MON MON MON			Qpah Qpah Qpah Qpah Qpah Qpah	0.01 0.01 0.01 0.01 0.01	14/03/2003 14/03/2003 14/03/2003 14/03/2003	10 10.6 10.6 10.6 10.6 10.6	14/10/2002 14/03/2003 14/03/2003 14/03/2003 14/03/2003 14/03/2003	59676 61445 61446 61447 61448 61449
12         03       12         03       12         03       12         03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	12 12 12 12 12 12 0 19.5 0 0 19.7	BKF	9 9 6 9 9 9	MON MON INV MON MON MON			Qpah Qpah Qpah Qpah Qpah	0.01 0.01 0.01	14/03/2003 14/03/2003 14/03/2003	10.6 10.6 10.6 10.6 10.6	14/03/2003 14/03/2003 14/03/2003 14/03/2003 14/03/2003	61445 61446 61447 61448 61449
03       12         03       12         03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	12 12 12 12 0 19.5 0 0 19.7	BKF	9 6 9 9	MON MON INV MON MON MON			Qpah Qpah Qpah Qpah Qpah	0.01 0.01 0.01	14/03/2003 14/03/2003 14/03/2003	10.6 10.6 10.6 10.6	14/03/2003 14/03/2003 14/03/2003 14/03/2003	61446 61447 61448 61449
03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	12 12 12 0 19.5 0 0 19.7	BKF	6 9 9	MON INV MON MON			Qpah Qpah Qpah	0.01 0.01	14/03/2003 14/03/2003	10.6 10.6 10.6	14/03/2003 14/03/2003 14/03/2003	61447 61448 61449
03       12         03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	12 12 0 19.5 0 0 19.7	BKF	9 9	INV MON MON MON			Qpah Qpah	0.01	14/03/2003	10.6 10.6	14/03/2003 14/03/2003	61448 61449
03       12         04       21.9         04       20.3         04       19.2         04       19.6         04       22         05       12         15	12 0 19.5 0 0 19.7	BKF	9	MON MON MON			Qpah			10.6	14/03/2003	61449
04 21.9 04 20.3 04 19.2 04 19.6 04 22 05 12 15	0 19.5 0 0 19.7	BKF		MON MON				0.01	14/03/2003			
04 20.3 04 19.2 04 19.6 04 22 05 12 15	19.5 0 0 19.7	BKF	16.4	MON			Qpah					120227
04 20.3 04 19.2 04 19.6 04 22 05 12 15	0 0 19.7		16.4					1	1	17.7	24/08/2004	1120237
04 19.2 04 19.6 04 22 05 12 15	0 0 19.7						Qpah			17.2	23/08/2004	
04 19.6 04 22 05 12 15	19.7	BKF		MON			Qpah			17	23/08/2004	
04 22 05 12 15	-		1	MON			Qpah			17.7	26/08/2004	
05 12 15	0		16.6	MON			Qpah			17.4	28/08/2004	
15		BKF			8870	30/05/2005	Qpah	0	30/05/2005	10.2	30/05/2005	
	15			MON			Qpah			9	05/09/2005	
	16		10	INV			Qpah			14.9	09/06/2006	
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	-	-										217439
	-											217440
	-				+						+	217442
	-			-	+						-	217441
	-	-			+						+	217437
	D06       18         D06       18         D07       15.6         D08       19         D08       19         D09       15.5         D09       23         D09       20         D09       20         D09       6         D09       6 </td <td>D06         18         18           D07         15.6         15.6           D08         19         19           D08         19         19           D08         17.5         17.5           D09         15         15           D09         23         23           D09         20         20           D09         20         20           D09         6         6</td> <td>D06         18         18           D07         15.6         15.6           D08         19         19           D08         19         19           D08         19         19           D08         19         19           D08         17.5         17.5           D09         15         15           D09         23         23           D09         20         20           D09         20         20           D09         20         20           D09         6         6           D0         BKF         0           D0         BKF</td> <td>D06         18         18         12           D07         15.6         15.6         12.6           D08         19         19         13           D08         19         19         13           D08         19         19         13           D08         17.5         17.5         15           D09         15         15         9           D09         23         23         11           D09         20         20         11           D09         20         20         11           D09         20         20         11           D09         6         6         1           D09         8KF         1         1           D0         8KF         1         1           D0         8KF         &lt;</td> <td>D06         18         18         12         INV           D07         15.6         15.6         12.6         INV           D08         19         19         13         INV           D08         17.5         17.5         15         INV           D09         15         15         9         INV           D09         23         23         11         INV           D09         20         20         11         INV           D09         20         20         11         INV           D09         20         20         11         INV           D09         6         6         1         INV</td> <td>D06       18       18       12       INV         D07       15.6       15.6       12.6       INV         D08       19       19       13       INV         D08       19       19       13       INV         D08       19       19       13       INV         D08       17.5       17.5       15       INV         D09       15       15       9       INV         D09       23       23       11       INV         D09       20       20       11       INV         D09       6       6       1       INV         INO       0       BKF       IN       IN         INO       IN<td>006       18       18       12       INV       Image: constraint of the stress o</td><td>006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6<!--</td--><td>006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         INV           0         BKF</td><td>006       18       18       12       INV       Qpah       INV       Qpah         007       15.6       15.6       12.6       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       INV       Qpah         008       17.5       17.5       15       INV       Qpah       INV       &lt;</td><td>006       18       18       12       INV       Qpah       15.25         006       18       18       12       INV       Qpah       15.12         007       15.6       15.6       12.6       INV       Qpah       15.5         008       19       19       13       INV       Qpah       16         008       19       19       13       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         009       15       15.6       9       INV       Qpah       11         009       23       23       11       INV       Qpah       16         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       6       6       1       INV       Qpah       16.5         009       6       6       1       INV       &lt;</td><td>0006         18         18         12         INV         Qpah         15.25         06/09/2006           006         18         18         12         INV         Qpah         15.12         06/09/2006           007         15.6         15.6         12.6         INV         Qpah         15.5         09/01/2007           008         19         19         13         INV         Qpah         16         22/08/2008           008         17.5         17.5         15         INV         Qpah         11         27/11/2008           009         15         15         9         INV         Qpah         16         12/08/2008           009         15         15         9         INV         Qpah         111         27/11/2008           009         23         23         11         INV         Qpah         16.5         17/08/2009           009         20         20         11         INV         Qpah         16.5         17/08/2009           009         6         6         11         INV         Qpah         16.5         17/08/2009           009         6         6         16         1</td></td></td>	D06         18         18           D07         15.6         15.6           D08         19         19           D08         19         19           D08         17.5         17.5           D09         15         15           D09         23         23           D09         20         20           D09         20         20           D09         6         6	D06         18         18           D07         15.6         15.6           D08         19         19           D08         19         19           D08         19         19           D08         19         19           D08         17.5         17.5           D09         15         15           D09         23         23           D09         20         20           D09         20         20           D09         20         20           D09         6         6           D0         BKF         0           D0         BKF	D06         18         18         12           D07         15.6         15.6         12.6           D08         19         19         13           D08         19         19         13           D08         19         19         13           D08         17.5         17.5         15           D09         15         15         9           D09         23         23         11           D09         20         20         11           D09         20         20         11           D09         20         20         11           D09         6         6         1           D09         8KF         1         1           D0         8KF         1         1           D0         8KF         <	D06         18         18         12         INV           D07         15.6         15.6         12.6         INV           D08         19         19         13         INV           D08         17.5         17.5         15         INV           D09         15         15         9         INV           D09         23         23         11         INV           D09         20         20         11         INV           D09         20         20         11         INV           D09         20         20         11         INV           D09         6         6         1         INV	D06       18       18       12       INV         D07       15.6       15.6       12.6       INV         D08       19       19       13       INV         D08       19       19       13       INV         D08       19       19       13       INV         D08       17.5       17.5       15       INV         D09       15       15       9       INV         D09       23       23       11       INV         D09       20       20       11       INV         D09       6       6       1       INV         INO       0       BKF       IN       IN         INO       IN <td>006       18       18       12       INV       Image: constraint of the stress o</td> <td>006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6<!--</td--><td>006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         INV           0         BKF</td><td>006       18       18       12       INV       Qpah       INV       Qpah         007       15.6       15.6       12.6       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       INV       Qpah         008       17.5       17.5       15       INV       Qpah       INV       &lt;</td><td>006       18       18       12       INV       Qpah       15.25         006       18       18       12       INV       Qpah       15.12         007       15.6       15.6       12.6       INV       Qpah       15.5         008       19       19       13       INV       Qpah       16         008       19       19       13       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         009       15       15.6       9       INV       Qpah       11         009       23       23       11       INV       Qpah       16         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       6       6       1       INV       Qpah       16.5         009       6       6       1       INV       &lt;</td><td>0006         18         18         12         INV         Qpah         15.25         06/09/2006           006         18         18         12         INV         Qpah         15.12         06/09/2006           007         15.6         15.6         12.6         INV         Qpah         15.5         09/01/2007           008         19         19         13         INV         Qpah         16         22/08/2008           008         17.5         17.5         15         INV         Qpah         11         27/11/2008           009         15         15         9         INV         Qpah         16         12/08/2008           009         15         15         9         INV         Qpah         111         27/11/2008           009         23         23         11         INV         Qpah         16.5         17/08/2009           009         20         20         11         INV         Qpah         16.5         17/08/2009           009         6         6         11         INV         Qpah         16.5         17/08/2009           009         6         6         16         1</td></td>	006       18       18       12       INV       Image: constraint of the stress o	006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6 </td <td>006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         INV           0         BKF</td> <td>006       18       18       12       INV       Qpah       INV       Qpah         007       15.6       15.6       12.6       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       INV       Qpah         008       17.5       17.5       15       INV       Qpah       INV       &lt;</td> <td>006       18       18       12       INV       Qpah       15.25         006       18       18       12       INV       Qpah       15.12         007       15.6       15.6       12.6       INV       Qpah       15.5         008       19       19       13       INV       Qpah       16         008       19       19       13       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         009       15       15.6       9       INV       Qpah       11         009       23       23       11       INV       Qpah       16         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       6       6       1       INV       Qpah       16.5         009       6       6       1       INV       &lt;</td> <td>0006         18         18         12         INV         Qpah         15.25         06/09/2006           006         18         18         12         INV         Qpah         15.12         06/09/2006           007         15.6         15.6         12.6         INV         Qpah         15.5         09/01/2007           008         19         19         13         INV         Qpah         16         22/08/2008           008         17.5         17.5         15         INV         Qpah         11         27/11/2008           009         15         15         9         INV         Qpah         16         12/08/2008           009         15         15         9         INV         Qpah         111         27/11/2008           009         23         23         11         INV         Qpah         16.5         17/08/2009           009         20         20         11         INV         Qpah         16.5         17/08/2009           009         6         6         11         INV         Qpah         16.5         17/08/2009           009         6         6         16         1</td>	006         18         18         12         INV         Qpah           007         15.6         15.6         12.6         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         19         19         13         INV         Qpah           008         17.5         17.5         15         INV         Qpah           009         15         15         9         INV         Qpah           009         23         23         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         20         20         11         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         Qpah           009         6         6         1         INV         INV           0         BKF	006       18       18       12       INV       Qpah       INV       Qpah         007       15.6       15.6       12.6       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       Qpah         008       19       19       13       INV       Qpah       INV       INV       Qpah         008       17.5       17.5       15       INV       Qpah       INV       <	006       18       18       12       INV       Qpah       15.25         006       18       18       12       INV       Qpah       15.12         007       15.6       15.6       12.6       INV       Qpah       15.5         008       19       19       13       INV       Qpah       16         008       19       19       13       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         008       17.5       15.5       INV       Qpah       16         009       15       15.6       9       INV       Qpah       11         009       23       23       11       INV       Qpah       16         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       20       20       11       INV       Qpah       16.5         009       6       6       1       INV       Qpah       16.5         009       6       6       1       INV       <	0006         18         18         12         INV         Qpah         15.25         06/09/2006           006         18         18         12         INV         Qpah         15.12         06/09/2006           007         15.6         15.6         12.6         INV         Qpah         15.5         09/01/2007           008         19         19         13         INV         Qpah         16         22/08/2008           008         17.5         17.5         15         INV         Qpah         11         27/11/2008           009         15         15         9         INV         Qpah         16         12/08/2008           009         15         15         9         INV         Qpah         111         27/11/2008           009         23         23         11         INV         Qpah         16.5         17/08/2009           009         20         20         11         INV         Qpah         16.5         17/08/2009           009         6         6         11         INV         Qpah         16.5         17/08/2009           009         6         6         16         1

Unit No	Date	Max Depth	Latest	Status	Cased To	Purpose	TDS (mg/L)	TDS Date	Aquifer	Yield	Yield Date	SWL (m)	SWL Date	Permit No
		(m)	Depth (m)		(m)					(L/sec)				
6628-26893	15/12/2011		7		3	INV			Qpah			3.6	15/12/2011	
6628-26894	14/12/2011	19	19		16	INV			Qpah			17	14/12/2011	
6628-26895	16/01/2012	20	20		17	INV			Qpah			17.5	16/01/2012	
6628-26995	24/11/2013	40	20		15.5	INV						18	24/11/2013	227790
6628-26996	14/11/2013	40	0	BKF		INV								227788
6628-26997	17/11/2013	40	19.8		10.8	INV						12.5	17/11/2013	227787
6628-26998	19/11/2013	40	0	BKF										227791
6628-26999	21/11/2013	40	20		15.5	INV						18	21/11/2013	227789
6628-27000	27/11/2013	40	0	BKF										227786
6628-27189	30/01/2014	13	13		8.6	INV			Qpah			10.5	30/01/2014	229689
6628-27190	29/01/2014	13.2	13.2		8.7	INV			Qpah			10.6	29/01/2014	229688
6628-27191	22/10/2013	3.4	3.4		1.5	INV								222133
6628-27192	22/10/2013	3.4	3.4		1.5	INV								222132
6628-27689	13/02/2015	20	0	BKF		INV								243203
6628-27690	12/02/2015	17	0	BKF		INV								243241
6628-27691	19/02/2015	20	0	BKF		INV								243243
6628-27699	21/02/2015	30	0	BKF		INV								243244
6628-27715	19/03/2015	16	16		10				Qpah			11.61	19/03/2015	243313
6628-27716	19/03/2015	20	20		14				Qpah			17.93	19/03/2015	243314
6628-27717	18/03/2015	16	16		10				Qpah			10.87	18/03/2015	243315
6628-27853	18/05/2015	21	21			INV								247371
6628-27903	23/06/2015	14	14		11	INV			Qpah			11.4	23/06/2015	248491
6628-27904	22/06/2015	8	7.7		7.7				Qpah			4	22/06/2015	248492
6628-27905	23/06/2015	12.5	12.5		9.5	INV			Qpah			10.1	23/06/2015	248490
6628-28037	18/10/2015	19.4	19.4		16.4	INV			Qpah			16	18/10/2015	248824
6628-28038	18/10/2015	20.8	20.8		17.8	INV			Qpah			16.16	18/10/2015	248823
6628-28591	12/10/2016	200	22		17							16.6	12/10/2016	273685
6628-28592	12/10/2016	13.5	13.5		13.5	INV						10.4	12/10/2016	273686
6628-28594	21/10/2016	25	25			INV								274264

150 records



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126 Wright Street, Adelaide

Appendix D: Acid Sulfate Soil Map

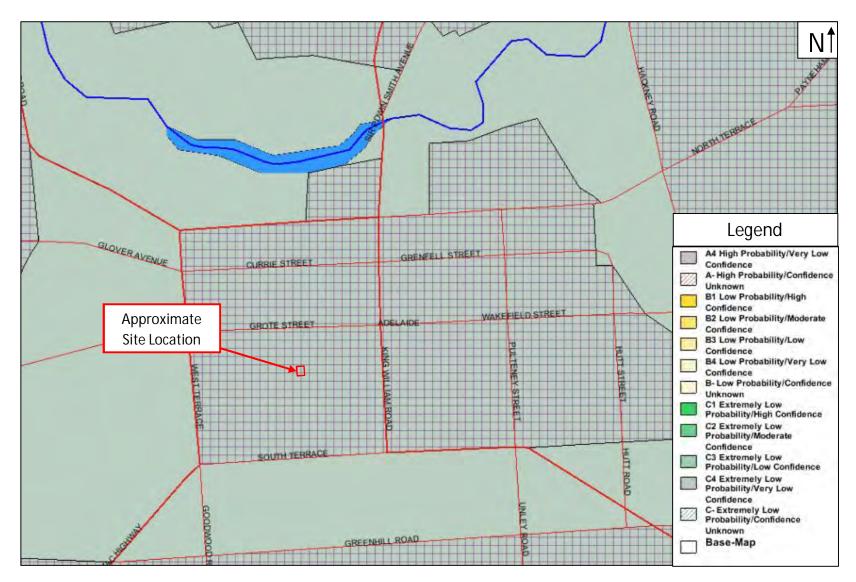


Figure – Acid Sulphate Soils Map



126 Wright Street, Adelaide

Appendix E: Sands and McDougall Information Summary



J150420 - 126 Wright Street, Adelaide, SA

Year	Wright Street	Wright Court
	Street Number, Listed Occupants and Occupations	(street encompassing site)
	(Possible site occupants in bold)	Street Number, Listed Occupants and Occupations
1880	Field Street (Formerly Wright Court)	Wright Street East
	Davidson, W. E.	Field, T. (carpenter)
	Westbury, -	Ellis, D.
	Morris, -	Edge, T.
	Joyce, J. J. (storekeeper)	Dawson, -
	Joyce, W. (junior.	Ford, M.
	Kelly, Mrs.	Green, M.
	Janzen, A.	Barnes, Mre. Joe.
	Newell, R.	Maffer, Mrs.
	Davis, S. (storeman)	Jennings, T.
	Bennetts, A.	Fletcher, J. (carpenter),
	Viney, Wm. (carpenter)	Kilmartin, M.
		Willouby, W. St. Clair.
	Wright court	Geo, S. (blacksmith)
		Sheenan, Mrs.
		Norris, H.
		Drury, C. H.
		Wright Street West
1890	Compton Street	Wright Street East
	Davidson, W. E.	Field, T. (carpenter)
	Westbury, -	Ellis, D.
	Morris, -	Edge, T.
	Joyce, J. J. (storekeeper)	Dawson, -
	Joyce, W. (junior)	Ford, M.
	Kelly, Mrs.	Green, M.
	Janzen, A.	Barnes, Mrs. Joe.
	Newell, R.	Maffer, Mrs.
	Davis, S. (storeman)	Jennings, T.
	Bennetts, A.	Fletcher, J. (carpenter)
	Viney, Wm. (carpenter)	Kilmartin, M.
		Willouby, W. St. Clair.
	Wright court	Geo, S. (blacksmith)
		Sheenan, Mrs.
		Norris, H.
		Drury, C. H.
		Wright Street West
1900	Field Street (Formerly Wright Court)	Wright Street East
	98. Newell, Mrs R. (storekeeper)*	6. Clarke, Mrs J.
	100. Viney, Wm. (builder)	4. Wise, E. J. (hairdresser)
	102. Ratcliffe, Jas	2. Fielder, S. A. (presser)
	104. Bennetts, Mrs M.	7. Edgley, Mrs B.
	106. Ritchie, H. C. (engineer)	9. Preece, W. J. (mechanic)
	108. Loechner, J. C.	24. Waters, W (miner)
	110. Gilbert, Wm. (carpenter)	22. Gurr, H. (stereotyper)
		20. Caire, A. J. (saddler)
	Wright Court	18. Coffey, J. (miner)
		16. Barry, J. (carter)
		14. Toolan, J. (mason)
		12. McGee L
		10. Just, W. (butcher)
		<ol> <li>8. Perrers, R. (blacksmith)</li> <li>6. Sheehan, Mrs A.</li> </ol>
		4. Brett, Miss C.
		2. Hooper, Mrs., Hogan, Mrs., Motley, C. (dealer), Lindholm, G. (hawker).
		13. Vallancy, R.
		17. McIntyre, D.

GREENCAP

		17. McIntyre, D.
		19. Black, Mrs.
		Wright Street West
1910	Field Street (Formerly Wright Court)	Wright Street East
	86. Carroll, Mrs E. (produce merchant and grocer)	2. Hunt, S. (Upholsterer)
	88. Swan G. C. (tobacconist and hairdresser)	6. Sheehan, Mrs. A.
	90. Thomas, Wm. (labourer)	5. Edgley, J. (Labourer)
	92. Oliver, T. L. (clerk)	7. Edgley, W. (tentmaker)
	98. Newell, Mrs S. (storekeeper), Newell, R. (coachbuilder), Newell,	9. Preece, W. J. (mechanic)
	Miss M. A. E. (hosiery knitters)	24. Waters, W. (miner)
	100. Viney, Wm. (builder)	22. Vallancy, R. (labourer)
	102. Burke, P. (labourer)	18. Coffey, J. (miner)
	104. Gibson, J. (boot clicker)	16. Casseltine, F. (librarian)
	106. Gray, W. A. (labourer)	14. Lacerda, H. (rail porter)
	108. Gunn, H. F. H. (motor driver)	12. Symons, H. (hawker)
		10. Reid, G. (mechanic)
	Wright court	8. Barry, J. (carter)

J150420 – 126 Wright Street, Adelaide, SA

Year	Wright Street	Wright Court
	Street Number, Listed Occupants and Occupations (Possible site occupants in bold)	(street encompassing site) Street Number, Listed Occupants and Occupations
		<ul> <li>6. Spangler, F. C. (packer)</li> <li>2. Rouse, W. (mason)</li> <li>9. Lindholm, G. (hawker)</li> <li>11. Brown, C. F. (motorman)</li> <li>13. Patterson, R. (labourer)</li> <li>17. Parmiter, A. P. (carpenter)</li> <li>19. Leo, P. (labourer), Gibbons, Jno (labourer), Hodgson, C. J. E. (caretaker)</li> <li>Harris, W. (engineer)</li> <li>Kirk, W. R. (constable)</li> <li>Wright Street West</li> </ul>
1920	<ul> <li>Field Street (Formerly Wright Court)</li> <li>86. Carroll, Mrs E. (general store)</li> <li>88. Bullock, Mrs M. (cool drinks and confectionary)</li> <li>90. Rosewarne, J. (enginecleaner)</li> <li>92. Oliver, T. L. (civil servant)</li> <li>96. Gehlert, Hermann (confectioner)</li> <li>98. Newell, R. (coachbuilder), Newell, Miss M. A. E. (hosiery knitters)</li> <li>100. Viney, Wm. (builder)</li> <li>102. McCarthy, J. J.</li> <li>106. Thoroughgood, F. (coachtrimmer)</li> <li>108. Viney, W. B. (carpenter)</li> <li>110. Raim, O. (laborer)</li> <li>Wright court</li> </ul>	<ul> <li>Wright Street East</li> <li>Wright Ct, Right side</li> <li>2. Barry, R. O.</li> <li>4. Williamson, J.</li> <li>6. Gould, W.</li> <li>19. Leo, Mrs. John.</li> <li>17. Parmiter, A. P. (carpenter)</li> <li>13. Hicks, M. F.</li> <li>11. Walker, Mrs</li> <li>Wright Ct, Left side</li> <li>8. Marks, D.</li> <li>9. Preece, W. J. (mechanic)</li> <li>7. Edgley, W. (tentmaker)</li> <li>5. Edgley, J. (laborer)</li> <li>1. McKenzie, A. (timberstacker)</li> <li>24. Fenwick, Mrs. M.</li> <li>20. Mitchell, Mrs. M.</li> <li>18. Bitmead, Mrs, H.</li> <li>16. Casey, J. M.</li> <li>14. Toolan, J.</li> <li>12. Symons, H. (hawker)</li> <li>10. Rouse, W. (mason)</li> <li>8. Barry, J. (carter)</li> <li>4. Cahill, J. (rail employee)</li> <li>2. Craig, S. G.</li> <li>Wright Street West</li> </ul>
1930	Field Street (Formerly Wright Court)         112. Mott, Mrs. B E. (General store)         114. Oliver, Mrs. (mixed business)         116. Bullock, Mrs. M.         120. Oliver, T. L. (civil services)         126. Newell, Miss. M. A. E. (general store)         128. Viney, W. (builder)         132. Eglinton, L. (labourer)         143. Rein, O. (librarian)         134a. Viney, W. B. (carpenter)         136. Dohne, G. (postal employee)         Wright court	<ul> <li>Wright Street Vest</li> <li>Wright Street East <ul> <li>Wright Ct, Right side</li> </ul> </li> <li>10. Bushell, Mrs.</li> <li>14. Ellis, T.</li> <li>22. Jenkinson, Mrs.</li> <li>24. Evans, Mrs.</li> <li>26. Ball, Mrs.</li> <li>28. Stead, H. (stableman)</li> <li>Wright Ct, Left side</li> <li>13. Ryan, J. A. (plumber)</li> <li>15. Edgley, W. (tentmaker)</li> <li>15a. Edgley, Mrs.</li> <li>17. Bradbury, V. G. (gardener)</li> <li>19. Allen, A. T.</li> <li>21. Cruickshank, Mrs.</li> <li>23. Kerslake, -</li> <li>25. Eardly, -</li> <li>27. Bitmead, Mrs. H.</li> <li>27a. Hosking, A. (labourer)</li> <li>29. Morgan, F. C. (labourer)</li> <li>31. Goldsworthy, J. O. (labourer)</li> <li>33. Fenwick, M. (labourer)</li> <li>35. Gummow, G. (labourer)</li> <li>37. Robertson, Mrs.</li> <li>37a. Edwards, J. (fencer)</li> <li>39. Murphy, Mrs. A.</li> </ul>
1940	<i>Field Street (Formerly Wright Court)</i> 112. S.A. Pensioners' Association - Lockyer, E. 114. Sandery, W. C. 116. Farrell, Miss. M. 120. Nicks, O. 124. Harris, C. E.	Wright Street West         Wright Street East – Off 136 Wright St         - Wright Ct, Right side         12. Hamilton, J.         14. Alsop, S.         22. Carroll, K.         24. Murrin, J.
	124. Newell, Miss. M. A. E. (general store)	26. McCraken, A. R.

GREENCAP

J150420 – 126 Wright Street, Adelaide, SA

Wright Court Year Wright Street Street Number, Listed Occupants and Occupations (street encompassing site) (Possible site occupants in bold) Street Number, Listed Occupants and Occupations 128. Warrick, F. M. (labourer) 28. Stead, H. 130. Taylor, W. J. 132. Viney, W. B. (carpenter) - Wright Ct, Left side 134. Atkins, J. J. (carrier) 136. McEnhill, Mrs. M. 13. Ryan, J. 15. Edgley, T. 15a. Christansen, Mrs. G. Wright court 17. Halliday, Mrs. I. B. 19. Cameron, Mrs. M. G. 21. Cruickshank, G. H. (labourer) 23. Milsom, H. (labourer) 27. Blackmore, W. R. 27a. Gurr, Mrs. A. M. 29. Solomon, S. J. 31. George, Mrs. G. 33. Schottelius, A. W. 35. Payne, T. (blacksmith) 37. Foyffe, A. 37a. Pretty, Mrs. J. 39. Keene, W. Wright Street West Wright Street East - Off 136 Wright St Field Street (Formerly Wright Court) 1950 - Wright Ct, Right side 112. Civil Pensioners' Association., Smith, Mrs. J. (secretary) 114. Charlton, Mrs. 13. Galea, J. P. (baker) 116. Leesong, S. M. 15. Crafter, A. M. 120. Furness, W. 15a. Christansen, Mrs. G. 124. Chapman, L (postal employee) 17. Saunders, W. J. 126. Newell, Miss. M. A. E. (general store) 19. Miller, G. 128. Warrick, F. M. (labourer) 21. Bishop, C. M. (building housekeeper) 130. Taylor, Mrs. D. A. 23. Williams, S. 132. Viney, W. B. (carpenter) 25. Lawler, Mrs. E. M. 134. Warrick, C. J. 27. Williams, I. 134a. Young, L. G. 27a. Gurr, Mrs. A. M. 136. Foran, S. H. 29. Holborn, W. 31. George, Mrs, G. Wright court 33. Schottelius, A. W. 35. Payne, Mrs. T. 37. Perman, W. 37a. Panoforis, A. P. 39. Keene, W. Dead end Field Street (Formerly Wright Court) Wright Street East – Off 136 Wright St 1960 - Wright Ct, Right side 112. Vacant 114. Charlton, Mrs. 13. Petkunas, J. 116. Leesong, S. M. 15 - 15a. Viney, F. R. B. 120. Furness, W. 17. Millard, G. W. 124. Chapman, L (postal employee) 21. Boarding House 126. Saunders Products Limited 23. Harris, A. J. (tool maker) 128. Warrick, D. W. (hall porter), Warwick, C. J. 25. Huxtable, R. P. 130. Viney, W. B. (storeman) 27. White, Mrs. E. M. 132. Crocker, A. G., Viney Mrs. A. 27. Earle, J. C. 134. Unknown. 27a. Caprin, A. 136. Kalle, E. 29. Prasinas, S. 136a. Atkins C (fencing contractor) Dead end Wright court 10. Bailey, W. G. 12. Buttignol, O. 14. Harris, Mrs. E.

GREENCAF

		22. Linkimis, A. (tailor)
		24. Unknown.
		26. Unknown.
		28. Kourtesis, D., Day R. B. & Sons Limited upholsterers
		Dead end
1973	Field Street (Formerly Wright Court)	Wright Street North & West – Off 136 Wright St
		- Wright Ct, Right side
	112. Manos Poultry Services P/L freezer & packing room	
	114. Manos Poultry (tax agent)	13. Petkunas, J.
	116. Manos Poultry Service (store room)	13. Watson, Miss. E.
	120. Manos, J.	15. Viney, O. M.
	124. Manos Poultry Service, Pty. Ltd.	25. Lamson Engineering Australia P/L Installation & maintenance
	126. Saunders Products Pty. Ltd. (sheet metal works, Poultry	27. Peoples Bookshop
	equipment)	27a. Bergin V.
	128. Warwick, C. J.	29. Prasinov, A.
	130. Benovic, S.	29. Prosinas, S. D., Solver Parking Area, Solver Paints rear entrance
	132. Viney, Mrs. A.	

J150420 – 126 Wright Street, Adelaide, SA

Year	Wright Street Street Number, Listed Occupants and Occupations (Possible site occupants in bold)	Wright Court (street encompassing site) Street Number, Listed Occupants and Occupations
	134. Read, G. H. 136. Byrum, Mrs. S. M. 136. Gillespie, T. K. 136a. Atkins, Mrs. E. G. <i>Wright court</i>	<ul> <li>Field St</li> <li>Wright Street- Off 136 Wright St</li> <li>Wright Ct East &amp; South, Right side</li> <li>10. Bailey, W. G.</li> <li>12</li> <li>14. Withington, D.</li> <li>22. Liakimis, G.</li> <li>24. Zafiriou, D.</li> <li>26. Mitanovski, P.</li> <li>28. Atta, Z.</li> <li>28. Petrovic, P.</li> <li>30 - 34 Saunders Products, Pty. Ltd. (sheet metal works)</li> <li>Field Street</li> </ul>

GREENCAP

NOTES: \* Presumes this record is for Mr not Mrs as recorded in Sands and Mc





126 Wright Street, Adelaide

Appendix F: Aerial Photographs





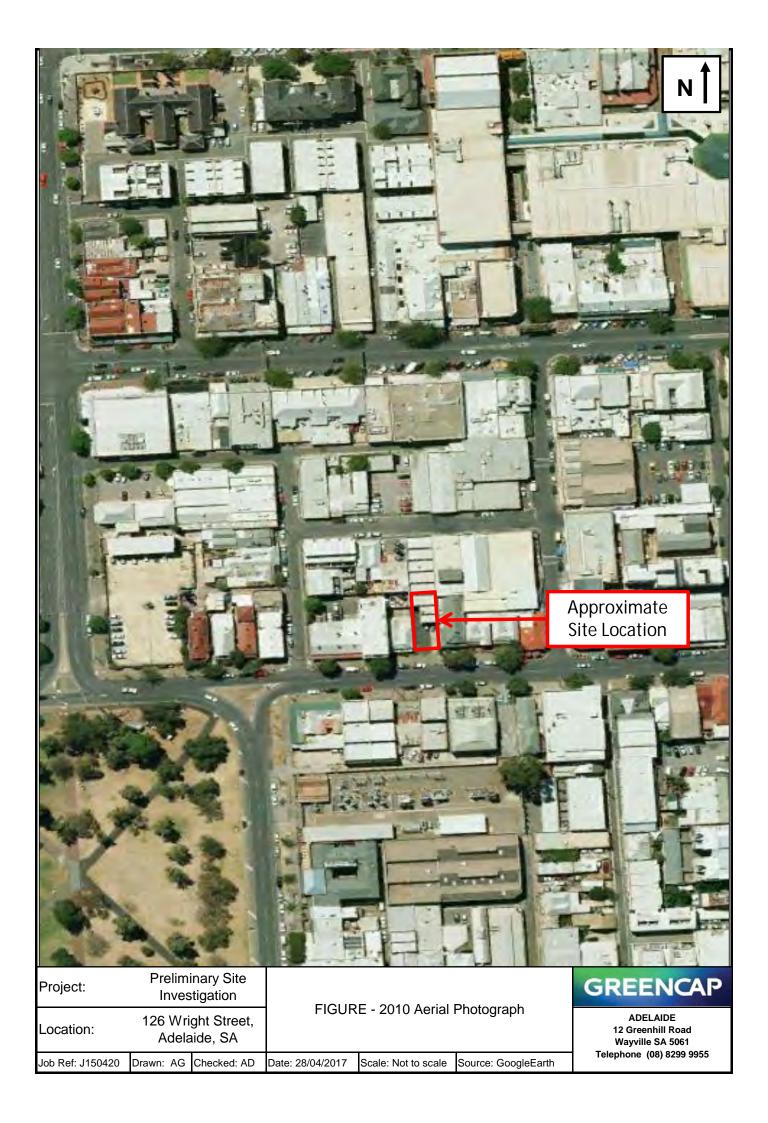
Location.	S	SA					
Job Ref: J150420	Drawn: AG	Checked: AD	Date: 28/04/2017	Scale: Not to scale	Source: Mapland	Teleph	













126 Wright Street, Adelaide

Appendix G: Government Records



#### **Government of South Australia**

SafeWork SA

Attorney-General's Department

Licensing, Customer Services Team

Level 4 World Park A 33 Richmond Road Keswick SA 5035

GPO Box 465 Adelaide SA 5001

DX 715 Adelaide

 Phone
 1300 365 255

 Fax
 08 8204 9200

 Email
 licensing.safework@sa.gov.au

 ABN
 50-560-588-327

www.safework.sa.gov.au

Alyssa Giannoni Greencap Pty Ltd 12 Greenhill Road WAYVILLE SA 5034

27 April 2017

Dear Alyssa Giannoni

### DANGEROUS SUBSTANCES LICENCE SEARCH

### PROPERTY DETAILS: 126 WRIGHT STREET, ADELAIDE SA 5000

Further to your Application for a Dangerous Substance Search dated 24 April 2017 the abovementioned site, I advise that there are no current or historical records for this site.

Yours sincerely

\$2

HANAGER CUSTOMER SERVICES TEAM SAFEWORK SA



**Environment Protection Authority** 

www.epa.sa.gov.au





GPO Box 2607 Adelaide SA 5001 250 Victoria Square Adelaide SA T (08) 8204 2000 F (08) 8204 2020 Country areas 1800 623 445

Greencap 12 Greenhill Road WAYVILLE SA 5034

sa@greencap.com.au

Contact: Section 7 Telephone: (08) 8204 2026 Email: epasection7@sa.gov.au

Contact: Public Register Telephone: (08) 8204 9128 Email: epa.publicregister@sa.gov.au

05 May, 2017

#### EPA STATEMENT TO FORM 1 - CONTRACTS FOR SALE OF LAND OR BUSINESS

The EPA provides this statement to assist the vendor meet its obligations under section 7(1)(b) of the Land and Business (Sale and Conveyancing) Act 1994. A response to the questions prescribed in Schedule 1-Contracts for sale of land or business-forms (Divisions 1 and 2) of the Land and Business (Sale and Conveyancing) Act 1994 is provided in relation to the land.

I refer to your enquiry concerning the parcel of land comprised in

Title ReferenceCT Volume 5185 Folio 557Address126 Wright Street, ADELAIDE SA 5000

#### Schedule – Division 1 – Land and Business (Sale and Conveyancing) Regulations 2010

#### PARTICULARS OF MORTGAGES, CHARGES AND PRESCRIBED ENCUMBRANCES AFFECTING THE LAND

#### 7. Environment Protection Act 1993

Does the EPA hold any of the following details relating to the Environment Protection Act 1993:

7.1	Section 59 - Environment performance agreement that is registered in relation to the land.	NO
7.2	Section 93 - Environment protection order that is registered in relation to the land.	NO
7.3	Section 93A - Environment protection order relating to cessation of activity that is registered in relation to the land.	NO
7.4	Section 99 - Clean-up order that is registered in relation to the land.	NO
7.5	Section 100 - Clean-up authorisation that is registered in relation to the land.	NO
7.6	Section 103H - Site contamination assessment order that is registered in relation to the land.	NO
7.7	Section 103J - Site remediation order that is registered in relation to the land.	NO

7.8	Section 103N - Notice of declaration of special management area in relation to the land (due to possible existence of site contamination).	NO
7.9	Section 103P - Notation of site contamination audit report in relation to the land.	NO
7.10	Section 103S - Notice of prohibition or restriction on taking water affected by site contamination in relation to the land.	NO
Sched	ule – Division 2 – Land and Business (Sale and Conveyancing) Regulations 2010	
PARTI	CULARS RELATING TO ENVIRONMENT PROTECTION	
3-Lice	nces and exemptions recorded by EPA in public register	
Does t	he EPA hold any of the following details in the public register:	
a)	details of a current licence issued under Part 6 of the <i>Environment Protection Act 1993</i> to conduct, at the land-	
i)	a waste or recycling depot (as referred to in clause 3(3) of Schedule 1 Part A of that Act); or	NO
ii)	activities producing listed wastes (as referred to in clause 3(4) of Schedule 1 Part A of that Act); or	NO
iii)	any other prescribed activity of environmental significance under Schedule 1 of that Act?	NO
b)	details of a licence no longer in force issued under Part 6 of the <i>Environment Protection Act</i> 1993 to conduct, at the land-	
i)	a waste or recycling depot (as referred to in clause 3(3) of Schedule 1 Part A of that Act); or	NO
ii)	activities producing listed wastes (as referred to in clause 3(4) of Schedule 1 Part A of that Act); or	NO
iii)	any other prescribed activity of environmental significance under Schedule 1 of that Act?	NO
c)	details of a current exemption issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
d)	details of an exemption no longer in force issued under Part 6 of the <i>Environment Protection Act 1993</i> from the application of a specified provision of that Act in relation to an activity carried on at the land?	NO
e)	details of a licence issued under the repealed South Australian Waste Management Commission Act 1979 to operate a waste depot at the land?	NO
f)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to operate a waste depot at the land?	NO
g)	details of a licence issued under the repealed <i>South Australian Waste Management</i> <i>Commission Act 1979</i> to produce waste of a prescribed kind (within the meaning of that Act) at the land?	NO

h)	details of a licence issued under the repealed <i>Waste Management Act 1987</i> to produce prescribed waste (within the meaning of that Act) at the land?	NO
4-Pollution and site contamination on the land - details recorded by the EPA in public register		
Does the EPA hold any of the following details in the public register in relation to the land or part of the land:		
a)	details of serious or material environmental harm caused or threatened in the course of an activity (whether or not notified under section 83 of the <i>Environment Protection Act 1993</i> )?	NO
b)	details of site contamination notified to the EPA under section 83A of the <i>Environment Protection Act 1993</i> ?	NO
c)	a copy of a report of an environmental assessment (whether prepared by the EPA or some other person or body and whether or not required under legislation) that forms part of the information required to be recorded in the public register?	NO
d)	a copy of a site contamination audit report?	NO
e)	details of an agreement for the exclusion or limitation of liability for site contamination to which section 103E of the <i>Environment Protection Act 1993</i> applies?	NO
f)	details of an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act</i> 1993?	NO
g)	details of an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993?</i>	NO
h)	details of a notification under section 103Z(1) of the <i>Environment Protection Act 1993</i> relating to the commencement of a site contamination audit?	NO
i)	details of a notification under section 103Z(2) of the <i>Environment Protection Act 1993</i> relating to the termination before completion of a site contamination audit?	NO
j)	details of records, held by the former <i>South Australian Waste Management Commission</i> under the repealed <i>Waste Management Act 1987</i> , of waste (within the meaning of that Act) having been deposited on the land between 1 January 1983 and 30 April 1995?	NO
5-Pollution and site contamination on the land - other details held by EPA		
Does the EPA hold any of the following details in relation to the land or part of the land:		
a)	a copy of a report known as a "Health Commission Report" prepared by or on behalf of the <i>South Australian Health Commission</i> (under the repealed <i>South Australian Health Commission Act 1976</i> )?	NO
b)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site contamination assessment proposal under section 103I of the <i>Environment Protection Act 1993</i> ?	NO
c)	details (which may include a report of an environmental assessment) relevant to an agreement entered into with the EPA relating to an approved voluntary site remediation proposal under section 103K of the <i>Environment Protection Act 1993</i> ?	NO

d)	a copy of a pre-1 July 2009 site audit report?	NO
e)	details relating to the termination before completion of a pre-1 July 2009 site audit?	NO

All care and diligence has been taken to access the above information from available records. Historical records provided to the EPA concerning matters arising prior to 1 May 1995 are limited and may not be accurate or complete and therefore the EPA cannot confirm the accuracy of the historical information provided.

# This index was last updated 02 May 2017

Search				
Suburb/Town:	ADELAIDE « required			
Туре	All <u>Type definitions</u>	V		
	Search			

Notification no	Туре	Address	Potentially contaminating activity
60184	Audit Notification	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded
60088	Audit Notification	North Terrace ADELAIDE SA 5000	Not recorded
60074	Audit Notification	Lot 101 Montefiore Road ADELAIDE SA 5000	Not recorded
60079	Audit Notification	231-241 Waymouth and 17 Crowther Street ADELAIDE SA 5000	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
60093	Audit Notification	South Parklands (near cnr of Greenhill & Fullarton Roads) ADELAIDE SA 5000	Not recorded
60098	Audit Notification	142-184 Franklin Street ADELAIDE SA 5000	Not recorded
60099	Audit Notification	Fullarton Road ADELAIDE SA 5000	Not recorded
60101	Audit Notification	102 Waymouth Street ADELAIDE SA 5000	Not recorded
60117	Audit Notification	Franklin Street ADELAIDE SA 5000	Not recorded
60125	Audit Notification	Lot 20 North Terrace ADELAIDE SA 5000	Not recorded
60377	Audit Notification	North Terrace ADELAIDE SA 5000	Fill or soil importation; Incineration; Listed Substances (storage); Motor vehicle repair or maintenance; Railway operations; Waste depots; Wastewater storage, treatment or disposal
60380	Audit Notification	North Terrace ADELAIDE SA 5000	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
60194	Audit Notification	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded
60227	Audit Notification	Victoria Park Grandstand Precinct & Northern Playing Field South West Corner of Fullarton & Wakefield Road ADELAIDE SA 5000	Not recorded
60256	Audit Notification	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded
60261	Audit Notification	Former Adelaide Rail Yards Festival Drive ADELAIDE SA 5000	Not recorded
60314	Audit Notification	445-449A Pulteney Street ADELAIDE SA 5000	Not recorded
60514	Audit Notification	Section 6016 Fullarton Road ADELAIDE SA 5000	Fill or soil importation
60625	Audit Notification	Cnr Port & James Congdon Roads	Motor vehicle repair or maintenance; Works depots

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5000	
60627	Audit Notification	Lot 10 North Tce and Lot 60 Port Road ADELAIDE SA 5000	Not recorded
60628	Audit Notification	Lot 30 North Terrace ADELAIDE SA 5000	Not recorded
60704	Audit Notification	Sturt Street (Former Sturt St Carpark) ADELAIDE SA 5000	Not recorded
60728	Audit Notification	Lot 20 North Terrace ADELAIDE SA 5000	Not recorded
60768	Audit Notification	43-69 Sturt Street ADELAIDE SA 5000	Electrical or electronics component manufacture; Spray painting
60778	Audit Notification	22-26 Selby Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Spray painting
60934	Audit Notification	142-184 Franklin Street ADELAIDE SA 5000	Fill or soil importation; Liquid organic chemical substances-storage
61111	Audit Notification	172-176 Gilbert Street ADELAIDE SA 5000	Service stations

Notification no	Туре	Address	Potentially contaminating activity
61216	Audit Notification	Lot 30 North Terrace ADELAIDE SA 5000	Listed Substances (storage); Railway operations
61249	Audit Notification	Lot 20 North Terrace ADELAIDE SA 5000	Railway operations
61267	Audit Notification	43-69 Sturt Street ADELAIDE SA 5000	Electrical or electronics component manufacture; Electrical transformer or capacitor works; Foundry; Listed Substances (storage); Metal coating, finishing or spray painting; Motor vehicle repair or maintenance; Spray painting
61297	Audit Notification	95-97 Gilles Street ADELAIDE SA 5000	Fill or soil importation
61314	Audit Notification	Lot 30 North Terrace ADELAIDE SA 5000	Listed Substances (storage); Railway operations
61315	Audit Notification	Lot 20 North Terrace ADELAIDE SA 5000	Railway operations
61352	Audit Notification	Lots 1, 201 & 186-190 Franklin Street & Lots 45 & 46 Mellor	Fill or soil importation; Listed Substances (storage)

Notification no	Туре	Address	Potentially contaminating activity
		Street ADELAIDE SA 5000	
61375	Audit Notification	Lot 100 Waymouth Street ADELAIDE SA 5000	Not recorded
61396	Audit Notification	411-427 King William Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Service stations
61418	Audit Notification	34 Angas Street ADELAIDE SA 5000	Fill or soil importation
61434	Audit Notification	Lot 11 (D85638) and Lots 10 & 60 (D85645) North Terrace ADELAIDE SA 5000	Railway operations
61493	Audit Notification	200 Petronella Lane ADELAIDE SA 5000	Fill or soil importation
61517	Audit Notification	186-190 FRANKLIN Street ADELAIDE SA 5000	Fill or soil importation
61519	Audit Notification	231-241 Waymouth Street and 17 Crowther Street ADELAIDE SA 5000	Motor vehicle repair or maintenance

Notification no	Туре	Address	Potentially contaminating activity
61695	Audit Notification	87-93 Angas Street ADELAIDE SA 5000	Dry cleaning; Fill or soil importation; Motor vehicle repair or maintenance; Plastics manufacture works
60314 - 001	Audit Report	445-449A Pulteney Street ADELAIDE SA 5000	Fill or soil importation; Listed Substances (storage); Motor vehicle repair or maintenance
60778 - 001	Audit Report	22-26 Selby Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Spray painting
60704 - 001	Audit Report	Sturt Street (Former Sturt St Carpark) ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Works depots
60101 - 001	Audit Report	102 Waymouth Street ADELAIDE SA 5000	Animal burial; Fill or soil importation; Scrap metal recovery
60625 - 001	Audit Report	Cnr Port & James Congdon Roads ADELAIDE SA 5000	Motor vehicle repair or maintenance; Works depots
61396 - 001	Audit Report	411-427 King William Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Service stations
61434 - 001	Audit Report	Lot 11 (D85638) and Lots 10 & 60 (D85645) North Terrace	Railway operations

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5000	
61375 - 001	Audit Report	Lot 100 Waymouth Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Printing works; Service stations; Transport depots or loading sites
61297 - 001	Audit Report	95-97 Gilles Street ADELAIDE SA 5000	Fill or soil importation
61434 - 002	Audit Report	Lot 11 (D85638) and Lots 10 & 60 (D85645) North Terrace ADELAIDE SA 5000	Animal saleyards; Battery manufacture, recycling or disposal; Coal handling or storage; Fill or soil importation; Gasworks; Motor vehicle repair or maintenance; Oil recycling works; Pest control works; Railway operations; Transport depots or loading sites; Wastewater storage, treatment or disposal; Works depots
60088	Audit Termination	North Terrace ADELAIDE SA 5000	Not recorded
60184	Audit Termination	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded
60194	Audit Termination	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
60099	Audit Termination	Fullarton Road ADELAIDE SA 5000	Not recorded
60125	Audit Termination	Lot 20 North Terrace ADELAIDE SA 5000	Not recorded
60377	Audit Termination	North Terrace ADELAIDE SA 5000	Not recorded
60380	Audit Termination	North Terrace ADELAIDE SA 5000	Not recorded
60256	Audit Termination	Sturt Street Carpark Sturt Street ADELAIDE SA 5000	Not recorded
60117	Audit Termination	Franklin Street ADELAIDE SA 5000	Not recorded
60098	Audit Termination	142-184 Franklin Street ADELAIDE SA 5000	Not recorded
60093	Audit Termination	South Parklands (near cnr of Greenhill & Fullarton Roads) ADELAIDE SA 5000	Not recorded
60227	Audit Termination	Victoria Park Grandstand	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
		Precinct & Northern Playing Field South West Corner of Fullarton & Wakefield Road ADELAIDE SA 5000	
60514	Audit Termination	Section 6016 Fullarton Road ADELAIDE SA 5000	Not recorded
60628	Audit Termination	Lot 30 North Terrace ADELAIDE SA 5000	Not recorded
60728	Audit Termination	Lot 20 North Terrace ADELAIDE SA 5000	Not recorded
60768	Audit Termination	43-69 Sturt Street ADELAIDE SA 5000	Not recorded
60934	Audit Termination	142-184 Franklin Street ADELAIDE SA 5000	Not recorded
61111	Audit Termination	172-176 Gilbert Street ADELAIDE SA 5000	Not recorded
61216	Audit Termination	Lot 30 North Terrace	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5000	
61249	Audit Termination	Lot 20 North Terrace ADELAIDE SA 5000	Not recorded
61352	Audit Termination	Lots 1, 201 & 186-190 Franklin Street & Lots 45 & 46 Mellor Street ADELAIDE SA 5000	Not recorded
60627	Audit Termination	Lot 10 North Tce and Lot 60 Port Road ADELAIDE SA 5000	Not recorded
60079	Audit Termination	231-241 Waymouth and 17 Crowther Street ADELAIDE SA 5000	Not recorded
60074	Audit Termination	Lot 101 Montefiore Road ADELAIDE SA 5000	Not recorded
60104 - 01	S83A Notification	Lots 20 & 30 North Terrace ADELAIDE SA 5000	Listed Substances (storage); Railway operations
60121 - 01	S83A Notification	172-176 Gilbert Street ADELAIDE SA 5000	Service stations

Notification no	Туре	Address	Potentially contaminating activity
60123 - 01	S83A Notification	East Parklands Cnr Gilles Street & East Terrace ADELAIDE SA 5000	Not recorded
60418 - 01	S83A Notification	Franklin Street ADELAIDE SA 5000	Listed Substances (storage)
60413 - 01	S83A Notification	151-153 Gilles Street ADELAIDE SA 5000	Motor vehicle repair or maintenance
60482 - 01	S83A Notification	Festival Drive ADELAIDE SA 5000	Listed Substances (storage); Railway operations
60522 - 01	S83A Notification	172-190 Gawler Place ADELAIDE SA 5000	Transport depots or loading sites
60784 - 01	S83A Notification	43-69 Sturt Street ADELAIDE SA 5000	Electrical or electronics component manufacture; Spray painting
60841 - 01	S83A Notification	Lot 101 Montefiore Road ADELAIDE SA 5000	Railway operations
60923 - 01	S83A Notification	35-37 Wright Street ADELAIDE SA 5000	Not recorded
60987 - 01	S83A Notification	172-190 Gawler Place ADELAIDE SA 5000	Transport depots or loading sites

Notification no	Туре	Address	Potentially contaminating activity
61099 - 01	S83A Notification	Halifax Street and adjacent allotments ADELAIDE SA 5000	Works depots
61113 - 01	S83A Notification	Hundred Plan 106100 Section 1639 ADELAIDE SA 5000	Fill or soil importation
61247 - 01	S83A Notification	Filed Plan 38386 Allotment Piece 22 Frome Road ADELAIDE SA 5000	Not recorded
61360 - 01	S83A Notification	224-228 Waymouth Street ADELAIDE SA 5000	Motor vehicle repair or maintenance
61356 - 01	S83A Notification	95-97 Gilles Street ADELAIDE SA 5000	Fill or soil importation
61416 - 01	S83A Notification	34 Angas Street ADELAIDE SA 5000	Not recorded
61416 - 02	S83A Notification	34 Angas Street ADELAIDE SA 5000	Not recorded
61480 - 01	S83A Notification	411-427 King William Street ADELAIDE SA 5000	Fill or soil importation; Motor vehicle repair or maintenance; Service stations

Notification no	Туре	Address	Potentially contaminating activity
60784 - 02	S83A Notification	43-69 Sturt Street ADELAIDE SA 5000	Electrical or electronics component manufacture; Spray painting
61541 - 01	S83A Notification	Lot 10 North Terrace ADELAIDE SA 5000	Railway operations
61541 - 02	S83A Notification	Section 549 Gaol Road ADELAIDE SA 5000	Not recorded
61576 - 01	S83A Notification	200 Petronella Lane ADELAIDE SA 5000	Fill or soil importation
61541 - 03	S83A Notification	Section 549 Gaol Road and Lot 13 Port Road ADELAIDE SA 5000	Railway operations
61623 - 01	S83A Notification	231-235 & 237- 241 Waymouth Street and 17 Crowther Street ADELAIDE SA 5000	Motor vehicle repair or maintenance
61627 - 01	S83A Notification	Lots 1 & 748 North Terrace, Lot 100 King William Road, Lot 3 Station Road and 25 Pirie Street ADELAIDE SA 5000	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
61640 - 01	S83A Notification	37-44 North Terrace ADELAIDE SA 5000	Service stations
61706 - 01	S83A Notification	87-93 Angas Street ADELAIDE SA 5000	Dry cleaning; Fill or soil importation; Motor vehicle repair or maintenance; Plastics manufacture works
61706 - 02	S83A Notification	87-93 Angas Street ADELAIDE SA 5000	Dry cleaning; Fill or soil importation; Motor vehicle repair or maintenance
61545	Audit Notification	172-176 Gilbert Street ADELAIDE BC SA 5000	Motor vehicle repair or maintenance; Service stations
60650 - 01	S83A Notification	Jeffcott Road NORTH ADELAIDE SA 5006	Not recorded
60949 - 01	S83A Notification	131-139 O'Connell Street NORTH ADELAIDE SA 5006	Not recorded
60249	Audit Notification	Corner Todd & St Vincent Streets PORT ADELAIDE SA 5015	Listed Substances (storage); Metal processing, smelting, refining or metallurgical works
60267	Audit Notification	Lot 10 Grand Trunkway PORT ADELAIDE SA 5015	Fill or soil importation

Notification no	Туре	Address	Potentially contaminating activity
60822	Audit Notification	Lot 11 Grand Trunkway PORT ADELAIDE SA 5015	Fill or soil importation; Railway operations
61251	Audit Notification	6-10 McLaren Parade PORT ADELAIDE SA 5015	Fill or soil importation
61370	Audit Notification	6-10 McLaren Parade PORT ADELAIDE SA 5015	Fill or soil importation
61617	Audit Notification	74-76 Dale Street PORT ADELAIDE SA 5015	Fill or soil importation
61644	Audit Notification	13 College Street & Lot 359 Liddon Place PORT ADELAIDE SA 5015	Fill or soil importation; Metal forging; Motor vehicle repair or maintenance
61687	Audit Notification	291 & 293 St Vincent Street, Lots 33 & 118 Ocean Steamers Road and Lot 213 Todd Street PORT ADELAIDE SA 5015	Dredge spoil disposal or storage; Fill or soil importation; Vessel construction, repair or maintenance
60267 - 001	Audit Report	Lot 10 Grand Trunkway PORT	Fill or soil importation

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5015	
60267 - 002	Audit Report	Lot 10 Grand Trunkway PORT ADELAIDE SA 5015	Asbestos disposal; Dredge spoil disposal or storage; Fill or soil importation
60249	Audit Termination	Corner Todd & St Vincent Streets PORT ADELAIDE SA 5015	Not recorded
61251	Audit Termination	6-10 McLaren Parade PORT ADELAIDE SA 5015	Not recorded
61370	Audit Termination	6-10 McLaren Parade PORT ADELAIDE SA 5015	Not recorded
60198 - 01	S83A Notification	Lot 12 Endeavour Drive PORT ADELAIDE SA 5015	Service stations
60412 - 01	S83A Notification	Lot 213 Todd and 293 St Vincent Streets PORT ADELAIDE SA 5015	Ship breaking
60852 - 01	S83A Notification	Lots 10 & 11 Grand Trunkway PORT	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5015	
60853 - 01	S83A Notification	Lots 3, 10 & 11 Grand Trunkway PORT ADELAIDE SA 5015	Not recorded
61049 - 01	S83A Notification	LOT 11 St Vincent Street PORT ADELAIDE SA 5015	Fill or soil importation; Metal processing, smelting, refining or metallurgical works; Railway operations
61098 - 01	S83A Notification	6-10 McLaren Parade PORT ADELAIDE SA 5015	Fill or soil importation
61150 - 01	S83A Notification	3-7 Francis Street PORT ADELAIDE SA 5015	Fertiliser manufacture
61196 - 01	S83A Notification	Lot 3 Ocean Steamers Road PORT ADELAIDE SA 5015	Scrap metal recovery
61098 - 02	S83A Notification	6-10 McLaren Parade PORT ADELAIDE SA 5015	Fill or soil importation
61564 - 01	S83A Notification	Lot 5 Moonta Street PORT	Not recorded

Notification no	Туре	Address	Potentially contaminating activity
		ADELAIDE SA 5015	
61679 - 01	S83A Notification	Lot 101 Grand Trunkway PORT ADELAIDE SA 5015	Not recorded

# Flurparker 570 evel Parker 570

Bitte beachten Sie die separaten Technischen Hinweisel | Please observe the separate Technical Notes



Im vollautomatischen System Flurparker 570 werden die Fahrzeuge nach Art eines Puzzles in mindestens 2 Reihen auf einer Parkebene umsortiert. Vielseitige Anpassungsmöglichkeiten.

- Automatisches Parksystem zum Parken von Fahrzeugen auf 1 bis 4 Parkebenen
- Kleiner Grundflächenbedarf
- Mehrreihige Anordnung mit 3, 4 oder 5 Reihen hintereinander möglich
- Sicher f
  ür den Nutzer und Fahrzeug (keine engen Rampen, dunkle Treppenhäuser, keine Beschädigungen durch Parkkarambolagen oder Diebstahl)
- Keine raumintensiven Rampen und Fahrgassen erforderlich
- Keine aufwendige Beleuchtung, Belüftung nötig
- Sehr anpassungsfähig an individuelle Projektanforderungen
- Drehvorrichtung kann integriert werden
- Standardmäßig für Fahrzeuggewicht bis zu 2,5 t, höhere Belastung nach Rücksprache mit WÖHR möglich
- Vielseitige Bedienungsmöglichkeiten: vom Transponderchip bis hin zur Funkfernsteuerung
- Geeignet f
  ür Wohn- und Gesch
  äftsh
  äuser
- Folgt der Idee von "Green-Parking"

In the fully automated system Level Parker 570 cars are slided and glided closer together in a way like a puzzle. Flexible configuration options

- Automatic car parkings system for parking of vehicles on 1 to 4 parking levels
- Small footprint
- Multiple row arrangement with 3, 4 or 5 rows behind each other possible
- Safe for user and cars (no narrow ramps, dark stairs, no damage of theft or vandalism)
- No need for ramps and driving lanes
- No costly illumination and ventilation
- Variation options for individual project requirements
- Integrated turntable option
- For car weight up to 2.5 t, higher loads are possible after consultation with WÖHR
- Easy operation with several control options, e.g. trans-ponder chip or remote control
- Suitable for apartment- and office buildings
- Following the idea of "Green Parking"

01

Otto Wöhr GmbH Auto-Parksysteme

Ölgrabenstraße 14 71292 Friolzheim

Fon +49 [0] 7044 46-0 Fax +49 [0] 7044 46-149

www.woehr.de info@woehr.de

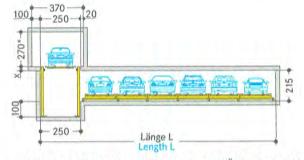
Wir verdichten Parkraum We compact parking sp



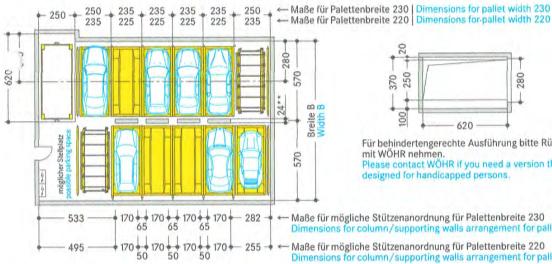
# Flurparker 570 | Level Parker 570

Im unteren Beispiel ist ein Flurparker 570 mit einer Parkebene und 10 Stellplätzen dargestellt. Für den Vertikaltransport wird ein Kettenaufzug eingesetzt. Die Tabelle unten links gibt Aufschluss über die Mindestabmessungen.

Vor dem Vertikalförderer kann ein weiterer Stellplatz angeordnet werden, falls bauseitig ein anderer Raum für den Schaltschrank zur Verfügung steht.



abhängig von der Torvariante (Rücksprache mit WÖHR erforderlich) depending on gate variant (please check with WÖHR)



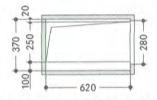
250

The example below shows a Level Parker 570 with one parking level and 10 parking spaces. For the vehicle transport a chain lift is used.

The table below on the left specifies the minimum dimensions.

An additional parking space may be arranged in front of the vertical lift provided that the control cabinet can be placed

somewhere else.



620

Für behindertengerechte Ausführung bitte Rücksprache mit WÖHR nehmen. Please contact WÖHR if you need a version that is specially designed for handicapped persons.

Maße f
ür m
ögliche St
ützenanordnung f
ür Palettenbreite 230 Dimensions for column/supporting walls arrangement for pallet width 230

Maße für mögliche Stützenanordnung für Palettenbreite 220 Dimensions for column/supporting walls arrangement for pallet width 220

\*\* ändert sich das Maß der Stützenbreite von 24 cm, so ändert sich auch die »Breite B« \*\* if the column/supporting walls width of 24 cm is changed, width B« changes as well

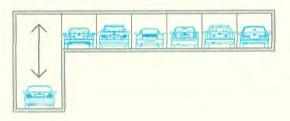
Stellplätze	Palettenbreite 230 Länge L	Palettenbreite 220 Länge L	Parkebenen Höhe H (für 160 cm hohe Pkw)	Reihenanzahl	Breite B
Parking spaces	Pallet width 230 Length L	Pallet width 220 Length L	Parking levels Height H (for 160 cm high cars)	Number of rows	Width B
6	1220	1170	1 215	2	1140
8	1455	1395		3	1710
10	1690	1620		4	2280
12	1925	1845			
14	2160	2070			
16	2395	2295			
18	2630	2520	Höhenangaben beziehen sich	Maße in cm	
20	2865	2745	auf Systeme ohne Drehvorrichtung.	Dimensions in cm	
22	3100	2970	Indicated heights refer to a system		
24	3335	3195	without turning device.		



#### Oberirdische Anlagen | Above-ground systems

Der Flurparker 570 kann nicht nur unterirdisch, sondern auch oberirdisch ausgeführt werden. Eine Anordnung ohne Vertikalförderer ist ebenerdig möglich.

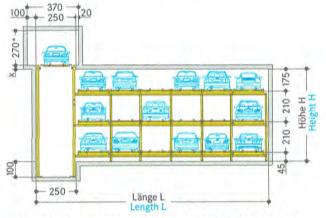
The Level Parker 570 can be installed out below ground, but also above ground. An arrangement without vertical lift is possible at ground-level.



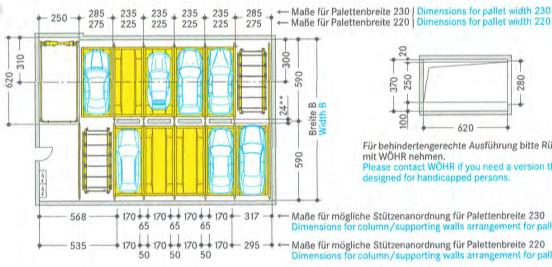
### Flurparker 570 | Level Parker 570

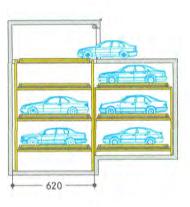
Im unteren Beispiel ist ein Flurparker 570 mit drei Parkebenen und 30 Stellplätzen dargestellt. Für den Vertikaltransport wird ein Kettenaufzug eingesetzt. Die Tabelle unten links gibt Aufschluss über die Mindestabmessungen.

Vor dem Vertikalförderer kann auf allen Ebenen ein weiterer Stellplatz angeordnet werden, falls bauseitig ein anderer Raum für den Schaltschrank zur Verfügung steht.



abhängig von der Torvariante (Rücksprache mit WÖHR erforderlich) ٠ depending on gate variant (ple ase check with WÖHR)

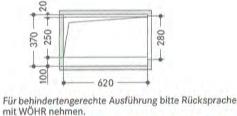




The example below shows a Level Parker 570 with three parking levels and 30 parking spaces. For the vehicle transport a chain lift is used. The table below on the left specifies the minimum dimensions.

An additional parking space may be arranged on all levels in front of the vertical lift, provided that the control cabinet can be placed

somewhere else.



Please contact WÖHR if you need a version that is specially designed for handicapped persons.

Maße für mögliche Stützenanordnung für Palettenbreite 230 Dimensions for column/supporting walls arrangement for pallet width 230 Maße für mögliche Stützenanordnung für Palettenbreite 220

Dimensions for column/supporting walls arrangement for pallet width 220

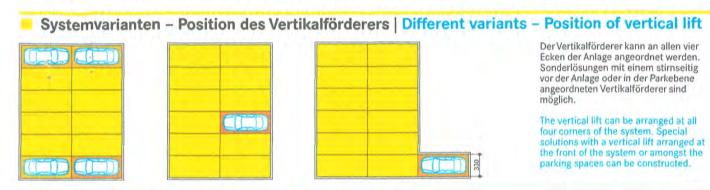
\*\* ändert sich das Maß der Stützenbreite von 24 cm, so ändert sich auch die »Breite B« \*\* if the column/supporting walls width of 24 cm is changed, width B¢ changes as well

Stellplätze	Palettenbreite 230 Länge L	Palettenbreite 220 Länge L	Parkebenen (für 160 cm h	Höhe H nohe Pkw)	Reihenanzahl	Breite B
Parking spaces	Pallet width 230 Length L	Pallet width 220 Length L	Parking levels (for 160 cm h	Height H high cars)	Number of rows	Width B
6	1290	1250	1	215	2	1180
8	1525	1475	2	430	3	1760
10	1760	1700	3	640	4	2340
12	1995	1925	4	850	5	2920
14	2230	2150				
16	2465	2375		1.4.12.24	110010130	
18	2700	2600	Höhenangaben bezie		Maße in cm	
20	2935	2825	auf Systeme ohne D	rehvorrichtung.	Dimensions in cm	
22	3170	3050	Indicated heights ref	er to a system		
24	3405	3275	without turning device			

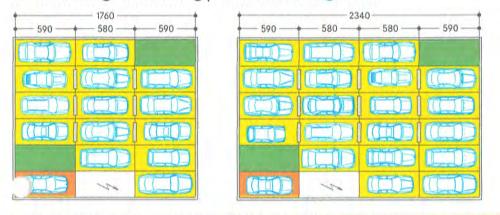
Wartungszugang und Schaltschrank | Maintenance access and switch cabinet

Ein Wartungszugang zur Anlage und ein Schaltschrankraum (mind. 2 x 5 m) sind notwendig (Rücksprache mit WÖHR erforderlich).

Maintenance access as well a room for the switch cabinet (min.  $2 \times 5 \mbox{ m})$  is required (please check with WÕHR).



### Mehrreihige Anordnung | Multi-row arrangement



Der Flurparker 570 kann je nach bauseitigen Platzverhältnissen auch mit mehr als nur zwei Reihen ausgeführt werden.

The Level Parker 570 can be constructed with more than only two rows, depending on the available space in the building.

### Systemvarianten – Drehvorrichtung | Different variants – Turning device

Wenn baurechtliche Vorschriften oder Komfortansprüche ein Vorwärtsausfahren aus dem Übergabebereich fordern, wird von der Firma WÖHR eine Drehvorrichtung im Übergabebereich eingesetzt.

When building regulations or convenience forward driving out, a turning device can be integrated in the transfer area

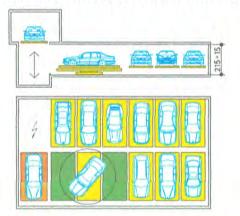
## Drehvorrichtung auf dem Vertikalförderer | Turning device on the vertical lift



Bei einer mitfahrenden Drehvorrichtung auf dem Vertikalförderer können die Fahrzeuge je nach baulicher Gegebenheit entweder im Übergabebereich oder auf einer Zwischenebene gedreht werden. (Für Detailabmessungen mit Drehvorrichtung bitte Rücksprache mit WOHR nehmen.)

If there is an integrated turning device on the vertical lift, the cars can be rotated either in the transfer area or on an intermediate level, depending on the design of the building. (For details of the dimensions with turning device please contact WOHR.)

# Drehvorrichtung in der Parkebene | Turning device at the parking level



Wenn bauseits keine andere Möglichkeit besteht, kann die Drehvorrichtung auch auf der untersten Parkebene angeordnet werden. (Für Detailabmessungen mit Drehvorrichtung bitte Rücksprache mit WÖHR nehmen.)

If the building offers no other alternative, the turning device can also e accomodated at the lowest parking level (For details of the dimensions with turning device please contact WÖHR.)

#### Max. Fahrzeugabmessungen | Max. car dimensions



Höhe über alles (Pkw mit Dachgepäckträgern, Dachreling, Antennen etc. dürfen die angegebene Höhe nicht überschreiten). with roof racks, roof rails, antennas etc. should verall height (cars not exceed the mentioned overall height).

\* Bodenfreiheit

Clearance underneath the gear case

Palettenbreite Pallet width 220 230

Maß A **Dimension A** 210 220

Fahrzeuggewicht max. 2500 kg, Radlast max. 625 kg.

Die hier genannten Fahrzeugmaße gelten für die angegebenen Einbaumaße. Andere Fahrzeugabmessungen sind bei entsprechenden Änderungen der Baumaße möglich.

Car weight max. 2500 kg, wheel load max. 625 kg.

These car dimensions are valid for the building dimensions as mentioned. If building dimensions are adjusted, other car dimensions are possible.

04

# OFFICE FOR DESIGN + ARCHITECTURE®

File No: 2014/11234/01

Ref No: 11755057

27 July 2017

Karl Woehle Planning Officer - CBD & Inner Metro Team Strategic Development Assessment Planning and Development Department of Planning, Transport and Infrastructure Level 5, 50 Flinders Street Adelaide SA 5000

karl.woehle@sa.gov.au

For the attention of the Development Assessment Commission

# 126 Wright Street, Adelaide

Further to the referral (020/A025/17) received 6 April 2017 and amended documentation received on 27 July 2017 pertaining to the development application at the above address and in my capacity as a statutory referral in the Development Assessment Commission, I would like to offer the following comments for your consideration.

The proposal has been presented to the Design Review panel twice, over which period the design response progressed considerably. A pre-lodgement agreement was not reached in advance of lodgement.

I commend the project team's aspiration to provide affordable residential options in this part of the CBD. However my support for the overall scheme is contingent on the proposed development delivering an exemplary streetscape response and offering optimum residential amenity, as a development of the proposed scale will set a precedent for future developments in this locality.

The subject site is located on the northern side of Wright Street, near the north east corner of Whitmore Square. The subject site is rectangular in shape with a total approximate land size of 260 square metres and a narrow frontage of approximately 9.6 metres. The surrounding area is characterised by a mixture of one to three storey commercial and residential buildings. The two adjoining properties on Wright Street are both one storey residential cottages, and the property on the eastern side (122-124 Wright Street) is a Local heritage place. There are a several other Local heritage places close to the subject site. The site immediately north of the subject site is a warehouse fronting to Wright Court, which forms a part of the processing facilities for Angelakis Bros.

The proposed overall height of the building is 58.2 metres, including lift overrun. The proposed height is particularly challenging in this location due to the adjacency to Local heritage places, the width of Wright Street, and adjacency to the Main Street zone, however I acknowledge the site is subject to over height criteria as described in the Development Plan. My support for building height beyond the maximum envisaged height of 43 metres, particularly in this locality with small scale existing

Level 1 26-28 Leigh Street Adelaide SA 5000

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# OFFICE FOR DESIGN + ARCHITECTURE®

File No: 2014/11234/01

Ref No: 11755057 built fabric, is contingent on the delivery of quality apartment amenity that is above and beyond the minimum quantitative requirements, as well as achieving a high quality design outcome, particularly in terms of the scale, form, and expression of the building relative to its current and future context.

The proposed built form is divided into two elements. The four storey high podium extends to the north, east and west boundaries, and is masonry in character. The south elevation of the podium is set back by two metres with the intent to reference the established setback pattern of the adjoining cottages. The tall and slender tower element above is set back from the north and south boundaries, and articulated into three forms of four to five storeys, with the intent to reduce the apparent scale and bulk. A single storey rooftop structure is further set back from the north, east and south boundaries, with the exception of the plant enclosure abutting the eastern boundary. I support the design direction to address the scale of the building by providing a breakdown in built form.

I support the provision of the podium in principle, and the proposed materiality of the podium is also supported, as it reflects the fine grain context of the existing streetscape and human scale. I strongly support the design intent of the two metre front setback to address the established scale and pattern of the immediate streetscape and to protect the amenity of the adjoining Local heritage listed cottages. Acknowledging the intent for the podium facade detailing to respond to the residential scale of the adjoining properties, I am concerned by the proposed height of the podium and its relationship to the existing context. In my opinion, the four storey podium does not satisfactorily mitigate the height impact of the overall development, given the narrowness of Wright Street. I recommend review of the podium massing with the view to reduce the impact of the large scale development at street level.

The proposed Wright Street frontage consists of the entry to the car hoist to the basement located between a projecting fire booster enclosure and mail boxes, a residential entry foyer and a small cafe tenancy accessed via the residential foyer. The stair and lift core is located centrally towards the western boundary, in order to create central foyers to serve the north and south facing apartments on the levels above. Bike parking and residential storage areas are located at the rear of the site. The basement floor houses the hoist and stacker system for five car parking spaces, as well as additional residential storage and services infrastructure. I support the provision of a cafe as a means of street activation, and the provision of the two metre front setback. In my opinion the setback has added to the opportunity to increase the street activation, as well as improving sight lines for cars exiting the car hoist. However I am concerned about the location of the fire booster and the mailboxes, as in my view these elements are inconsistent with the overall built form. While the height of the letterbox has been reduced to implement the recommendations of the project team's traffic consultant, the location of the fire booster compromises sightlines and pedestrian safety, particularly given the cars are proposed to reverse out over the footpath. I request further information be provided to demonstrate the proposed means to address the reduced visibility of vehicles entering and existing the car hoist.

Level 1 26-28 Leigh Street Adelaide SA 5000

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On levels one to three, three apartments are provided per floor. Above the podium, two apartments per floor are provided on levels four to 14, and levels 15 and 16 house three apartments including one loft apartment. I strongly support the mix of apartment types proposed. I also support the proposed apartment configurations

# OFFICE FOR DESIGN + ARCHITECTURE®

File No: 2014/11234/01

Ref No: 11755057

that afford outlook, functional layouts and access to natural light and ventilation. The provision of sufficient northern setback is also supported, as it maximises the northern aspect and safeguards the residential amenity from potential adjoining developments.

I generally do not support the location of air conditioning condenser units on balconies, due to adverse impacts on the amenity of that space and the street. While I support the intent to screen the condensers and to integrate the screening into the overall architectural expression, further information is required to demonstrate that the proposed arrangement successfully mitigates the environmental and acoustic impacts.

Indoor and outdoor community amenity facilities are provided on the rooftop. I support the provision of communal facilities in principle, however I strongly recommend development of a management strategy to implement the wind assessment report recommendations of securing loose furniture to ensure public and resident safety.

I support the proposed approach for creating shifts in the built form and the intent to address the scale of the development. I also support the articulation of all four elevations of the building, as the proposed building may remain exposed indefinitely. The proposed external materials and finishes includes textured concrete panels, dark coloured bricks, aluminium panelling and aluminium battens, which I support in principle.

To ensure the most successful design outcome is achieved the Development Assessment Commission may like to consider particular aspects of the project, which would benefit from protection as part of the planning permission, such as:

- Review of podium height.
- Review of treatment to car hoist entry at ground level.
- Review of air conditioning condenser units locations to mitigate environmental and acoustic impacts.
- Relocation of the projecting fire booster and the mail boxes, or provision of further information regarding vehicle exit safety strategy.
- Development of a management strategy to implement the wind assessment report recommendations of securing loose furniture to ensure public and resident safety.

Level 1 26-28 Leigh Street Adelaide SA 5000

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Yours sincerely

Nick Tridente Associate Government Architect

From:	Brett Eaton <beaton@aal.com.au></beaton@aal.com.au>
Sent:	Tuesday, 1 August 2017 9:51 AM
То:	Flysafe@infrastructure.gov.au
Cc:	Bill Stefanopoulos; Woehle, Karl (DPTI)
Subject:	Airspace Assessment 126 Wright Street Adelaide CBD
Attachments:	126 Wright Street Adelaide ols AND COORDS.PDF;
	126_Wright_St_Elevations.pdf; Ht email.pdf; AAL Calc Sheet.pdf; ASA
	Assessment.pdf; 170717 Property Building Development 126 Wright
	Street Adelaide CASA Response to Adelaide Airport.pdf

Hello Flysafe,

In accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996, Adelaide Airport requests approval on the development by the Department of Infrastructure and Regional Development.

Applicant	Victor Harbor 2013 Pty Ltd co Town Planning Advisors
Nature of the Development	18 level Mixed Use Building
Subject Land:	126 Wright Street Adelaide CBD

The proposal is to build a 18 level Mixed Use Building at 126 Wright Street Adelaide CBD

The development will penetrate the Obstacle Limitation Surfaces but remains below the PANS-OPS.

Comment on development was requested by AAL from the Civil Aviation Safety Authority and AirServices Australia, and has now been received.

The proponent of the development is Victor Harbor 2013 Pty Ltd co Town Planning Advisors. Contact person is: Bill Stefanopoulos Town Planning Advisors Ph: 08 83553246 | Mobile: 0478 509 777 Email: bill@townplanningadvisors.com.au

The building which at a maximum height of 101.00m AHD will penetrate the OLS at 83.84m AHD therefore an infringement of 17.16m. The development from our review is below the PANS-OPS which at approx 184.4m AHD Circling and the RTCC.

AAL will not object to this development as the development is in close proximity to 150 Wright Street West of this development at RL 115.9m AHD. (Shown on the elevations)

Airservices Australia advise that the development will not affect any approach or departure procedures at the Airport or impact navigation aids or communication facilities. CASA also do not object to the development with advise attached.

Please refer to attached files for documentation I have included AAL assessment sheet Location site plan CASA and AsA Approvals General elevations and site plan If you have any queries please ring

Regards and Thanks Brett

Brett Eaton Airside Operations Manager

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Australian Government

Department of Infrastructure and Regional Development

File reference: F16/562-12

то:	Cc:	FROM:
Mr Bill Stefanopoulos Town Planning Advisors bill@townplanningadvisors.com.au	Brett Eaton Adelaide Airport Limited beaton@aal.com.au	Flysafe Airspace Protection flysafe@infrastructure.gov.au
For	Airport Developments Airservices Australia	
Victor Harbor 2013 Pty Ltd	airport.developments@airservicesaustralia.com IFP@airservicesaustralia.com	
	Airspace Protection	
	Civil Aviation Safety Authority	
	airspace.protection@casa.gov.au	
	Adelaide City Council City@Adelaidecitycouncil.com	

### DECISION UNDER THE AIRPORTS (PROTECTION OF AIRSPACE) REGULATIONS 1996:

Proposed Activity:Building Construction: Multi-storey buildingLocation:126 Wright Street, Adelaide SAAMG 66 Coordinates:E 280257.50; N 6131717.10Proponent:Victor Harbor 2013 Pty Ltd c/o Town Planning Advisors

I refer to the application from Victor Harbor 2013 Pty Ltd c/o Town Planning Advisors (the proponent), received by the Department on 1 August 2017 from Adelaide Airport Limited (AAL). This application sought approval under the Airports (Protection of Airspace) Regulations 1996 (the Regulations) for the intrusion of a multi-storey at 126 Wright Street, Adelaide SA (the site), into airspace which, under the Regulations, is prescribed airspace for Adelaide Airport.

'Prescribed airspace' includes 'the airspace above any part of either an Obstacle Limitation Surface (OLS) or Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS) surface for the airport' (see subregulation 6(1)).

The Conical Surface of the OLS above this site is at a height of 83.84 metres Australian Height Datum (AHD) and hence prescribed airspace above the site commences at 83.84 metres. At a maximum height of 101.00 metres AHD, the building will penetrate the OLS by 17.16 metres.

Accordingly, the proposed construction of the development would constitute a "controlled activity" under Section 182 of the *Airports Act 1996* (the Act). Section 183 of the Act requires that controlled activities cannot be carried out without approval. Details of the penetrations of prescribed airspace are provided in Table 1.

Table 1: Height and location of the proposed development at the site that will intrude into prescribed airspace for Adelaide Airport

Activity	AMG 66 coordinates	Maximum height (AHD)	Penetration of prescribed airspace
Building	E 280257.50; N 6131717.10	101.00 metres	17.16 metres

Regulation 14 provides that a proposal to carry out a controlled activity must be approved unless carrying out the controlled activity would interfere with the safety, efficiency or regularity of existing or future air transport operations into or out of the airport concerned. Paragraph 14(1)(b) provides that an approval may be granted subject to conditions.

Under the Regulations, the Secretary is empowered to make decisions in relation to the approval of controlled activities, and impose conditions on the approval. I have been delegated the Secretary's powers under the Regulations.

### **Decision**

In making my decision, I have taken into consideration the opinions of the proponent, the Civil Aviation Safety Authority, Airservices Australia advice number AD-CA-104 and AAL.

In accordance with regulation 14, **I approve** the controlled activity of the intrusion of the multi-storey building at 126 Wright Street, Adelaide SA into prescribed airspace for Adelaide Airport to a **maximum height of 101.00 metres AHD**.

In accordance with this paragraph 14(1)(b), I impose the following conditions on my approval:

- 1. The building **must not exceed** a maximum height of **101.00 metres AHD**, inclusive of all lift over-runs, vents, chimneys, aerials, antennas, lightning rods, any roof top garden plantings, exhaust flues etc.
- 2. The proponent **must** advise Airservices at least 3 business days prior to the controlled activity commencing by emailing *<IFP@airservicesaustralia.com>* and quoting "AD-CA-104".
- 3. Separate approval **must be sought** under the Regulations for any cranes required to construct the building. Construction cranes may be required to operate at a height significantly higher than that of the proposed controlled activity and consequently, may not be approved under the Regulations.

**Breaches of approval conditions are subject to significant penalties** under sections 185 and 187 of the Act.

Yours sincerely

Craig Downsborough Director, Airspace Protection Aviation and Airports Division

August 2017

2

Adelaide City Council ABN 20 903 762 572 25 Pirie Street, Adelaide GPO Box 2252 Adelaide South Australia 5001 Tel 08 8203 7203 Fax 08 8203 7575 www.adelaidecitycouncil.com

**Enquiries:** 

# Will Gormly 8203 7081 F/S10/0009/2017

Reference:

10 July 2017 045 հիկիրինիկինինինին **Development Assessment Commission** GPO Box 1815 Adelaide SA 5001

#### **Attention: Robert Kleeman**

Dear Mr Kleeman

Application: S10/9/2017 (Your reference DA 020/A025/17) Applicant: VICTOR HARBOR 2013 P/L 126 Wright Street, ADELAIDE SA 5000 Address: Description: Demolish existing building and construct 18 level mixed use residential building, comprising of 34 apartments, car parking, ground tenancy with upper level amenities area with roof garden.

Whilst Council administration has not undertaken a full planning assessment of the application, we provide the following assessment with regard to Local Heritage concerns, as well as technical comments which are pertinent to the application. These comments are provided in relation to the amended plans as received on 26 June 2017 which relate to changes necessary to satisfy building rules.

### Local Heritage

The following areas of the proposed development are considered detrimental to the heritage value or context of the adjacent Local Heritage Places:

- The setback from the street boundary is less than the (nominal) 4 metre setback to the front wall of the adjoining Local Heritage Place and fails to address the nature of built form along Wright Street or the width of the street itself. The built form of the proposed podium will consequently still dominate the streetscape, particularly as viewed from the east, in front of and over the LHPs.
- There is a real lack of any significant contextual analysis (with the exception of recent multi-storey development) and particularly that of the south side of Wright Street. The design response is therefore weakened and would appear to address the excessive height only.
- The 4-storey podium has no contextual basis.



- The materials selection, within the context of Wright Street, fails to address the fine grain nature of the predominant built forms.
- The over-development of the site results in a limited design response for the east and west facades, with limited opportunity to explore an exemplary design response as called for by the Desired Future Character.

Relevant extracts from the Development Plan:

**Desired Future Character:** *Exemplary and outstanding building design* is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. *Innovative forms are expected in areas of identified street character, referencing the past,* but with emphasis on modern design-based responses that support optimal site development.

**PDC 10:** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a *contextual response to a heritage place*.

**PDC 11:** Other than in the Central Business Policy Area, buildings should be designed to include a *podium/street wall height and upper level setback (in the order of 3-6 metres)* that:

(a) relates to the width of the street and achieves a suitable level of enclosure to the public realm; (b) provides a human scale at street level; (c) creates a well-defined and continuity of frontage; (d) gives emphasis and definition to street corners to clearly define the street grid; (e) contributes to the interest, vitality and security of the pedestrian environment; (f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).

## Traffic/Transport

- The sight distance between exiting vehicles and pedestrians on footpath are required to meet the requirements of Australian Standard AS2890.1 The new plans show that this is not achieved.
- Bicycle users are required to negotiate two swing doors, which is both inconvenient and is likely to detract from bicycle usage. Existing the room with a bicycle could be hazardous in relation to other occupants opening the western door to the storage room. This should be considered.

Yours faithfully

Rebecca Rutschack TEAM LEADER - PLANNING ASSESSMENT

Adelaide City Council ABN 20 903 762 572 25 Pirie Street, Adelaide GPO Box 2252 Adelaide South Australia 5001 Tel 08 8203 7203 Fax 08 8203 7575 www.adelaidecitycouncil.com

Enquiries:

### Will Gormly 8203 7081 F/S10/0009/2017

Reference:

1/510/0005/20.

#### **Attention: Robert Kleeman**

Dear Mr Kleeman

Application:S10/9/2017 (Your reference DA 020/A025/17)Applicant:VICTOR HARBOR 2013 P/LAddress:126 Wright Street, ADELAIDE SA 5000Description:Demolish existing building and construct 18 level mixed use<br/>residential building, comprising of 34 apartments, car parking,<br/>ground tenancy with upper level amenities area with roof<br/>garden.

Whilst Council administration has not undertaken a full planning assessment of the application, we provide the following assessment with regard to Local Heritage concerns, as well as technical comments which are pertinent to the application:

### Local Heritage

The following areas of the proposed development are considered detrimental to the heritage value or context of the adjacent Local Heritage Places:

- The 2 metre setback from the street boundary is less than the (nominal) 4 metre setback to the front wall of the adjoining Local Heritage Place and fails to address the nature of built form along Wright Street or the width of the street itself. The built form of the proposed podium will consequently still dominate the streetscape, particularly as viewed from the east, in front of and over the LHPs.
- There is a lack of any significant contextual analysis (with the exception of recent multi-storey development) and particularly that of the south side of Wright Street. The design response is therefore weakened and would appear to address the excessive height only.
- The 4 storey podium has no contextual basis.
- The materials selection, within the context of Wright Street, fails to address the fine grain nature of the predominant built forms.



• The over-development of the site results in a limited design response for the east and west facades, with limited opportunity to explore an exemplary design response as called for by the Desired Future Character.

Relevant extracts from the Development Plan:

**Desired Future Character:** *Exemplary and outstanding building design* is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. *Innovative forms are expected in areas of identified street character, referencing the past,* but with emphasis on modern design-based responses that support optimal site development.

**PDC 10:** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a **contextual response to a heritage place**.

**PDC 11:** Other than in the Central Business Policy Area, buildings should be designed to include a *podium/street wall height and upper level setback (in the order of 3-6 metres)* that:

(a) relates to the width of the street and achieves a suitable level of enclosure to the public realm; (b) provides a human scale at street level; (c) creates a well-defined and continuity of frontage; (d) gives emphasis and definition to street corners to clearly define the street grid; (e) contributes to the interest, vitality and security of the pedestrian environment; (f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).

#### **Technical**

#### Survey/Land Tenure

- The proposed development is on land contained within Certificate of Title Volume 5185 Folio 557, the registered proprietor being Victor Harbor 2013 PTY LTD.
- There are no Rights of Way or easements.
- The canopy on the proposed development encroaches onto Wright Street, a public road and needs consent.
- The proposed development is being built on or near to the boundaries of the subject land. These boundaries should be clearly marked by a Licensed Surveyor prior to construction.

#### **Roads/Footpaths**

 Any disused driveway inverts resulting from the development are to be reinstated to equivalent footpath levels to ACC standards and specifications.

- Any damage caused to ACC's road, footpath and kerbing infrastructure during development will be the responsibility of the developer to rectify to a standard that equals or improves the pre development condition.
- Existing crossovers and new crossovers have been highlighted under this development. All new or alterations to existing crossovers firstly require ACC approval outside of the DA process. These need to be to ACC standards and specifications via the City Works Guidelines.
- Existing boundary (back of path) levels must not be modified. Finished floor levels should be based around retaining the existing back of path levels subject to the following:
  - If the level difference between top of kerb and back of path is less than 50 mm
  - If the existing cross fall(s) exceed 4% (1:25)

If any of the above conditions exist for any footpath infrastructure that services the perimeter of the site boundary then please contact the Asset Manager for Water Infrastructure prior to setting finished floor levels.

#### Stormwater

- Stormwater runoff from the proposed development must be contained within the property boundaries, collected, and discharged to the Wright Street road reserve.
- Seepage water from landscaped areas and planter boxes must be collected and discharged to sewer.
- Council encourages the storage and reuse of collected stormwater for irrigation and toilet flushing through the buildings.

#### Lighting/Electrical/CCTV

- The proposed development works will not impact on the public lighting within the proximity of the development site. The existing street lighting on Wright Street is owned and maintained by SA Power Networks and consists of stobie poles with lighting installed to them with overhead cabling between. There is a stobie located in on the property boundary to the west of the property.
- If temporary hoarding or site works require modification of existing Council and/or SA Power Network's public lighting (including associated infrastructure such as cabling etc) shall meet Councils' requirements. The works shall be carried out to meet Councils' requirements and all costs borne directly by the developer.
- All modifications requiring temporary removal/relocation/provision of temporary lighting/reinstatement of existing Council and/or SA Power Network's public lighting (including associated infrastructure such as cabling etc) shall meet Councils' requirements. The works shall be

carried out to meet Councils' requirements and all costs borne directly by the developer.

- All damage to ACC's infrastructure, including damage to public lighting and u/g ducting etc caused by projects works or loading of site crane onto pathways will be repaired to meet Councils requirements and the cost of the developer.
- If new canopies are to be constructed as part of these works, then lighting to meet ACC's under veranda requirements shall be installed.
- Obtrusive Lighting Lighting design and installation to be fully compliant with Australian Standard AS 4282 1997 Control of the obtrusive effects of outdoor lighting. Sign off by consultant required to confirm compliance. Provide relevant lighting calculation grid detailing property boundary lines for Councils record.

#### Street Trees/Landscape

- Whilst there are currently no existing street trees in front of this property, it is highly desirable to allow for the installation of at least one street tree in front of the property following the completion of the development. In line with this desire, if any infrastructure services are introduced into the development from the street, the positioning of such infrastructure is critical to allow for the desired tree(s) installation which will then supply a consistency in how the street is landscaped.
- If any street trees adjacent to this location are required to be removed, which is neither proposed as part of this development nor desirable, the 'Amenity Tree Valuation' process will be applied. The development will cover all associated costs for this process.

#### Waste

- There seems to be a lack of correlation between the Waste Management Plan provided, and the detailed plans.
- There is a gap between space required for that of hard waste and that of commercial waste.
- The drawing for the waste room layout does not match the design proposed within the Waste Management Plan.
- The above matters need to be addressed prior to approval.
- It should be further noted that on-street parking controls appear to be required to support the proposed collection point. Council's Traffic team provide further detail in this respect, as below.

#### Traffic

- A dedicated on-street loading facility, as required by the Waste Management Report, cannot be provided on Wright Street. Whilst the applicant may apply for a loading zone on Wright Street, if implemented this would be available to the public for use. Longer length loading zones, as per the requirements in the Waste Management Report, in practice are often not available for longer vehicles as two smaller loading vehicles can legally occupy the space. There is no legal means for restricting occupation to a single vehicle if the zone is long enough to accommodate two. The applicant should note that there is already a loading zone adjacent 134 Wright Street, in close proximity to this development.
- The owners and occupants of the development are advised that they are not eligible for residential parking permits.

Yours faithfully

Elach

Rebecca Rutschack TEAM LEADER - PLANNING ASSESSMENT

# CAPITAL CITY ZONE

#### Introduction

The Desired Character, Objectives and Principles of Development Control that follow apply in the whole of the Capital City Zone shown on <u>Maps Adel/17 to 20, 23 to 26 and 29 to 31</u>. They are additional to those expressed for the whole of the Council area and in cases of apparent conflict, take precedence over the more general provisions. In the assessment of development, the greatest weight is to be applied to satisfying the Desired Character for the Zone.

### **DESIRED CHARACTER**

This Zone is the economic and cultural focus of the State and includes a range of employment, community, educational, tourism and entertainment facilities. It is anticipated that an increased population within the Zone will complement the range of opportunities and experiences provided in the City and increase its vibrancy.

The Zone will be active during the day, evening and late night. Licensed entertainment premises, nightclubs and bars are encouraged throughout the Zone, particularly where they are located above or below ground floor level to maintain street level activation during the day and evening.

High-scale development is envisaged in the Zone with high street walls that frame the streets. However an interesting pedestrian environment and human scale will be created at ground floor levels through careful building articulation and fenestration, frequent openings in building façades, verandahs, balconies, awnings and other features that provide weather protection.

In important pedestrian areas, buildings will be set back at higher levels above the street wall to provide views to the sky and create a comfortable pedestrian environment. In narrow streets and laneways the street setback above the street wall may be relatively shallow or non-existent to create intimate spaces through a greater sense of enclosure. In the Central Business Policy Areas, upper level setbacks are not envisaged.

Non-residential land uses at ground floor level that generate high levels of pedestrian activity such as shops, cafés and restaurants will occur throughout the Zone. Within the Central Business Policy Area, residential land uses at ground level are discouraged. At ground level, development will continue to provide visual interest after hours by being well lit and having no external shutters.

There will also be a rich display of art that is accessible to the public and contextually relevant.

Exemplary and outstanding building design is desired in recognition of the location as South Australia's capital. Contemporary juxtapositions will provide new settings for heritage places. Innovative forms are expected in areas of identified street character, referencing the past, but with emphasis on modern design-based responses that support optimal site development.

# Adelaide's pattern of streets and squares

The distinctive grid pattern of Adelaide will be reinforced through the creation of a series of attractive boulevards as shown on Concept Plan <u>Figures CC/1 and 2</u>. These boulevards will provide a clear sense of arrival into the City and be characterised by buildings that are aligned to the street pattern, particularly at ground level.

Views to important civic landmarks, the Park Lands and the Adelaide Hills will be retained as an important part of the City's charm and character.

The City's boulevards, terraces and Squares will be developed as follows:

(a) North Terrace will be reinforced as an important pedestrian promenade and cultural boulevard that provides an important northern edge to the City square mile.

- (b) King William Street will be enhanced as the City's principal north-south boulevard and will be reinforced as the City's commercial spine.
- (c) Grote Street-Wakefield Street will be enhanced as the City's principal east-west boulevard and will be developed to provide a strong frame that presents a sense of enclosure to the street.
- (d) East Terrace will be characterised by buildings that maximise views through to the Park Lands and provide a distinct City edge.
- (e) West Terrace will be reinforced as the western 'gateway' to the City centre and will form an imposing frontage to the western City edge. Buildings will be constructed to the front and side boundaries, and designed to maximise views through to the Park Lands. Corner sites at the junctions of West Terrace and the major east-west streets will be developed as strongly defined visual gateways to the City. This will provide an imposing frontage to the western edge of the City, which comprises a mixture of commercial, showroom and residential development.
- (f) Pulteney and Morphett streets are key north-south boulevards. A sense of activation and enclosure of these streets will be enhanced through mixed use development with a strong built form edge. Pulteney Street will include residential, office and institutional uses, and retail activities. These boulevards will become important tree-lined commercial corridors.
- (g) Currie, Grenfell, Franklin and Flinders streets, as wider east-west boulevards provide important entry points to the City. Currie and Grenfell streets will become a key focus for pedestrians, cycling and public transport. These streets also provide long views to the hills as their closing vistas and these view corridors should remain uncluttered.
- (h) Victoria, Hindmarsh and Light Squares will have a continuous edge of medium to high-scale development that frames the Squares and increases ground level activity.

The Zone also includes a number of Main Street areas, encompassing Rundle Mall, Rundle Street, Hindley Street and Gouger Street, which are envisaged to have a wide range of retail, commercial and community uses that generate high levels of activity. These areas will have an intimately scaled built form with narrow and frequent building frontages. These areas are shown on Concept Plan Figures CC/1 and 2.

Minor streets and laneways will have a sense of enclosure (a tall street wall compared to street width) and an intimate, welcoming and comfortable pedestrian environment with buildings sited and composed in a way that responds to the buildings' context. There will be a strong emphasis on ground level activation through frequent window openings, land uses that spill out onto the footpath, and control of wind impacts.

Development in minor streets and laneways with a high value character will respond to important character elements and provide a comfortable pedestrian environment, particularly in the following streets: Gray, Leigh, Union, Chesser, Coromandel, Tucker, Cardwell, Kenton, Market, Ruthven, Cannon, Tatham, Benthem streets, Murrays Lane and Wright Court.

A comprehensive, safe and convenient movement network throughout the City will develop, focusing on the provision of linkages on both public and private land between important destinations and public transport. A high quality system of bicycle or shared pedestrian and bicycle routes will be established within the Zone.

#### OBJECTIVES

# General

# **Objective 1:** The principal focus for the economic, social and political life of metropolitan Adelaide and the State.

Objective 2:	A vibrant mix of commercial, retail, professional services, hospitality, entertainment, educational facilities, and medium and high density living.
Objective 3:	Design and management of City living to ensure the compatibility of residential amenity with the essential commercial and leisure functions of the Zone.
Objective 4:	City streets that provide a comfortable pedestrian environment.
Objective 5:	Innovative design approaches and contemporary architecture that respond to a building's context.
Objective 6:	Buildings that reinforce the gridded layout of Adelaide's streets and respond to the underlying built-form framework of the City.
Objective 7:	Large sites developed to their full potential while ensuring a cohesive scale of development and responding to a building's context.

**Objective 8:** Development that contributes to the Desired Character of the Zone.

### PRINCIPLES OF DEVELOPMENT CONTROL

# Land Use

- 1 The following types of development, or combinations thereof, are envisaged:
  - Affordable housing Aged persons accommodation Community centre Consulting room Convention centre Dwelling Educational establishment Emergency services facility Hospital Hotel Indoor recreation centre Licensed entertainment premises Library Motel Office Pre-school Personal service establishment Place of worship Serviced apartment Restaurant Residential flat building Student accommodation Shop or group of shops Tourist accommodation
- 2 Land uses that are typically closed during the day should be designed to maximise daytime and evening activation at street level and be compatible with surrounding land uses, in particular residential development.
- 3 Low impact industries should be located outside the Central Business Policy Area and have minimal off-site impacts with respect to noise, air, water and waste emissions, traffic generation and movement.
- 4 Development listed as non-complying is generally inappropriate.

# Form and Character

**5** Development should be consistent with the Desired Character for the Zone.

# **Design and Appearance**

- 6 Development should be of a high standard of architectural design and finish which is appropriate to the City's role and image as the capital of the State.
- **7** Buildings should present an attractive pedestrian-oriented frontage that adds interest and vitality to City streets and laneways.
- 8 The finished ground floor level of buildings should be at grade and/or level with the footpath to provide direct pedestrian access and street level activation.
- **9** Providing footpath widths and street tree growth permit, development should contribute to the comfort of pedestrians through the incorporation of verandahs, balconies, awnings and/or canopies that provide pedestrian shelter.
- **10** Buildings should be positioned regularly on the site and built to the street frontage, except where a setback is required to accommodate outdoor dining or provide a contextual response to a heritage place.
- 11 Other than in the Central Business Policy Area, buildings should be designed to include a podium/street wall height and upper level setback (in the order of 3-6 metres) that:
  - (a) relates to the width of the street and achieves a suitable level of enclosure to the public realm;
  - (b) provides a human scale at street level;
  - (c) creates a well-defined and continuity of frontage;
  - (d) gives emphasis and definition to street corners to clearly define the street grid;
  - (e) contributes to the interest, vitality and security of the pedestrian environment;
  - (f) maintains a sense of openness to the sky for pedestrians and brings daylight to the street; and
  - (g) achieves pedestrian comfort by minimising micro climatic impacts (particularly wind tunnelling and downward drafts).
- **12** Buildings north of Rundle Mall, Rundle Street, Hindley Street and Gouger Street should have a built form that incorporates slender tower elements, spaces between buildings or other design techniques that enable sunlight access to the southern footpath.
- **13** Buildings, advertisements, site landscaping, street planting and paving should have an integrated, coordinated appearance and should enhance the urban environment.
- **14** Building façades should be strongly modelled, incorporate a vertical composition which reflects the proportions of existing frontages, and ensure that architectural detailing is consistent around corners and along minor streets and laneways.
- The Squares (Victoria, Hindmarsh and Light)
- **15** Outdoor eating and drinking facilities associated with cafés and restaurants are appropriate ground floor uses and should contribute to the vitality of the Squares and create a focus for leisure.

- **16** Buildings fronting the Squares should:
  - (a) provide a comfortable pedestrian and recreation environment by enabling direct sunlight to a minimum of 75 percent of the landscaped part of each Square at the September equinox; and
  - (b) reinforce the enclosure of the Squares with a continuous built-form with no upper level set-backs.
- The Terraces (North, East and West)
- **17** Development along the terraces should contribute to a continuous built form to frame the City edge and activate the Park Lands.
- **18** Development along North Terrace should reinforce the predominant scale and 'City wall' character of the Terrace frontage.

# **Building Height**

- **19** Development should generally be compatible with the overall desired city form and not exceed the maximum building height shown in Concept Plan Figures CC/1 and 2; unless it meets one or more of the following:
  - (a) the proposed building is located in one of the following areas:
    - (i) fronting North Terrace, West Terrace or East Terrace and/or at the junction of two City boulevards shown in Concept Plan <u>Figures CC/1 and 2</u>;
    - (ii) on an allotment with frontage to Light Square;
    - (iii) within 200 metres of a high concentration public transport route identified on <u>Map</u> <u>Adel/1 (Overlay 4)</u>;
  - (b) the site area is greater than 1500 square metres and has side or rear vehicle access;
  - (c) the development provides an orderly transition up to an existing taller building or prescribed maximum building height in an adjoining Zone or Policy Area;
  - (d) the proposal incorporates the retention and conservation of a character building.
- **20** Development should have optimal height and floor space yields to take advantage of the premium City location and should have a building height no less than half the maximum shown on Concept Plan Figures CC/1 and 2, or 28 metres in the Central Business Policy Area, except where one or more of the following applies:
  - (a) a lower building height is necessary to achieve compliance with the Commonwealth Airports (Protection of Airspace) Regulations;
  - (b) the site is adjacent to the City Living Zone or the Adelaide Historic (Conservation) Zone and a lesser building height is required to manage the interface with low-rise residential development;
  - (c) the site is adjacent to a heritage place, or includes a heritage place;
  - (d) the development includes the construction of a building in the same, or substantially the same, position as a building which was demolished, as a result of significant damage caused by an event, within the previous 3 years where the new building has the same, or substantially the same, layout and external appearance as the previous building.

# Interface

- 21 Development should manage the interface with the City Living Zone or the Adelaide Historic (Conservation) Zone in relation to building height, overshadowing, massing, building proportions and traffic impacts and should avoid land uses, or intensity of land uses, that adversely affect residential amenity.
- 22 Development on all sites on the southern side of Gouger Street Angas Street and adjacent to a northern boundary of the City Living Zone or the Adelaide Historic (Conservation) Zone should not exceed 22 metres in building height unless the Council Wide overshadowing Principles of Development Control are met.

### Movement

- **23** Pedestrian movement should be based on a network of pedestrian malls, arcades and lanes, linking the surrounding Zones and giving a variety of north-south and east-west links.
- 24 Development should provide pedestrian linkages for safe and convenient movement with arcades and lanes clearly designated and well-lit to encourage pedestrian access to public transport and areas of activity. Blank surfaces, shutters and solid infills lining such routes should be avoided.
- 25 Development should ensure existing through-site and on-street pedestrian links are maintained and new pedestrian links are developed in accordance with <u>Map Adel/1 (Overlay 2A)</u>.
- 26 Car parking should be provided in accordance with <u>Table Adel/7</u>.
- 27 Multi-level car parks should locate vehicle access points away from the primary street frontage wherever possible and should not be located:
  - (a) within any of the following areas:
    - (i) the Core Pedestrian Area identified in Map Adel/1 (Overlays 2, 2A and 3)
    - (ii) on frontages to North Terrace, East Terrace, Rundle Street, Hindley Street, Currie Street, Waymouth Street (east of Light Square), Victoria Square or King William Street;
  - (b) where they conflict with existing or projected pedestrian movement and/or activity;
  - (c) where they would cause undue disruption to traffic flow; and
  - (d) where it involves creating new crossovers in North Terrace, Rundle Street, Hindley Street, Currie Street and Waymouth Street (east of Light Square), Grenfell Street and Pirie Street (west of Pulteney Street), Victoria Square, Light Square, Hindmarsh Square, Gawler Place and King William Street or access across primary City access and secondary City access roads identified in <u>Map Adel/1 (Overlay 1)</u>.
- 28 Multi-level, non-ancillary car parks are inappropriate within the Core Pedestrian Area as shown on <u>Map Adel/1 (Overlays 2, 2A and 3)</u>.
- 29 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:
  - (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages;
  - (b) complement the surrounding built form in terms of height, massing and scale; and

(c) incorporate façade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the Desired Character of the locality.

# Advertising

- **30** Other than signs along Hindley Street, advertisements should use simple graphics and be restrained in their size, design and colour.
- **31** In minor streets and laneways, a greater diversity of type, shape, numbers and design of advertisements are appropriate provided they are of a small-scale and located to present a consistent message band to pedestrians.
- **32** There should be an overall consistency achieved by advertisements along individual street frontages.
- **33** In Chesser Street, French Street and Coromandel Place advertisements should be small and preferably square and should not be located more than 3.7 metres above natural ground level or an abutting footpath or street. However, advertisements in these streets may be considered above 3.7 metres at locations near the intersections with major streets.
- **34** Advertisements on the Currie Street frontages between Topham Mall and Gilbert Place and its north-south prolongation should be of a size, shape and location complementary to the desired townscape character, with particular regard to the following:
  - (a) On the southern side of Currie Street, advertisements should be fixed with their underside at a common height, except where the architectural detailing of building façades precludes it. At this 'canopy' level advertisements should be of a uniform size and fixed without the support of guy wires. Where architectural detailing permits, advertisements may mark the major entrances to buildings along the southern side of Currie Street with vertical projecting advertisements 1.5 metres high by 1.2 metres wide at, or marginally above, the existing canopy level. Painted wall or window signs should be restrained.
  - (b) On the northern side of Currie Street, advertisements should be of a uniform fixing height and consistent dimensions to match those prevailing in the area.

#### **PROCEDURAL MATTERS**

#### **Complying Development**

35 Complying developments are prescribed in Schedule 4 of the Development Regulations 2008.

In addition, the following forms of development are assigned as **complying**:

- (a) Other than in relation to a State heritage place, Local heritage place (City Significance), or Local heritage place, work undertaken within a building which does not involve a change of use or affect the external appearance of the building;
- (b) Temporary depot for Council for a period of no more than 3 months where it can be demonstrated that appropriate provision has been made for:
  - (i) dust control;
  - (ii) screening, including landscaping;
  - (iii) containment of litter and water; and
  - (iv) securing of the site.

(c) Change in the use of land from a non-residential use to an office, shop or consulting room (excluding any retail showroom, adult entertainment premises, adult products and services premises or licensed premises).

#### Non-complying Development

36 The following kinds of development are **non-complying**:

A change in use of land to any of the following:

Amusement machine centre

Advertisements involving any of the following:

- (a) Third party advertising except on Hindley Street, Rundle Mall or on allotments at the intersection of Rundle Street and Pulteney Street, or temporary advertisements on construction sites;
- (b) Advertisements located at roof level where the sky or another building forms the background when viewed from ground level;
- (c) Advertisements in the area bounded by West Terrace, Grote Street, Franklin Street and Gray Street;
- (d) Animation of advertisements along and adjacent to the North Terrace, King William Street and Victoria Square frontages.

Total demolition of a State Heritage Place (as identified in Table Adel/1).

Vehicle parking except:

- (a) where it is ancillary to an approved or existing use;
- (b) it is a multi-level car park located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3); or
- (c) it is within an existing building located outside the Core Pedestrian Area as indicated on Map Adel/1 (Overlay 2, 2A and 3).

#### **Public Notification**

**37** Categories of public notification are prescribed in Schedule 9 of the *Development Regulations* 2008.

In addition, the following forms of development, or any combination of (except where the development is non-complying), are assigned:

(a) **Category 1**, public notification not required:

All forms of development other than where it is assigned Category 2.

(b) **Category 2**, public notification required. Third parties do not have any appeal rights.

Any development where the site of the development is adjacent land to land in the City Living Zone or Adelaide Historic (Conservation) Zone and it exceeds 22 metres in building height.

Note: For Category 3 development, public notification is required. Third parties may make written representations, appear before the relevant authority on the matter, and may appeal against a development consent. This includes any development not classified as either Category 1 or Category 2.

# **Council Wide**

# Medium to High Scale Residential/Serviced Apartment

# OBJECTIVE

**Objective 22:** Medium to high scale residential (including student accommodation) or serviced apartment development that:

- (a) has a high standard of amenity and environmental performance;
- (b) comprises functional internal layouts;
- (c) is adaptable to meet a variety of accommodation and living needs; and
- (d) includes well-designed and functional recreation and storage areas.

# PRINCIPLES OF DEVELOPMENT CONTROL

# **Building Entrances**

- 48 Entrances to medium to high scale residential or serviced apartment development should:
  - (a) be oriented towards the street;
  - (b) be visible and easily identifiable from the street; and
  - (c) provide shelter, a sense of personal address and transitional space around the entry.
- **49** Entrances to individual dwellings or apartments within medium to high scale residential or serviced apartment development should:
  - (a) be located as close as practical to the lift and/or lobby access and minimise the need for long access corridors;
  - (b) be clearly identifiable; and
  - (c) avoid the creation of potential areas for entrapment.

# Daylight, Sunlight and Ventilation

- **50** Medium to high scale residential or serviced apartment development should be designed to maximise opportunities to facilitate natural ventilation and capitalise on natural daylight and minimise the need for artificial lighting during daylight hours.
- 51 Medium to high scale residential or serviced apartment development should be designed and located to maximise solar access to dwellings and communal open space on the norther facade.
- **52** Ceiling heights that promote the use of taller windows, highlight windows, fan lights and light shelves should be utilised to facilitate access to natural light, improve daylight distribution and enhance air circulation, particularly in dwellings with limited light access and deep interiors.
- **53** All new medium to high scale residential or serviced apartment development should have direct ventilation and natural light.
- **54** The maximum distance of a habitable room such as a living, dining, bedroom or kitchen from a window providing natural light and ventilation to that room is 8 metres.

- **55** Light wells should not be used as the primary source of daylight for living rooms to ensure a sufficient level of outlook and daylight.
- **56** Medium to high scale residential or serviced apartment development should be designed to ensure living areas, private open space or communal open space, where such communal open space provides the primary area of private open space, are the main recipients of sunlight.
- **57** Medium to high scale residential or serviced apartment development should locate living areas, private open space and communal open space, where such communal open space provides the primary area of private open space, where they will receive sunlight and, where possible, should maintain at least two hours of direct sunlight solar time on 22 June to:
  - (a) at least one habitable room window (excluding bathroom, toilet, laundry or storage room windows);
  - (b) to at least 20 percent of the private open space; and
  - (c) communal open space, where such communal open space provides the primary private open space for any adjacent residential development.
- 58 Natural cross ventilation of habitable rooms should be achieved by the following methods:
  - (a) positioning window and door openings in different directions to encourage cross ventilation from cooling summer breezes;
  - (b) installing small low level windows on the windward side and larger raised openings on the leeward side to maximise airspeed in the room;
  - (c) installing higher level casement or sash windows, clerestory windows or operable fanlight windows to facilitate convective currents;
  - (d) selecting windows which the occupants can reconfigure to funnel breezes such as vertical louvred, casement windows and externally opening doors;
  - (e) ensuring the internal layout minimises interruptions to airflow;
  - (f) limiting building depth to allow for ease of cross ventilation; and/or
  - (g) draught proofing doors, windows and other openings.

# **Private Open Space**

- **59** Medium to high scale residential development and serviced apartments should provide the following private open space:
  - (a) studio (where there is no separate bedroom): no minimum requirement but some provision is desirable.
  - (b) 1 bedroom dwelling/apartment: 8 square metres.
  - (c) 2 bedroom dwelling/apartment: 11 square metres.
  - (d) 3+ bedroom dwelling/apartment: 15 square metres.

A lesser amount of private open space may be considered appropriate in circumstances where the equivalent amount of open space is provided in a communal open space accessible to all occupants of the development. Private open space for 2 or more bedroom dwellings/apartments may be divided into different areas whilst private open space for studios or 1 bedroom dwelling/apartments should be in a single area.

Areas used for parking of motor vehicles are not included as private open space.

Note: In the City Living, Main Street and Institutional Zones, specific landscaped open space and private landscaped open space provisions apply.

- **60** Medium to high scale residential (other than student accommodation) or serviced apartment development should ensure direct access from living areas to private open space areas, which may take the form of balconies, terraces, decks or other elevated outdoor areas provided the amenity and visual privacy of adjacent properties is protected.
- 61 Other than for student accommodation, private open space should have a minimum dimension of 2 metres and should be well proportioned to be functional and promote indoor/outdoor living.
- **62** Balconies should be integrated into the overall architectural form and detail of the development and should:
  - (a) utilise sun screens, pergolas, shutters and openable walls to control sunlight and wind;
  - (b) be cantilevered, partially cantilevered and/or recessed in response to daylight, wind, acoustic and visual privacy;
  - (c) be of a depth that ensures sunlight can enter the dwelling below; and
  - (d) allow views and casual surveillance of the street while providing for safety and visual privacy.
- **63** Secondary balconies, including Juliet balconies or operable walls with balustrades should be considered, subject to overlooking and privacy, for additional amenity and choice.
- **64** For clothes drying, balconies off laundries or bathrooms and roof top areas should be screened from public view.
- **65** The incorporation of roof top gardens is encouraged providing it does not result in unreasonable overlooking or loss of privacy.

### **Visual Privacy**

- **66** Medium to high scale residential or serviced apartment development should be designed and sited to minimise the potential overlooking of habitable rooms such as bedrooms and living areas of adjacent development.
- **67** A habitable room window, balcony, roof garden, terrace or deck should be set-back from boundaries with adjacent sites at least three metres to provide an adequate level of amenity and privacy and to not restrict the reasonable development of adjacent sites.

#### **Noise and Internal Layout**

- **68** Medium to high scale residential or serviced apartment development close to high noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.
- **69** Attached or abutting dwellings/apartments should be designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusions.

# **Minimum Unit Sizes**

- **70** Medium to high scale residential or serviced apartment development should provide a high quality living environment by ensuring the following minimum internal floor areas:
  - (a) studio (where there is no separate bedroom): 35 square metres.
  - (b) 1 bedroom dwelling/apartment: 50 square metres
  - (c) 2 bedroom dwelling/apartment: 65 square metres
  - (d) 3+ bedroom dwelling/apartment: 80 square metres plus an additional 15 square metres for every additional bedroom over 3 bedrooms.

Note: Dwelling/apartment "unit size" includes internal storage areas but does not include balconies or car parking as part of the calculation.

71 Internal structural columns should correspond with the position of internal walls to ensure that the space within the dwelling/apartment is useable.

# Adaptability

- 72 Within medium to high scale residential or serviced apartment development, dwelling/apartment layouts should be adaptable to accommodate:
  - (a) a range of activities and privacy levels between different spaces;
  - (b) flexible room sizes and proportions;
  - (c) efficient circulation to optimise the functionality of floor space within rooms; and
  - (d) the future reuse of student accommodation as residential apartments through a design and layout that allows individual apartments to be reconfigured into a larger dwelling or other alternative use.

# Outlook

**73** All medium to high scale residential or serviced apartment development should be designed to ensure the living rooms have a satisfactory external outlook. Living rooms that do not have an outlook or the only source of outlook is through high level windows or a skylight are not considered to provide an appropriate level of amenity for the occupiers.

Note: Outlook is a short range prospect and is distinct from a view which is more extensive and long range to particular objects or geographic features.

- **74** Light wells may be used as a source of daylight, ventilation, outlook and sunlight for medium to high scale residential or serviced apartment development provided that:
  - (a) living rooms do not have lightwells as their only source of outlook;
  - (b) lightwells up to 18 metres in height have a minimum horizontal dimension of 3 metres or 6 metres if overlooked by bedrooms; and
  - (c) lightwells higher than 18 metres in height have a minimum horizontal dimension of 6 metres or 9 metres if overlooked by bedrooms.

# **On-Site Parking and Fencing**

#### OBJECTIVE

**Objective 23:** Safe and convenient on-site car parking for resident and visitor vehicles.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **75** To ensure an adequate provision of on-site parking, car parking should be provided for medium to high scale residential (other than student accommodation) or serviced apartment development in accordance with <u>Table Adel/7</u>.
- **76** Garages and parking structures associated with medium to high scale residential or serviced apartment development should be located so that they do not visually dominate the street frontage.
- 77 Car parking areas should be designed and located to:
  - (a) be close and convenient to dwellings/apartments;
  - (b) be lit at night;
  - (c) be well ventilated if enclosed;
  - (d) avoid headlight glare into windows; and
  - (e) clearly define visitor parking.
- 78 Where garages are located within a basement or undercroft:
  - the width of access driveways should be kept to a minimum and should not detract from the streetscape;
  - (b) driveways should be designed to ensure safe and convenient access and egress;
  - (c) access should be restricted to one driveway or one point of access and egress;
  - (d) vehicles should be able to safely exit in a forward direction and should not compromise pedestrian safety or cause conflict with other vehicles; and
  - (e) the height of the car park ceiling should not exceed one metre above the finished ground floor level to ensure minimal impact on the streetscape.
- 79 Fencing and walls should:
  - (a) be articulated and detailed to provide visual interest;
  - (b) assist the development to address the street;
  - (c) assist in the provision of safety and surveillance;
  - (d) assist in highlighting entrances; and
  - (e) enable visibility of buildings from and to the street.

# **Storage Areas**

**80** Site facilities should be readily accessible to each dwelling/serviced apartment, complement the development and relevant desired character and should include:

- (a) a common mail box structure located close to the main pedestrian entrance;
- (b) areas for the storage and collection of goods, materials, refuse and waste including facilities to enable the separation of recyclable materials as appropriate to the size and nature of the development and screened from public view; and
- (c) external clothes drying areas for residential dwellings that do not incorporate ground level open space.
- **81** Medium to high scale residential (other than student accommodation) or serviced apartment development should provide adequate and accessible storage facilities for the occupants at the following minimum rates:
  - (a) studio: 6 cubic metres
  - (b) 1 bedroom dwelling/apartment: 8 cubic metres
  - (c) 2 bedroom dwelling/apartment: 10 cubic metres
  - (d) 3+ bedroom dwelling/apartment: 12 cubic metres

50 percent of the storage space should be provided within the dwelling/apartment with the remainder provided in the basement or other communal areas.

#### Environmental

### **Crime Prevention Through Urban Design**

#### **OBJECTIVES**

Objective 24: A safe and secure, crime resistant environment that:

- (a) ensures that land uses are integrated and designed to facilitate natural surveillance;
- (b) promotes building and site security; and
- (c) promotes visibility through the incorporation of clear lines of sight and appropriate lighting.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **82** Development should promote the safety and security of the community in the public realm and within development. Development should:
  - (a) promote natural surveillance of the public realm, including open space, car parks, pedestrian routes, service lanes, public transport stops and residential areas, through the design and location of physical features, electrical and mechanical devices, activities and people to maximise visibility by:
    - (i) orientating windows, doors and building entrances towards the street, open spaces, car parks, pedestrian routes and public transport stops;
    - (ii) avoiding high walls, blank facades, carports and landscaping that obscures direct views to public areas;
    - (iii) arranging living areas, windows, pedestrian paths and balconies to overlook recreation areas, entrances and car parks;
    - (iv) positioning recreational and public space areas so they are bound by roads on at least two road frontages or overlooked by development;

- (v) creating a complementary mix of day and night-time activities, such as residential, commercial, recreational and community uses, that extend the duration and level of intensity of public activity;
- (vi) locating public toilets, telephones and other public facilities with direct access and good visibility from well-trafficked public spaces;
- (vii) ensuring that rear service areas and access lanes are either secured or exposed to surveillance; and
- (viii) ensuring the surveillance of isolated locations through the use of audio monitors, emergency telephones or alarms, video cameras or staff eg by surveillance of lift and toilet areas within car parks.
- (b) provide access control by facilitating communication, escape and path finding within development through legible design by:
  - (i) incorporating clear directional devices;
  - (ii) avoiding opportunities for concealment near well travelled routes;
  - (iii) closing off or locking areas during off-peak hours, such as stairwells, to concentrate access/exit points to a particular route;
  - (iv) use of devices such as stainless steel mirrors where a passage has a bend;
  - (v) locating main entrances and exits at the front of a site and in view of a street;
  - (vi) providing open space and pedestrian routes which are clearly defined and have clear and direct sightlines for the users; and
  - (vii) locating elevators and stairwells where they can be viewed by a maximum number of people, near the edge of buildings where there is a glass wall at the entrance.
- (c) promote territoriality or sense of ownership through physical features that express ownership and control over the environment and provide a clear delineation of public and private space by:
  - (i) clear delineation of boundaries marking public, private and semi-private space, such as by paving, lighting, walls and planting;
  - dividing large development sites into territorial zones to create a sense of ownership of common space by smaller groups of dwellings; and
  - (iii) locating main entrances and exits at the front of a site and in view of a street.
- (d) provide awareness through design of what is around and what is ahead so that legitimate users and observers can make an accurate assessment of the safety of a locality and site and plan their behaviour accordingly by:
  - (i) avoiding blind sharp corners, pillars, tall solid fences and a sudden change in grade of pathways, stairs or corridors so that movement can be predicted;
  - using devices such as convex security mirrors or reflective surfaces where lines of sight are impeded;
  - (iii) ensuring barriers along pathways such as landscaping, fencing and walls are permeable;

- (iv) planting shrubs that have a mature height less than one metre and trees with a canopy that begins at two metres;
- (v) adequate and consistent lighting of open spaces, building entrances, parking and pedestrian areas to avoid the creation of shadowed areas; and
- (vi) use of robust and durable design features to discourage vandalism.
- **83** Residential development should be designed to overlook streets, public and communal open space to allow casual surveillance.
- **84** To maximise security and safety, buildings should be designed to minimise access between roofs, balconies and windows of adjacent buildings.
- **85** Security features should be incorporated within the design of shop fronts to complement the design of the frontage and allow window shopping out of hours. If security grilles are provided, these should:
  - (a) be transparent and illuminated to complement the appearance of the frontage;
  - (b) provide for window shopping; and
  - (c) allow for the spill of light from the shop front onto the street.

Solid shutters with less than 75 percent permeability are not acceptable.

### **Noise Emissions**

#### OBJECTIVES

- **Objective 26:** Development that does not unreasonably interfere with the desired character of the locality by generating unduly annoying or disturbing noise.
- **Objective 27:** Noise sensitive development designed to protect its occupants from existing noise sources and from noise sources contemplated within the relevant Zone or Policy Area and that does not unreasonably interfere with the operation of non-residential uses contemplated within the relevant Zone or Policy Area.

#### PRINCIPLES OF DEVELOPMENT CONTROL

### **Noise Sources**

- **89** Development with potential to emit significant noise (including licensed entertainment premises and licensed premises) should incorporate appropriate noise attenuation measures in to their design to prevent noise from causing unreasonable interference with the amenity and desired character of the locality, as contemplated in the relevant Zone and Policy Area.
- **93** Mechanical plant or equipment should be designed, sited and screened to minimise noise impact on adjacent premises or properties. The noise level associated with the combined operation of plant and equipment such as air conditioning, ventilation and refrigeration systems when assessed at the nearest existing or envisaged noise sensitive location in or adjacent to the site should not exceed
  - (a) 55 dB(A) during daytime (7.00am to 10.00pm) and 45 dB(A) during night time (10.00pm to 7.00am) when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.
  - (b) 50 dB(A) during daytime (7.00am to 10.00pm) and 40 dB(A) during night time (10.00pm to 7.00am) in or adjacent to a City Living Zone, the Adelaide Historic

(Conservation) Zone, the North Adelaide Historic (Conservation) Zone or the Park Lands Zone when measured and adjusted in accordance with the relevant environmental noise legislation except where it can be demonstrated that a high background noise exists.

- 94 To ensure minimal disturbance to residents:
  - (a) ancillary activities such as deliveries, collection, movement of private waste bins, goods, empty bottles and the like should not occur:
    - (i) after 10.00pm; and
    - (ii) before 7.00am Monday to Saturday or before 9.00am on a Sunday or Public Holiday.
  - (b) typical activity within any car park area including vehicles being started, doors closing and vehicles moving away from the premises should not result in sleep disturbance when proposed for use after 10.00pm as defined by the limits recommended by the World Health Organisation.

#### **Noise Receivers**

- **95** Noise sensitive development should incorporate adequate noise attenuation measures into their design and construction to provide occupants with reasonable amenity when exposed to noise sources such as major transport corridors (road, rail, tram and aircraft), commercial centres, entertainment premises and the like, and from activities and land uses contemplated in the relevant Zone and Policy Area provisions.
- **96** Noise sensitive development in mixed use areas should not unreasonably interfere with the operation of surrounding non-residential uses that generate noise levels that are commensurate with the envisaged amenity of the locality.
- **97** Noise sensitive development adjacent to noise sources should include noise attenuation measures to achieve the following:
  - (a) satisfaction of the sleep disturbance criteria in the bedrooms or sleeping areas of the development as defined by the limits recommended by the World Health Organisation;
  - (b) the maximum satisfactory levels in any habitable room for development near major roads, as provided in the Australian/New Zealand Standard AS/NZS 2107:2000 -'Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors'; and
  - (c) noise level in any bedroom, when exposed to music noise (L<sub>10</sub>) from existing entertainment premises, being:
    - (i) less than 8 dB above the level of background noise (L<sub>90,15 min</sub>) in any octave band of the sound spectrum; and
    - (ii) less than 5 dB(A) above the level of background noise (L<sub>A90,15 min</sub>) for the overall (sum of all octave bands) A-weighted levels.
  - Background noise within the habitable room can be taken to be that expected in a typical residential/apartment development of the type proposed, that is inclusive of internal noise sources such as air conditioning systems, refrigerators and the like as deemed appropriate.

Unless otherwise demonstrated, the minimum background noise to be used will be:

Octave Band Centre Frequency (Hz)	Minimum Background Noise Level (L <sub>A90, 15</sub> ) dB (A)
63	10
125	12
250	14
500	14
1000	12
2000	10
4000	8
Overall Sum	21

on the basis of the windows being closed for the noise sensitive development and any existing entertainment premises complying with the relevant legislation relating to noise emission.

Note: The report prepared by a suitably qualified acoustic engineer at the planning application submission stage should identify existing noise sources, identify the appropriate level of sound attenuation required and specify the noise attenuation measures that will be applied to the proposal. The noise attenuation measures might include:

- (a) siting and orientating the building away from the noise source and/or providing an external area that limits noise levels to World Health Organisation recommendations for residential areas;
- (b) sensitive internal layout of rooms, by locating noise sensitive rooms such as bedrooms and secluded private open space areas away from the noise source;
- (c) locating and designing entrances to be sealed and to provide air lock entries to sensitive rooms;
- (d) window location and design through thicker glass or double glazing of windows in recognition of the noise source;
- (e) sloping of roof or flat roof/parapet design to assist in noise passing overhead rather than penetrating through the roof of the dwelling;
- (f) selecting appropriate construction materials, such as sound absorbing materials and materials that reduce sound transmission;
- (g) installing door seals;
- (h) creation of hybrid buildings that serve as a buffer between different uses, eg the location of offices between residential and entertainment uses, can be vertically or horizontally applied;
- (i) adequate separation between residential and noise generating uses;
- (j) acoustic separation of ducts, fans etc;
- (k) constructing shared walls and floors between dwellings/apartments in a way which minimises the transmission of noise; or
- (I) separating openings of adjacent dwellings/apartments by a distance of a least three metres.
- **98** Attached dwellings/serviced apartments should be designed to minimise the transmission of sound between dwellings/serviced apartments and should particularly protect bedrooms from possible noise intrusion.

#### Waste Management

#### OBJECTIVE

**Objective 28:** Development which supports high local environmental quality, promotes waste minimisation, re-use and recycling, encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution.

#### PRINCIPLES OF DEVELOPMENT CONTROL

**101** A dedicated area for on-site collection and sorting of recyclable materials and refuse should be provided within all new development.

- **102** A dedicated area for the collection and sorting of construction waste and the recycling of building materials during construction as appropriate to the size and nature of the development should be provided and screened from public view.
- **103** Development greater than 2 000 square metres of total floor area should manage waste by:
  - (a) containing a dedicated area for the collection and sorting of construction waste and recyclable building materials;
  - (b) on-site storage and management of waste;
  - (c) disposal of non-recyclable waste; and
  - (d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.
- **104** Development should not result in emission of atmospheric, liquid or other pollutants, or cause unacceptable levels of smell and odour which would detrimentally affect the amenity of adjacent properties or its locality. Land uses such as restaurants, shops, cafés or other uses that generate smell and odour should:
  - (a) ensure extraction flues, ventilation and plant equipment are located in appropriate locations that will not detrimentally affect the amenity of adjacent occupiers in terms of noise, odours and the appearance of the equipment;
  - (b) ensure ventilation and extraction equipment and ducting have the capacity to clean and filter the air before being released into the atmosphere; and
  - (c) ensure the size of the ventilation and extraction equipment is suitable and has the capacity to adequately cater for the demand generated by the potential number of patrons.

and also states any conditions pertaining to the use(s).

# **Energy Efficiency**

#### OBJECTIVE

**Objective 30:** Development which is compatible with the long term sustainability of the environment, minimises consumption of non-renewable resources and utilises alternative energy generation systems.

#### PRINCIPLES OF DEVELOPMENT CONTROL

#### All Development

- **106** Buildings should provide adequate thermal comfort for occupants and minimise the need for energy use for heating, cooling and lighting by:
  - (a) providing an internal day living area with a north-facing window, other than for minor additions<sup>\*</sup>, by:
    - (i) arranging and concentrating main activity areas of a building to the north for solar penetration; and

<sup>\*</sup> Minor additions have a floor area less than 50 percent of the existing dwelling and do not include a day living area.

- placing buildings on east-west allotments against or close to the southern boundary to maximise northern solar access and separation to other buildings to the north.
- (b) efficient layout, such as zoning house layout to enable main living areas to be separately heated and cooled, other than for minor additions;
- (c) locating, sizing and shading windows to reduce summer heat loads and permit entry of winter sun;
- (d) allowing for natural cross ventilation to enable cooling breezes to reduce internal temperatures in summer;
- (e) including thermal insulation of roof, walls, floors and ceilings and by draught proofing doors, windows and openings;
- (f) ensuring light colours are applied to external surfaces that receive a high degree of sun exposure, but not to an extent that will cause glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles;
- (g) providing an external clothes line for residential development; and
- (h) use of landscaping.
- **107** All development should be designed to promote naturally ventilated and day lit buildings to minimise the need for mechanical ventilation and lighting systems.
- **108** Energy reductions should, where possible, be achieved by the following:
  - (a) appropriate orientation of the building by:
    - (i) maximising north/south facing facades;
    - designing and locating the building so the north facade receives good direct solar radiation;
    - (iii) minimising east/west facades to protect the building from summer sun and winter winds;
    - (iv) narrow floor plates to maximise the amount of floor area receiving good daylight; and/or
    - (v) minimising the ratio of wall surface to floor area.
  - (b) window orientation and shading;
  - (c) adequate thermal mass including night time purging to cool thermal mass;
  - (d) appropriate insulation by:
    - (i) insulating windows, walls, floors and roofs; and
    - (ii) sealing of external openings to minimise infiltration.
  - (e) maximising natural ventilation including the provision of openable windows;
  - (f) appropriate selection of materials, colours and finishes; and
  - (g) introduction of efficient energy use technologies such as geo-exchange and embedded, distributed energy generation systems such as cogeneration\*, wind power,

fuel cells and solar photovoltaic panels that supplement the energy needs of the building and in some cases, export surplus energy to the electricity grid.

- **109** Orientation and pitch of the roof should facilitate the efficient use of solar collectors and photovoltaic cells.
- **110** Buildings, where practical, should be refurbished, adapted and reused to ensure an efficient use of resources.
- **111** New buildings should be readily adaptable to future alternative uses.
- **112** Selection of internal materials for all buildings should be made with regard to internal air quality and ensure low toxic emissions, particularly with respect to paint and joinery products.
- **114** Development is encouraged to avoid heat loss by incorporating treatments, such as double glazing of windows along the southern elevation, or by minimizing the extent of windows facing south.

#### **Micro-climate and Sunlight**

#### **OBJECTIVES**

- **Objective 33:** Buildings which are designed and sited to be energy efficient and to minimise micro-climatic and solar access impacts on land or other buildings.
- **Objective 34:** Protection from rain, wind and sun without causing detriment to heritage places, street trees or the integrity of the streetscape.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **119** Development should be designed and sited to minimise micro-climatic and solar access impact on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow.
- **120** Development should be designed and sited to ensure an adequate level of daylight, minimise overshadowing of buildings, and public and private outdoor spaces, particularly during the lunch time hours.
- **121** Development should not significantly reduce daylight to private open space, communal open space, where such communal open space provides the primary private open space, and habitable rooms in adjacent City Living Zone, Adelaide Historic (Conservation) Zone and North Adelaide Historic (Conservation) Zone.
- **122** Glazing on building facades should not result in glare which produces discomfort or danger to pedestrians, occupants of adjacent buildings and users of vehicles.
- **124** Weather protection should not be introduced where it would interfere with the integrity or heritage value of heritage places or unduly affect street trees.
- **125** Development that is over 21 metres in building height and is to be built at or on the street frontage should minimise wind tunnel effect.

# **Stormwater Management**

#### OBJECTIVES

Objective 35: Development which maximises the use of stormwater.

**Objective 36:** Development designed and located to protect stormwater from pollution sources.

Surface water (inland, marine, estuarine) and ground water has the potential to be detrimentally affected by water run-off from development containing solid and liquid wastes. Minimising and possibly eliminating sources of pollution will reduce the potential for degrading water quality and enable increased use of stormwater for a range of applications with environmental, economic and social benefits.

- **Objective 37:** Development designed and located to protect or enhance the environmental values of receiving waters.
- **Objective 38:** Development designed and located to prevent erosion.

Development involving soil disturbance may result in erosion and subsequently sedimentation and pollutants entering receiving waters. Design techniques should be incorporated during both the construction and operation phases of development to minimise the transportation of sediment and pollutants off-site.

**Objective 39:** Development designed and located to prevent or minimise the risk of downstream flooding.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **126** Development of stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.
- **127** Development affecting existing stormwater management systems should be designed and located to improve the quality of stormwater, minimise pollutant transfer to receiving waters, and protect downstream receiving waters from high levels of flow.
- **128** Development should incorporate appropriate measures to minimise any concentrated stormwater discharge from the site.
- **131** Development should manage stormwater to ensure that the design capacity of existing or planned downstream systems are not exceeded, and other property or environments are not adversely affected as a result of any concentrated stormwater discharge from the site.

# Heritage and Conservation

#### OBJECTIVES

- **Objective 42:** Acknowledge the diversity of Adelaide's cultural heritage from pre-European occupation to current time through the conservation of heritage places and retention of their heritage value.
- **Objective 43:** Development that retains the heritage value and setting of a heritage place and its built form contribution to the locality.
- **Objective 44:** Continued use or adaptive reuse of the land, buildings and structures comprising a heritage place.
- **Objective 45:** Recognition of Aboriginal sites, items and areas which are of social, archaeological, cultural, mythological or anthropological significance.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **140** Development on land adjacent to a heritage place in non-residential Zones or Policy Areas should incorporate design elements, including where it comprises an innovative contemporary design, that:
  - (a) utilise materials, finishes, and other built form qualities that complement the adjacent heritage place; and
  - (b) is located no closer to the primary street frontage than the adjacent heritage place.
- **142** Development that abuts the built form/fabric of a heritage place should be carefully integrated, generally being located behind or at the side of the heritage place and without necessarily replicating historic detailing, so as to retain the heritage value of the heritage place.

# **Development on Land Adjacent to a Heritage Place**

- **162** Development on land adjacent to land containing a Heritage Place should demonstrate design consideration of the relationship with the Heritage Place (without necessarily replicating its historic detailing) by establishing compatible:
  - (a) scale, bulk and setbacks;
  - (b) proportion and composition of design elements;
  - (c) form and visual interest (as determined by play of light and shade, treatments of openings and depths of reveals, roofline and silhouette, colour and texture of materials and details, landscaping and fencing);
  - (d) width of frontage and boundary set-back patterns; and
  - (e) vehicle access and carparking arrangements.
- **163** Development on land adjacent to a Heritage Place and sited in prominent locations, such as corners or at the termination of vistas where a strong presence is desirable, should have a scale and detail equal to that of the Heritage Place.
- 164 In a locality where single-storey Heritage Places prevail at or close to the primary street frontage, single storey development and a consistent building set-back should be maintained. Sympathetically designed second storey components that utilise or extend roof space to the rear of a building may be appropriate subject to scale, views from the street, overshadowing and privacy considerations.
- **165** Development that is visible from the street should match the building levels and storey heights of adjacent Heritage Places.

# Height, Bulk and Scale

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **167** Development should be of a high standard of design and should reinforce the grid layout and distinctive urban character of the City by maintaining a clear distinction between the following:
  - (a) the intense urban development and built-form of the town acres in the Capital City, Main Street, Mixed Use, City Frame and City Living Zones;

- (b) the less intense and more informal groupings of buildings set within the landscaped environment of the Institutional Zones;
- (c) the historic character of the Adelaide and North Adelaide Historic (Conservation) Zones and groups of historic housing within the City Living Zone; and
- (d) the open landscape of the Park Lands Zone.
- **168** The height and scale of development and the type of land use should reflect and respond to the role of the street it fronts as illustrated on <u>Map Adel/1 (Overlay 1)</u>.
- **169** The height, scale and massing of buildings should reinforce:
  - (a) the desired character, built form, public environment and scale of the streetscape as contemplated within the Zone and Policy Area, and have regard to:
    - (i) maintaining consistent parapet lines, floor levels, height and massing with existing buildings consistent with the areas desired character;
    - (ii) reflecting the prevailing pattern of visual sub-division of neighbouring building frontages where frontages display a character pattern of vertical and horizontal sub-divisions; and
    - (iii) avoiding massive unbroken facades.
  - (b) a comfortable proportion of human scale at street level by:
    - (i) building ground level to the street frontage where zero set-backs prevail;
    - (ii) breaking up the building facade into distinct elements;
    - (iii) incorporating art work and wall and window detailing; and
    - (iv) including attractive planting, seating and pedestrian shelter.
- **170** Where possible, large sites should incorporate pedestrian links and combine them with publicly accessible open space.
- **171** Buildings and structures should not adversely affect by way of their height and location the longterm operational, safety and commercial requirements of Adelaide International Airport. Buildings and structures which exceed the heights shown in <u>Map Adel/1 (Overlay 5)</u> and which penetrate the Obstacle Limitation Surfaces (OLS) should be designed, marked or lit to ensure the safe operation of aircraft within the airspace around the Adelaide International Airport.

# Landscaped Open Space

176 Landscaped open space should be provided on the site of a development to at least the extent specified in the Principles of Development Control for the relevant Zone or Policy Area for siting, amenity and screening purposes. Where the existing amount of landscaped open space provided is less than the amount specified in the relevant Zone or Policy Area, development should not further reduce this amount. Where landscaped open space is not required, the provision of landscaped pedestrian spaces, planter boxes and in-ground planting is appropriate.

# **Building Set-backs**

**178** Buildings within the Capital City Zone should be built to the street edge to reinforce the grid pattern, create a continuity of frontage and provide definition and enclosure to the public realm whilst contributing to the interest, vitality and security of the pedestrian environment.

# **Composition and Proportion**

- **179** Development should respect the composition and proportion of architectural elements of building facades that form an important pattern which contributes to the streetscape's distinctive character in a manner consistent with the desired character of a locality by:
  - (a) establishing visual links with neighbouring buildings by reflecting and reinforcing the prevailing pattern of visual sub-division in building facades where a pattern of vertical and/or horizontal sub-divisions is evident and desirable, for example, there may be strong horizontal lines of verandahs, masonry courses, podia or openings, or there may be vertical proportions in the divisions of facades or windows; and
  - (b) clearly defining ground, middle and roof top levels.
- **180** Where there is little or no established building pattern, new buildings should create new features which contribute to an areas desired character and the way the urban environment is understood by:
  - (a) frontages creating clearly defined edges;
  - (b) generating new compositions and points of interest;
  - (c) introducing elements for future neighbouring buildings; and
  - (d) emphasising the importance of the building according to the street hierarchy.

# **Articulation and Modelling**

- **181** Building facades fronting street frontages, access ways, driveways or public spaces should be composed with an appropriate scale, rhythm and proportion which responds to the use of the building, the desired character of the locality and the modelling and proportions of adjacent buildings.
- **182** Balconies should be designed to give shelter to the street or public space at first floor levels.
- **183** Balconies should:
  - (a) respond to the street context and building orientation; and
  - (b) incorporate balustrade detailing to reflect the balcony type and location and the materials and detail of the building facade.
- **184** No part of any fully enclosed building should extend over property boundaries, including streets and public spaces, whether above a balcony at a lower level or not.
- **185** Building services such as drainage pipes together with security grills/screens, ventilation louvres and car park entry doors, should be coordinated and integrated with the overall facade design.

# Materials, Colours and Finishes

- **186** The design, external materials, colours and finishes of buildings should have regard to their surrounding townscape context, built form and public environment, consistent with the desired character of the relevant Zone and Policy Area.
- **187** Development should be finished with materials that are sympathetic to the design and setting of the new building and which incorporate recycled or low embodied energy materials. The form, colour, texture and quality of materials should be of high quality, durable and contribute to the desired character of the locality. Materials, colours and finishes should not necessarily imitate materials and colours of an existing streetscape

- **188** Materials and finishes that are easily maintained and do not readily stain, discolour or deteriorate should be utilised.
- **189** Development should avoid the use of large expanses of highly reflective materials and large areas of monotonous, sheer materials (such as polished granite and curtained wall glazing).

# Sky and Roof Lines

# OBJECTIVE

**Objective 49:** Innovative and interesting skylines which contribute to the overall design and performance of the building.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **191** Where a prevailing pattern of roof form assists in establishing the desired character of the locality, new roof forms should be complementary to the shape, pitch, angle and materials of adjacent building roofs.
- **192** Buildings should be designed to incorporate well designed roof tops that:
  - (a) reinforce the desired character of the locality, as expressed in the relevant Zone or Policy Area;
  - (b) enhance the skyline and local views;
  - (c) contribute to the architectural quality of the building;
  - (d) provide a compositional relationship between the upper-most levels and the lower portions of the building;
  - (e) provide an expression of identity;
  - (f) articulate the roof, breaking down its massing on large buildings to minimise apparent bulk;
  - (g) respond to the orientation of the site; and
  - (h) create minimal glare.
- **193** Roof top plant and ancillary equipment that projects above the ceiling of the top storey should:
  - (a) be designed to minimise the visual impact; and
  - (b) be screened from view, including the potential view looking down or across from existing or possible higher buildings, or be included in a decorative roof form that is integrated into the design of the building.
- **194** Roof design should facilitate future use for sustainable functions such as:
  - (a) rainwater tanks for water conservation;
  - (b) roof surfaces orientated, angled and of suitable material for photovoltaic applications; and/or
  - (c) "green" roofs (ie roof top gardens structurally capable of supporting vegetation) or water features.

# **Active Street Frontages**

#### OBJECTIVES

- **Objective 50:** Development that enhances the public environment and, where appropriate provides activity and interest at street level, reinforcing a locality's desired character.
- **Objective 51:** Development designed to promote pedestrian activity and provide a high quality experience for City residents, workers and visitors by:
  - (a) enlivening building edges;
  - (b) creating welcoming, safe and vibrant spaces;
  - (c) improving perceptions of public safety through passive surveillance; and
  - (d) creating interesting and lively pedestrian environments.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **195** Development should be designed to create active street frontages that provide activity and interest to passing pedestrians and contribute to the liveliness, vitality and security of the public realm.
- **196** Retail frontages should be designed to provide interest to passing pedestrians at street level and relief to building mass.
- **197** Commercial buildings should be designed to ensure that ground floor facades are rich in detail so they are exciting to walk by, interesting to look at and to stand beside.
- **198** Residential development should be designed to create interesting pedestrian environments and resident surveillance of any street, accessway and driveway.

# **Outdoor Dining**

#### OBJECTIVE

**Objective 52:** Development that contributes to the vibrancy, activity and desired character of a locality.

#### PRINCIPLES OF DEVELOPMENT CONTROL

**199** Outdoor dining should:

- (a) be located outside the associated premises;
- (b) provide sufficient set-backs, such as from kerbs and property boundaries, and clearances, such as from buildings;
- (c) be located in an area safe for patrons where the security of the building is not compromised;
- (d) ensure the dining area is set back from the building line at street intersections;
- (e) ensure unimpeded pedestrian flow through free and uninterrupted pedestrian paths; and

(f) ensure wheelchair access to pedestrian ramps is not compromised.

**200** Structures should:

- (a) be of high quality design and form an integral part of the streetscape;
- (b) not restrict public access;
- (c) not detract or restrict views of significant sightlines, buildings and landmarks;
- **201** Signage that identifies the business name or logo, or advertises goods sold on the premises is only appropriate on glass and canvas screens and umbrellas and should meet the following:
  - signage and advertisements should be designed to improve and complement the amenity of the premises, be of an appropriate design and consistent with the desired character of the locality;
  - (b) advertisements on outdoor dining items such as umbrellas and canvas screens should not exceed a portion that covers 10 percent of the total available space on each outdoor dining item, up to half of which may be commercial advertisements in the form of product logos used or sold by the premises;
  - (c) advertisements should not be illuminated or animated; and
  - (d) third party advertising on outdoor dining items is inappropriate.

#### **Transport and Access**

#### **Access and Movement**

#### OBJECTIVE

**Objective 60:** Access to and movement within the City that is easy, safe, comfortable and convenient with priority given to pedestrian and cyclist safety and access.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- 223 Development should provide safe, convenient and comfortable access and movement.
- 224 Vehicle access points along primary and secondary city access roads and local connector roads, as shown on <u>Map Adel/1 (Overlay 1)</u> should be restricted.

#### **Pedestrian Access**

#### **OBJECTIVES**

- **Objective 61:** Development that promotes the comfort, enjoyment and security of pedestrians by providing shelter and reducing conflict with motor vehicles.
- **Objective 62:** Development that contributes to the quality of the public realm as a safe, secure and attractive environment for pedestrian movement and social interaction.
- **Objective 63:** Safe and convenient design of and access to buildings and public spaces, particularly for people with disabilities.

# PRINCIPLES OF DEVELOPMENT CONTROL

225 Development should reflect the significance of the paths and increase the permeability of the pedestrian network identified within <u>Map Adel/1 (Overlay 2)</u> by ensuring:

- (a) pedestrians are not disrupted or inconvenienced by badly designed or located vehicle access ramps in footpaths or streets; and
- (b) vehicle and service entry points are kept to a minimum to avoid adverse impact on pedestrian amenity.

#### **Bicycle Access**

#### **OBJECTIVES**

- **Objective 64:** Greater use of bicycles for travel to and within the City and the improvement of conditions, safety and facilities for cyclists.
- **Objective 65:** Adequate supply of secure, short stay and long stay bicycle parking to support desired growth in City activities.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **232** Development should have regard to the bicycle routes identified within <u>Map Adel/1 (Overlay 3)</u> by:
  - (a) limiting vehicular access points; and
  - (b) ensuring that vehicles can enter and leave the site in a forward direction, thereby avoiding reverse manoeuvres.
- **233** An adequate supply of on-site secure bicycle parking should be provided to meet the demand generated by the development within the site area of the development. Bicycle parking should be provided in accordance with the requirements set out in <u>Table Adel/6</u>.
- **234** Onsite secure bicycle parking facilities for residents and employees (long stay) should be:
  - (a) located in a prominent place;
  - (b) located at ground floor level;
  - (c) located undercover;
  - (d) located where passive surveillance is possible, or covered by CCTV;
  - (e) well lit and well signed;
  - (f) close to well used entrances;
  - (g) accessible by cycling along a safe, well lit route;
  - (h) take the form of a secure cage with locking rails inside or individual bicycle lockers; and
  - (i) in the case of a cage have an access key/pass common to the building access key/pass.
- 235 Onsite secure bicycle parking facilities for short stay users (i.e. bicycle rails) should be:
  - (a) directly associated with the main entrance;
  - (b) located at ground floor level;
  - (c) located undercover;

- (d) well lit and well signed;
- (e) located where passive surveillance is possible, or covered by CCTV; and
- (f) accessible by cycling along a safe, well lit route.
- 236 Access to bicycle parking should be designed to:
  - (a) minimise conflict with motor vehicles and pedestrians;
  - (b) ensure the route is well signed and well lit including the use of road markings such as a bicycle logo if appropriate to help guide cyclists; and
  - (c) ensure the route is unhindered by low roof heights.

integrated into the design of the development whilst retaining active street frontages.

### **Traffic and Vehicle Access**

#### **OBJECTIVES**

- **Objective 68:** Development that supports a shift toward active and sustainable transport modes (i.e. public transport, cycling and walking).
- **Objective 69:** An enhanced City environment and the maintenance of an appropriate hierarchy of roads to distribute traffic into the City to serve development in preference to through traffic.
- **Objective 70:** Adequate off-street facilities for loading and unloading of courier, delivery and service vehicles and access for emergency vehicles.

#### PRINCIPLES OF DEVELOPMENT CONTROL

- **240** Development should be designed so that vehicle access points for parking, servicing or deliveries, and pedestrian access to a site, are located to minimise traffic hazards and vehicle queuing on public roads. Access should be safe, convenient and suitable for the development on the site, and should be obtained from minor streets and lanes unless otherwise stated in the provisions for the relevant Zone or Policy Area and provided residential amenity is not unreasonably affected.
- **241** Facilities for the loading and unloading of courier, delivery and service vehicles and access for emergency vehicles should be provided on-site as appropriate to the size and nature of the development. Such facilities should be screened from public view and designed, where possible, so that vehicles may enter and leave in a forward direction.
- **247** Buildings located along primary and secondary access roads should be sited to avoid the need for vehicles to reverse on to the road (unless the dimensions of the site make this impractical).

# **Car Parking**

### OBJECTIVES

- **Objective 71:** To meet community expectation for parking supply while supporting a shift toward active and sustainable transport modes.
- **Objective 72:** An adequate supply of short-stay and long-stay parking to support desired growth in City activities without detrimental affect on traffic and pedestrian flows.

#### PRINCIPLES OF DEVELOPMENT CONTROL

250 Car parking areas should be located and designed to:

- (a) ensure safe and convenient pedestrian movement and traffic circulation through and within the car parking area;
- (b) include adequate provision for manoeuvring and individually accessible car standing areas;
- (c) enable, where practical, vehicles to enter and leave the site in a forward direction;
- (d) minimise interruption to the pattern of built form along street frontages;
- (e) provide for access off minor streets and for the screening from public view of such car parking areas by buildings on the site wherever possible;
- (f) minimise adverse impacts on adjoining residential properties in relation to noise and access and egress;
- (g) minimise loss of existing on-street parking spaces arising through crossovers and access;
- (h) incorporate secure bicycle parking spaces and facilitate convenient, safe and comfortable access to these spaces by cyclists; and
- (i) provide landscaping, such as semi-mature trees, to shade parked vehicles and reduce the visual impact of the car parking area while maintaining direct sight lines and informal visual surveillance.

# **OVERLAYS**

# **OVERLAY 1 – AFFORDABLE HOUSING**

The following Objectives and Principles of Development Control apply to the designated areas marked on <u>Map Adel/1 (Overlays 15a, 15b and 15c)</u>. They are additional to those expressed for the whole of the Council area and those expressed for the relevant Zone and, if applicable, Policy Area.

#### INTERPRETATION

Where the Objectives and/or Principles of Development Control that apply in relation to this Overlay are in conflict with the relevant Council wide, Zone or Policy Area Objectives and/or Principles of Development Control in the Development Plan, the Overlay will prevail.

#### **OBJECTIVES**

- **Objective 1:** Affordable housing that is integrated with residential and mixed use development.
- **Objective 2:** Development that comprises a range of affordable dwelling types that cater for a variety of household structures.
- **Objective 3:** Affordable housing that deliver whole-of-life cost savings to the occupants.
- **Objective 4:** Affordable housing that is provided in a wide range of locations and integrated into the City.

#### PRINCIPLES OF DEVELOPMENT CONTROL

1 Development comprising 20 or more dwellings should include a minimum of 15 percent affordable housing.

- 2 Where development includes affordable housing, then the quantitative provisions in respect to the following elements are not applicable to the affordable housing component provided the qualitative outcomes can be achieved:
  - (a) allotment area and dimensions;
  - (b) building height;
  - (c) site area and dimensions;
  - (d) site coverage;
  - (e) front, side and rear setbacks to boundaries;
  - (f) area and dimensions of private open space;
  - (g) minimum unit sizes;
  - (h) minimum storage areas;
  - (i) plot ratio;
  - (j) dwelling unit factor; and
  - (k) landscaped open space.