COUNCIL ASSESSMENT REPORT

Panel Reference	PPSSCC-86
DA Number	DA 1732/2019/HA
LGA	The Hills Shire Council
Proposed Development	Residential Flat Building Development comprising 57 units
Street Address	Lot 3 DP 271187 and SP98192 No. 9 Spurway Drive, Norwest
Applicant/Owner	Sekisui House Australia Pty Ltd / SH Orchards Pty Ltd and Owners of Strata Plan 98192
Consultants Town Planner: Architect: Landscape Architect: Engineering: Surveyor: Acoustic: Traffic: Quantity Surveyor: Contamination: Geotechnical: Access: BCA:	 Dowling Urban Rothe Lowman Site Image Northrop LTS Lockley Acoustic Logic Varga Traffic Planning Rider Levett Bucknall SLR Global Environmental Solutions and EI Australia Asset Geotechnical Morris Goding Vic Lilli
Date of DA lodgement	14 June 2019
Number of Submissions	1
Recommendation	Approval subject to conditions
Regional Development Criteria (Schedule 7 of the SEPP (State and Regional Development) 2011	State Environmental Planning Policy (State and Regional Development) 2011 Part 4 Clause 21 - The site is subject to a Concept masterplan determined by the Regional Planning Panel
List of all relevant s4.15(1)(a) matters	EPIs: • State Environmental Planning Policy (State and Regional Development) 2011 • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy No. 55 – Remediation of Land • State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development • Sydney Regional Environmental Plan No 20—Hawkesbury-Nepean River • The Hills Local Environmental Plan 2019 – See discussion relating to The Hills LEP 2012 under “Matters for Consideration” Draft EPIs: • Draft Environment SEPP Relevant development control plan • The following sections of The Hills DCP 2012: o Part B Section 5 – Residential Flat Building o Part C Section 1 – Parking o Part C Section 3 – Landscaping

	○ Part D Section 7 – Balmoral Road Release Area Any relevant planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F: s79C(1)(a)(iv): • Nil Relevant regulations: • Demolition of buildings – *Environmental Planning and Assessment Regulation 2000* - Clause 92(1)(b)
List all documents submitted with this report for the Panel's consideration	• Clause 4.6 variation request • Submission
Clause 4.6 requests	• The Hills Local Environmental Plan (LEP) 2019 • Clause 4.3 Height • Clause 7.11 Residential development yield on certain land • R4 High Density Residential Zone
Summary of key submissions	• Impact on Heritage Trees • Golf Ball Safety
Report prepared by	Robert Buckham Principal Executive Planner
Report date	16 April 2020

Summary of s4.15 matters Have all recommendations in relation to relevant s4.15 matters been summarised in the Executive Summary of the assessment report?	**Yes**
Legislative clauses requiring consent authority satisfaction Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report? *e.g. Clause 7 of SEPP 55 - Remediation of Land, Clause 4.6(4) of the relevant LEP*	**Yes**
Clause 4.6 Exceptions to development standards If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	**Yes**
Special Infrastructure Contributions Does the DA require Special Infrastructure Contributions conditions (S7.24)?	**Yes**
Conditions Have draft conditions been provided to the applicant for comment?	**Yes**

EXECUTIVE SUMMARY

The key issues that need to be considered by the Panel in respect of this application are:

- This application is accompanied by a request to vary development standards pursuant to Clause 4.6 of The Hills Local Environmental Plan. The proposal seeks to vary Clause 4.3 Building Height, and Clause 7.11 which specifies a mix of apartment typologies and parking requirements for the subject development site should it be developed to its maximum yield of 1300 dwellings. These matters have been reviewed holistically for the entire development site under the masterplan approved by the Regional Planning Panel on 11 April 2018. Clause 4.6 variations were prepared for each matter as well as a Floor Space Ratio variation and the Panel found that that the variations could be supported.

- The current proposal is consistent with those variations considered as part of the masterplan and remains satisfactory. Each variation is addressed in detail in this report.

- A variation is proposed to the front setback control within the DCP. The DCP requires a primary front setback for residential flat buildings of 10 metres. The subject development is set back 6 metres to the building. A 6 metre setback is not uncommon to the locality with three approved flat buildings, at No. 38 and 40 Solent Circuit on the southern side of Spurway Drive both having setbacks to 6 metres and directly adjacent to this site at Nos. 11-13 Spurway Drive within the Sekisui Development site.

- The application was notified for a period of 14 days. One submission was received from the Castle Hill Country Club. The issues raised include the impact on the existing trees along the golf course access way and golf ball safety. It is understood the Club has no objection to the provision of the barrier but do not wish to contribute to the cost of its construction. These matters are addressed in this report and it is considered that they do not warrant refusal of the application or amendments to the application.

- The application is consistent with the outcomes approved under the masterplan application relating to the entire development site.

The application is recommended for approval subject to conditions.

DETAILS AND SUBMISSIONS

Owner:	Sekisui House Australia Pty Ltd
Zoning:	R4 High Density Residential RE2 Private Recreation
Area:	4,682m^2
Existing Development:	Vacant
Section 7.11 Contribution	$2,109,094.57
Exhibition:	Not Required
Notice Adj Owners:	14 days
Number Advised:	82
Submissions Received:	1

BACKGROUND

The site was subject to a Planning Proposal to amend the Hills Local Environmental Plan 2012 (10/2013/PLP). Amendment No. 32 for the site was notified on the NSW legislation website (Notification No. 210) on 29 April 2016.

The Hills Local Environmental Plan 2012 was amended as follows:

- Increased the maximum building height from 16 metres to heights ranging between 18 metres and 36 metres;
- Applied a maximum floor space ratio ranging from 1.5:1 to 3.2:1;
- Identified the site as “Area B” within the Key Sites Map; and
- Included a new local provision which ensures that future development on the site does not exceed a yield of 1,300 dwellings and that, in order to achieve this yield, development must comply with Council’s standards for apartment mix, apartment size and car parking.

Associated amendments to The Hills Development Control Plan 2012 (Part D Section 7 – Balmoral Road Release Area) also came into force on 29 April 2016. The amendments will facilitate the upgrade and inclusion of the existing portion of Spurway Drive (currently private) as a public road to connect to the existing planned local road network within the Balmoral Road Release Area (from Windsor Road to Fairway Drive).

A number of Development Applications have been approved on the site they include:

- Development Application 736/2017/JP was approved by the Panel on 11 April 2018 for concept masterplan for the entire development site (refer Attachment 5). The masterplan provided indicative details of each of the future buildings. The masterplan also dealt with impact and off-setting of vegetation across the site. The masterplan identified the staging of the development site including the provision of the eastern and western portions of the Spurway Drive extension.

  The application approved in concept the redistribution of building height and floor space across the site compared to that identified within the LEP amendment. The masterplan provided indicative details of each of the buildings which will be further detailed within future Development Applications. The purpose of this application was to demonstrate how the site will be developed in its entirety and to provide an assessment framework for future detailed development applications for individual buildings.

  The application was accompanied by a request to vary development standards pursuant to Clause 4.6 of The Hills Local Environmental Plan 2012 (LEP). The proposal varied Clause 4.3 Building Height, Clause 4.4 Floor Space Ratio and Clause 7.11 which specifies a mix of apartment typologies and parking requirements for the subject site should it be developed to its maximum yield of 1300 dwellings.

  In summary the variation to height was attributed to three reasons. These included the redistribution of built form on the central northern part of the site, height attributed to an alternate built form provided on the western part of the site to improve the amenity of adjoining land, and design matters in terms of the numbers of storeys identified within the planning proposal, increased floor to ceiling heights, site topography and lift overruns.

  The floor space ratio on the site did not exceed the provisions of the LEP when the site is considered in totality. The variation to FSR was attributed to a redistribution of built form on the central northern part of the site. The additional built form is provided in an area nominated as 1.5:1 FSR. The proposal provides an FSR of 1.58:1. The built form in this area occupies a lesser building footprint than what could otherwise be provided within a compliant scheme, allowing for the retention of more landscaping including Cumberland Plain Woodland vegetation.

  The masterplan also sought a variation to the mix of apartment typologies and car parking. The variations have been assessed and it is considered the proposal provides appropriate amenity for future residents and sufficient parking given the site’s proximity to the future Norwest station. The parking provision exceeds the Road and Maritime Service rates for sites within 800m of a railway station. The site is located approximately 650m walking distance from the future Norwest Station.

In relation to the Clause 4.6 Variations, The Panel determined:

The Panel has considered the applicant's request to vary the development standards contained in The Hills Local Environment Plan 2012 Clause 4.3 relating to height of buildings, Clause 4.4 Floor Space Ratio and Clause 7.11 Residential Development Yield on Certain Land. The Panel considers compliance with the standards would be unreasonable and unnecessary in the circumstances of this case as the variations provide a better design outcome through provision of additional and improved open space, greater retention of significant trees and provides better building relationships to adjoining properties, and will not result in development inconsistent with this locality. The development as designed remains consistent with the underlying intent of the standard and the objectives of the zone.

The Panel is therefore satisfied that the Applicant's clause 4.6 variation requests have adequately addressed the matters required to be demonstrated in clause 4.6 of The Hills LEP 2012 and that the proposed development will be in the public interest because it is consistent with the objectives of the relevant controls and the objectives for development within the R4 zone in which the development is proposed to be carried out.

For the above reasons, the Panel is satisfied that the variations from the LEP development standards are in the public interest.

A 4.55(1A) modification was approved under delegated authority on 21 January 2020 to alter the approved staging of buildings and road construction across the Sekisui development site. Specifically the modification brought forward the construction of the proposed building D3 subject to this application. It should be noted that the sequence of construction of the Spurway Drive road link and dedication will occur sooner than anticipated in the concept consent but not in association with D3 now that it is proposed to be brought forward.

- Development Application 46/2018/JP was approved by the SCCP Panel on 20 December 2018 to construct a 9-13 Storey Residential Flat Building Development comprising three hundred and thirty units (330) with basement parking for 470 vehicles and associated Community Title Subdivision

- Development Application 779/2017/JP was approved by the SCCP Panel on 20 July 2017 to construct two seven-storey residential flat buildings comprising a total of 121 apartments, car parking for 199 vehicles over three levels of basement car park, and subdivision. Some of these spaces are utilised by this development.

- Development Application 417/2018/HC was approved under delegated authority on 16 September 2019 for a pedestrian bridge across Strangers Creek.

- Subdivision and early works Development Application (DA 634/2017/ZB) was approved by Council's Development Assessment Unit on 29 August 2017, which sought to expedite the delivery of utility servicing and local road construction including Spurway Drive, Lucinda Avenue and Horatio Avenue as identified within the Development Control Plan. The application also assessed the deletion of Rosetta Crescent.

- Temporary display suite for the marketing and sales has been constructed fronting Fairway Drive (DA 60/2017/HA). The display suite will be demolished prior to the construction of the final stage of development.

- Consents for the demolition of all structures across the site have been approved across four separate DAs (610/2015/LA, 611/2015/LA, 612/2015/LA and 58/2017/HA).

Note: Council at its meeting of 10 December 2019 considered a report on the outcomes of the public exhibition of a planning proposal (5/2015/PLP), draft development control plan and draft voluntary planning agreement for land at 40 Solent Circuit, Norwest (part Lot 2105 DP1201899) directly to the south of the subject property. The planning proposal would facilitate a mixed use development with 9 towers ranging from 8 to 26 storeys in height and accommodating 864 residential units, 2,500m² of commercial floor space, 1,500m² of retail floor space, a 1,500m² gymnasium and a 500m² childcare centre. Council resolved that the planning proposal be forwarded to the Department of Planning, Industry and Environment for finalisation.

PROPOSAL

The subject site is identified as Stage 3 of the masterplan application as modified (736/2017/JP/A). The site is irregular in shape and will have vehicular access from the extension to Spurway Drive. The site has a total area of 4,682m².

Built Form

The building is eight storeys in height (7 residential storeys) and will contain a total of 57 residential apartments comprising 15 x 1 bedroom, 36 x 2 bedroom, 4 x 3 bedroom and 2 x 4 bedroom units.

Vehicle access will be provided through the existing basement of the residential flat building at Nos. 11-13 Spurway Drive. The three basement levels provide 101 car parking spaces incorporating 89 resident spaces and 12 visitor spaces, including 4 accessible spaces.

Communal open space will be provided primarily on the roof top with 1,248m^2 at ground level and on the roof top. The roof top also contains a swimming pool.

Subdivision

The proposal includes the subdivision of the existing Community Title subdivision to create Lots 5 and 6 for this development and the retained accessway to the adjoining golf course (refer Attachment 13). The subdivision occurs along the zone boundary between the R4 High Density Residential and RE2 Private Recreation zone.

The completed Stage 1 of the community title subdivision created the following.
- Lot 1 – Community Lot
- Lot 2 – Stage 1 Lot (for Strata Subdivision)
- Lot 3 – Residue Lot for Stage 5 (for future Community subdivision)
- Lot 4 – Residue Lot for Stages 2-5 (for future Community subdivision

Since building D3 within this Stage 3 DA will become the next completed phase of development, the next stage of the community title subdivision proposes to re-subdivide Lot 3 to create the following.
- Lot 5 – Lot for Strata Subdivision of Stage 3
- Lot 6 – Accessway to golf course (1,990 m^2 for transfer to Community Assoc.)

The application also includes the provision of a golf ball net on the boundary of the subject site and the golf course. The net has a length of approximately 85 metres and a height ranging from 15m to 25 metres (refer Attachment 10),

ISSUES FOR CONSIDERATION

1. Compliance with The Hills Local Environmental Plan 2019

The DA was lodged under The Hills LEP 2012. On 6 December 2019, The Hills LEP 2012 was amended and renamed Parramatta (former The Hills) Local Environmental Plan 2012. This LEP applies to that part of the City of Parramatta local government area which was previously located within The Hills local government area.

The Hills Local Environmental Plan 2019 came into force on 6 December 2019 and applies to The Hills local government area, including the site of the proposed development.

Clause 1.8A of The Hills LEP 2019 states that:

"If a development application has been made before the commencement of this Plan in relation to land to which this Plan applies and the application has not been finally determined before that commencement, the application must be determined as if this Plan had not commenced."

Nevertheless, the provisions of The Hills LEP 2019 are the same as those contained in the previous The Hills LEP 2012. The only change is the change of name.

a. Permissibility

The land is zoned R4 High Density Residential and RE2 Private Recreation under Local Environmental Plan 2012. The proposed residential flat building is wholly located within land zoned R4 High Density Residential and is permissible in the zone. The existing driveway to the Castle Hill Country Club is located within the land zoned RE2 Private Recreation and is only proposed to be resealed under this application.

The proposed golf nets are located on land zoned RE2 Private Recreation and is ancillary to the golf course which would be defined as a recreation facility (outdoor), which is a permitted use in the zone.

b. Zone Objectives

The part of the site subject to the residential flat building is zoned R4 High Density Residential under The Hills LEP 2019. The objectives of the zone are:

<u>R4 High Density Residential Objectives</u>

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To encourage high density residential development in locations that are close to population centres and public transport routes.*

The proposal is considered to be consistent with the stated objectives of the zone, in that the proposal will provide for a land use to meet the needs of the surrounding residents and is also considered to provide an alternative housing option for future residents.

As such the proposal is considered satisfactory in respect to the LEP 2019 objectives.

c. Development Standards

The following addresses the principal development standards of the LEP:

CLAUSE	REQUIRED	PROVIDED	COMPLIES
4.3 Height	21 metres	28.9 metres	No
4.4 Floor Space Ratio	1.5:1 (7,023m^2)	1.32:1 (6,178m^2)	Yes
4.6 Exceptions to development standards	Exceptions will be considered subject to appropriate assessment.	Variations proposed to the LEP are addressed below.	Yes
7.11 Residential development yield on certain land	Where development exceeds 600 dwellings certain the development must provide a specific mix, unit sizes and parking.	A total of 451 dwellings are approved and 57 dwellings proposed as part of this application (508 dwellings in total). This Clause has been addressed given the development site will exceed 600 dwellings under future applications	NA, however addressed below.

d. Variation to Height

LEP 2012 limits the height of the development site to 21 metres. The proposal has a maximum height of 28.9 metres therefore a variation of 7.9 metres or 37.6% is sought:

The applicant has provided a Clause 4.6 Variation which is provided at Attachment 12.

Clause 4.6 Exceptions to Development Standards states:

(1) The objectives of this clause are as follows:

- *(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
- *(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.

(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- *(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
- *(b) that there are sufficient environmental planning grounds to justify contravening the development standard.*

(4) Development consent must not be granted for development that contravenes a development standard unless:

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

(b) the concurrence of the Secretary has been obtained.

(5) In deciding whether to grant concurrence, the Secretary must consider:

(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and

(b) the public benefit of maintaining the development standard, and

(c) any other matters required to be taken into consideration by the Secretary before granting concurrence.

(6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:

(a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or

(b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.

(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).

(8) This clause does not allow development consent to be granted for development that would contravene any of the following:

(a) a development standard for complying development,

(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,

(c) clause 5.4,

(ca) clause 6.1 or 6.2,

(cb) clause 7.12.

In determining the appropriateness of the variation request a number of factors identified by the Applicant have been taken into consideration to determine whether the variation is supportable in this instance. They include:

- The development is consistent with the objectives of the development standard as provided in Clause 4.3(1) of THLEP 2012.
- The proposal is consistent with the approved Masterplan.
- The proposed development seeks to vary the maximum building height controls for the site on the premise that the development is consistent with the number of storeys as intended.
- The scale and mass of the buildings is compatible with the established built form within the immediate context of the site.
- The proposed built form responds to the topographical constraints of the site.

- The proposal has been designed to comply with the floor to ceiling height requirements specified in the Apartment Design Guide.
- The massing of the building minimises overshadowing impacts on neighbouring buildings to the south.

Comment: The development has been designed to provide a built form outcome that responds to the opportunities and constraints of the site. The development facilitates higher densities close to the Norwest station and centre.

The site was identified with the planning proposal to cater for 6-12 storeys and the proposal is generally consistent with these outcomes. The variations to height are generally in response to providing alternate planning outcomes that lessen impacts on adjoining properties. In both instances greater separation and open space is provided adjacent to the boundary in excess of that required under the DCP with compliant schemes.

In summary, the applicant has undertaken a solar analysis to quantify the impact of the developments adjacent to the development site. This development does impact solar access to the adjoining development at Nos 11-13 Spurway Drive, however it is considered that impacts relating to solar access are reasonable and do not warrant any further amendments to the south-west and south of the site.

In addition to the matters above it is noted that building height and number of storeys identified in the Planning Proposal was based on a floor to floor height of 3 metres. The masterplan proposal exceedance is also attributed to site topography, lift over runs and minimum floor to ceiling heights in the ADG of 3.1 metres.

Specifically, in relation to recent judgments of the Land and Environment Court, for the reasons identified in this report and the Applicant's Clause 4.6 Variation Request, it is considered that the variation can be supported as:

- The Applicant's request is well founded;
- The proposed variation results in a development that is consistent with the objectives of Clause 4.3 Height of Building and the R4 High Density zone objectives;
- Compliance with the standard is unnecessary or unreasonable in this instance; and
- The proposal results in a better planning outcome as it provides for additional and improved open space, greater retention of significant trees and a better building relationship to adjoining properties. The increased height also facilitates increased floor to ceiling heights to increase the amenity of future residents.

It is also noted that in accordance with the Departments Circular PS 18-003 that Director General's concurrence can be assumed in respect of any Environmental Planning Instrument that adopts Clause 4.6 Exceptions to Development Standards of the Standard Instrument or a similar clause.

e. Variation to Clause 7.11 - Residential development yield on certain land

Clause 7.11 of the THLEP 2012 includes requirements specific to the subject site. The clause enables the consent authority to grant consent to the erection of residential flat buildings with a maximum of 1,300 dwellings. The clause requires that where more than 600 dwellings are proposed, the development must provide a specific mix, unit sizes and parking. The proposal is the third stage of development on the site. In addition to the approved stage 1 development (121 units) and stage 2 development (330 units), this development (57 units), development on the site has not yet exceed 600 dwellings (508 units); however it formed part of a master planned outcome considered under the masterplan application (736/2017/JP) that will comprise 1,300 dwellings once fully developed. The clause in its entirety states:

"(1) The objectives of this clause are as follows:

(a) to ensure the provision of a mix of dwelling types in residential flat buildings, providing housing choice for different demographics, living needs and household budgets,
(b) to ensure that development for residential flat buildings does not place an unreasonable burden on the provision of services, facilities and infrastructure in the area to which this clause applies,
(c) to provide opportunities for suitable housing density that is compatible with existing development and the future character of the surrounding area,
(d) to promote development that accommodates the needs of larger households, being a likely future residential use.

(2) This clause applies to land identified as "Area B" on the Key Sites Map.

(3) The consent authority may consent to the erection of residential flat buildings on the land containing a maximum of 1,300 dwellings.

(4) If development under this clause will result in no more than 600 dwellings in residential flat buildings, development consent may be granted for the development only if the height of each residential flat building does not exceed 16 metres.

(5) If development under this clause will result in more than 600 dwellings in residential flat buildings, development consent may be granted for the development only if:

(a) no more than 25% of the total number of dwellings (to the nearest whole number of dwellings) forming part of the development are studio or 1 bedroom dwellings, or both, and
(b) at least 10% of the total number of dwellings (to the nearest whole number of dwellings) forming part of the development are 3 or more bedroom dwellings, and
(c) the development comprises the following:
(i) Type 1 apartments—up to 30% of the total number of dwellings (to the nearest whole number of dwellings), and
(ii) Type 2 apartments—up to 30% of the total number of dwellings (to the nearest whole number of dwellings), and
(iii) Type 3 apartments, and
(d) the following minimum number of car parking spaces are provided in the development:
(i) for each 1 bedroom dwelling—1 car parking space, and
(ii) for each 2 or more bedroom dwelling—2 car parking spaces, and
(iii) for every 5 dwellings—2 car parking spaces, in addition to the car parking spaces required for the individual dwelling.

(6) In this clause:

***Type 1 apartment** means:*
(a) a studio or 1 bedroom apartment with an internal floor area of at least 50m^2 but less than 65m^2, or
(b) a 2 bedroom apartment with an internal floor area of at least 70m^2 but less than 90m^2, or
(c) a 3 or more bedroom apartment with an internal floor area of at least 95m^2 but less than 120m^2.
***Type 2 apartment** means:*
(a) a studio or 1 bedroom apartment with an internal floor area of at least 65m^2 but less than 75m^2, or
(b) a 2 bedroom apartment with an internal floor area of at least 90m^2 but less than 110m^2, or

(c) a 3 or more bedroom apartment with an internal floor area of at least 120m^2 but less than 135m^2.

***Type 3 apartment** means:*

(a) a studio or 1 bedroom apartment with a minimum internal floor area of 75m^2, or

(b) a 2 bedroom apartment with a minimum internal floor area of 110m^2, or

(c) a 3 or more bedroom apartment with a minimum internal floor area of 135m^2.

***internal floor area** does not include the floor area of any balcony."*

The applicant proposes to vary the unit sizes and parking requirements of the Clause by way of a Clause 4.6 Variation. This is addressed below.

As identified above, Clause 7.11 of the THLEP 2012 includes requirements specific to the subject site. The clause enables the consent authority to grant consent to the erection of residential flat buildings with a maximum of 1,300 dwellings across the site, however if development will results in more than 600 dwellings, the development must provide a specific mix, unit sizes and parking. As identified above this clause is not yet activated; however the Applicant addressed this matter as part of the approved masterplan. This application remains consistent with the variation approved under the masterplan however has been addressed in detail as part of this application.

In summary the following tables detail the applicable planning controls:

Apartment Mix	LEP Development Standard	Proposal	Compliance
One Bedroom	25% (Maximum)	**26.3%**	No
Three/Four Bedroom	10% (Minimum)	10.5%	Yes

Apartment Typology	LEP Development Standard	Proposal	Compliance
Type 1 Apartments	<30%	**30%**	No
Type 2 Apartments	<30%	28%	Yes
Type 3 Apartments	N/A	42%	N/A

Parking Type	LEP Development Standard	Proposed Rate	RMS Requirements	LEP Compliance
1 Bedroom	1 car space	1 car space	0.6	Yes
2 Bedroom	2 car spaces	**1.6 car spaces**	0.9	No
3 & 4 Bedroom	2 car space	2 car spaces	1.40	No
Visitor	2 spaces per 5 units	**1 space per 5 units**	1 space per 5 units	No

Clause 4.6 Exceptions to Development Standards is quoted in this report.

The applicant has provided a Clause 4.6 Variation which is provided at Attachment 12.

<u>Apartment Mix</u>

A minor variation is proposed to the number of one bedroom units. The subject development provides 26.3% of 1 bedroom units rather than 25%. Overall are larger type 3 apartments are provided to offset the altered mix.

<u>Apartment Size</u>

The proposed development will result in 30% of apartments being classified as Type 1 under the sizes specified in Clause 7.11(5). While the required typology mix of Type 1 units is 30% not less than 30%, the intent of the clause is met.

The applicant considers that the proposed apartment sizes, which are generally much larger than ADG requirements are appropriate and outline that residents will also have access to a range of high quality facilities. They feel the extent of facilities provided will set a new standard for the amenity of developments in the surrounding area and will promote social interactions and lifestyle choices for future residents.

The objectives of the Clause to provide a mix of dwelling types, providing housing choice for different demographics, living needs and household budgets, as well as to promote development that accommodates the needs of larger households, are maintained. The extent of variation to the apartment sizes (between 4 - 8m^2) is minimal and considered reasonable given the facilities and open space which will be provided.

Car Parking

The development provides a total of 101 car parking spaces within the basement carpark. Based on strict compliance with the car parking rates specified under Clause 7.11, the proposal would require 118 spaces.

While the development will provide 17 fewer basement spaces, the car parking provided is in excess of the 69 spaces specified by the RMS' *Guide to Traffic Generating Development* for developments within 800 metres of a railway station. The subject site is within 650m walking distance to Norwest Station.

To support the reduction in parking the applicant has proposed the use of car share vehicles from the outset of the development. Four vehicles will be provided across the development site.

The application also includes the reduction in visitor parking to 1 per 5 apartments resulting in 12 visitor spaces being proposed.

The variation to the car parking development standard is consistent with the masterplan approval and the earlier built form approvals for Stage 1 and Stage 2. The variation is considered reasonable given the proposed provision is far in excess of the RMS requirements and given the car-share scheme proposed.

Specifically in relation to recent judgments of the Land and Environment Court, for the reasons identified in this report it is considered that the variation can be supported as:

- The Applicant's request is well founded;
- The proposed variation results in a development that is consistent with the objectives of Clause 7.11 and the R4 High Density zone objectives;
- Compliance with the standard is unnecessary or unreasonable in this instance; and
- The proposal results in a better planning outcome as it will provide for dwellings that are well serviced and meet the demographics of the Shire and encourage alternative transport use including the use of the north-west metro whilst still meeting the needs of residents and visitors.

It is also noted that in accordance with the Departments Circular PS 18-003 that Director General's concurrence can be assumed in respect of any Environmental Planning Instrument that adopts Clause 4.6 Exceptions to Development Standards of the Standard Instrument or a similar clause.

f. 7.7 Design Excellence

Clause 7.7 of the LEP seeks to deliver a high standard of architectural and urban design and applies to development involving the erection of a new building or external alterations to an existing building if the building has a height of 25 metres or more. The Clause also prescribes that development consent must not be granted to development to which this clause applies unless the consent authority considers that the development exhibits design excellence. In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters:

(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,
(b) whether the form, arrangement and external appearance of the development will improve the quality and amenity of the public domain,
(c) whether the development detrimentally impacts on view corridors,
(d) whether the development detrimentally impacts on any land protected by solar access controls established under a development control plan,
(e) the requirements of any development control plan to the extent that it is relevant to the proposed development,
(f) how the development addresses the following matters:

- *(i) the suitability of the land for development,*
- *(ii) existing and proposed uses and use mix,*
- *(iii) heritage issues and streetscape constraints,*
- *(iv) the relationship of the development with other development (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
- *(v) bulk, massing and modulation of buildings,*
- *(vi) street frontage heights,*
- *(vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
- *(viii) the achievement of the principles of ecologically sustainable development,*
- *(ix) pedestrian, cycle, vehicular and service access, circulation and requirements,*
- *(x) the impact on, and any proposed improvements to, the public domain,*
- *(xi) the configuration and design of public access areas, recreation areas and communal open space on the site and whether that design incorporates exemplary and innovative treatments,*

(g) the findings of a panel of 3 or more persons that has been convened by the consent authority for the purposes of reviewing the design excellence of the development proposal.

Comment:
The design excellence of the proposal was considered at a Design Excellence Panel meeting convened by Council and held on 14 August 2019. The meeting minutes of the Design Excellence Panel are included at Attachment 11. The comments made to the application included:

- *The location of condenser units on balconies should be avoided. Opportunities to screen or incorporate them into dedicated plant spaces on the roof or individual floors is preferred, to maximise useability of balcony spaces. Consideration should also be given to the opportunity for BBQs and outdoor cooking to occur on all balconies within the development, including those where in-built facilities are not proposed.*

- *The Panel raised concern with the proximity of the private driveway along the north-eastern edge of the building, however noted the constraints arising from the retention of*

heritage trees, as well as the proposed landscaping treatments and level difference between the terrace spaces and the road provide intended to ensure satisfactory amenity for future residents.

- *The Panel noted the proposed texture of external precast masonry finishes. The strong profile and contrasting texture of these spandrel and infill panels is essential to relieving the extent of solid areas across the facades and reducing the risk of the building design appearing "dated".*
- *There are inconsistencies between the photomontages and floor plans (living room radius, extent of glazing and internal column). These inconsistencies must be resolved and it is the view of the Panel that the internal column should be integrated into the facade to ensure that the useable, functional space is maximised for each unit.*
- *The applicant should consider further opportunities to allow natural light into all corridors on all levels from at least two locations. The Panel noted the rationale behind limiting windows/outlook from certain areas on the western side of the building, to minimise privacy impacts to the existing building to the west.*
- *The Panel encouraged the applicant to further consider and refine the layout of the units to ensure that all spaces are optimised in terms of functionality and amenity. The project would benefit from an interior design layout review taking into account the capacity to properly furnish primary/main living spaces. Consideration should be given to relationships between living/kitchen/dining areas and bathroom and bedroom doorways. Noting that families are likely to occupy 3 bedroom units, multiple living spaces may provide better amenity and functionality compared to single living areas of a larger scale.*

In relation to comments above the following comments are provided in response to the matters raised above by the panel;

- *Condenser units for the premium apartments will be located in a dedicated plant space on the roof. Where located on balconies, condensers are either located in corners or screened to limit visibility.*
- *Free standing BBQs can be accommodated on all balconies and have been tested to inform gas bayonet locations, which will be provided on all balconies.*
- *Planters along the private driveway have been increased to provide greater visual screening to the apartments, and the terraces have been rationalised to allow for more substantial planting. Additional privacy is provided through the height difference between the residential level and adjacent footpath, in conjunction with a solid balustrade and deeper terraces.*
- *The vertical profiled cladding is integral to the design, and materiality is being explored to ensure a quality finish to the façade. The intention at this stage is for a patterned concrete façade throughout.*
- *The corner columns have been revised to be integrated within the façade rather than free standing within the unit. Photomontages have been updated to show the amended structural design and extent of solidity in the facade.*
- *A review of the plans was undertaken to test a third corridor opening to the southern end of the corridor. The corner unit (Type F) needs north facing windows to maintain solar access, which creates a cut in the form where the corridor stops short of the living room glazing. The smooth, singular forms are integral to the Architectural design concept and the preference is to maintain this language while minimising privacy impacts to the adjoin apartments given natural light is provided to the corridor at other points.*

- *A detailed review of the unit layouts and functionality is underway in coordination with the sales and marketing team. With their advice in the design phase, a decision was made to provide more generous primary living spaces to the corner three bedroom units, rather than multiple smaller living areas. The central three bedroom units offer a secondary living area, providing a diverse mix of unit types to the market.*

The Design Excellence Panel concluded;

The Panel have reviewed the plans and documentation provided and, subject to adjustments in response to the comments above, considers that the proposal exhibits design excellence. No further advice from the Panel is required unless the consent authority considers further advice necessary.

Based on the comments provided by the Panel and the response provided by the Applicant, it is considered that the proposal exhibits design excellence and satisfies Clause 7.7 of the LEP.

g. Heritage Conservation

Clause 5.10 of the LEP requires that the consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned.

Under Schedule 5 of The Hills Local Environmental Plan, the site is identified as containing Local Item 25 known as "Avenue of trees leading to Castle Hill Country Club".

Relevant to this Clause, the application is accompanied by the following supporting documentation:

- Statement of Heritage Impact (prepared by Comber Consultants, October 2016)
- Landscape Plan (prepared by Site Image Landscape Architects, June 2019)
- Aboricultural Impact Assessment (prepared by Tree Wise Men, May 2017)

The proposed residential flat building poses a potential impact to the heritage item in terms of the adequacy of protection of the trees during construction as well as their ongoing protection and recognition as an item of heritage significance.

The Heritage Impact Statement prepared by Comber Consulting relates to the entire site including reconstruction of Spurway Drive and considers the impact of the proposal and suggests mitigation measures be utilised to ensure the ongoing protection and recognition of The Avenue of Trees. Relevant measures are listed below:

- Their visual primacy should be maintained, with consideration to maintaining the character and visual line of the trees, with any design and/or height of new buildings.
- The colour palette of the towers should not clash with the muted greens and greys of Spurway Drive
- An interpretative panel should be placed on the verge to identify the significance of the trees
- The trees should be adequately protected during demolition, excavation and construction so as to ensure that physical impact, dusting and lowering of the water table does not occur.
- There should be a program to "fill in" the missing gaps in the arcade of trees
- There should be a horticultural program to amplify the plantings so that they are progressively replaced and do not die out.

These criteria are considered to be adequate in addressing the heritage significance of the trees and have primarily been addressed as part of the underlying masterplan application and civil works application that deals with the reconstruction of Spurway Drive.

As part of this application there is no direct impact on the trees located on Lot 3. The location of the golf club driveway has been maintained in its current location to ensure any impact on the trees was minimised. No trees are required to be removed. Prior to lodging the subject application, the applicant had sought to relocate the driveway to the northern side of the trees closer to the golf club away from the subject building as identified in the masterplan. A number of conditions have been recommended in relation to tree protection. Refer Condition Nos. 39, 40, 41 and 42.

It is considered that the measures proposed in both the Tree Protection Plan and the Heritage Impact Statement adequately address the protection of the trees during construction as well as their ongoing protection and recognition as an item of heritage significance.

h. Other Provisions

The proposal has been considered against the relevant provision of the SEPP. Specific regard has been given to Clauses:

- 5.9 Preservation of trees or vegetation;
- 6.2 Public utility infrastructure; and
- 7.2 Earthworks

The proposal has been considered against these provisions and satisfies each of the standards and objectives relating to each of the clauses

2. State Environmental Planning Policy No. 55 Remediation of Land

This Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspects of the environment.

Clause 7 of the SEPP states:-

1) A consent authority must not consent to the carrying out of any development on land unless:

(a) it has considered whether the land is contaminated, and
(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Comment:
A Stage 2 Site Investigation been undertaken by EI Australia. The investigation found that the potential for low-level and isolated contamination to be present on the site, as a result of past and present land use activities, is considered to be low to moderate.

However, given the extent of the excavations and the nature of landscaping works anticipated with the proposed development, any contamination that may be present on site is likely to be removed offsite or covered by the landscaped material.

The investigation also found that potential asbestos impacted soil (if any) is likely to be excavated as part of the basement excavation, cleared as part of the site clearance work or covered with landscaping material as part of the proposed development. As such, asbestos contamination, if present, is unlikely to pose an unacceptable risk to future site users. A condition is recommended that requires all asbestos material to be removed from the site.

In this regard, it is considered that the site is suitable for the proposed development with regard to land contamination and the provisions of SEPP 55.

3. Compliance with State Environmental Planning Policy (SEPP) No. 65 – Design Quality of Residential Apartment Development

The required Design Verification Statement was prepared by Ben Pomroy registration number 7918 of Rothe Lowman Architects.

The Development Application has been assessed against the relevant design quality principles contained within SEPP 65 as follows:

Principle 1: Context and neighbourhood character
The proposal is compatible with the existing and desired context and neighbourhood character of the precinct. The proposal seeks to respond to and contribute to the context of Norwest both in its present state as well as the desired future character.

The locality is comprised of a mixture of existing residential buildings, low to medium and high density, multi-residential and single dwellings, with the future vision of the area zoned to encourage an increased scale of high density residential development adjacent to the site.

Principle 2: Built form and scale
The proposal is consistent with the requirements of the Hills Council LEP, and is appropriately articulated to minimise the perceived scale. Generous rear setback, separation and variety along the elevations and layering of façade elements, assist in creating expressive street frontages and enhancing the developments relationship with the public domain.

Principle 3: Density
The subject proposal provides for 57 dwellings which will from part of 1300 dwellings across the development site. The density complies and is appropriate for the site and precinct.

Principle 4: Sustainability
The design achieves natural ventilation and solar access as required by the Apartment Design Guidelines. The incorporation of insulation will minimise the dependency on energy resources in heating and cooling. The achievement of these goals then contributes significantly to the reduction of energy consumption, resulting in a lower use of valuable resources and the reduction of costs.

Principle 5: Landscape
The landscape plan indicates that all open spaces will be appropriately landscaped with native trees and shrubs to provide a high quality finish. The proposed landscaping integrates with the overall appearance of the development.

Principle 6: Amenity
The building design has been developed to provide for the amenity of the occupants as well as the public domain. The proposed units are designed with appropriate room dimensions and layout to maximise amenity for future residents. The proposal incorporates good design in terms of achieving natural ventilation, solar access and acoustic privacy. All units incorporate balconies accessible from living areas and privacy has been achieved through appropriate design and orientation of balconies and living areas. Storage areas and laundries have been provided for each unit. The proposal would provide convenient and safe access to lifts connecting the basement and all other levels.

Principle 7: Safety

The development has been designed with safety and security concerns in mind. The common open spaces are within direct view of occupants to allow passive surveillance. Open spaces are designed to provide attractive areas for recreation and entertainment purposes. These open spaces are accessible to all residents and visitors whilst maintaining a degree of security. Private spaces are clearly defined and screened.

The NSW Police have reviewed the Development Application and outlined a number of CPTED recommendations. Compliance with NSW Police recommendations will be recommended as a condition of consent.

Principle 8: Housing diversity and social interaction

The location of this development provides dwellings within a precinct that will provide in the future, a range of support services and provides a reasonable mix of units in terms of size and number of bedrooms.

Principle 9: Aesthetics

The proposal integrates a number of recesses and projections into the facades of the structure to articulate the overall mass and form into smaller segments. The bulk of the overall building works and height is reduced by the articulation of the facades, creating smaller segments in order to minimise the overall bulk and scale of the development. The design is modern in style and appropriate for the area.

Apartment Design Guidelines

In accordance with Clause 30(2) of SEPP 65, a consent authority in determining a Development Application for a residential flat building is to take into consideration the Apartment Design Guidelines. The following table is an assessment of the proposal against the Design Criteria provided in the Apartment Design Guidelines.

Clause	**Design Criteria**	**Compliance**
Siting		
Communal open space	25% of the site, with 50% of the area achieving a minimum of 50% direct sunlight for 2 hours midwinter.	Yes, 26.5% of the development site area (1,243m^2). The communal open space area will receive at least 83% direct sunlight for 2 hours at during midwinter.
Deep Soil Zone	7% of site area. On some sites it may be possible to provide a larger deep soil zone, being 10% for sites with an area of 650-1500m^2 and 15% for sites greater than 1500m^2.	Yes, 35% of the development site area is true deep soil zones as defined within the ADG.
Separation	For habitable rooms, 6m for 4 storeys, 9m for 5-8 storeys and 12m for 9+ storeys.	Yes
Visual privacy	Visual privacy is to be provided through use of setbacks, window placements, screening and similar.	Yes Greater than 18 metres provided

		between buildings and greater than 9 metres to adjoining allotments. The visual privacy of the development has been duly considered with the placement of windows and balconies. Separation distances between habitable / non habitable spaces are considered to be adequate. Screening devices set at oblique angles have been incorporated to minimise direct overlooking. The proposed development is considered to afford a reasonable degree of privacy for future residents and adjoining properties.
Carparking	Carparking to be provided based on proximity to public transport in metropolitan Sydney. For sites within 800m of a railway station or light rail stop, the parking is required to be in accordance with the RMS Guide to Traffic Generating Development which is: Metropolitan Sub-Regional Centres: 0.6 spaces per 1 bedroom unit. 0.9 spaces per 2 bedroom unit. 1.40 spaces per 3 bedroom unit. 1 space per 5 units (visitor parking).	Yes The site is located within 800m of the future Norwest Station. 68.2 Spaces would be required utilising the RMS rate, 101 spaces are provided
Designing the Building		
Solar and daylight access	1. Living and private open spaces of at least 70% of apartments are to receive a minimum of 2 hours direct sunlight between 9am and 3pm midwinter. 2. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	Yes. The proposed development will achieve two hours solar access for 75.4% of apartments between 9am and 3.00pm. No. There are 21% (12 of 57) of apartments that will not receive any solar access between 9.00

		am and 3.00 pm. Refer comments below.
Natural ventilation	1. At least 60% of units are to be naturally cross ventilated in the first 9 storeys of a building. For buildings at 10 storeys or greater, the building is only deemed to be cross ventilated if the balconies cannot be fully enclosed. 2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	Yes. A total of 61.4% of units will meet the cross ventilation requirements or can be naturally ventilated. Yes The maximum overall depth is 18 metres for a cross through apartment.
Ceiling heights	For habitable rooms – 2.7m. For non-habitable rooms – 2.4m. For two storey apartments – 2.7m for the main living floor and 2.4m for the second floor, where it's area does not exceed 50% of the apartment area. For attic spaces – 1/8m at the edge of the room with a 30^0 minimum ceiling slope. If located in a mixed use areas – 3.3m for ground and first floor to promote future flexible use.	Yes Floor to ceiling height approx. 2.7 metres for all apartments. NA
Apartment size	1. Apartments are required to have the following internal size: Studio – $35m^2$ 1 bedroom – $50m^2$ 2 bedroom – $70m^2$ 3 bedroom – $90m^2$ The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal areas by $5m^2$ each. A fourth bedroom and further additional bedrooms increase the minimum internal area by $12m^2$ each. 2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	Yes 1 bedroom – 54-$71m^2$ 2 bedroom – 76-$109m^2$ 3 bedroom – 120-$161m^2$ Where additional bathrooms are proposed, an additional $5m^2$ has been provided. Yes – $193m^2$ All habitable rooms have windows greater than 10% of the floor area of the dwelling.
Apartment layout	Habitable rooms are limited to a maximum depth of 2.5 x the ceiling height.	Yes

	In open plan layouts the maximum habitable room depth is 8m from a window. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow layouts	All rooms comply.
Balcony area	The primary balcony is to be: Studio – 4m^2 with no minimum depth 1 bedroom – 8m^2 with a minimum depth of 2m 2 bedroom – 10m^2 with a minimum depth of 2m 3 bedroom – 12m^2 with a minimum depth of 2.4m For units at ground or podium levels, a private open space area of 15m^2 with a minimum depth of 3m is required.	Yes All balcony sizes and depths comply.
Common Circulation and Spaces	The maximum number of apartments off a circulation core on a single level is eight For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Yes NA
Storage	Storage is to be provided as follows: Studio – 4m^3 1 bedroom – 6m^3 2 bedroom – 8m^3 3+ bedrooms – 10m^3 At least 50% of the required storage is to be located within the apartment.	Yes Each unit contains the minimum storage area.
Apartment mix	A variety of apartment types is to be provided and is to include flexible apartment configurations to support diverse household types and stages of life.	Yes The apartment mix is satisfactory.

Solar and Daylight Access

Objective 4A-1 of the Apartment Design Guide is; *"To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space".* The design criteria includes that a maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm mid-winter. There are 21% (12 of 57) of apartments that will not receive any solar access between 9.00 am and 3.00 pm.

The applicant has provided the following justification;

"A limited number of apartments have an orientation to the south due to the primary massing strategy and orientation of the site. Careful planning allows for all other units on the site to get 2 hours solar access, and the units with no sun is limited to 2 per floor from ground level – level 5 (21%). The proposal is consistent with the number of units with no sun in the masterplan DA. These units however receive solar access from September to March."

Comment
The Masterplan application for the site identified that the subject building, which then included 56 units would not achieve compliance with the subject provision however would comply across the whole site. The masterplan identified that 17 of 56 units, approximately 30%, would not achieve 2 hours of solar access between 9am and 3pm. The subject proposal has been improved to 12 of 57 units, approximated 21%.

It is also noted that the subject building shares a common basement with the building at Nos. 11-13 Spurway Drive. That building provides for 121 units with only 10% of the units (12 units) not receiving 2 hours of sunlight between 9am and 3pm.

It is considered that given the orientation of the site, and its relationship with the adjoining build, that the limited number of units that do not receive solar access for 2 hours in mid-winter is reasonable in this instance.

4. Compliance with The Hills Development Control Plan 2012

The proposal has been against the relevant provisions of The Hills Development Control Plan 2012 noting that some standards such as density, number of storeys, unit typology and parking are superseded by the site specific provisions in the LEP.

The proposed development achieves compliance with the relevant requirements of the development controls with the exception of the following:

DEVELOPMENT CONTROL	THDCP REQUIREMENTS	PROPOSED DEVELOPMENT	COMPLIANCE
Part B Section 5 Residential Flat Buildings - Clause 3.3(2)(a)	Front Setback 10m	Setback to Spurway Drive 6m to facade	No

a) Front Setback

The DCP requires a front setback for residential flat buildings of 10 metres. The subject development is set back 6 metres to the building façade and a cantilevered balcony set back 5.3 metres.

The relevant objectives of this clause of the DCP are:

(i) To provide setbacks that complement the setting and contributes to the streetscape and character of the street while allowing flexibility in siting of buildings;

(ii) To ensure that the space in front of the building is sufficient to permit landscaping that will complement the building form and enhance the landscape character of the street.

(iii) Side and rear setbacks are to be proportioned to the slope of the site having regard to the height and relationship of the buildings on adjoining properties.

(iv) The setbacks of proposed buildings are to minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.

(v) To ensure placement of buildings takes into account the retention and protection of existing trees.

The applicant has provided the following justification for the variation.

"The proposal has variable setbacks to Spurway Drive which has been reduced to 6 to 8 m from the 10m standard to create a greater rear setback for the linear park and be consistent with the setback for buildings D1 and D2.
The adopted setback meets the objectives of the standard and will provide adequate solar access, privacy and building separation to the adjoining site to the south as shown on the shadow analysis plans TP05.10-11.
In addition, the building will be screened by street trees within the road reserve and landscaping of the setback areas to provide an appropriate aesthetic compatible with the more urban desired future character of the locality".

Comment:

The masterplan consent associated with this development application sought to establish a 6m setback along Spurway Drive. This was not supported under the masterplan at that time. The panel determined that all future built form applications east of Stranger's Creek shall address the Development Control Plan and justify any setback encroachments. The development site is located on the future Spurway Drive extension. The locality will comprise a number of residential flat buildings on both the northern and southern sides of Spurway Drive.

A 6 metre setback is not uncommon to the locality with three approved flat buildings, at No. 38 and 40 Solent Circuit on the southern side of Spurway Drive both having setbacks to 6 metres and directly adjacent to this site at Nos 11-13 Spurway Drive within the Sekisui Development site.

In this regard, it is considered that the site is appropriate in this instance and the variation to the front setback control is supported.

b) Golf Ball Safety

Clause 9.2 of Part D of Section 7 – Balmoral Road Release Area of the Hills Shire Development Control Plan requires;

"Any development proposed on land immediately adjoining the existing golf course shall address the issue of safety (golf balls). This applies to all land within a development regardless of whether or not that land will become public land as a result of that development."

In response to a request for further information, the applicant has undertaken a detailed assessment in relation to golf ball safety and subsequently proposed a golf ball net on the boundary of the subject site and the golf course. The net has a length of approximately 85 metres and a height ranging from 15m to 25 metres (refer Attachments 9 and 10). Conditions are recommended requiring detailed plans of the nets be submitted for the review and approval prior to the issue of a Construction Certificate and that the net be installed prior to the issue of an Occupation Certificate.

5. Issues Raised in Submissions

The application was notified and one submission was received. A summary of the submission is detailed below:

ISSUE/OBJECTION	COMMENT
While the Club does not object to the development application, we request that a condition of approval be included in any development consent issued by Council to protect Item 125 of the Heritage Items listed in Schedule 5, Environmental Heritage to the Hills Local Environmental	The location of the golf club driveway has been maintained to ensure any impact on the trees was minimised. No trees are required to be removed. Prior to lodging the subject application, the applicant had sought to relocate the driveway to the northern side of the trees closer to the golf club away from the subject building as identified in the

ISSUE/OBJECTION	COMMENT
Plan 2012, being the avenue of trees leading to Castle Hill Country Club to ensure no damage is caused to them during and after completion of the construction work.	masterplan. A number of conditions have been recommended in relation to tree protection. Refer Condition Nos. 39, 40, 41 and 42.
The Club notes that under Clause 9.2 of Part D of Section 7 – Balmoral Road Release Area of the Hills Shire Development Control Plan, Council has set a series of development controls for developers when considering developing land which adjoins the golf course. We note that relevantly, subclause (a) sets out a requirement of the Council for consideration of the issue of safety from golf balls for any development over the adjoining land to the golf course. We consider the comments made in paragraph 4.10.2 of the Statement of Environmental Effects not to be responsive to Clause 9.2 of Part D of Section 7 – Balmoral Road Release Area of the Hills Shire Development Control Plan.	As outlined above, the applicant has undertaken a detailed assessment in relation to golf ball safety and subsequently proposed a golf ball net on the boundary of the subject site and the golf course. The net has a length of approximately 85 metres and a height ranging from 15m to 25 metres (refer Attachments 9 and 10). Conditions are recommended requiring detailed plans of the nets be submitted for the review and approval prior to the issue of a Construction Certificate and that the net be installed prior to the issue of an Occupation Certificate. The golf ball safety report was submitted after the submission was received and it is understood that the applicant and the club have met subsequently to discuss the report and golf ball net. It is understood the Club has no objection to the provision of the barrier but do not wish to contribute to the cost of its construction. Given the barrier is beyond what is regarded as a dividing fence and given its need is generated by this development, the developer will be required to provide it.

NSW POLICE COMMENTS
The NSW Police have reviewed the Development Application and outlined a number of Crime Prevention Through Environmental Design (CPTED) recommendations to ensure that the site is appropriately protected (See Condition No. 5).

SUBDIVISION ENGINEERING COMMENTS
No objections are raised to the proposal subject to conditions.

TREE MANAGEMENT COMMENTS
No objection is raised to the proposal subject to conditions.

HEALTH & ENVIRONMENTAL PROTECTION COMMENTS
No objection is raised to the proposal subject to conditions.

WASTE MANAGEMENT COMMENTS
No objection is raised to the proposal subject to conditions.

RESOURCE RECOVERY COMMENTS
No objection is raised to the proposal subject to conditions.

CONCLUSION
The proposal has been assessed having regard to the provisions of Section 4.15 of the Environmental Planning and Assessment Act, 1979, SEPP 65, SEPP 55, LEP 2012 and The Hills Development Control Plan and is considered satisfactory.

The variations to the LEP Height control and unit mix, size and parking are addressed in the report and are considered satisfactory.

In relation to the Clause 4.6 Variation requests, it is considered that the Applicant's request is well founded, and the proposed variation results in a development that is consistent with the relevant objectives, and compliance with the standard are unnecessary in this instance, and the proposal results in a better planning outcome as outlined in this report.

The issues raised in the submission have been addressed in the report. Further amendment or refusal of the application is not warranted.

Accordingly approval subject to conditions is recommended.

RECOMMENDATION

The Development Application be approved for the reasons listed below and subject to the following conditions:

- The Clause 4.6 Variation requests, are considered be well founded, and the proposed variations result in a development that is consistent with the relevant objectives, and compliance with the standard are unnecessary in this instance, and the proposal results in a better planning outcome as outlined in this report.
- The site is considered suitable for the development.
- The proposal adequately satisfy the relevant state and local planning provisions.
- The proposal will have no unacceptable impacts on the built or natural environments.
- The proposal is in the public interest.

GENERAL MATTERS

1. Development in Accordance with Submitted Plans
The development being carried out in accordance with the following approved plans and details, stamped and returned with this consent except where amended by other conditions of consent.

REFERENCED PLANS AND DOCUMENTS

DRAWING/JOB NO.	DESCRIPTION	SHEET	REVISION	DATE
TP00.10	Site Plan	-	C	18/12/2019
TP00.11	Site Plan Basement 3	-	C	18/12/2019
TP00.12	Site Plan Basement 2	-	C	18/12/2019
TP00.13	Site Plan Basement 1	-	C	18/12/2019
TP00.14	Site Plan Ground	-	C	18/12/2019
TP01.00	Basement 3	-	C	18/12/2019
TP01.01	Basement 2	-	C	18/12/2019
TP01.02	Basement 1	-	C	18/12/2019
TP01.03	Ground	-	C	18/12/2019

TP01.04	Level 1	-	C	18/12/2019
TP01.05	Level 2	-	C	18/12/2019
TP01.06	Level 3	-	C	18/12/2019
TP01.07	Level 4	-	C	18/12/2019
TP01.08	Level 5	-	C	18/12/2019
TP01.09	Level 6	-	C	18/12/2019
TP01.10	Roof Terrace	-	C	18/12/2019
TP01.11	Roof Plan	-	C	18/12/2019
TP02.01	Elevations Sheet 1	-	C	18/12/2019
TP02.02	Elevations Sheet 2	-	C	18/12/2019
TP03.01	Sections	-	A	27/09/2019
TP03.02	Sections	-	A	27/09/2019
SS18-4022	Landscape Coversheet	000	G	30/10/2019
SS18-4022	Landscape Plan Ground	001	J	30/10/2019
SS18-4022	Landscape Plan Ground Floor Common Open Space	101	H	30/10/2019
SS18-4022	Landscape Plan Temporary Spurway Dr Cul-de-sac	102	J	30/10/2019
SS18-4022	Landscape Plan Future Spurway Dr Connection	102B	C	30/10/2019
SS18-4022	Landscape Plan Ground Floor Common Open Space	103	I	30/10/2019
SS18-4022	Landscape Plan Roof	201	H	23/09/2019
SS18-4022	Landscape Details	501	B	27/09/2019
SS18-4022	Landscape Details and Plant Schedule	502	E	30/10/2019
SS18-4022	Landscape Sections	601	D	30/10/22019
SS18-4022	Landscape Sections	602	B	23/09/2019
SS18-4022	Landscape Plan Soil Depths	701	C	30/10/2019

No work (including excavation, land fill or earth reshaping) shall be undertaken prior to the issue of the Construction Certificate, where a Construction Certificate is required.

2. Approved Subdivision Plan

The subdivision component of the development must be carried out in accordance with the approved plan of subdivision prepared by Matthew Graham Smith Drawing 41917–029DP 1-7 except where amended by other conditions of consent.

3. Separate Application for Strata Subdivision

The strata title subdivision of the development is not included. A separate development application or complying development certificate application is required.

4. Provision of Parking Spaces

The development is required to be provided with 101 off-street car parking spaces comprising 89 resident spaces and 12 visitor spaces. These car parking spaces shall be available for off street parking at all times.

5. Compliance with NSW Police Force Requirements

Compliance with the requirements of NSW Police – Local Area Command as outlined in their letter dated 21 August 2019:

Surveillance:

- CCTV coverage is required to be installed to monitor all common areas and entry/exits points. Use of height indicator stickers on entrance/exit doors is required on entry/exit doors.
- Paint the lift shaft points and perimeter walls in the basement white to reflect light.
- Vegetation to be kept trimmed at all times.
- Installation of a security intercom system is required to access the residential parts of the basement car park and main lobbies. Each unit is to contain an intercom system to enable access for visitors to the basement car park and lobby. Security access is to be utilised at the entrance of the basement.

Lighting:

- Lighting is to meet minimum Australian Standards. Special attention is to be made to lighting at entry/exit points from the building, the car park and driveways.

Environmental Maintenance:

- Use of anti-graffiti building materials.
- High fencing during construction is to be used.
- Use of security sensor lights and a security company to monitor the site during construction phase are required.

Access Control:

- Ground level units are required to have upgraded security measures in place such as doors/ windows being alarmed, thickened glass and sensor lights.
- High quality letter boxes that meet AS ISO9001:2008 are required.
- Lift from car park into the residential part of the building to be used with a fob or pin code is required.
- Entry into car park to be secured by a fob, remote/code access and camera are required.
- Ensure improved strength to security roller shutters/garage doors is used.
- Caged storage units are to be built up close to the ceiling with a door with better quality locking mechanism are to be used.
- Fire doors are to be alarmed and a magnetic strip is required so that the door will shut closed.
- External doors that can be used to enter the car park or into the complex are required to have a plate installed to the door.
- On units above ground level, devices are to be fitted to enable windows to be locked at 12.5cm when the devices are engaged

6. External Finishes

External finishes and colours shall be in accordance with the details submitted with the development application and approved with this consent.

7. Planting Requirements

All trees planted as part of the approved landscape plan are to be minimum 75 litre pot size. All shrubs planted as part of the approved landscape plan are to be minimum 200mm pot size. Groundcovers are to be planted at 5/m^2.

8. Acoustic Requirements

The recommendations of the Acoustic Assessment and Report prepared by Acoustic Logic Pty Ltd, referenced as 20190350.1/0204A/R0/TA, dated 2 April 2019 and submitted as part of the Development Application are to be implemented as part of this approval.

9. Control of early morning noise from trucks

Trucks associated with the construction of the site that will be waiting to be loaded must not be brought to the site prior to 7am.

10. Control of Noise from Trucks

The number of trucks waiting to remove fill from the site must be managed to minimise disturbance to the neighbourhood. No more than one truck is permitted to be waiting in any of the streets adjacent to the development site.

11. Ventilation for Basement Carpark

The basement car park is to be provided with ventilation in accordance with Australian / New Zealand Standard AS/NZS 1668.2 2012.

The exhaust from the basement carpark shall be positioned so as to not cause a nuisance due to odour or noise to an occupier of any residential premises.

12. Property Numbering and Cluster Mail Boxes for Residential Flat Buildings

The responsibility for property numbering is vested solely in Council under the *Local Government Act 1993*

The property address for this development is: - **9 Spurway Drive, Norwest.**

Approved unit numbering is as per plans marked up within consent documentation; and as follows:

Level

Ground	G01 – G08 (G08 not required for Lobby Lounge if part of SP common property)
One	101 – 109
Two	201 – 209
Three	301 – 309
Four	401 – 408
Five	501 – 508
Six	601 - 607

These addresses shall be used for all correspondence, legal property transactions and shown on the final registered Deposited Plan/Strata Plan lodged with Land Registry Services NSW as required.

Under no circumstances can unit numbering be repeated or skipped throughout the development regardless of the building name or number.

Approved numbers, unless otherwise approved by Council in writing, are to be displayed clearly on all door entrances including stairwells, lift and lobby entry doors.

External directional signage is to be erected on site at driveway entry points and on buildings to ensure that all numbering signage throughout the complex is clear to assist emergency service providers locate a destination easily & quickly.

Mail Boxes

One Cluster mail box is to be located as shown on plans submitted marked as DWG No TP01.03 dated 6/12/18.

The number of mail boxes to be provided is to be equal to the number of units plus one (1) for the proprietors of the development and be as per Australia Post size requirements.

Strata Developments

All approved developments that require subdivision under a Strata Plan, must submit a copy of the final strata plan to Council's Land Information Section *before it is registered* for the approval and allocation of final property and unit numbering. This applies regardless of whether the PCA is Council or not.

It is required that Lot numbers within the proposed strata plan all run sequentially within the same level, commencing from the lowest level upwards to the highest level within the development.

Please call 9843 0555 or email a copy of the final strata plan *before it is registered* to council@thehills.nsw.gov.au for the allocation of final Property and Unit numbering required to be included within the registered Strata Administration sheet.

13. Management of Construction Waste

Waste materials must be appropriately stored and secured within a designated waste area onsite at all times, prior to its reuse onsite or being sent offsite. This includes waste materials such as paper and containers which must not litter the site or leave the site onto neighbouring public or private property. A separate dedicated bin must be provided onsite by the builder for the disposal of waste materials such as paper, containers and food scraps generated by all workers. Building waste containers are not permitted to be placed on public property at any time unless a separate application is approved by Council to locate a building waste container in a public place.

Any material moved offsite is to be transported in accordance with the requirements of the Protection of the Environment Operations Act 1997 and only to a place that can lawfully be used as a waste facility. The separation and recycling of the following waste materials is required: metals, timber, masonry products and clean waste plasterboard. This can be achieved by source separation onsite, that is, a bin for metal waste, a bin for timber, a bin for bricks and so on. Alternatively, mixed waste may be stored in one or more bins and sent to a waste contractor or transfer/sorting station that will sort the waste on their premises for recycling. Receipts of all waste/recycling tipping must be kept onsite at all times and produced in a legible form to any authorised officer of the Council who asks to see them.

Transporters of asbestos waste (of any load over 100kg of asbestos waste or 10 square metres or more of asbestos sheeting) must provide information to the NSW EPA regarding the movement of waste using their WasteLocate online reporting tool www.wastelocate.epa.nsw.gov.au.

14. Disposal of Surplus Excavated Material

The disposal of surplus excavated material, other than to a licenced waste facility, is not permitted without the previous written approval of Council prior to works commencing on site. Any unauthorized disposal of waste, which includes excavated material, is a breach of the Protection of the Environment Operations Act 1997 and subject to substantial penalties. Receipts of all waste/ recycling tipping must be kept onsite at all times and produced in a legible form to any authorised officer of the Council who asks to see them.

15. Commencement of Domestic Waste Service

A domestic waste service must be commenced with Council and its Contractor. The service must be arranged no earlier than two days prior to occupancy and no later than seven days after occupancy of the development. All requirements of Council's domestic waste management service must be complied with at all times. Contact Council's Resource Recovery Team on (02) 9843 0310 to commence a domestic waste service.

16. Construction of D3 Waste Chute Termination Room

The waste chute termination room must be designed and constructed in accordance with the following requirements. The area must provide minimum storage facility for 1 x 2-bin linear conveyor track with 2 x 660 litre garbage bins and 1 x compactor (compaction rate 2:1) and 1 x 2-bin linear conveyor track with 2 x 660 litre recycling bins with no compaction.

- The waste chute termination room must be of adequate size to comfortably store and manoeuvre the total minimum required number of bins and associated waste infrastructure as specified above.
- The layout of the waste chute termination room must ensure that each bin is easily accessible and manoeuvrable in and out of the areas with no manual handling of other bins. All internal walkways must be at least 1.5m wide.
- The walls of the waste chute termination room must be constructed of brickwork or blockwork.
- The floor of the waste chute termination room must be constructed of concrete with a smooth non-slip finish, graded and drained to sewer. The room must not contain ramps and must be roofed (if located external to the building).
- The waste chute termination room must have a waste servicing door, with a minimum clear floor width of 1.5m. The door must be located to allow the most direct access to the bins by the building caretaker and cleaning staff. Acceptable waste servicing doors are single or double swinging doors.
- All doors of the waste chute termination room, when fully opened, must be flush with the outside walls and must not block or obstruct car park aisles or footways. All doors must be able to be fixed in position when fully opened.
- The waste chute termination room must be adequately ventilated (mechanically if located within the building footprint). Vented waste chute termination rooms should not be connected to the same ventilation system supplying air to the units.
- The waste chute termination room must be provided with a hose tap (hot and cold mixer), connected to a water supply. If the tap is located inside the waste chute termination room, it is not to conflict with the space designated for the placement of bins.
- The waste chute termination room must be provided with internal lighting such as automatic sensor lights.
- The maximum grade acceptable for manual moving of bins for collection purposes is 5%.
- The waste chute termination room must have appropriate signage (Council approved designs), mounted in a visible location on internal walls and are to be permanently maintained by the Owners Corporation.
- Finishes and colours of the waste chute termination room are to complement the design of the development.

Example Bin Measurements (mm)

660L: 850 (d) 1370 (w) 1250 (h)

17. Communal Composting Areas

An area shall be incorporated in the landscape design of the development for communal composting. Whilst the operation of such a facility will depend upon the attitudes of occupants and their Owners Corporation, the potential to compost should exist.

18. Provision of Waste Chute System

The development (Building D3) must incorporate 1 x dual waste chute system with 1 chute for garbage disposal and 1 chute for recyclables. Chute openings must be provided on every residential floor within the building corridors. The waste chutes must terminate into the waste chute termination room. Garbage must discharge into a 660 litre bin housed on a 2-bin conveyor with compactor (2:1 compaction ratio) and recyclables must discharge into a 660 litre bin housed on a 2-bin linear conveyor with no compaction. The waste chute system must be maintained in accordance with manufactory standards.

19. Construction Certificate

Prior to construction of the approved development, it is necessary to obtain a Construction Certificate. A Construction Certificate may be issued by Council or an Accredited Certifier. Plans submitted with the Construction Certificate are to be amended to incorporate the conditions of the Development Consent.

20. Building Work to be in Accordance with BCA

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

21. Clause 94 upgrade

Under clause 94 of the Environmental Planning & Assessment Regulation, the following fire safety/Building Code of Australia (BCA) works are to be undertaken with the construction certificate works and are to be completed prior to the issue of the occupation certificate:

i. As the existing building at 11-13 Spurway Drive Norwest will be joined at the basement levels with the proposed building subject to this consent, the existing building is to be upgraded in accordance with DP4, EP1.3, EP1.4, EP1.6, EP2.2, EP3.2, EP4.3 of the BCA.

ii. "Offence relating to fire exits" signage is to be provided adjacent to the doorway of each fire isolated exit throughout the existing building.

iii. Service penetrations in the existing sprinkler pumproom are to be protected appropriate to CP8 of the BCA.

iv. A review the width of the path of travel from the existing fire isolated passageways is to be undertaken to ensure safe evacuation appropriate to DP4 & EP2.2 of the BCA.

v. A review of the evacuation route to the road is to be undertaken to ensure that any occupants discharging from the existing fire isolated exits and pass within 6m of the existing external wall (measured at right angles to the path of travel) are afforded sufficient protection, appropriate to EP2.2 of the BCA.

22. Recycled Water – Rouse Hill/ Sydney Water

The subject site must be connected to Sydney Water's Rouse Hill Recycled Water Scheme, unless written evidence from Sydney Water is submitted advising that this service is not available.

23. Water Sensitive Urban Design Handover Process

An operations and maintenance plan must be prepared for all WSUD proposals. The operations and maintenance plan must include:

- The location and type of each WSUD element, including details of its operation and design;
- A brief description of the catchment characteristics, such as land uses, areas etc;
- Estimated pollutant types, loads and indicative sources;
- Intended maintenance responsibility, Council, landowner etc;
- Inspection method and estimated frequency;
- Adopted design cleaning/ maintenance frequency;
- Estimate life-cycle costs;
- Site access details, including confirmation of legal access, access limitations etc;
- Access details for WSUD measure, such as covers, locks, traffic control requirements etc;
- Description of optimum cleaning method and alternatives, including equipment and personnel requirements;

- Landscape and weed control requirements, noting that intensive initial planting is required upfront to reduce the requirement for active weed removal;
- A work method statement;
- A standard inspection and cleaning form.

For the purposes of complying with the above a WSUD treatment system is considered to include all functional elements of the system as well as any landscaped areas directly surrounding the system.

All constructed WSUD elements within public areas, being roads or drainage reserves, are to be transferred to Council at the end of the project. The following is required in order to facilitate this handover process:

- The developer will be responsible for the maintenance of the item for a defined maintenance period agreed to by Council.
- The operations and maintenance plan for this element (above) is submitted to Council for review/ revision and subsequent approval.
- Council staff inspects the WSUD measure to confirm that it is being maintained in accordance with the approved maintenance plan.
- A whole of life assessment is provided for the WSUD measure which is based upon the expenses incurred during the maintenance period, and documentation is provided to confirm these expenses.
- WAE drawings and any required engineering certifications are provided to Council.
- Where water quality monitoring has been determined by Council as being required, monitoring results must be submitted to Council for review.
- Details of all incidents including OHS incidents, public safety, WSUD performance and complaints received should be provided.

If Council determines that the WSUD measure is not complying with the conditions of this approval or monitoring identifies that it is not performing as anticipated, Council may request that alterations be made to the WSUD element prior to transfer.

24. Road Opening Permit

Should the subdivision/ development necessitate the installation or upgrading of utility services or any other works on Council land beyond the immediate road frontage of the development site and these works are not covered by a Construction Certificate issued by Council under this consent then a separate road opening permit must be applied for and the works inspected by Council's Maintenance Services team.

The contractor is responsible for instructing sub-contractors or service authority providers of this requirement. Contact Council's Construction Engineer if it is unclear whether a separate road opening permit is required.

25. Protection of Public Infrastructure

Adequate protection must be provided prior to work commencing and maintained during building operations so that no damage is caused to public infrastructure as a result of the works. Public infrastructure includes the road pavement, kerb and gutter, concrete footpaths, drainage structures, utilities and landscaping fronting the site. The certifier is responsible for inspecting the public infrastructure for compliance with this condition before an Occupation Certificate or Subdivision Certificate is issued. Any damage must be made good in accordance with the requirements of Council and to the satisfaction of Council.

PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE

26. Section 7.11 Contribution – Balmoral Road Release Area

The following monetary contributions must be paid to Council in accordance with Section 7.11 of the Environmental Planning and Assessment Act, 1979, to provide for the increased demand for public amenities and services resulting from the development.

Payments comprise of the following:-

	Purpose: 1 bedroom unit	*Purpose: 2 bedroom unit*	*Purpose: 3 bedroom unit*	*Purpose: 4+ bedroom unit*	*Purpose: Credit*
Open Space - Land	$ 18,271.11	$ 25,298.45	$ 28,298.21	$ 28,298.21	$ 28,298.21
Open Space - Capital	$ 4,849.09	$ 6,714.13	$ 7,510.25	$ 7,510.25	$ 7,510.25
Transport Facilities - Capital	$ 3,452.80	$ 4,780.80	$ 5,347.67	$ 5,347.67	$ 5,347.67
Community Facilities - Land	$ 361.33	$ 500.31	$ 559.62	$ 559.62	$ 559.62
Community Facilities - Capital	$ 1,480.27	$ 2,049.62	$ 2,292.65	$ 2,292.65	$ 2,292.65
Administration	$ 253.60	$ 351.14	$ 392.77	$ 392.77	$ 392.77
Drainage Facilities - Capital	$ 386.65	$ 535.35	$ 598.83	$ 598.83	$ 598.83
Total	**$ 29,054.84**	**$ 40,229.78**	**$ 45,000.00**	**$ 45,000.00**	**$ 45,000.00**

No. of 1 Bedroom units: 15	*No. of 2 Bedroom units: 36*	*No. of 3 Bedroom units: 4*	*No. of 4 + Bedroom units: 2*	*Sum of Units*	*No. of Credits: 1*	*Total S7.11*
$ 274,066.65	$ 910,744.06	$ 113,192.84	$ 56,596.42	$ 1,354,599.97	$ 28,298.21	**$ 1,326,301.76**
$ 72,736.28	$ 241,708.57	$ 30,041.00	$ 15,020.50	$ 359,506.35	$ 7,510.25	**$ 351,996.10**
$ 51,792.00	$ 172,108.69	$ 21,390.68	$ 10,695.34	$ 255,986.71	$ 5,347.67	**$ 250,639.04**
$ 5,419.95	$ 18,011.02	$ 2,238.48	$ 1,119.24	$ 26,788.69	$ 559.62	**$ 26,229.07**
$ 22,203.98	$ 73,786.14	$ 9,170.60	$ 4,585.30	$ 109,746.02	$ 2,292.65	**$ 107,453.37**
$ 3,804.00	$ 12,640.90	$ 1,571.08	$ 785.54	$ 18,801.52	$ 392.77	**$ 18,408.75**
$ 5,799.75	$ 19,272.60	$ 2,395.32	$ 1,197.66	$ 28,665.33	$ 598.83	**$ 28,066.50**
$ 435,822.60	**$ 1,448,271.97**	**$ 180,000.00**	**$ 90,000.00**	**$ 2,154,094.57**	**$ 45,000.00**	**$ 2,109,094.57**

Prior to payment of the above contributions, the applicant is advised to contact Council's Development Contributions Officer on 9843 0268. Payment must be made by cheque or credit/debit card. Cash payments will not be accepted.

This condition has been imposed in accordance with Contributions Plan No. 12.

Council's Contributions Plans can be viewed at www.thehills.nsw.gov.au or a copy may be inspected or purchased at Council's Administration Centre.

27. Golf Ball Safety Net

Details of the proposed Golf ball Safety Net, including details of poles and mesh are to be submitted to Council's Manager Development of Assessment for approval prior to the issue of a Construction Certificate for the Golf ball Safety Net works.

28. Amended Construction Management Plan

An amended Construction Management Plan is required to be submitted to Council incorporating the requirements of this consent. The plan is to be amended to detail no temporary site fencing within the public Road (Spurway Drive).

A copy of the plan must be submitted to Council before being implemented. Where amendments to the plan are made, they must be submitted to Council before being implemented.

29. Design Verification

Prior to the release of the Construction Certificate design verification is required from a qualified designer to confirm the development is in accordance with the approved plans and details and continues to satisfy the design quality principles in SEPP65.

30. Special Infrastructure Contribution – Growth Centres

A special infrastructure contribution is to be made in accordance with the Environmental Planning and Assessment (Special Infrastructure Contribution – Western Sydney Growth Areas) Determination 2011, as in force when this consent becomes operative.

Information about the special infrastructure contribution can be found on the Department of Planning and Environment website:

http://www.planning.nsw.gov.au/

Please contact the Department of Planning and Environment regarding arrangements for the making of a payment.

31. Notice of Requirements

The submission of documentary evidence to the Certifying Authority, including a Notice of Requirements, from Sydney Water Corporation confirming that satisfactory arrangements have been made for the provision of water and sewerage facilities.

Following an application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Co-ordinator, since building of water / sewer extensions can be time consuming and may impact on other services and building, driveway and landscape design.

32. Related Applications – Construction Certificate Spurway Extension

Prior to release of any construction certificates covered by this consent a construction certificate issued under 634/2017/ZB covering the construction of extension of Spurway Drive for the full frontage of the subject site of this consent must be issued.

33. Erosion & Sediment Control Plan

Submission of an Erosion and Sediment Control Plan to the Principal Certifier, including details of:

a) Allotment boundaries

b) Location of the adjoining roads

c) Contours

d) Existing vegetation

e) Existing site drainage

f) Critical natural areas

g) Location of stockpiles

h) Erosion control practices

i) Sediment control practices

j) Outline of a maintenance program for the erosion and sediment controls

(NOTE: For guidance on the preparation of the Plan refer to 'Managing Urban Stormwater Soils & Construction' produced by the NSW Department of Housing).

34. Erosion and Sediment Control/ Soil and Water Management Plan

The detailed design must be accompanied by an Erosion and Sediment Control Plan (ESCP) or a Soil and Water Management Plan (SWMP) prepared in accordance with the Blue Book and Council's Works Specification Subdivision/ Developments.

A SWMP is required where the overall extent of disturbed area is greater than 2,500 square metres, otherwise an ESCP is required.

An ESCP must include the following standard measures along with notes relating to stabilisation and maintenance:

- Sediment fencing.
- Barrier fencing and no-go zones.
- Stabilised access.
- Waste receptacles.
- Stockpile site/s.

A SWMP requires both drawings and accompanying commentary (including calculations) addressing erosion controls, sediment controls, maintenance notes, stabilisation requirements and standard drawings from the Blue Book.

An INSERT is required for this development.

35. Stormwater Management System

Onsite Water management is required in accordance with Stormwater Strategy approved with 736/2017/JP

The stormwater concept plan prepared by Northrop Drawing DA-C84.01 Revision 03 dated 30.09.19 is for development application purposes only and is not to be used for construction.

Water sensitive urban design elements, consisting of Bioretention basins and vegetated swales are to be located generally in accordance with the plans and information submitted with the application.

Detailed plans for the water sensitive urban design elements must be submitted for approval. The detailed plans must be suitable for construction, and include detailed and representative longitudinal and cross sections of the proposed infrastructure. The design must be accompanied, informed and supported by detailed water quality and quantity modelling. The modelling must demonstrate a reduction in annual average pollution export loads from the development site in line with the following environmental targets:

- 90% reduction in the annual average load of gross pollutants
- 85% reduction in the annual average load of total suspended solids
- 65% reduction in the annual average load of total phosphorous
- 45% reduction in the annual average load of total nitrogen

All model parameters and data outputs are to be provided.

The design and construction of the stormwater management system must be approved by either Council or an accredited certifier. A Compliance Certificate certifying the detailed design of the stormwater management system can be issued by Council. The following must be included with the documentation approved as part of any Construction Certificate:

- Design/ construction plans prepared by a hydraulic engineer.
- Certificate from NER (Civil) Engineer confirm design of WSUD devices will meet the environmental targets as listed above.
- A maintenance schedule.

36. Construction Management Plan (CMP) (Staged Applications)

A construction management plan must be submitted demonstrating how the potential for conflict between resident and construction traffic is to be minimised and managed throughout all stages of the development. The construction management plan must be submitted before a Construction Certificate is issued and complied with for the duration of works.

This Construction management plan must directly refer to the availability of a temporary turning head on Spurway Drive at all stages of development. Removal of the temporary turning arrangement without satisfactory provision of alternate temporary turning arrangement will not be supported. Construction management plan must be submitted to Councils Principal Coordinator – Subdivision and Release Areas for review and approval prior to release of any Construction Certificate

CMP to address how traffic entering golf course will be handled during construction works over/adjacent existing access way.

37. Stormwater Pump/ Basement Car Park Requirements

The stormwater pump-out system must be designed and constructed in accordance with AS/ NZS 3500.3:2015 - Plumbing and Drainage - Stormwater drainage. The system must be connected to the Onsite Stormwater Detention system before runoff is discharged to the street (or other point of legal discharge) along with the remaining site runoff, under gravity. All plans, calculations, hydraulic details and manufacturer specifications for the pump must be submitted with certification from the designer confirming compliance with the above requirements.

38. Engineering Works

The design and construction of the engineering works listed below must be provided for in accordance with Council's Design Guidelines Subdivisions/ Developments and Works Specifications Subdivisions/ Developments.

Engineering works can be classified as either "subdivision works" or "building works".

Works within an existing or proposed public road, or works within an existing or proposed public reserve can only be approved, inspected and certified by Council.

Depending on the development type and nature and location of the work the required certificate or approval type will differ. The application form covering these certificates or approvals is available on Council's website and the application fees payable are included in Council's Schedule of Fees and Charges.

The concept engineering plan prepared by INSERT Revision INSERT is for development application purposes only and is not to be used for construction. The design and construction of the engineering works listed below must reflect the concept engineering plan and the conditions of consent.

a) Temporary Turning Heads

A temporary cul-de-sac turning head must be provided at the end of all roads that will be extended into adjoining properties if/ when they are developed. The cul-de-sac must have a diameter of 19 measured from the edge pavement. This must be shown on architectural plans prior to release of construction certificate (or reduced diameter as approved by Council and LTC)

A temporary turning head is required at the Eastern end of Spurway Drive. Any Construction Certificate under this Development Application cannot be issued until such time as a Construction Certificate under 634/2017/ZB has been issued for the extension of Spurway Drive for the full frontage of this development, inclusive of 19m temporary turning head (or reduced width where approved the Council and the Local Traffic Committee)

A temporary turning head must be present either within dedicated public road or covered by a suitable easement in gross prior to, during and post construction of the building works.

b) Water Sensitive Urban Design Elements

Water sensitive urban design elements, consisting of INSERT, are to be located generally in accordance with the plans and information submitted with the application.

Detailed plans for the water sensitive urban design elements must be submitted for approval. The detailed plans must be suitable for construction, and include detailed and representative longitudinal and cross sections of the proposed infrastructure. The design must be accompanied, informed and supported by detailed water quality and quantity modelling. The modelling must demonstrate a reduction in annual average pollution export loads from the development site in line with the following environmental targets:

- 90% reduction in the annual average load of gross pollutants
- 85% reduction in the annual average load of total suspended solids
- 65% reduction in the annual average load of total phosphorous
- 45% reduction in the annual average load of total nitrogen

All model parameters and data outputs are to be provided.

c) Existing access way to Golf Club

Plan DA.C84.01 Rev 03 Dated 30.09.19 by Northrop indicates a rigid pavement is to be utilised in area identified as grey. Suitable accredited Certifier to approve design and construction of rigid pavement in accordance with Design Traffic Loading within Councils Design Guidelines Subdivision/Developments

PRIOR TO WORK COMMENCING ON THE SITE

39. Tree Protection Fencing

Prior to any works commencing on site Tree Protection Fencing must be in place around trees or groups of trees nominated for retention. In order of precedence the location of fencing shall be a) As per Tree Protection Plan as per Arborist report for project or b) Tree Protection Zone (TPZ) as calculated under AS4970 (2009) Protection of trees on development sites c) A minimum of 3m radius from trunk.

The erection of a minimum 1.8m chain-wire fence to delineate the TPZ is to stop the following occurring:

- Stockpiling of materials within TPZ;
- Placement of fill within TPZ;
- Parking of vehicles within the TPZ;
- Compaction of soil within the TPZ;
- Cement washout and other chemical or fuel contaminants within TPZ; and
- Damage to tree crown.

40. Tree Protection Signage

Prior to any works commencing on site a Tree Protection Zone sign must be attached to the Tree Protection Fencing stating “Tree Protection Zone No Access” (The lettering size on the sign shall comply with AS1319). Access to this area can only be authorised by the project arborist or site manager.

41. Mulching within Tree Protection Zone

Prior to any works commencing on site all areas within the Tree Protection Zone are to be mulched with composted leaf mulch to a depth of 100mm.

42. Trenching within Tree Protection Zone

Any Excavation or trenching for any structure or the installation of drainage, sewerage, irrigation or any other services within the Tree Protection Zone of trees identified for retention must be undertaken under the supervision of a project arborist.

Certification of supervision must be provided to the Certifying Authority within 14 days of completion of trenching works.

43. Erosion and Sedimentation Controls

Erosion and sedimentation controls shall be in place prior to the commencement of site works and maintained throughout construction activities, until the site is landscaped and/or suitably revegetated. These requirements shall be in accordance with *Managing Urban Stormwater – Soils and Construction (Blue Book)* produced by the NSW Department of Housing.

This will include, but not be limited to a stabilised access point and appropriately locating stockpiles of topsoil, sand, aggregate or other material capable of being moved by water being stored clear of any drainage line, easement, natural watercourse, footpath, kerb or roadside.

44. Soil and Water Management Plan

A Soil and Water Management Plan is to be prepared. The plan shall be in accordance with *"Managing Urban Stormwater - Soils and Construction" (Blue Book)* produced by the NSW Department of Housing. The plan is to be kept on site at all times and made available upon request.

The plan is to include a plan of management for the treatment and discharge of water accumulated in open excavations. Water containing suspended solids greater than 50 mg/L shall not be discharged to the stormwater system.

45. Erosion & Sediment Control Plan Kept on Site

A copy of the Erosion and Sediment Control Plan must be kept on site at all times during construction and available to Council on request.

46. Construction Waste Management Plan Required

Prior to the commencement of works, a Waste Management Plan for the construction and/ or demolition phases of the development must be submitted to and approved by Council. The plan should be prepared in accordance with The Hills Development Control Plan 2012 Appendix A. The plan must comply with the waste minimisation requirements in the relevant Development Control Plan. All requirements of the approved plan must be implemented during the construction and/ or demolition phases of the development. The plan must address the following, but not limited to:

- The type and estimated quantity of waste material to be removed from the site;
- The location of waste disposal and recycling;
- The company name of the skip bin hire company or transport contractor(s); and
- The proposed reuse or recycling methods for waste remaining onsite.

47. Details and Signage - Principal Contractor and Principal Certifier

Details

Prior to work commencing, submit to the Principal Certifier notification in writing of the principal contractor's (builder) name, address, phone number, email address and licence number.

No later than two days before work commences, Council is to have received written details of the Principal Certifier in accordance with Clause 103 of the Environmental Planning and Assessment Regulations 2000.

Signage

A sign is to be erected in accordance with Clause 98A(2) of the Environmental Planning and Assessment Regulations 2000. The sign is to be erected in a prominent position and show –

a) the name, address and phone number of the Principal Certifier for the work,
b) the name and out of working hours contact phone number of the principal contractor/person responsible for the work.

The sign must state that unauthorised entry to the work site is prohibited.

48. Management of Building Sites

The erection of suitable fencing or other measures to restrict public access to the site and building works, materials or equipment when the building work is not in progress or the site is otherwise unoccupied.

The erection of a sign, in a prominent position, stating that unauthorised entry to the site is not permitted and giving an after hours contact name and telephone number.

49. Approved Temporary Closet

An approved temporary closet connected to the sewers of Sydney Water, or alternatively an approved chemical closet is to be provided on the land, prior to building operations being commenced.

50. Traffic Control Plan

A Traffic Control Plan is required to be prepared and approved. The person preparing and approving the plan must have the relevant accreditation to do so. A copy of the approved plan must be submitted to Council before being implemented. Where amendments to the plan are made, they must be submitted to Council before being implemented.

A plan that includes full (detour) or partial (temporary traffic signals) width road closure requires separate specific approval from Council. Sufficient time should be allowed for this to occur.

51. Erosion and Sediment Control/ Soil and Water Management

The approved ESCP or SWMP measures must be in place prior to works commencing and maintained during construction and until the site is stabilised to ensure their effectiveness. For

major works, these measures must be maintained for a minimum period of six months following the completion of all works.

52. Separate Water Management System Detailed Design Approval
No work is to commence until a detailed design for the Water Management system has been approved by either Council or an accredited certifier.

DURING CONSTRUCTION

53. Documentation On Site
A copy of the development consent and stamped plans together with the following documents shall be kept during construction.

- Arborist Report
- Waste Management Plan
- Erosion and Sedimentation Control Plan
- Traffic Control Plan

54. Temporary Fencing of Pools
This condition applies to unoccupied land.

On excavation and prior to installation of the pool shell or placement of the steel re-enforcement, a fence is to be provided around the pool excavation, so as to isolate and prevent access to it.

The fence provided is to be 1.8m high and to no less a standard than correctly joined and secured, temporary fence panels or chainmesh. The fence is to remain in place until the site (dwelling) has been approved for occupation.

55. Pool not to be Filled Until Occupation
The pool is not to be filled with water until a satisfactory pool fence inspection has been carried out by the PCA.

56. Swimming Pool Safety Fencing
All pools and safety barriers are to comply with the Swimming Pools Act 1992 and the Swimming Pools Regulation 2018. A fact sheet titled Swimming Pool Fencing Requirements is available from www.thehills.nsw.gov.au.

It should be noted that any steps, retaining walls, objects (for example – planter boxes, pump enclosures and the like) or level changes that would otherwise reduce the height of the barrier within a property shall not be located within 500mm of the barrier.

57. Resuscitation Warning Notice
In accordance with the Swimming Pools Regulation 2018, a Warning Notice is to be displayed in a prominent position, in the immediate vicinity of the swimming pool. The notice is to contain a diagrammatic flow chart of resuscitation techniques, the words:

(i) "YOUNG CHILDREN SHOULD BE SUPERVISED WHEN USING THIS SWIMMING POOL",

and

(ii) "POOL GATES MUST BE KEPT CLOSED AT ALL TIMES", and

(iii) "KEEP ARTICLES, OBJECTS AND STRUCTURES AT LEAST 900 MILLIMETRES CLEAR OF THE POOL FENCE AT ALL TIMES",

and all other details required by the Regulation.

58. Project Arborist
The Project Arborist must be on site to supervise any works in the vicinity of or within the Tree Protection Zone (TPZ) of any trees required to be retained on the site or any adjacent sites.

Supervision of the works shall be certified by the Project Arborist and a copy of such certification shall be submitted to the PCA within 14 days of completion of the works.

59. Rock Breaking Noise

Upon receipt of a justified complaint in relation to noise pollution emanating from rock breaking as part of the excavation and construction processes, rock breaking will be restricted to between the hours of 9am to 3pm, Monday to Friday.

Details of noise mitigation measures and likely duration of the activity will also be required to be submitted to Council's Manager – Environment and Health within seven (7) days of receiving notice from Council.

60. Contamination

Ground conditions are to be monitored and should evidence such as, but not limited to, imported fill and/or inappropriate waste disposal indicate the likely presence of contamination on site, works are to cease, Council's Manager- Environment and Health is to be notified and a site contamination investigation is to be carried out in accordance with *State Environmental Planning Policy 55 – Remediation of Land.*

The report is to be submitted to Council's Manager – Environment and Health for review prior to works recommencing on site.

61. Stockpiles

Stockpiles of topsoil, sand, aggregate or other material capable of being moved by water shall be stored clear of any drainage line, easement, natural watercourse, footpath, kerb or roadside.

62. Dust Control

The emission of dust must be controlled to minimise nuisance to the occupants of the surrounding premises. A dust management plan is to be developed with a copy submitted to Council.

In the absence of any alternative measures, the following measures must be taken to control the emission of dust:

- All dusty surfaces must be wet down and suppressed by means of a fine water spray. Water used for dust suppression must not cause water pollution;
- All exposed / disturbed areas which is not an active work area is to be sealed by way of hydro-seeding, hydro-mulching or other soil binding product or turfed; and
- All stockpiles of materials that are likely to generate dust must be kept damp or covered.

The dust management plan must be implemented until the site works are completed and the site is stable and covered in either vegetation or bonding agent. The dust management plan must be provided to any contractor involved in the demolition, excavation, provision of fill or any other dust generating activity.

63. Hours of Work

Work on the project to be limited to the following hours: -

Monday to Saturday - 7.00am to 5.00pm;

No work to be carried out on Sunday or Public Holidays.

The builder/contractor shall be responsible to instruct and control sub-contractors regarding the hours of work.

64. Compliance with BASIX Certificate

Under clause 97A of the Environmental Planning and Assessment Regulation 2000, it is a condition of this Development Consent that all commitments listed in BASIX Certificate No. 1002925M_02 is to be complied with. Any subsequent version of this BASIX Certificate will supersede all previous versions of the certificate.

65. Critical Stage Inspections and Inspections Nominated by the Principal Certifier

Section 6.6 of the Environmental Planning and Assessment Act 1979 requires critical stage inspections to be carried out for building work as prescribed by Clause 162A of the

Environmental Planning and Assessment Regulation 2000. Prior to allowing building works to commence the Principal Certifier must give notice of these inspections pursuant to Clause 103A of the Environmental Planning and Assessment Regulation 2000.

An Occupation Certificate cannot be issued and the building may not be able to be used or occupied where any mandatory critical stage inspection or other inspection required by the Principal Certifier is not carried out. Inspections can only be carried out by the Principal Certifier unless agreed to by the Principal Certifier beforehand and subject to that person being an accredited certifier.

PRIOR TO ISSUE OF AN OCCUPATION AND/OR SUBDIVISION CERTIFICATE

66. Golf Ball Safety Net

The Golf ball Safety net required by this consent is to be constructed or installed prior to the issue of an Occupation Certificate.

67. Section 73 Certificate must be submitted to the Principal Certifier before the issuing of an Occupation Certificate

A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation.
Make early application for the certificate, as there may be water and sewer pipes to be built and this can take some time. This can also impact on other services and building, driveway or landscape design.
Application must be made through an authorised Water Servicing Coordinator. For help either visit www.sydneywater.com.au > Building and developing > Developing your land > water Servicing Coordinator or telephone 13 20 92.
The Section 73 Certificate must be submitted to the Principal Certifier before occupation of the development/release of the plan of subdivision.

68. Registration of Swimming Pool/Spa

Prior to issue of an Occupation Certificate the swimming pool/spa is to be registered on the NSW state register of swimming pools and spas. To register the swimming pool/spa you are to log onto www.swimmingpoolregister.nsw.gov.au and follow the prompts. A copy of the registration certificate is to be submitted to the Principal Certifier to confirm the registration.

69. Provision of Telecommunication Services

Prior to the issue of an Occupation Certificate the developer (whether or not a constitutional corporation) is to provide evidence satisfactory to the Certifying Authority that arrangements have been made for:

The installation of fibre-ready facilities to all individual lots and/ or premises in a real estate development project so as to enable fibre to be readily connected to any premises that is being or may be constructed on those lots. Demonstrate that the carrier has confirmed in writing that they are satisfied that the fibre ready facilities are fit for purpose; and

The provision of fixed-line telecommunications infrastructure in the fibre-ready facilities to all individual lots and/ or premises in a real estate development project demonstrated through an agreement with a carrier.

Real estate development project has the meanings given in Section 372Q of the Telecommunications Act 1978 (Cth).

For small developments, NBN Co will issue a Provisioning of Telecommunications Services – Confirmation of Final Payment. For medium and large developments, NBN Co will issue a Certificate of Practical Completion of Developers Activities.

For non-fibre ready facilities, either an agreement advice or network infrastructure letter must be issued by Telstra confirming satisfactory arrangements have been made for the provision of telecommunication services. This includes the undergrounding of existing overhead services, except where a specific written exemption has been granted by Council.

70. Landscaping Prior to Issue of any Occupation Certificate

Landscaping of the site shall be carried out prior to issue of an Occupation Certificate. The Landscaping shall be either certified to be in accordance with the approved plan by an Accredited Landscape Architect or be to the satisfaction of Council's Manager Environment and Health. All landscaping is to be maintained at all times in accordance with THDCP Part C, Section 3 – Landscaping and the approved landscape plan.

71. Provision of Electricity Services

Submission of a compliance certificate from the relevant service provider confirming satisfactory arrangements have been made for the provision of electricity services. This includes undergrounding of existing and proposed services where directed by Council or the relevant service provider.

72. Design Verification Certificate

Prior to the release of the Occupation Certificate design verification is required from a qualified designer to confirm that the development has been constructed in accordance with approved plans and details and has satisfied the design quality principles consistent with that approval.

73. Final Inspection of the Waste Chute Termination Room

Prior to any Occupation Certificate being issued, a final inspection of the waste chute termination room and associated management facilities must be undertaken by Council's Resource Recovery Project Officer. This is to ensure compliance with Council's design specifications and that necessary arrangements are in place for domestic waste collection by Council and its Domestic Waste Collection Contractor. The time for the inspection should be arranged at least 48 hours prior to any suggested appointment time.

74. Provision of Signage for Waste Rooms

Prior to any Occupation Certificate being issued, complete sets of English and Chinese waste educational signage (garbage, recycling and no dumping) must be purchased and installed in visible locations on internal walls of the waste chute termination room. One set of English and translated English garbage and recycling signage must be provided above every chute opening on every floor. The signage must meet the minimum specifications below and must be designed in accordance with Council's approved artwork. Contact Council's Resource Recovery Education Officer on (02) 9843 0505 to obtain artwork designs.

- Flat size: 330mm wide x 440mm high
- Finished size: 330mm wide x 440mm high. Round corners, portrait
- Material: Aluminium / polyethylene composite sheet 3.0mm, white (alupanel)
- Colours: Printed 4 colour process one side, UV ink
- Finishing: Over laminated gloss clear. Profile cut with radius corners and holes

75. Waste Chute System Installation Compliance Certificate

Prior to any Occupation Certificate being issued, a letter of compliance must be submitted to and approved by the Principal Certifying Authority. The letter must be prepared by the equipment supplier/installer confirming that the Council approved waste chute system, including all associated infrastructure, has been installed to manufacture standards and is fully operational and satisfies all relevant legislative requirements and Australian standards.

76. Procurement of Mechanical Bin Mover

Prior to an Occupation Certificate being issued, a mechanical bin mover, suitable for 660 litre bins must be purchased and delivered to the site. The equipment procured must have the capacity to move full bins over all ramps and slopes between the waste storage areas and waste collection point. All waste moving equipment must be lawfully handed into the ownership of the Owners Corporation.

77. Subdivision Works – Submission Requirements

Once the subdivision works are complete the following documentation (where relevant/ required) must be prepared in accordance with Council's Design Guidelines Subdivisions/ Developments and submitted to Council's Construction Engineer for written approval:

- Works as Executed Plans
- Stormwater Drainage CCTV Recording
- Pavement Density Results
- Street Name/ Regulatory Signage Plan
- Pavement Certification
- Public Asset Creation Summary
- Concrete Core Test Results
- Site Fill Results
- Structural Certification

The works as executed plans must be prepared by a civil engineer or registered surveyor.

All piped stormwater drainage systems and ancillary structures which will become public assets must be inspected by CCTV. A copy of the actual recording must be submitted electronically for checking.

A template public asset creation summary is available on Council's website and must be used.

78. Completion of Engineering Works

An Occupation Certificate must not be issued prior to the completion of all engineering works covered by this consent, in accordance with this consent.

79. Pump System Certification

Certification that the stormwater pump system has been constructed in accordance with the approved design and the conditions of this approval must be provided by a hydraulic engineer.

80. Stormwater Management Certification

The stormwater management system must be completed to the satisfaction of the Principal Certifier prior to the issuing of an Occupation Certificate. The following documentation is required to be submitted upon completion of the stormwater management system and prior to a final inspection:

- Works as executed plans prepared on a copy of the approved plans;
- For Onsite Stormwater Detention (OSD) systems, a certificate of hydraulic compliance (Form B.11) from a hydraulic engineer verifying that the constructed OSD system will function hydraulically;
- For OSD systems, a certificate of structural adequacy from a structural engineer verifying that the structures associated with the constructed OSD system are structurally adequate and capable of withstanding all loads likely to be imposed on them during their lifetime;
- Records of inspections; and
- An approved operations and maintenance plan.

Where Council is not the Principal Certifier a copy of the above documentation must be submitted to Council.

81. Water Sensitive Urban Design Certification

An Occupation Certificate must not be issued prior to the completion of the WSUD elements conditioned earlier in this consent. The following documentation must be submitted in order to obtain an Occupation Certificate:

- WAE drawings and any required engineering certifications;
- Records of inspections;
- An approved operations and maintenance plan; and
- A certificate of structural adequacy from a suitably qualified structural engineer verifying that any structural element of the WSUD system are structurally adequate and capable of withstanding all loads likely to be imposed on them during their lifetime.

Where Council is not the PCA a copy of the above documentation must be submitted to Council.

82. Creation of Restrictions/ Positive Covenants

Before an Occupation Certificate is issued the following restrictions/ positive covenants must be registered on the title of the subject site via dealing/ request document or Section 88B instrument associated with a plan. Council's standard recitals must be used for the terms:

a) Restriction/ Positive Covenant – Water Sensitive Urban Design

The subject site must be burdened with a positive covenant that refers to the water sensitive urban design elements referred to earlier in this consent using the "water sensitive urban design elements" terms included in the standard recitals.

b) Positive Covenant – Stormwater Pump

The subject site must be burdened with a restriction and a positive using the "basement stormwater pump system" terms included in the standard recitals.

THE USE OF THE SITE

83. Maintenance of Landscaping Works

The landscaping works, associated plantings and construction of retaining walls are to be effectively maintained at all times and throughout the life of the development.

84. Lighting

Any lighting on the site shall be designed so as not to cause a nuisance to other residences in the area or to motorists on nearby roads and to ensure no adverse impact on the amenity of the surrounding area by light overspill. All lighting shall comply with the *Australian Standard AS 4282:1997 Control of Obtrusive Effects of Outdoor Lighting.*

85. Offensive Noise

The use of the premises, building services, equipment, machinery and ancillary fittings shall not give rise to "offensive noise" as defined under the provisions of the *Protection of the Environment Operation Act 1997*. Ventilation systems, car park exhausts and pumps and filters associated with the swimming pool shall be treated to minimise noise so that the noise is not more than 5 dB above the background noise level when measured at the boundary of any adjoining premise or at the window or balcony of any unit within the site.

86. Waste and Recycling Management

To ensure the adequate storage and collection of waste from the occupation of the premises, all garbage and recyclable materials emanating from the premises must be stored in the designated waste rooms within buildings D1-3, which must include provision for the storage of all waste generated on the premises between collections. Arrangement must be in place in all areas of the development for the separation of recyclable materials from garbage. All waste storage rooms must be screened from view from any adjoining residential property or public place. A caretaker must be appointed to manage waste operations on site including undertaking all instructions issued by Council to enable waste collection. Waste rooms must be kept clean and tidy, bins must be washed regularly, and contaminants must be removed from bins prior to any collection.

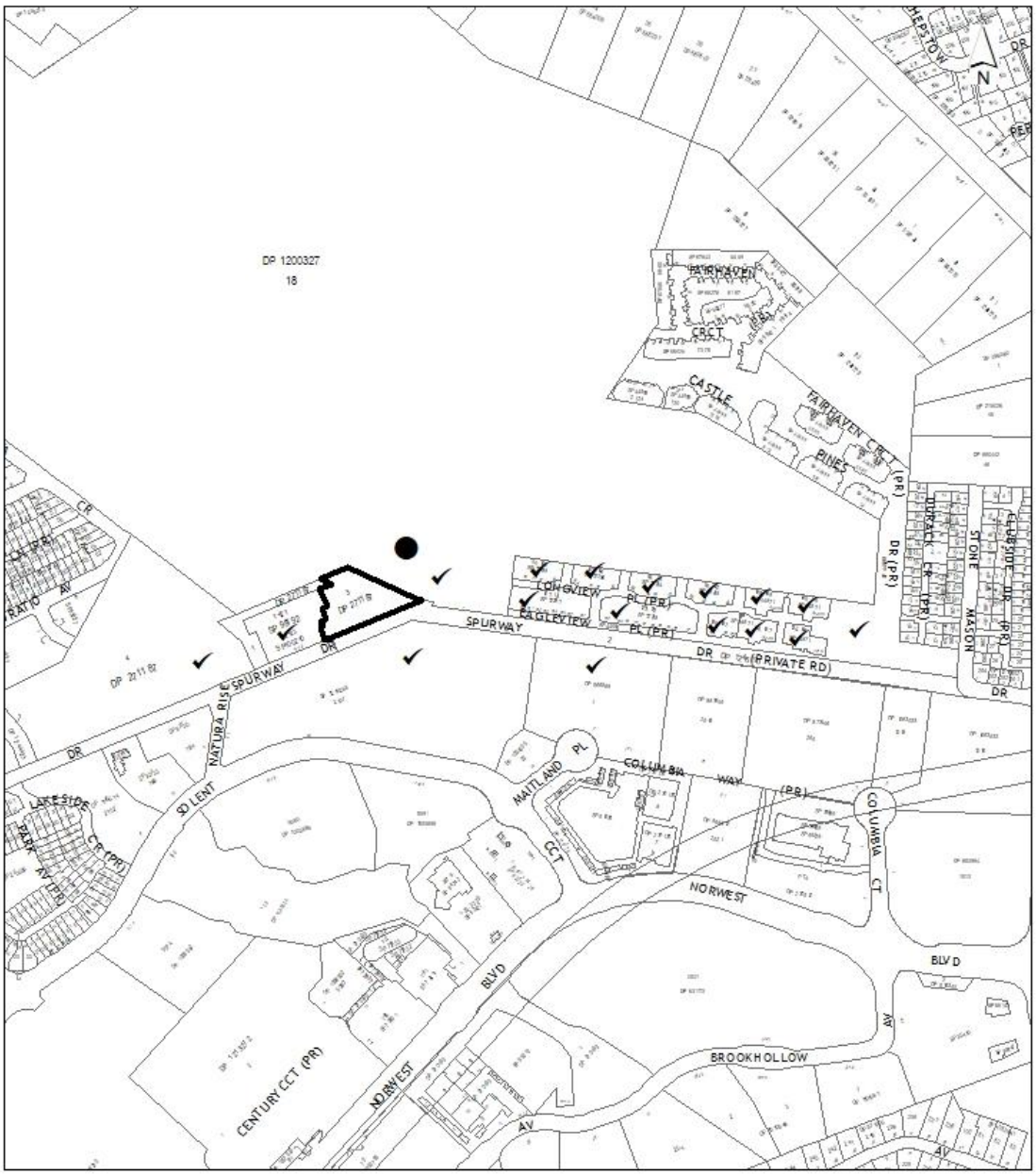
87. Waste and Recycling Collection

The garbage and recycling bins allocated to building D3 will be stored in the waste collection room located in building D1. Garbage and recycling bins must be rotated between the use of the bins in the waste chute termination room in building D3 and the storage and servicing of the bins in building D1. Full garbage and recycling bins from the waste chute termination room in D3 must be transported to the waste collection room in building D1 to be collected on collection day. Empty bins from D1 must then be transported to the waste chute termination room to replace the full bins from D3 to service the chute disposal system for D3.

ATTACHMENTS

1. Locality Plan
2. Aerial Photograph
3. Zoning Map
4. Height Map
5. Approved Masterplan
6. Architectural Plans
7. Landscape Plans
8. Photomontages
9. Golf Ball Safety Report
10. Golf Ball Net Plans
11. Design Excellence Minutes
12. Clause 4.6 Variation
13. Subdivision Plans

ATTACHMENT 1 – LOCALITY PLAN



SUBJECT SITE

✓ PROPERTIES NOTIFIED

● SUBMISSION RECEIVED

THE HILLS Sydney's Garden Shire

THE HILLS SHIRE COUNCIL

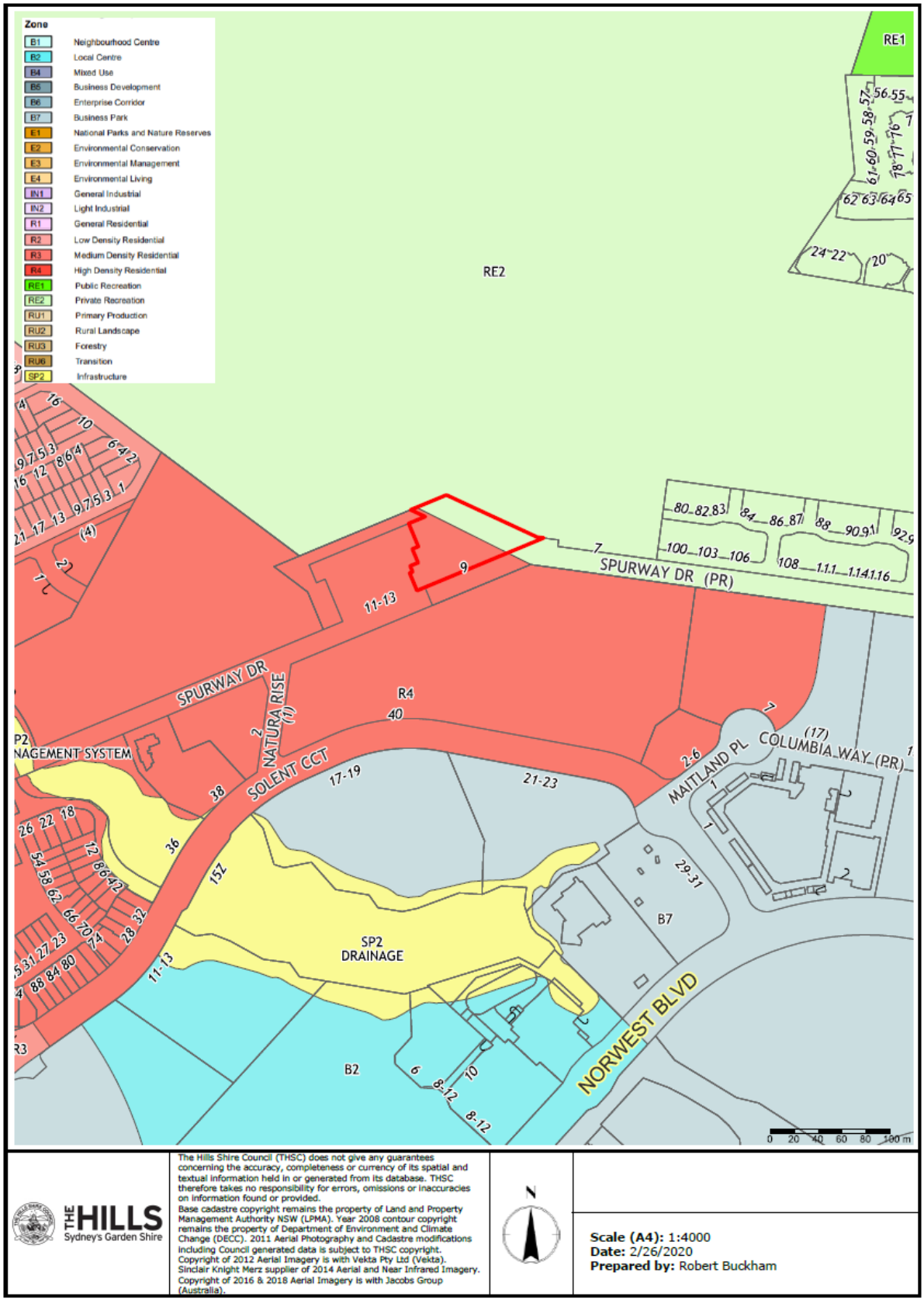
ATTACHMENT 2 – AERIAL MAP

SUBJECT SITE

THE HILLS Sydney's Garden Shire

THE HILLS SHIRE COUNCIL

ATTACHMENT 3 – LEP ZONING MAP



THE HILLS Sydney's Garden Shire

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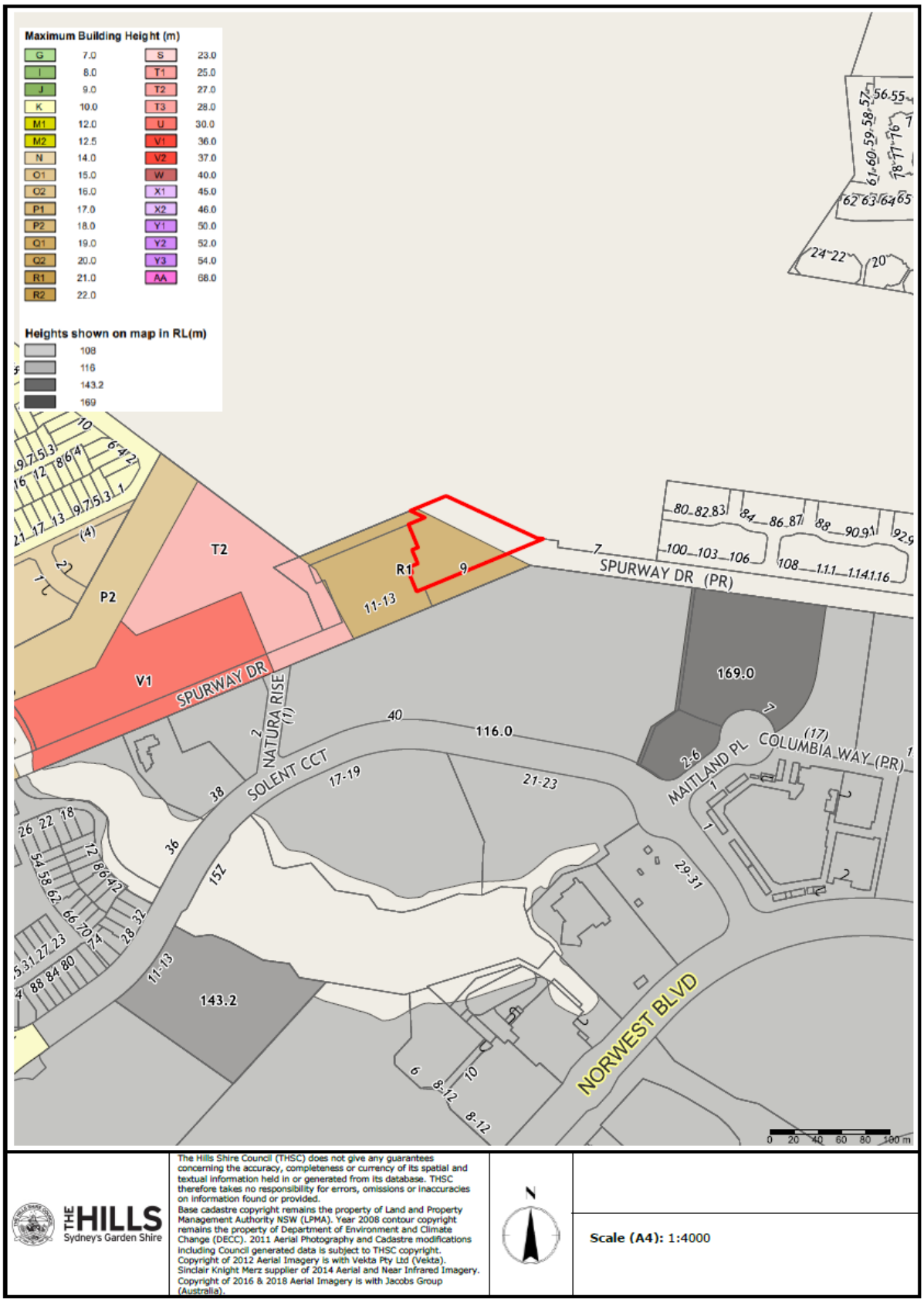
Date: 2/26/2020
Prepared by: Robert Buckham

ATTACHMENT 4 – LEP HEIGHT MAP



THE HILLS Sydney's Garden Shire

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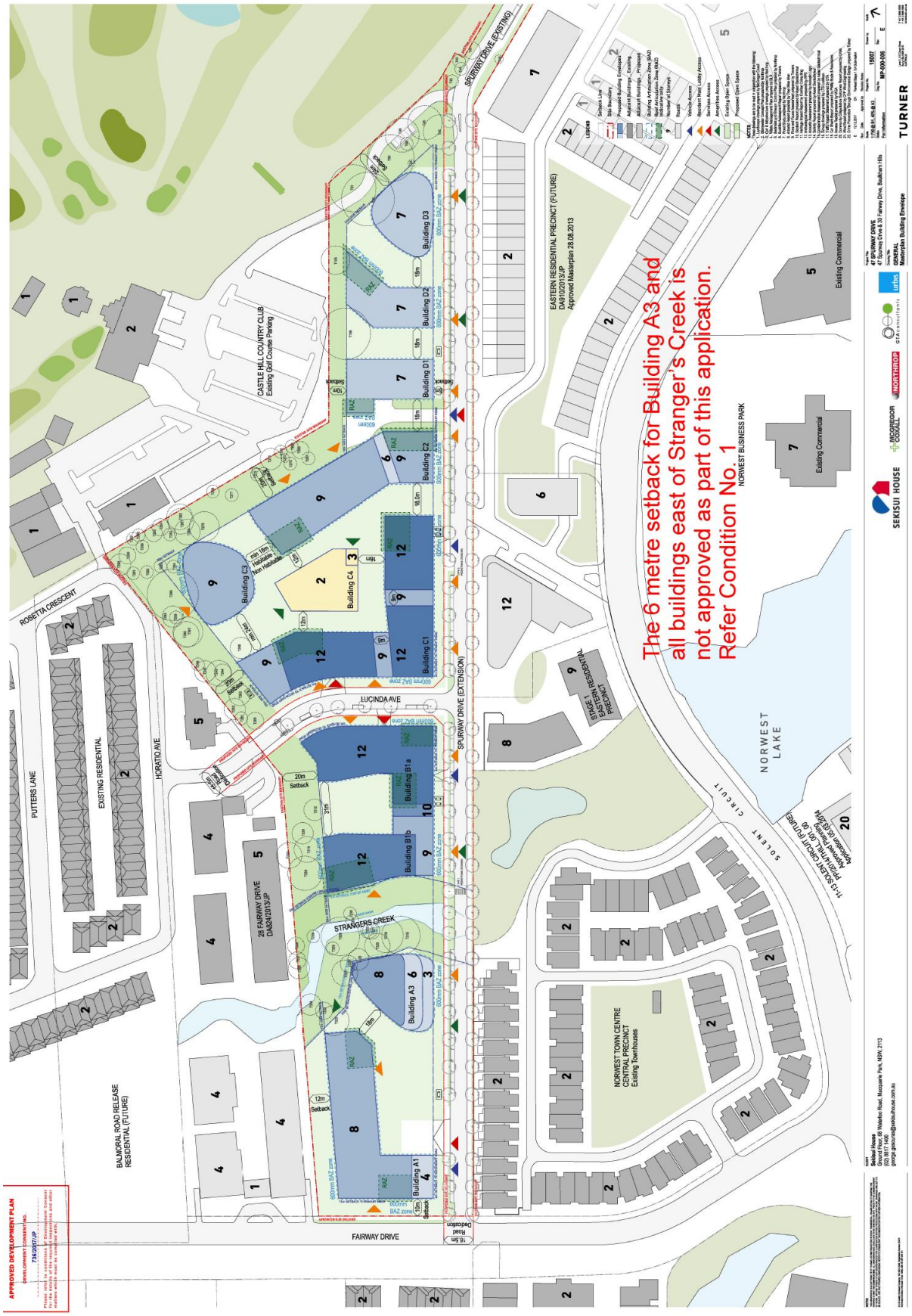

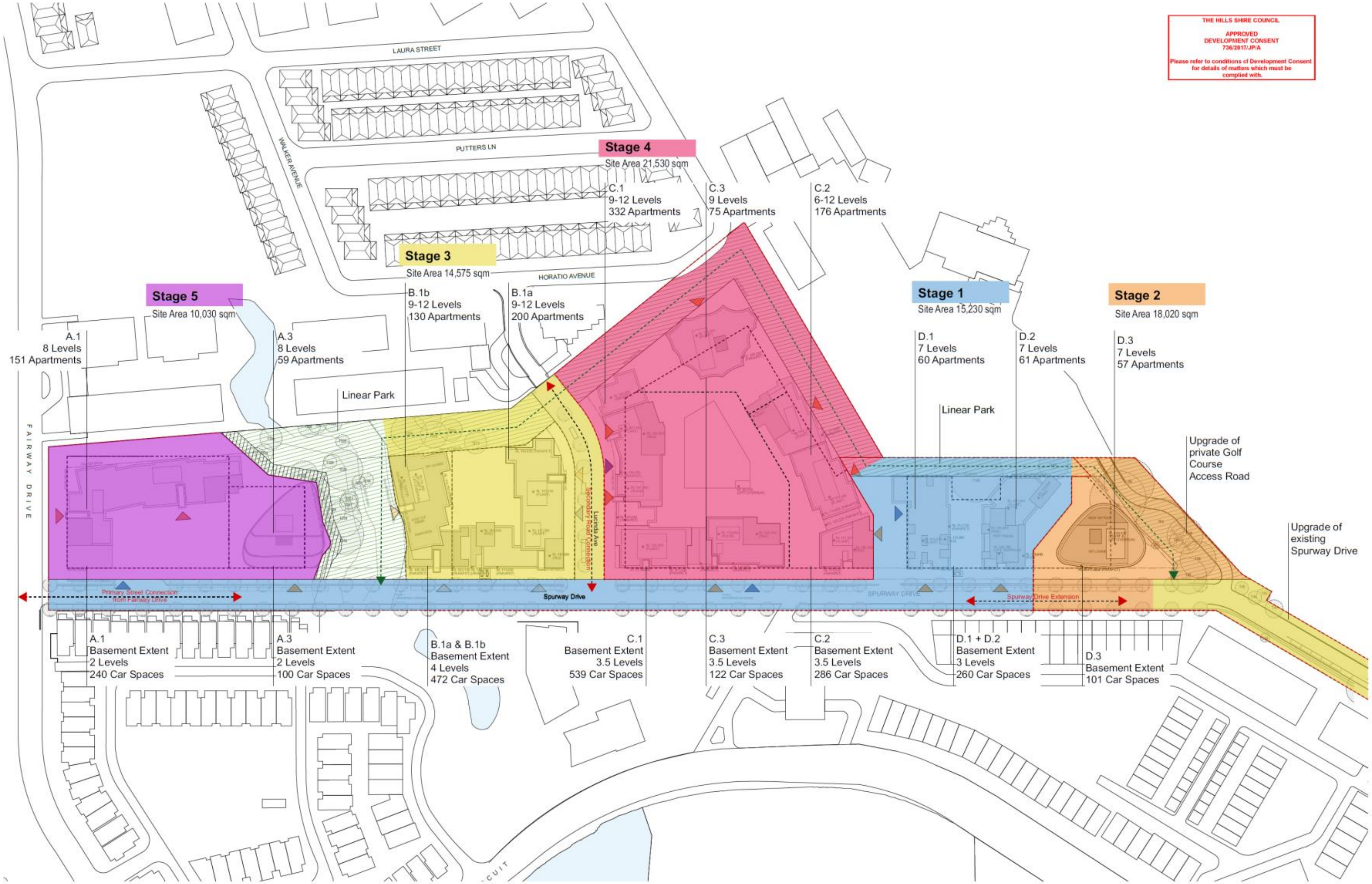

Client
Sekisui House
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SEKISUI HOUSE | MCGREGOR COXALL | NORTHROP | GTA consultants | urbis

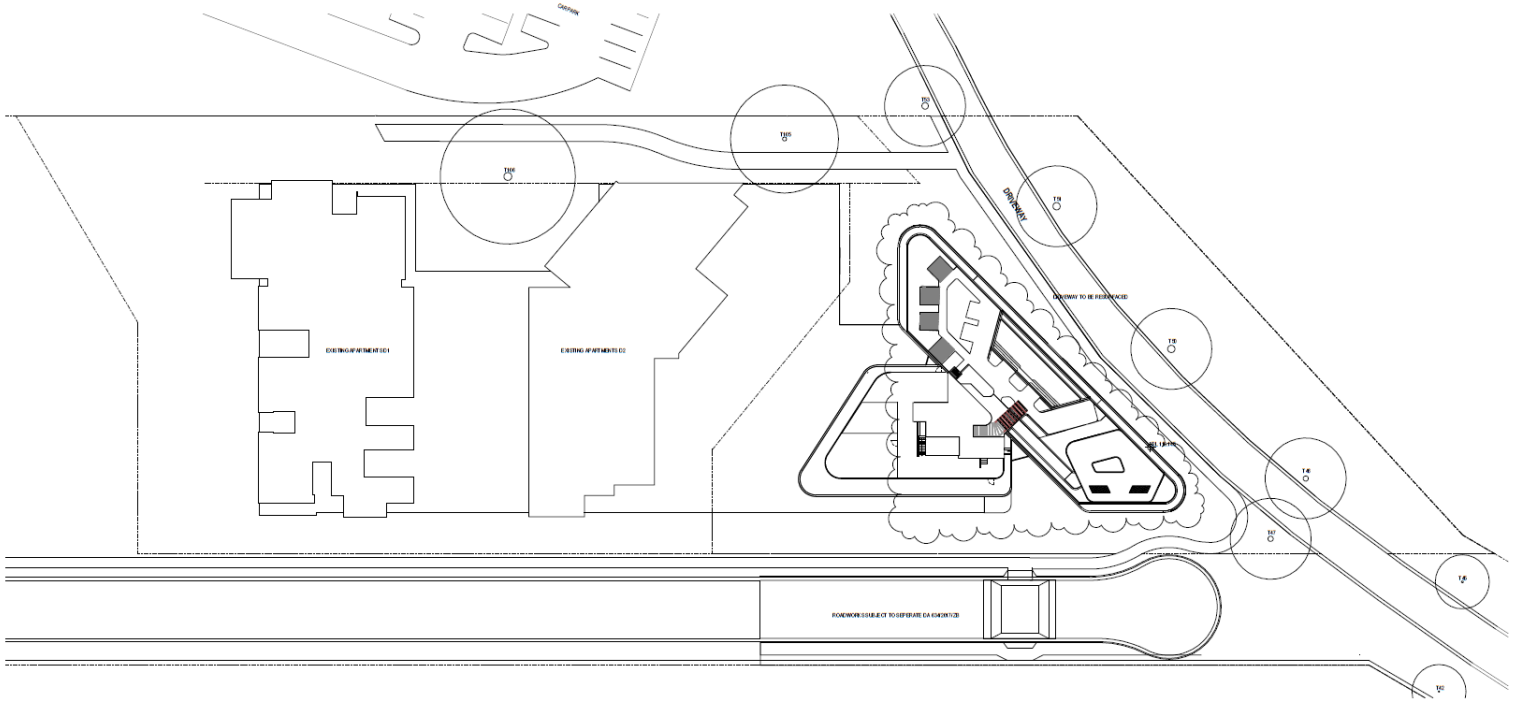
Project Title
47 SPURWAY DRIVE
47 Spurway Drive & 30 Fairway Drive, Baulkham Hills

Drawing Title
Staging
Staging Plan

B 17.01.2020 CH Response to Council Request for Additional Information
Rev. Date Approved by Revision Notes

Scale 1:750 @ B1, 40% @ A3
Project No. 15007
Drawn by CH
Status For Information
Dwg No. MP-410-001
Rev B

TURNER



PRELIMINARY

Revisions				
-	14.06.19	DA ISSUE	NE	Minor changes permitted for engineering works
A	27.09.19	DA RESPONSE	JC	
B	31.10.19	DA RESPONSE	SgM	
C	18.12.19	REVISED DA	JC	

19/12/2019 10:41:17 AM

Project: **Aire, The Orchards**
9 Spurway Drive
Norwest 2153

Drawing: **Site Plan**

Project No.: **217144**

Date: **20.03.19**

Author: **JC**

Scale: @ A1 **1 : 300**

Drawing No.: **TP00.10 C**

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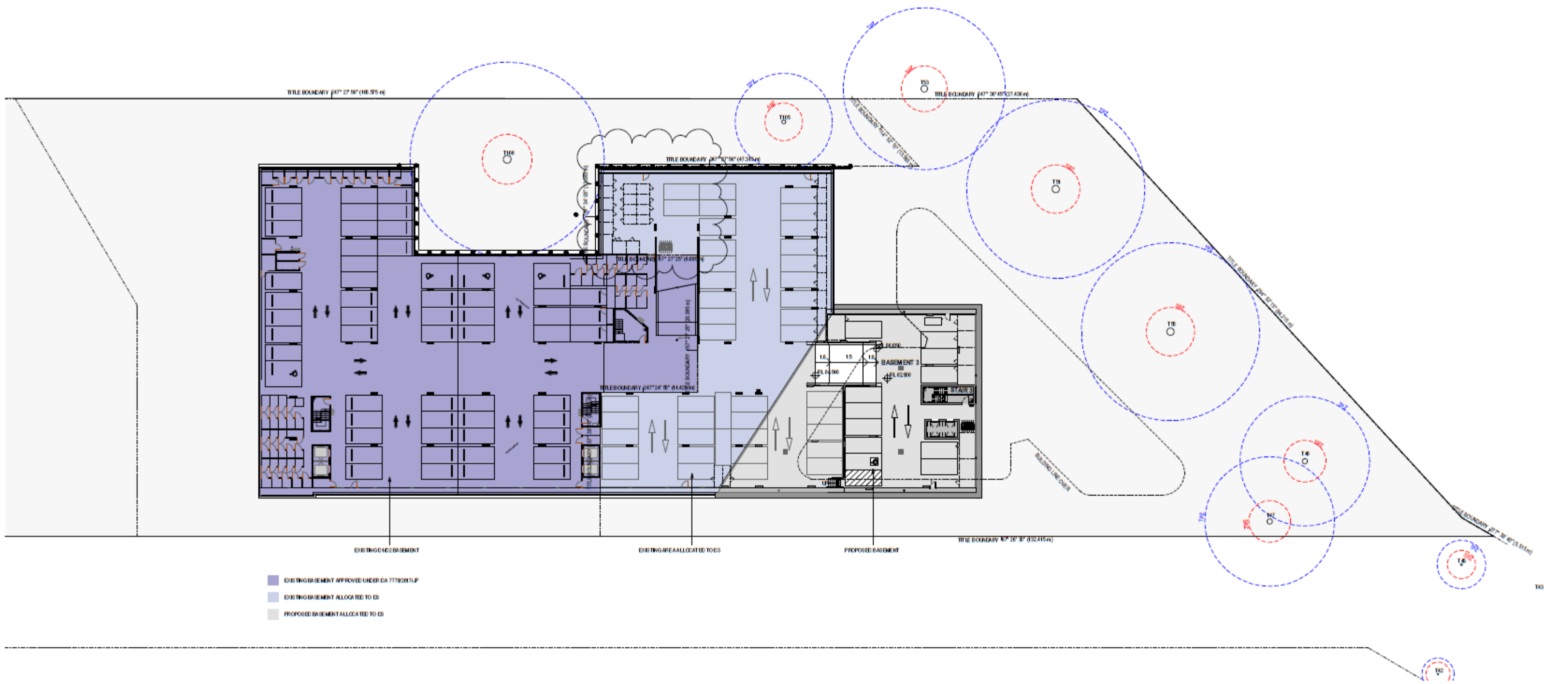
Brisbane, Melbourne, Sydney
www.rothelowman.com.au

ATTACHMENT 6 – ARCHITECTUAL PLANS



PRELIMINARY

Revisions

-	14.06.19	DA ISSUE	NE	Minor changes permitted for engineering works
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B	31.10.19	DA RESPONSE	SgM	
C	18.12.19	REVISED DA	JC	

19/12/2019 10:23:55 AM

Project: **Aire, The Orchards**

9 Spurway Drive
Norwest 2153

Drawing: **Site Plan - Basement 3**

Project No: **217144**

Date: **06.02.19**

Author: **JC**

Scale @ A3: **1 : 300**

Drawing No: **TP00.11 C**

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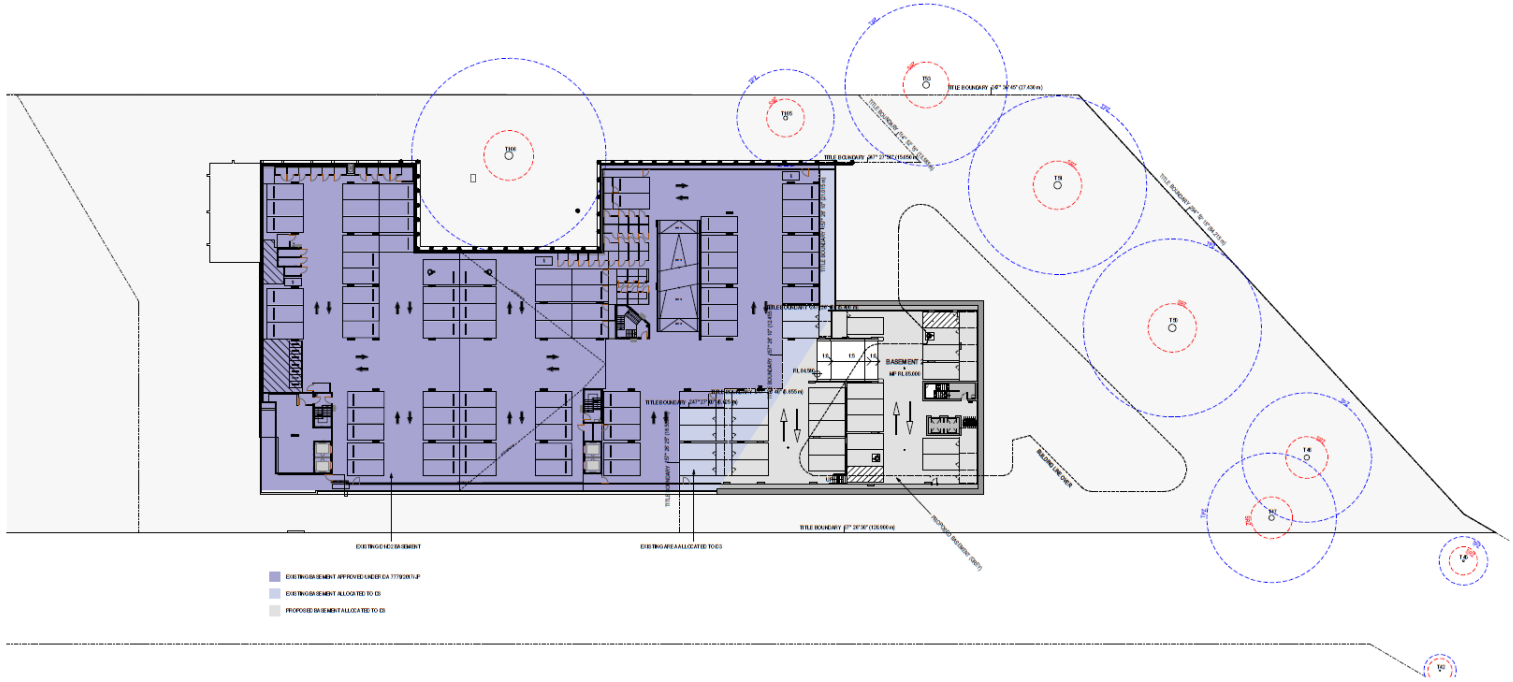

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	B	31.10.19	DA RESPONSE	SgM
	C	18.12.19	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2019 10:24:01 AM

Project: Aire, The Orchards
9 Spurway Drive
Norwest 2153

Drawing: Site Plan - Basement 2
Project No: 217144
Date: 12.12.18
Author: GT
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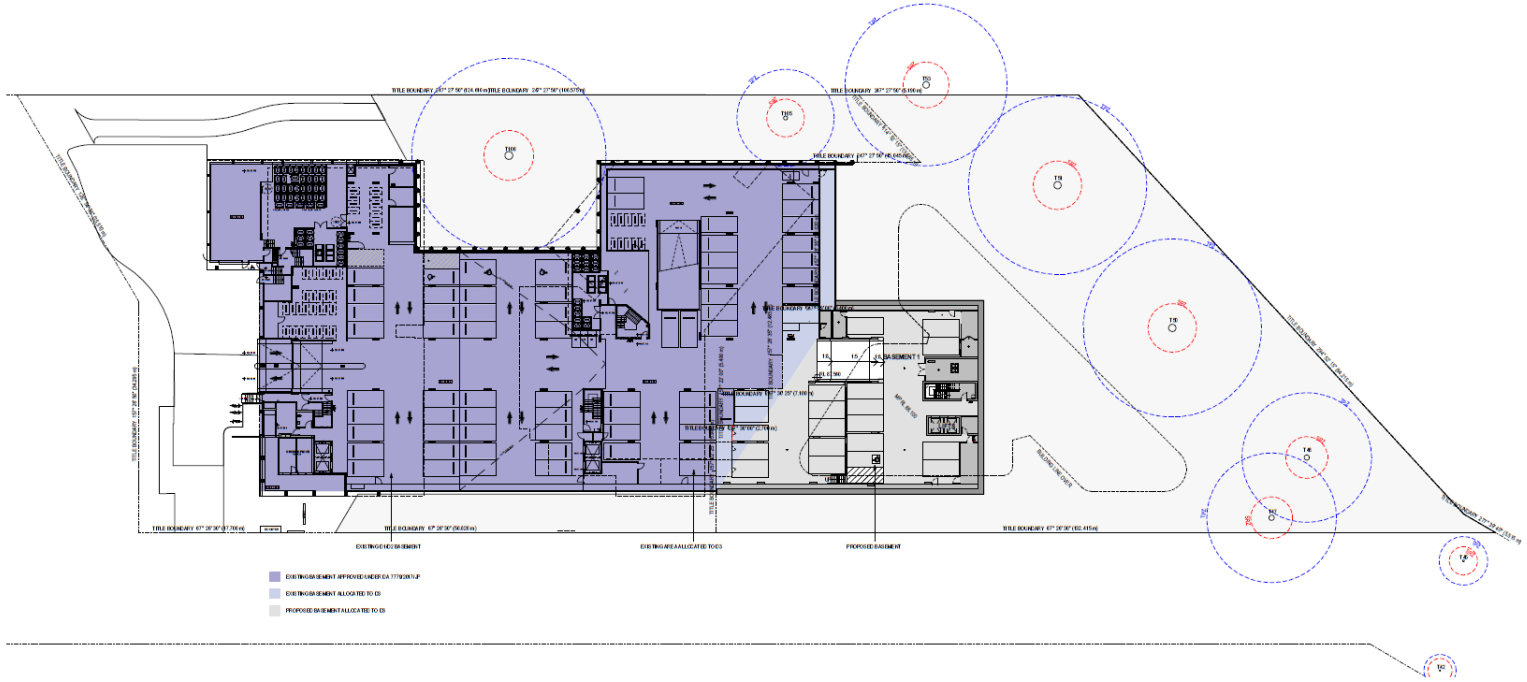

PRELIMINARY

Revisions				
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	A	27.09.18	DA RESPONSE	JC
	B	31.10.18	DA RESPONSE	SgM
	C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:24:07 AM

Project: Aire, The Orchards
9 Spurway Drive
Norwest 2153

Drawing: Site Plan - Basement 1
Project No: 217144
Date: 12.12.18
Author: NE
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Drawing No: TP00.13 C

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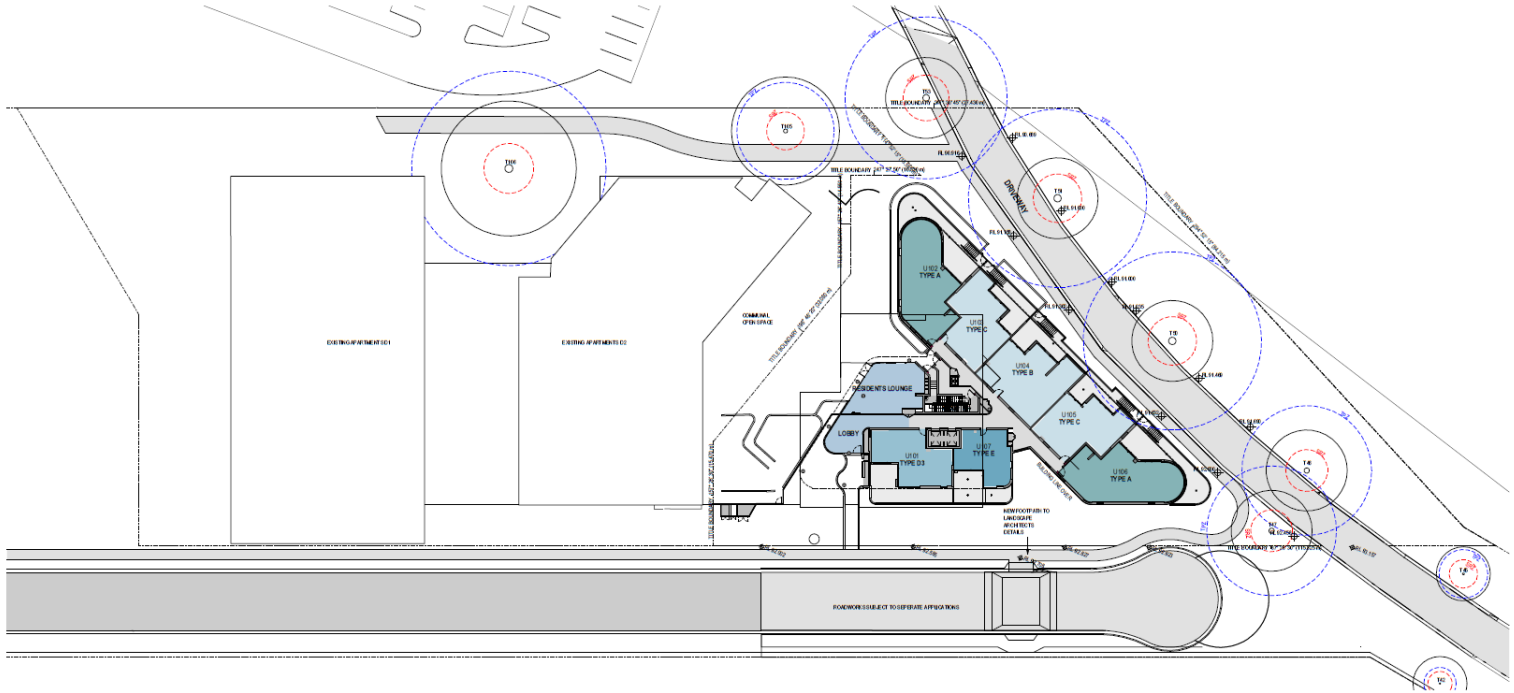

PRELIMINARY

Revisions				
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	B	31.10.19	DA RESPONSE	SgM
	C	18.12.19	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2019 10:24:15 AM

Project: Aire, The Orchards
9 Spurway Drive
Norwest 2153

Drawing: Site Plan - Ground
Project No: 217144
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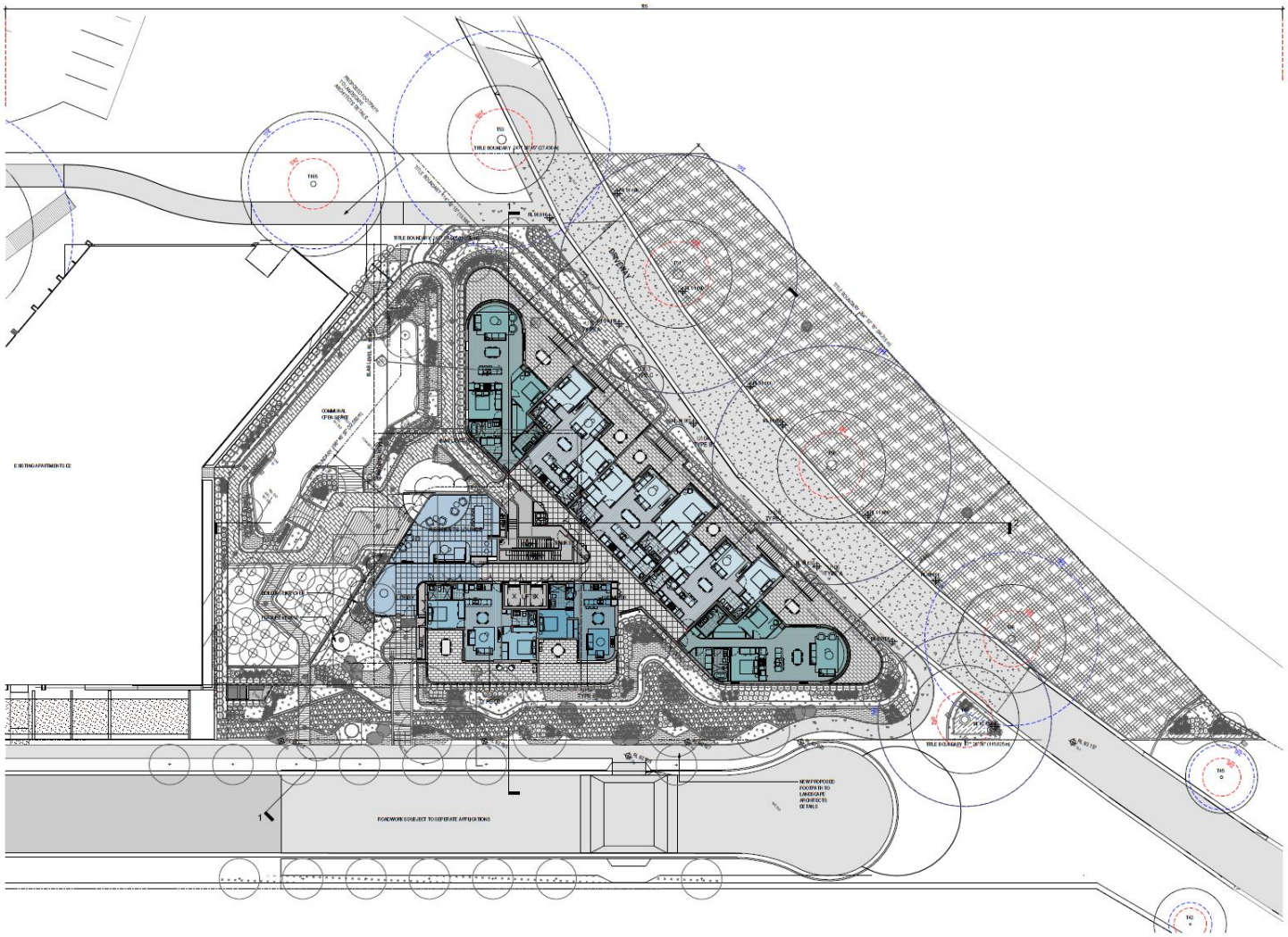
rothelowman

Brisbane, Melbourne, Sydney
www.rothelowman.com.au



PRELIMINARY

Revisions			
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B	30.10.18	DA RESPONSE	NB
C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:24:54 AM

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Drawing: **Ground**
Project No: **217144**
Date: **06.12.18**
Author: **JC**
Scale: @ A3 **1 : 200**
Drawing No: **TP01.03 C**

6 Spanway Drive
Norwest 2153

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Brisbane, Melbourne, Sydney
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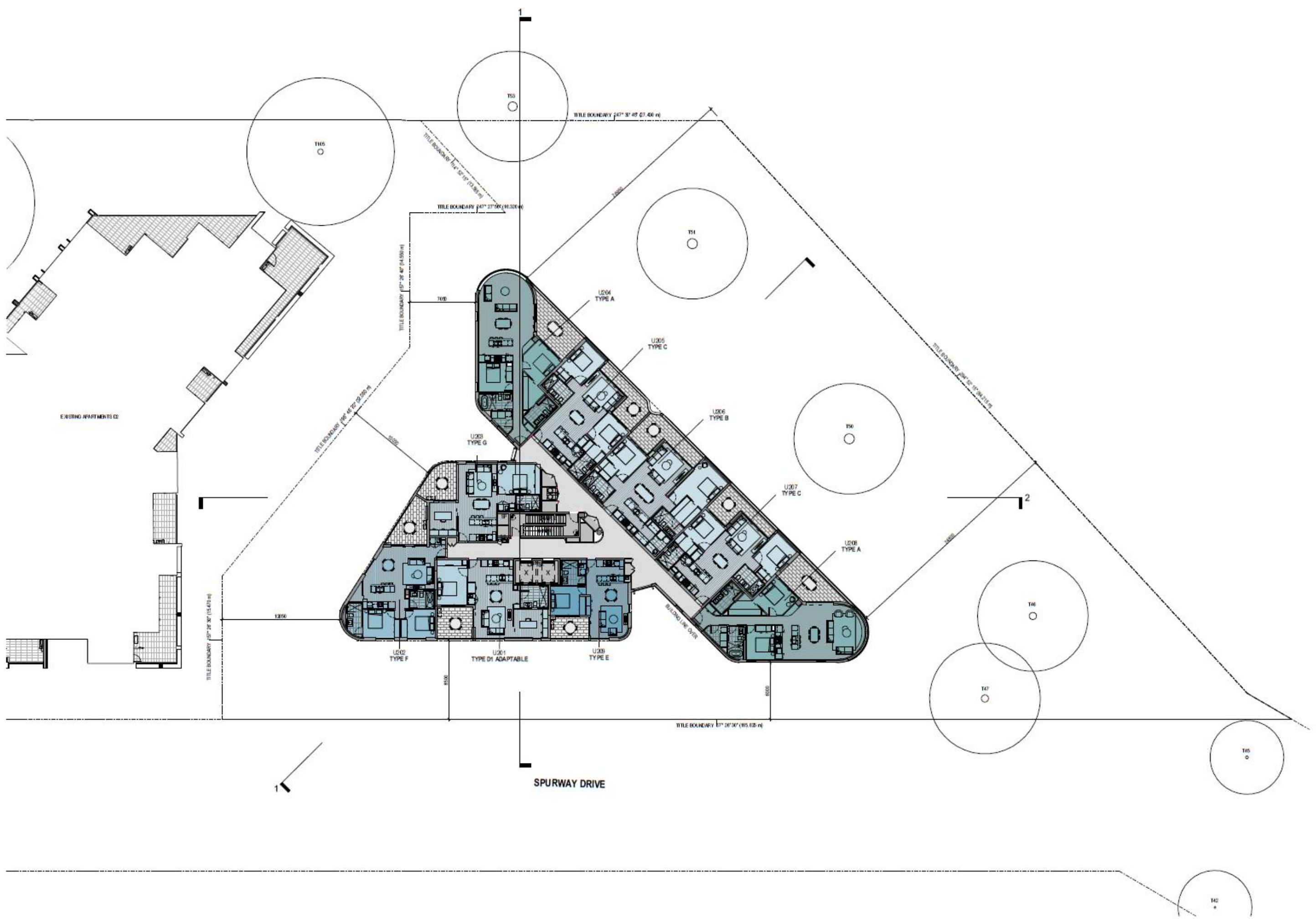

PRELIMINARY

Revisions

-	14.06.19	DA ISSUE	NE	Minor changes permitted for engineering works
A	27.09.19	DA RESPONSE	JC	
B	31.10.19	DA RESPONSE	SgM	
C	18.12.19	REVISED DA	JC	

19/12/2019 10:25:07 AM

Project: **Aire, The Orchards**

9 Spurway Drive
Norwest 2153

Drawing: **Level 1**

Project No: **217144**

Date: **06.12.18**

Author: **JC**

Scale @ A3: **1 : 200**

Drawing No: **TP01.04 C**

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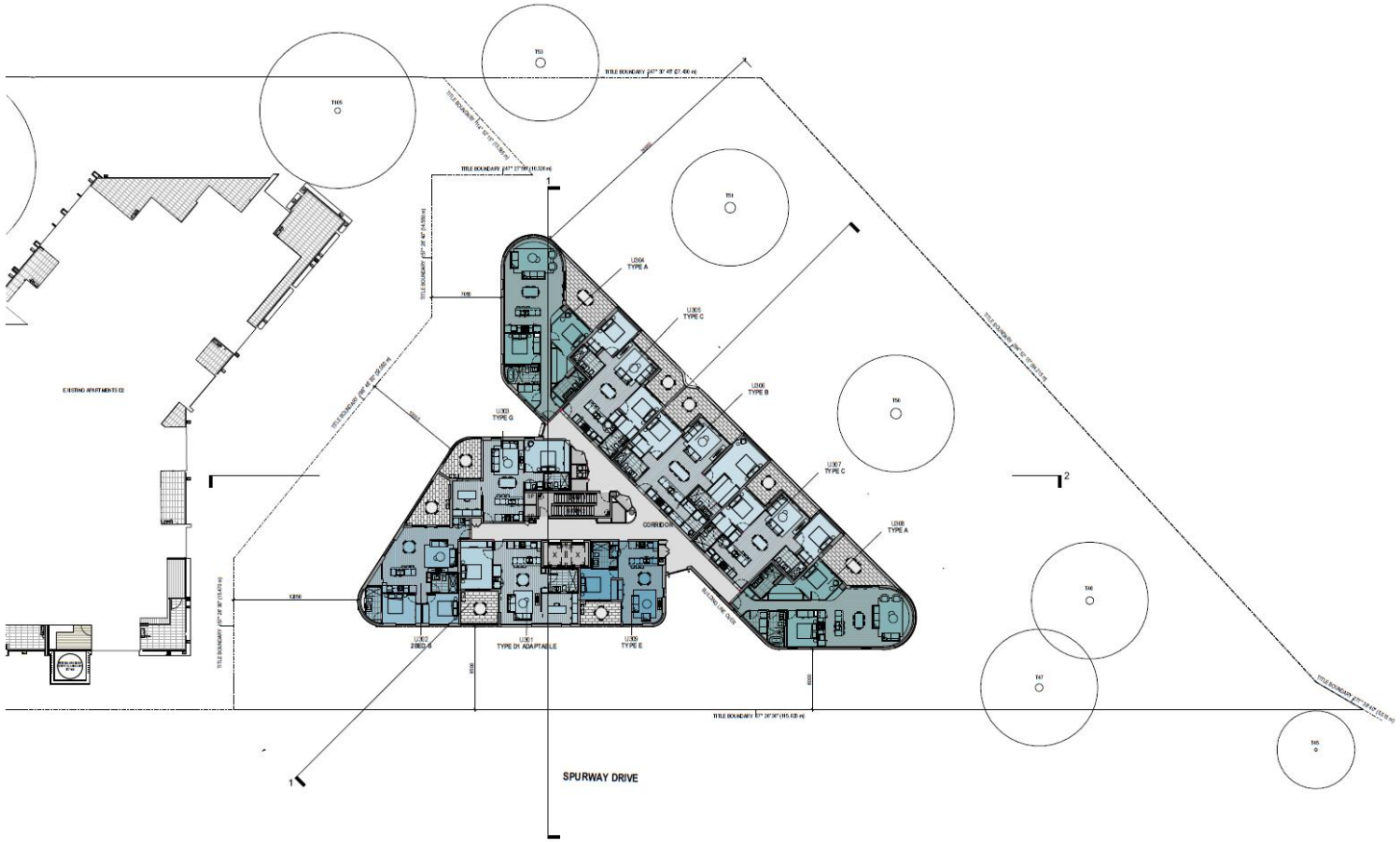

PRELIMINARY

Revisions				
	-	14.06.18	DA ISSUE	NE
	A	27.09.18	DA RESPONSE	JC
	B	30.10.18	DA RESPONSE	SpR
	C	06.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:25:18 AM

Project: Aire, The Orchards
Drawing: Level 2
Project No: 217144
Date: 06.12.18
Author: JC
Scale: @ A1: 1 : 200
Drawing No: TP01.05 C

9 Spurway Drive
Norwest 2153

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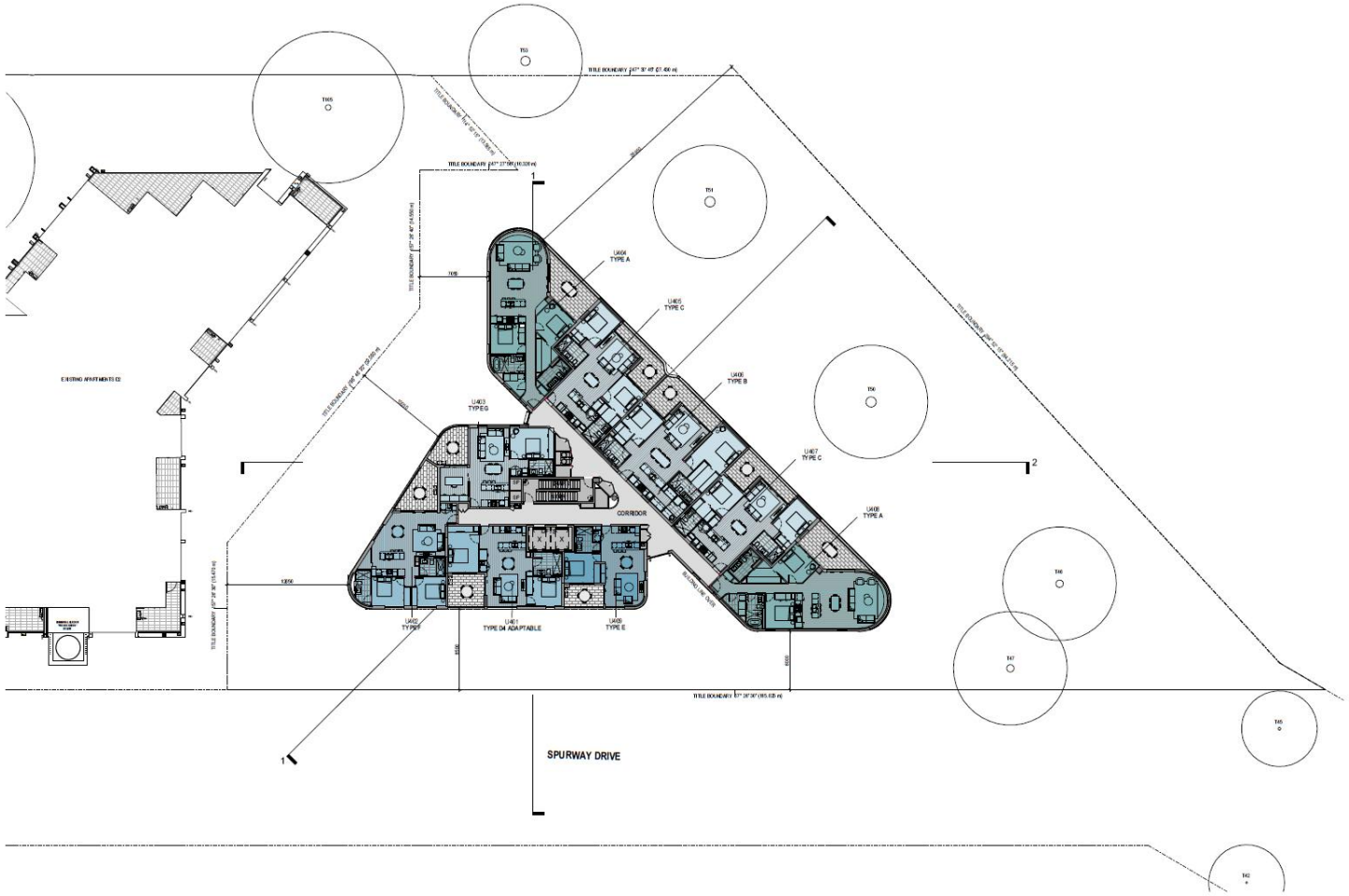

PRELIMINARY

Revisions				
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	B	30.10.18	DA RESPONSE	SpR
	C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:25:32 AM

Project: Aire, The Orchards
Drawing: Level 3
Project No: 217144
Date: 06.12.18
Author: JC
Scale: @ A1: 1 : 200
Drawing No: TP01.06 C

9 Spurway Drive
Norwest 2153

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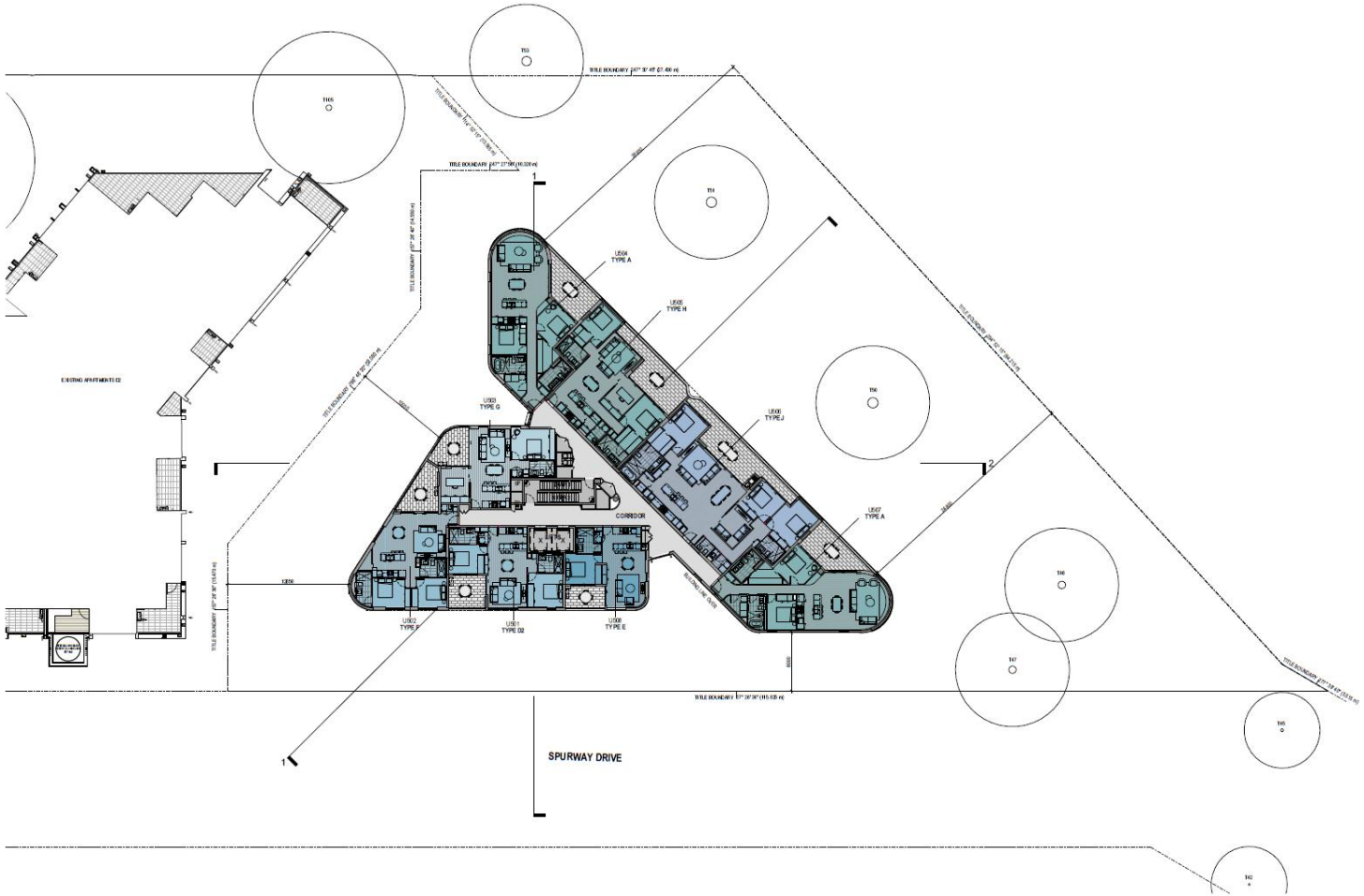

PRELIMINARY

Revisions				
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	B	30.10.18	DA RESPONSE	SpR
	C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:25:47 AM

Project: Aire, The Orchards
Drawing: Level 4
Project No: 217144
Date: 06.12.18
Author: JC
Scale: @ A1: 1 : 200
Drawing No: TP01.07 C

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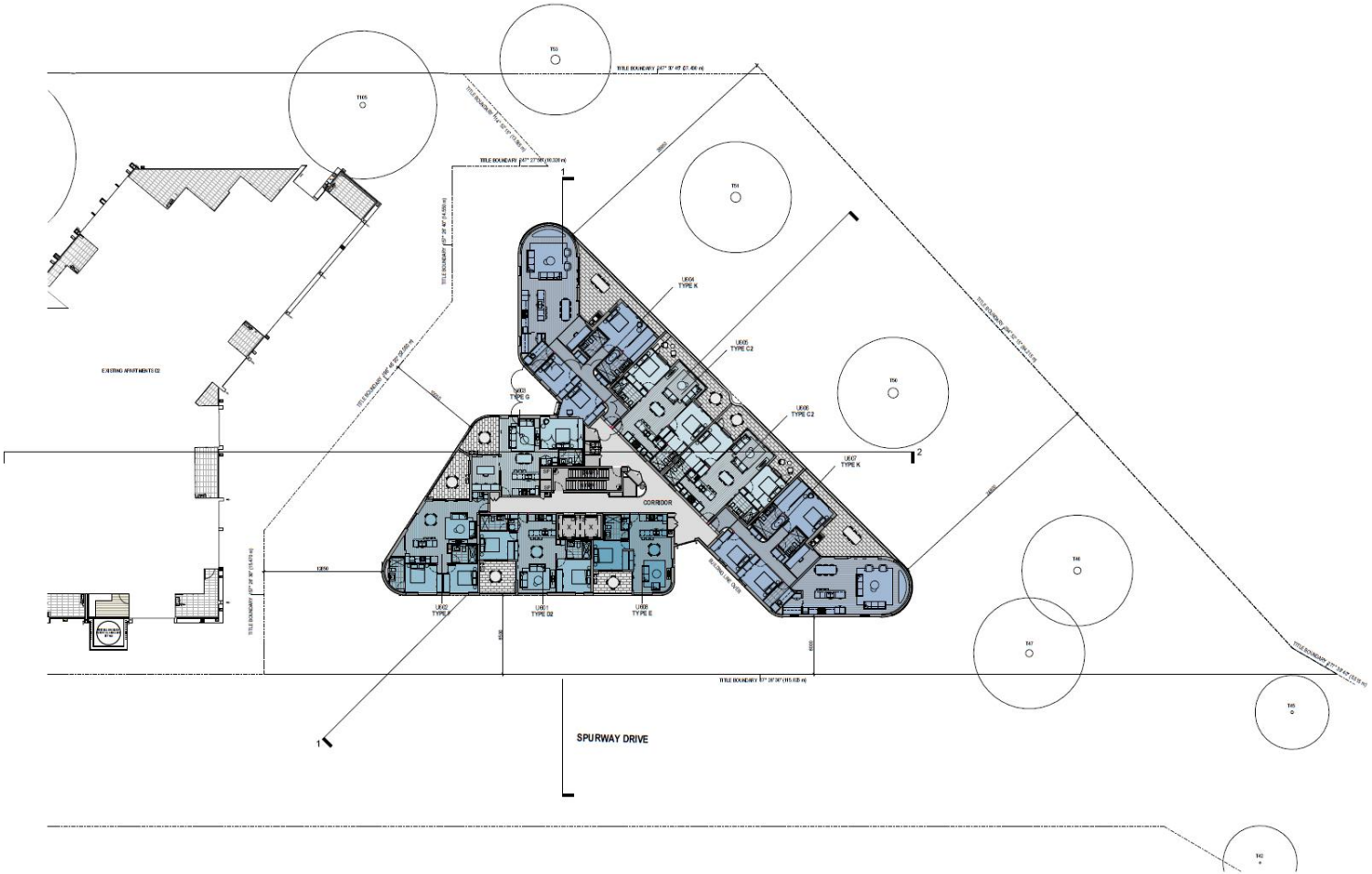

PRELIMINARY

Revisions			
-	14.06.18	DA ISSUE	NE
A	27.09.18	DA RESPONSE	JC
B	30.10.18	DA RESPONSE	SgM
C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:25:59 AM

Project: Aire, The Orchards
Drawing: Level 5
Project No: 217144
Date: 06.12.18
Author: JC
Scale: @ A1: 1 : 200
Drawing No: TP01.08 C

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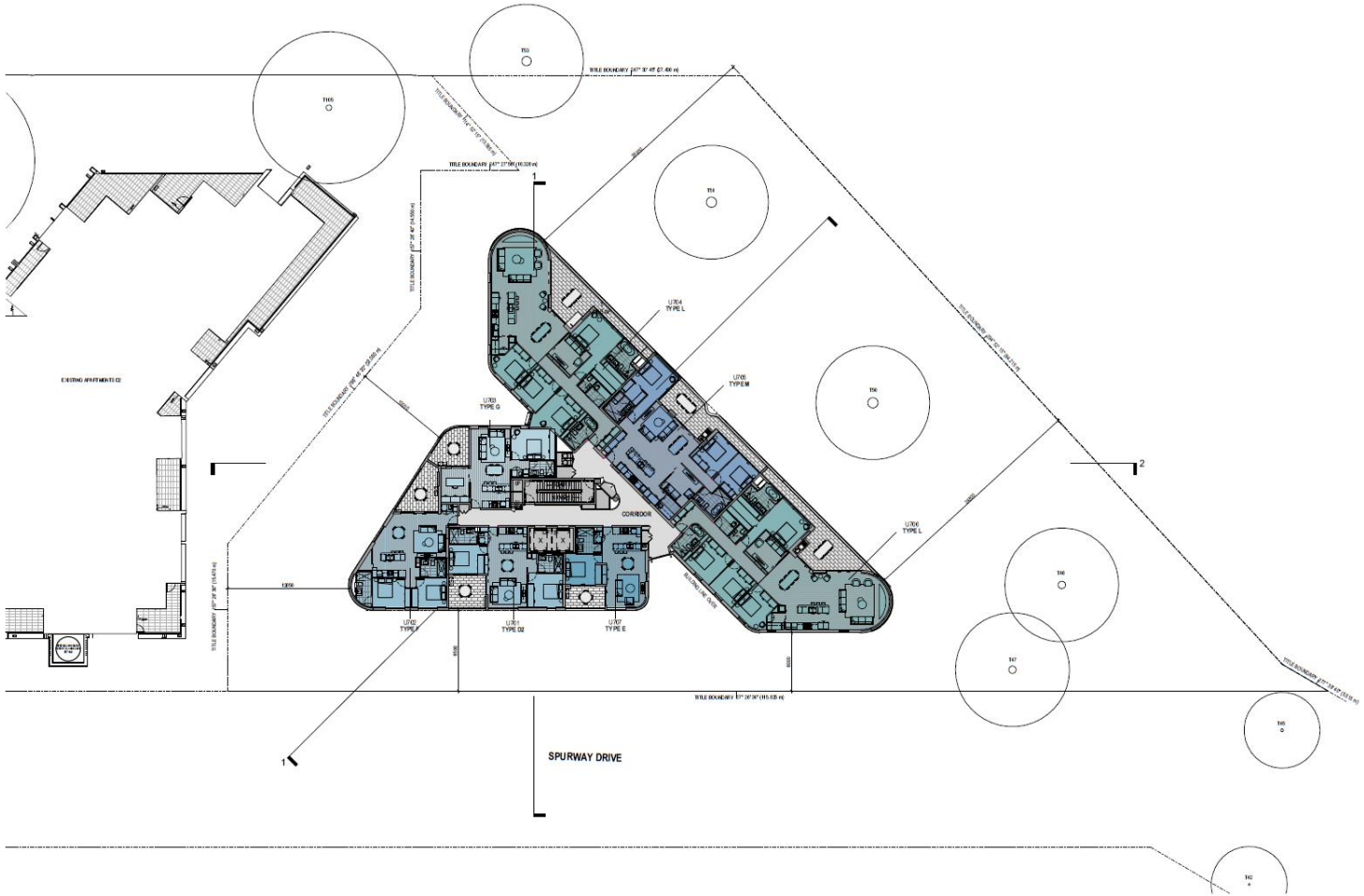

PRELIMINARY

Revisions				
	-	14.06.18	DA ISSUE	NE
	A	27.09.18	DA RESPONSE	JC
	B	31.10.18	DA RESPONSE	SpR
	C	18.12.18	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2018 10:26:09 AM

Project: Aire, The Orchards
Drawing: Level 6
Project No: 217144
Date: 06.12.18
Author: JC
Scale: @ A1: 1 : 200
Drawing No: TP01.09 C

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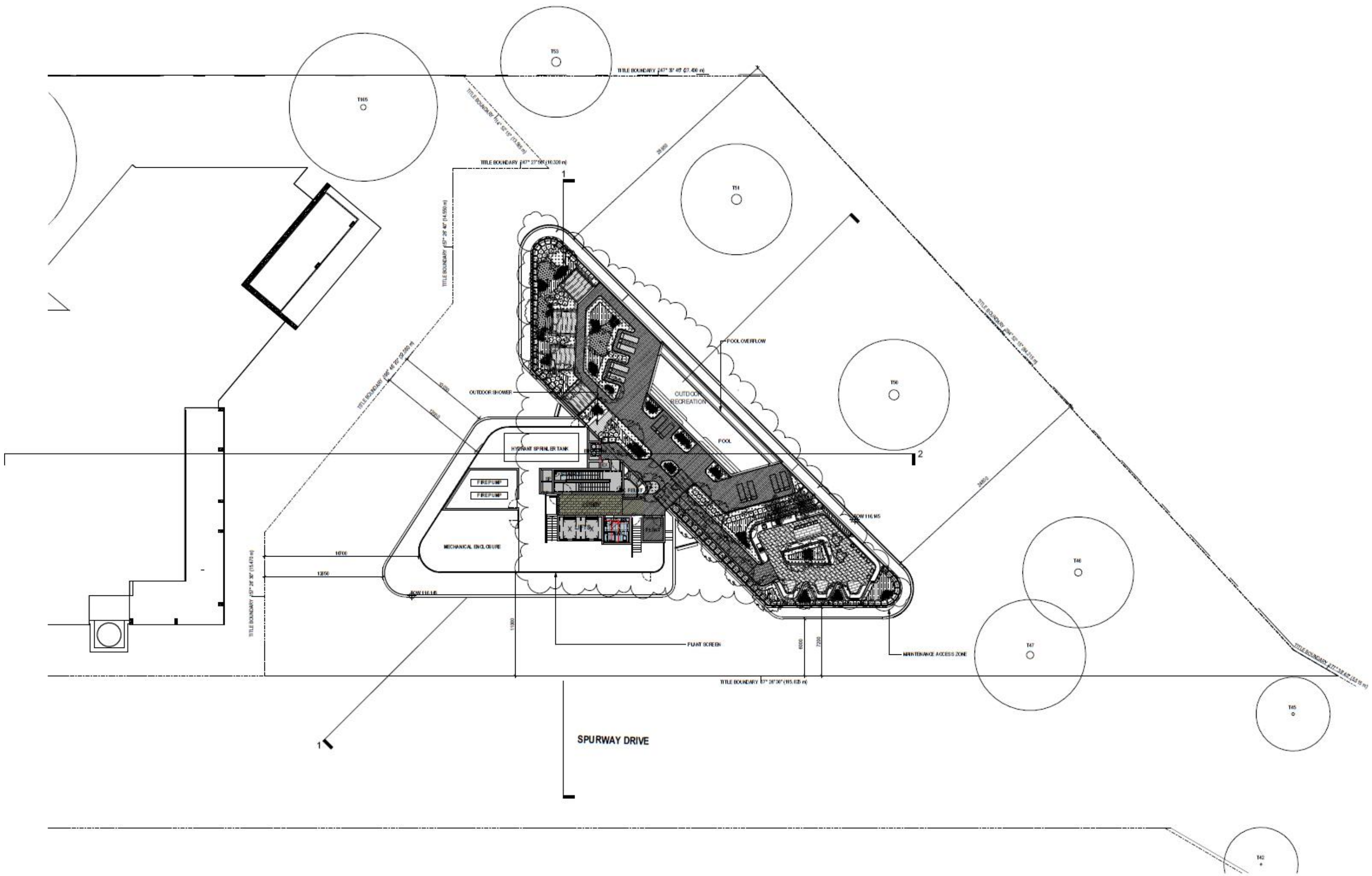

PRELIMINARY

Revisions

-	14.06.19	DA ISSUE	NE	Minor changes permitted for engineering works
A	27.09.19	DA RESPONSE	JC	
B	31.10.19	DA RESPONSE	SgM	
C	18.12.19	REVISED DA	JC	

19/12/2019 10:26:17 AM

Project / **Aire, The Orchards**

Drawing / **Roof Terrace**

Project No / **217144**

Date / **06.12.18**

Author / **JC**

Scale @ A3 / **1 : 200**

Drawing No / **TP01.10 C**

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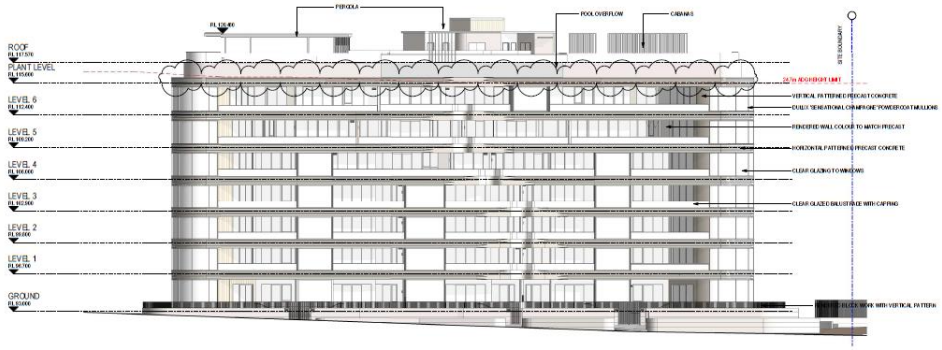
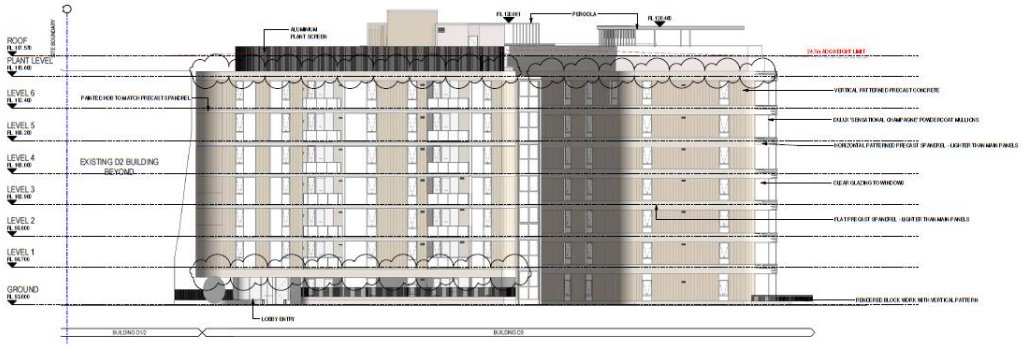


TP NORTH ELEVATION



SOUTH ELEVATION TP

PRELIMINARY

Revisions			
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A	27.09.19	DA RESPONSE	JC
B	31.10.19	DA RESPONSE	SgM
C	18.12.19	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2019 10:26:49 AM

Project: Aire, The Orchards
Drawing: Elevations Sheet 1
Project No: 217144
Date: 11.02.19
Author: JL
Scale: @ A3: 1 : 200
Drawing No: TP02.01 C

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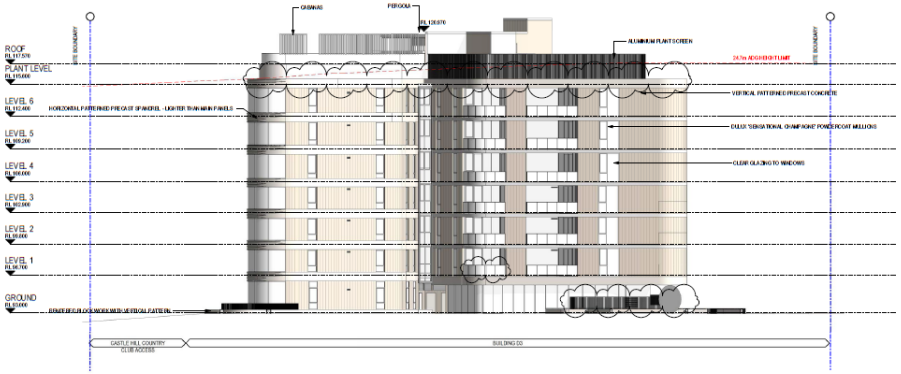

TP WEST ELEVATION

PRELIMINARY

Revisions			
-	14.06.19	DA ISSUE	NE
A	27.09.19	DA RESPONSE	JC
B	31.10.19	DA RESPONSE	SpM
C	18.12.19	REVISED DA	JC

Minor changes permitted for engineering works

19/12/2019 10:27:13 AM

Project: Aire, The Orchards
Drawing: Elevations Sheet 2
Project No: 217144
Date: 11.02.19
Author: JL
Scale: @ A1: 1 : 200
Drawing No: TP02.02 C

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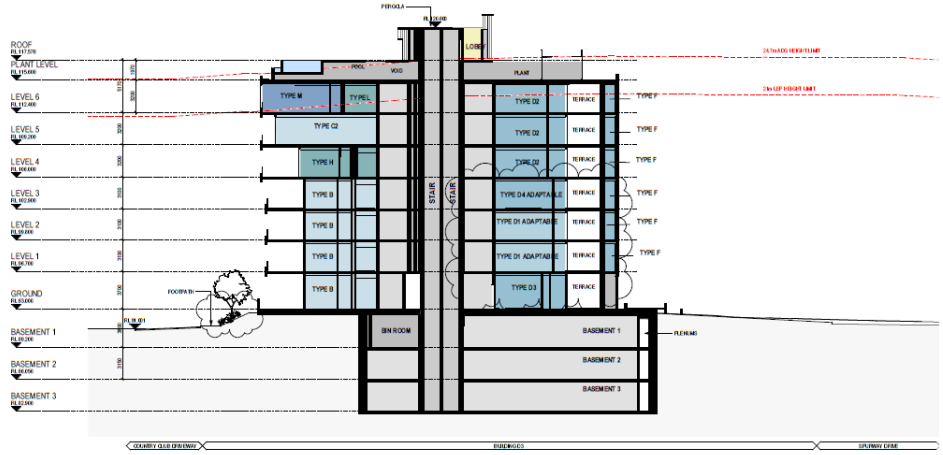
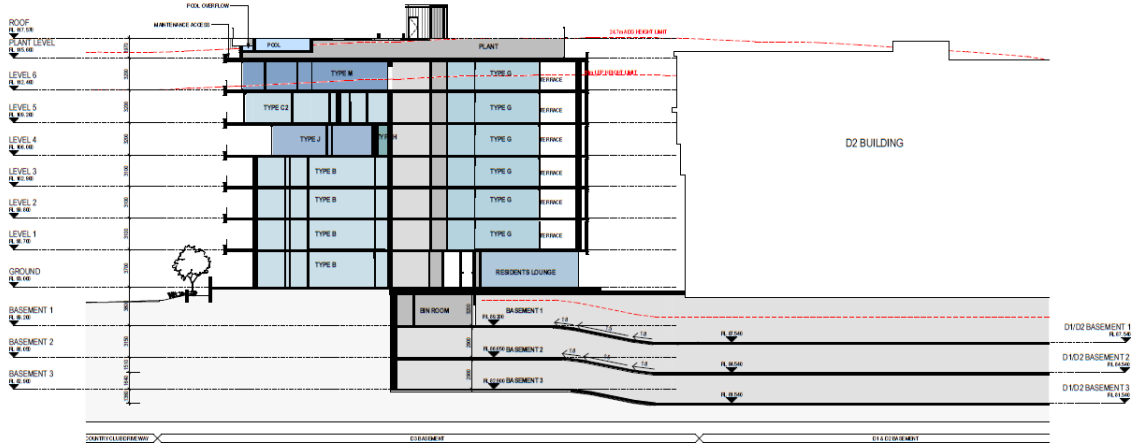


TP Section 1



TP Section 2

Thermal Comfort Specifications	
Glazing Doors/windows	Aluminium framed performance glazing throughout **Group A – awning** U-value: 4.90 (equal to or lower than) SHGC: 0.51 (±10%) **Group B – sliding doors + fixed glazing** U-value: 4.90 (equal to or lower than) SHGC: 0.59 (±10%) Aluminium framed double glazing as per assessor certificate: U-value: 4.10 (equal to or lower than) SHGC: 0.52 (±10%) Aluminium framed performance double glazing as per assessor certificate: U-value: 2.91 (equal to or lower than) SHGC: 0.44 (±10%)
Roof	Concrete roof, no insulation Medium colour modelled
Ceiling	Plasterboard ceiling with R1.5 insulation (insulation only value) where balconies are above Plasterboard ceiling with R2.5 insulation (insulation only value) to soffit of concrete where roof and plant rooms are over Plasterboard ceiling with R3.0insulation (insulation only value) to soffit of concrete where roof is over as per assessor certificate Plasterboard ceiling, no insulation where neighbouring units are above
External Walls	Lightweight/Metal cladding as per plans on framed walls with R2.0 insulation (insulation only value) Internally lined concrete walls as per plans with R2.0 insulation (insulation only value) All external wall insulation increased to R2.5 as per assessor certificate. Default colour modelled
Internal walls	Plasterboard on studs – no insulation
Inter tenancy walls	75mm Hebel Power Panel to walls adjacent to neighbours, no insulation required 75mm Hebel Power Panel to walls adjacent to hallways with a minimum R 1.7 insulation (insulation only value) Minimum 150mm concrete with furring channel and plasterboard lining to all walls adjacent to lift shafts and fire stairs with a minimum R1.7 insulation (insulation only value)
Floors	Concrete with a minimum R1.2insulation (insulation only value) required to units with Garage below Concrete with a minimum R1.5insulation (insulation only value) required to units with Garage below as per assessor certificate. Concrete with a minimum R1.2 insulation (insulation only value) required to units where open outdoor is below Concrete between levels, no insulation required Concrete slab on ground no insulation required
Eaves and shading	Eaves as per plans

BASIX Water Commitments	
Fixtures	Showerheads: Mid flow (>6L but <=7.5L/min) Toilets: 4.0 star Kitchen taps: 5.0 star Bathroom vanity taps: 5.0 star
Appliances	Dishwashers: 4.0 stars water rating Clothes Washer 3.5 stars waterrating

BASIX Energy Commitments	
Hot water system	Central Gas hot water system with R1.0 insulation to ring main and supply risers
Heating and Cooling systems	All units to have individual, single phase, reverse cycle air conditioning to living areas, and at least 1 bedroom A minimum efficiency of 3.0 stars is required for cooling; and A minimum efficiency of 3.0 stars is required for heating
Ventilation in units	Kitchen– Individual fan, externally ducted to roof or façade, manual on/off switch Bathrooms - Individual fan, ducted to roof or façade, manual on/off switch Laundry- Individual fan, ducted to roof or façade, manual on/off switch
Ventilation to common areas	Car park area – supply and exhaust air with a carbon monoxide monitor & VSD fan Garbage rooms – Exhaust air, running continuously Plant/Storage – Supply only, interlocked to light Ground floor Lobbies and Hallways – Naturally ventilated
Lighting to common areas	Car park area – Fluorescent lights with zoned switching and motion sensors Lifts – LED lights connected to lift call button Garbage rooms – Fluorescent lights with motion sensor Plant/switch room – Fluorescent lights with manual on / manual off switch Ground floor lobby – Light emitting diodes (LEDs) with motion sensors Hallways – Light emitting diodes (LEDs) with zoned switching and motion sensors
Other	Gas cooktop & electric oven Dishwashers: 4.0 star Clothes washer: 3.5 star Clothes dryers: 2.5 star Well ventilated fridge space
Pool	Pool heated by electric heat pump Pool pump controlled by timer

PRELIMINARY

Revisions			
-	14.06.13	DA ISSUE	NE
A	27.09.13	DA RESPONSE	JC

27/09/2013 4:06:24 PM

Project: **THE ORCHARDS, PHASE 5**
Spurway Drive, Bardiham Hills

Drawing: **SECTIONS**

Project No: **217144** Date: **03.06.13** Author: **JC** Scale: @ A1 **1 : 200** Drawing No: **TP03.01 A**

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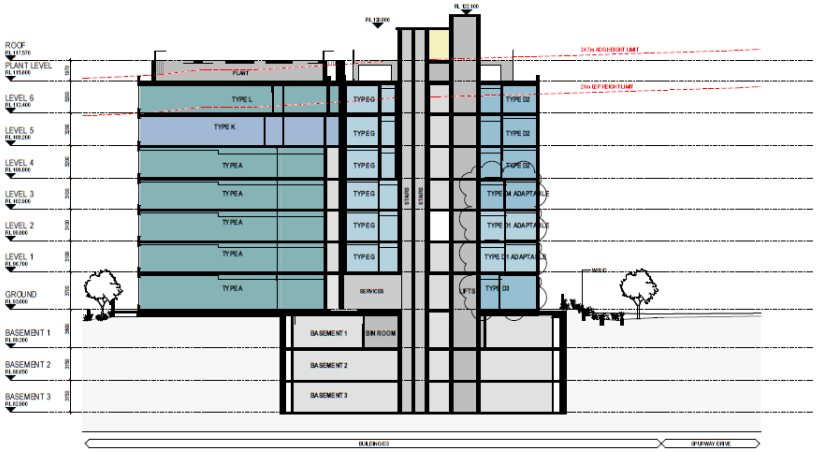

Section 3

PRELIMINARY

Revisions			
	14.06.19	DA ISSUE	NE
A	27.09.19	DA RESPONSE	JC

27/09/2019 4:56:28 PM

Project: **THE ORCHARDS, PHASE 5**
Spurway Drive, Baulkham Hills

Drawing: **SECTIONS**

Project No: **217144** Date: **12.06.18** Author: **JC** Scale: @ A1 **1 : 200** Drawing No: **TP03.02 A**

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The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

Issue	Revision Description	Drawn	Check	Date
J	Council Resubmission	JW	NM	30.10.2019
I	South Spurway St Tree Planting Added	JD	NM	11.10.2019
H	Development Application	JW	NM	27.09.2019
G	Revised For Comments	JM	NM	23.09.2019
F	Architectural Coordination	JM	NM	07.06.2019
E	Landscape Amendments	JM	NM	18.04.2019
D	Landscape Amendments	JW	NM	16.04.2019
C	Draft DA Issue	JW	NM	12.04.2019
B	For Comment	LM	NM	04.04.2019
A	For Comment	JW	NM	22.03.2019

LEGEND

- 400L Tree
- Stone Unit Paver 1
- Stone Unit Paver 2
- Exposed Aggregate Concrete
- Exposed Aggregate Concrete (Road Pavement)
- Mass Planting (Shrubs and Groundcovers)
- Native Planting Matrix (Refer Detail)
- Swale
  1-1.5m Dia. Boulder
  300-600mm Dia. Boulder
  Shrub and Grass Planting Refer Detail
  Other Civil Requirements
- OW Off Form Concrete Wall
- S Off Form Concrete Seat
- CE Concrete Edge
- WF Water Feature
- Aboriginal Artifact Reburial Site

Client:
Sekisui House

Project:
The Orchards Phase 5
Spurway Drive
Baulkham Hills

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Redfern NSW 2016
Australia
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Site Image (NSW) Pty Ltd
ABN 44 001 262 300
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DEVELOPMENT APPLICATION

Drawing Name:
Landscape Plan
Ground

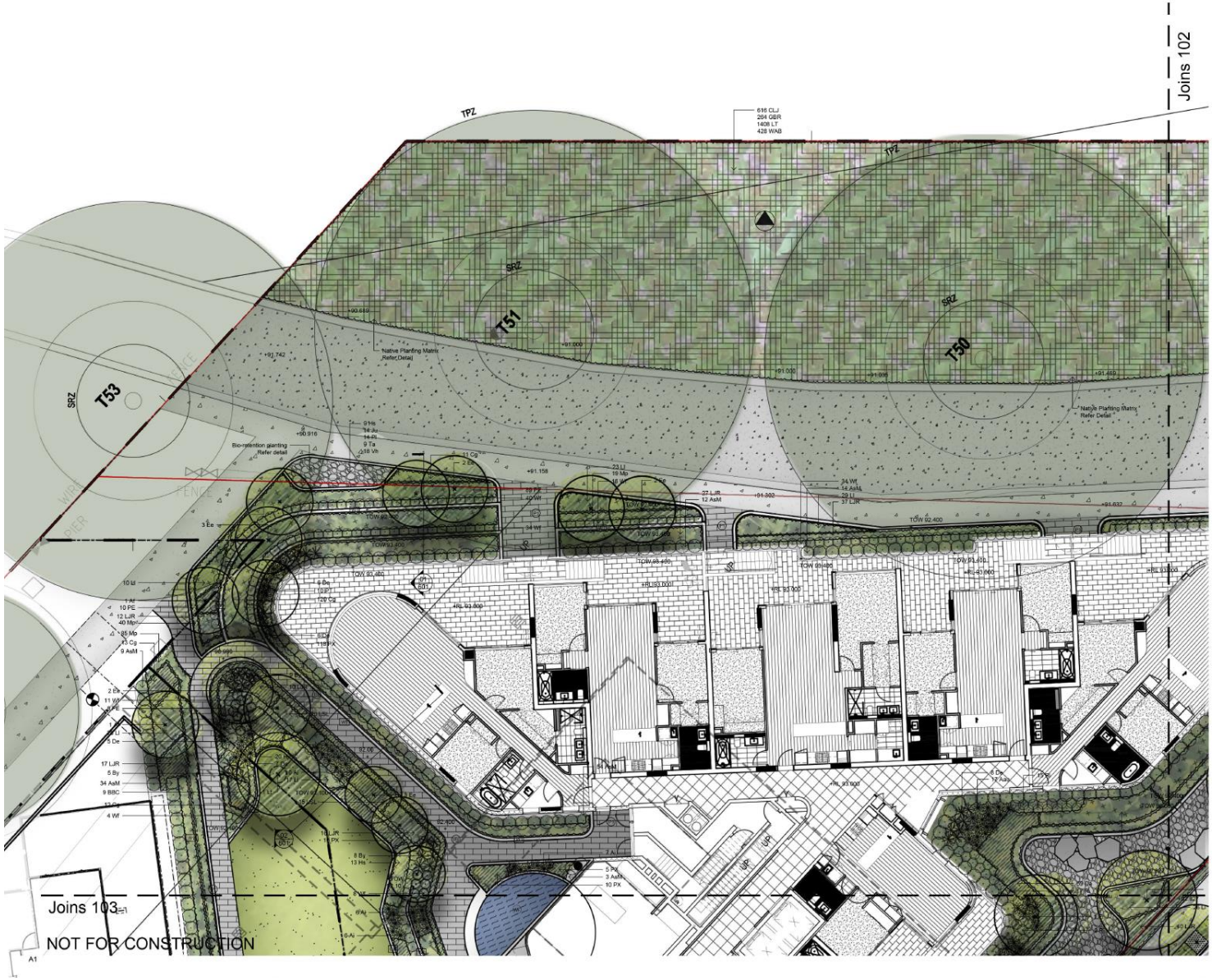
Scale: 1:200 @ A1
0 2 4 6 10m

Job Number	Drawing Number	Issue
SS18-4022	001	J

NOT FOR CONSTRUCTION

A1

ATTACHMENT 7 – LANDSCAPE PLANS



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E	Architectural Coordination	JM	NM	07.06.2019
D	Landscape Amendments	JW	NM	18.04.2019
C	Draft DA Issue	JW	NM	12.04.2019
B	For Comment	LM	NM	04.04.2019
A	For Comment	JW	NM	22.03.2019

LEGEND

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- Stone Unit Paver 1
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  Shrub and Grass Planting Refer Detail
  Other Civil Requirements
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- S Off Form Concrete Seat
- CE Concrete Edge
- WF Water Feature
- Aboriginal Artifact Reburial Site

Client:
Sekisui House

Project:
The Orchards Phase 5
Spurway Drive
Baulkham Hills

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ABN 44 801 262 380
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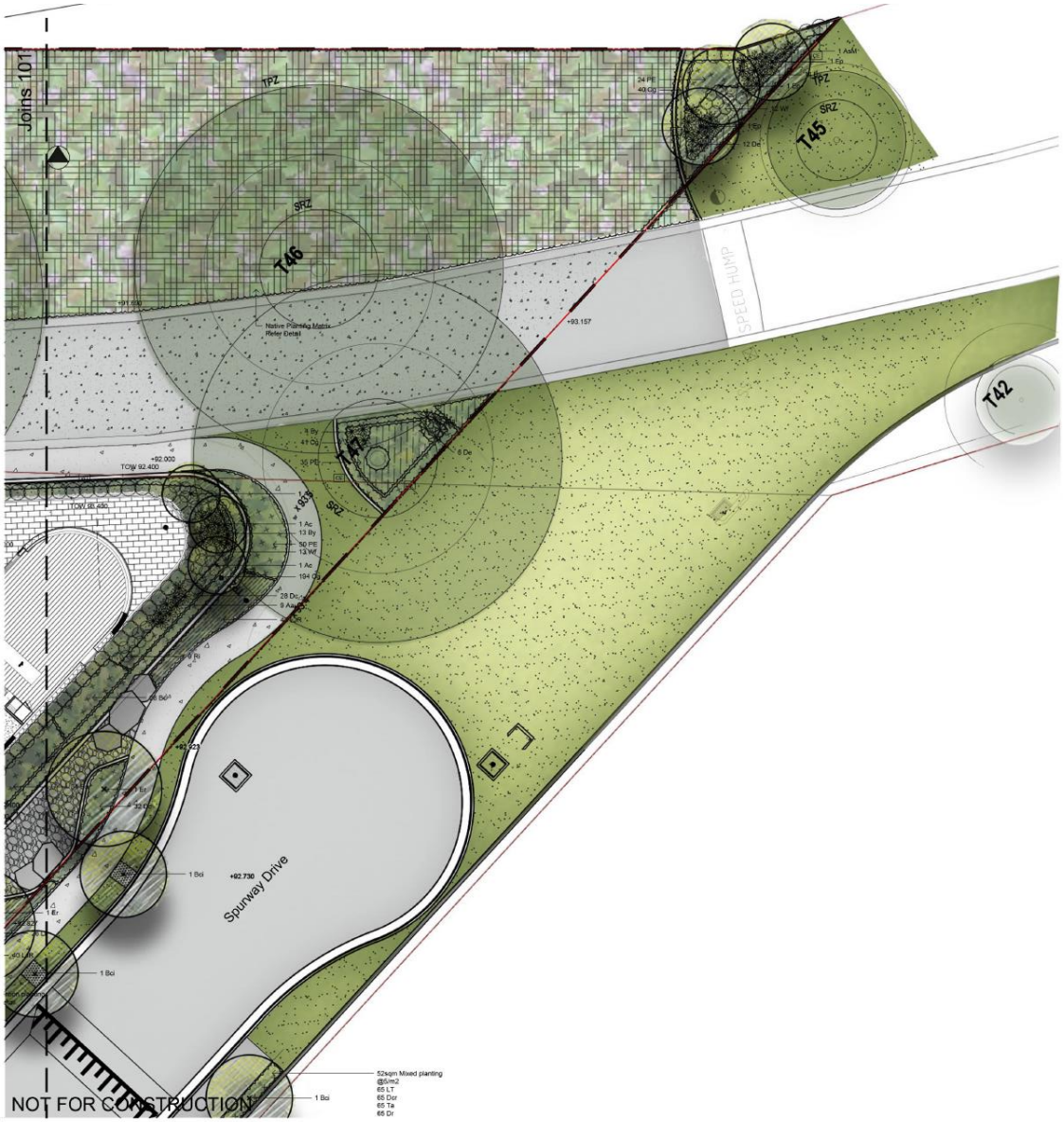
DEVELOPMENT APPLICATION

Drawing Name:
Landscape Plan
Ground Floor Common Open Space

Scale: 1:100 @ A1
0 1 2 3 4 5m

Job Number: SS18-4022
Drawing Number: 101
Issue: H



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I	South Spurway St Tree Planting Added	JD	NM	11.10.2019
H	Development Application	JW	NM	27.09.2019
G	Revised For Comments	JW	NM	23.09.2019
F	Revised For Comments	JM	NM	23.09.2019
E	Architectural Coordination	JM	NM	07.06.2019
D	Landscape Amendments	JW	NM	18.04.2019
C	Draft DA Issue	JW	NM	12.04.2019
B	For Comment	LM	NM	04.04.2019
A	For Comment	JW	NM	22.03.2019

LEGEND

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- Swale
  1-1.5m Dia. Boulder
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  Other Civil Requirements
- Off Form Concrete Wall
- Off Form Concrete Seat
- Concrete Edge
- Water Feature
- Aboriginal Artifact Reburial Site

Client
Sekisui House

Project
The Orchards Phase 5
Spurway Drive
Baulkham Hills

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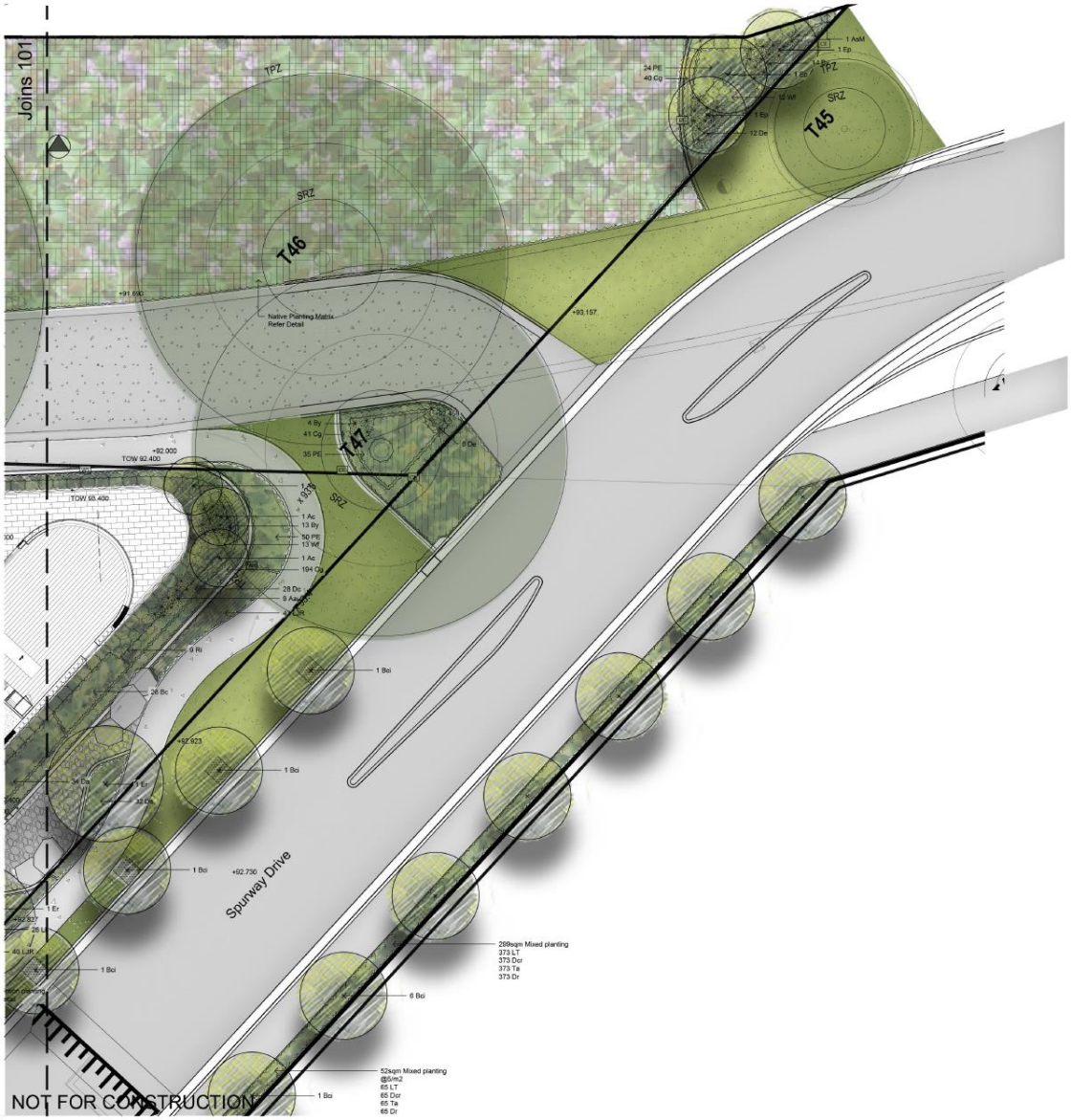
DEVELOPMENT APPLICATION

Drawing Name:
Landscape Plan
Temporary Spurway Dr Cul-de-sac

Scale: 1:100 @ A1 (0 1 2 3 4 5m)
Job Number: SS18-4022
Drawing Number: 102
Issue: J



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Issue	Revision Description	Drawn	Check	Date
C	Council Resubmission	JW	NM	30.10.2019
B	South Spurway St Tree Planting Added	JW	NM	15.10.2019
A	Development Application	JW	NM	27.09.2019

LEGEND

- 400L Tree
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  Other Civil Requirements
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- S Off Form Concrete Seat
- CE Concrete Edge
- WF Water Feature
- Aboriginal Artifact Reburial Site

Client
Sekisui House

Project
The Orchards Phase 5
Spurway Drive
Baulkham Hills

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DEVELOPMENT APPLICATION

Drawing Name
Landscape Plan
Future Spurway Dr Connection

Scale 1:100 @ A1 (0 1 2 3 4 5m)
Job Number SS18-4022
Drawing Number 102B
Issue C

Joins 101

A1

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D	Landscape Amendments	JW	NM	19.04.2019
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B	For Comment	LM	NM	04.04.2019
A	For Comment	JW	NM	22.03.2019

LEGEND

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Client
Sekisui House

Project
The Orchards Phase 5
Spurway Drive
Baulkham Hills

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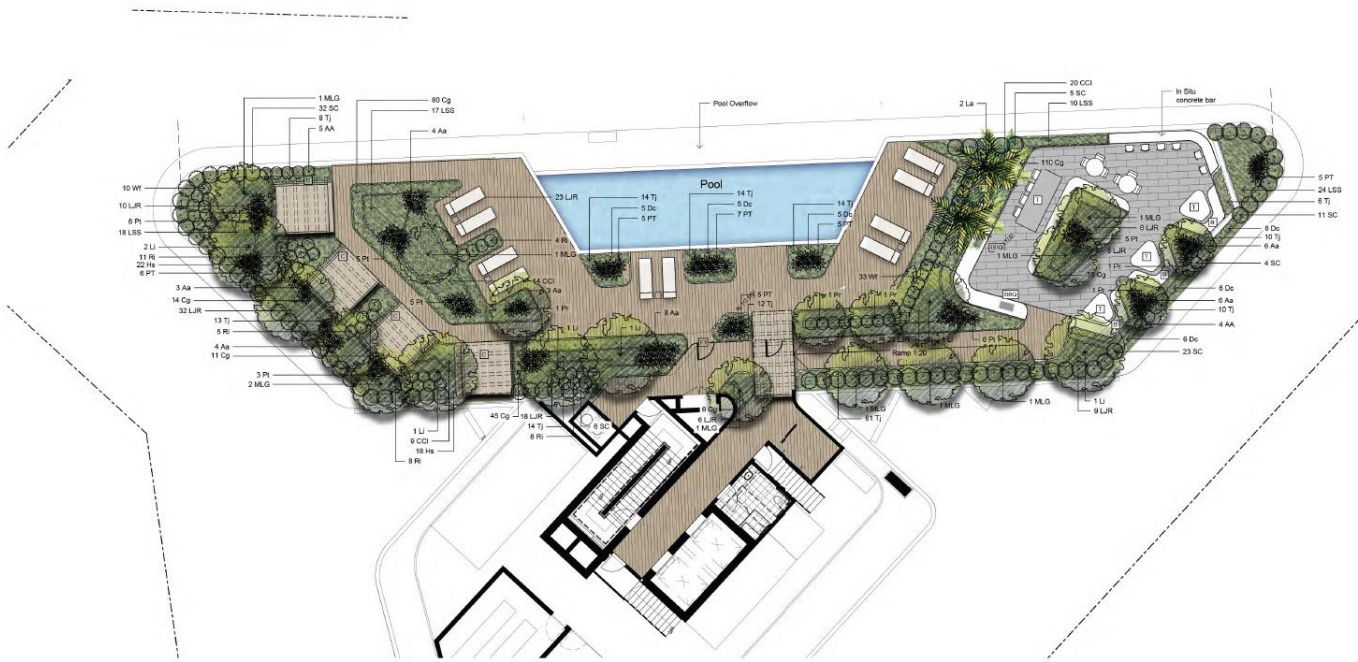
DEVELOPMENT APPLICATION

Drawing Name:
Landscape Plan
Ground Floor Common Open Space

Scale: 1:100 @ A1 (0 1 2 3 4 5m)

Job Number	Drawing Number	Issue
SS18-4022	103	I

The contractor shall check and verify all work on site (including work by others) before commencing the landscape installation. Any discrepancies are to be reported to the Project Manager or Landscape Architect prior to commencing work. Do not scale this drawing. Any required dimensions not shown shall be referred to the Landscape Architect for confirmation.

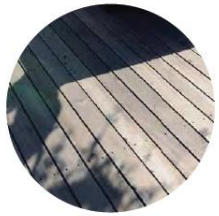


Issue	Revision Description	Drawn	Check	Date
H	Revised For Comments	JM	NM	23.09.2019
G	Architectural Coordination	JM	NM	26.08.2019
F	Architectural Coordination	JM	NM	07.06.2019
E	Landscape Amendments	JM	NM	14.05.2019
D	Landscape Amendments	JW	NM	16.04.2019
C	Draft DA Issue	JW	NM	12.04.2019
B	For Comment	LM	NM	04.04.2019
A	For Comment	JW	NM	22.03.2019

LEGEND

- Proposed Tree
- Pergola Structure (Steel/Timber)
- Cabana (Steel/Timber)
- Unit Paver
- Timber Decking
- Mass Planting (Shrubs and Groundcovers)
- OBar — Off Form Concrete Bar
- BBQ — Off Form Concrete Barbeque
- B T — Off Form Concrete Bench and Tables
- P — Glass Pool Fence and Gate


Cabanas


Timber Decking


Pool & day beds


BBQ & Dining area


Bar & Bar Stools


Table & Bench seating nooks

Client:
Sekisui House

Project:
The Orchards Phase 5
Spurway Drive
Baulkham Hills

SITE IMAGE
Level 1, 3-5 Baptist Street
Redfern NSW 2016
Australia
Tel: (61 2) 8332 5600
Fax: (61 2) 9698 2877
www.siteimage.com.au
Site Image (NSW) Pty Ltd
ABN 44 606 262 368
Landscape Architects

DEVELOPMENT APPLICATION

Drawing Name:
Landscape Plan
Roof

Scale: 1:100 @ A1 (0 1 2 3 4 5m)

Job Number	Drawing Number	Issue
SS18-4022	201	H

NOT FOR CONSTRUCTION

A1

ATTACHMENT 8 – PHOTOMONTAGES

View South from Golf Club Driveway

View West towards Spurway Drive façade

sport safety
NETTING

Amended Summary Report
Sekisui - Castle Hill GC Practice Range

February 2020

Sports Safety Netting Pty Ltd
PO Box 330, OAKLEIGH VIC 3166
Ph: 03 9542 0222 - Fax: 03 9540 0909
A.B.N 22 121 880 500

Table of Contents

Summary and Conclusions

INTRODUCTION

This document considers the potential for, and mitigation of, errant balls from the Practice Range at Castle Hill GC, taking into account potential development plans.

The scope of the investigation and modelling is the right side boundary only. This report considers errant ball issues in external areas (i.e. not in the golfcourse envelope) bordering the Practice Range, as well as the location and size of any barriers to reduce such problems. The end of the range and the existing barrier are included for completeness, but not addressed in any detail by the study.

Details of the range layout are based on the outlines and drawings provided; Google Earth images and ELVIS terrain data are used for topography.

The play area (green overlay Fig. 1) is situated between external development areas and planted areas adjacent to a fairway of the golf course.

Layout of the Practice Range

Figure 1

Area at Risk

The *Area at Risk* is along most of the right side of the range - the outline (red) shown in Figure 2 covers the areas to be protected against errant balls resulting from drives from the bays. These include public roads and residential areas and some access roads and paths.

There are trees and plantings shown. The simulations do not assign any protective quality to these; while there may be some slowing or blocking of errant balls, the barrier effect is neither complete nor easy to determine and not assessed in the models.

It is not clear at the time of writing if the range uses normal or Reduced Flight (RF) range balls.

Figure 2

LAYOUT AND MODELLING

The range is not wide; it has a play area that varies in width from about 30m wide near the tee area, widening to about 70m at the midpoint, and is about 220m long. The areas to be protected are identified in Fig. 2 (previous).

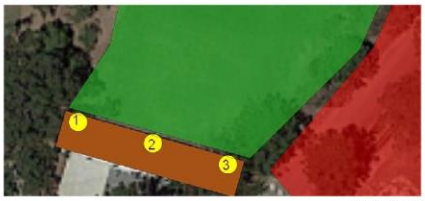


Figure 3

Practice tee area and tee-off points for modelling

The covered bays (brown) are about 30m wide. The modelling uses 3 tee-offs across this area (numbered in Fig. 3).

Figure 3

Practice Ranges

Practice Ranges present an errant ball challenge, since;

- there are many more shots played from the range tee area than a normal golf tee and consequently more chance of unusual variations in ball flights,
- the bays are distributed across a wide area, so that the dispersion patterns are wide, and
- Lines of play are less clear and players are often testing their skills, so there is a greater chance of mis-hit balls.

Lines of Play

The intended lines of play in the models are all directed at the target at about180m as shown (Fig. 4). This has been chosen as it is a central location and reasonably clear of trees.

Allowing for Winds

Winds are a key consideration when identifying errant balls (data is not available for Baulkham Hills; the closest (10km) is Parramatta North.). The models include the effect of winds from eight directions. Winds over 30km/h occur occasionally (about 4% of the time); initially, a threshold of 20 km/h is used in this study. Details are given in Appendix 1, and monthly averages below. These show higher average winds in the summer months.

Wind speed - Monthly Averages[1] (km/h)
Parramatta Nth WS 66124 (1967-2010)

Speed (km/h)	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sep*	*Oct*	*Nov*	*Dec*
Avg 9 am	7.3	6.4	6.4	6.7	6.7	7.2	7.7	9.1	9.8	9.8	8.4	8.1
Avg 3 pm	14.5	13.0	12.2	10.8	9.3	10.4	10.6	13.2	15.2	14.9	15.6	15.4

[1] http://www.bom.gov.au/climate/averages/tables/cw_066124.shtml

Modelling

The modelling identifies **first** impacts – that is, when the ball in simulated flight first contacts the ground and therefore does not account for possible running-on after the initial impact.

Although the diagrams show only the initial "landing" position, some comments may refer to bounce and run-on if it is felt these may further contribute to the errant ball issue. However, too many factors can affect bounce and run-on to allow more definitive analysis and the effect vegetation and plantings on errant balls is also uncertain.

As far as possible the simulations take account of terrain features, especially elevation. The analysis is mainly based on normal flight balls being used on the practice range - with some analysis of the effect of using reduced flight (RF) balls on barrier heights and locations.

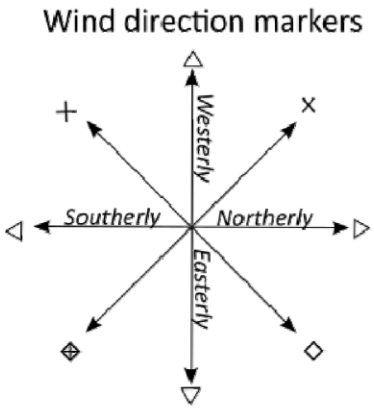
Ball flights are calculated using ball launch data collected for actual golf drives with a Flightscope™ tracking system. For the RF balls, this base data is adjusted for the different Coefficient of Restitution (CoR) provided by a manufacturer.

Ball flights simulate winds from eight (8) compass points. Impacts affected by wind can then be compared with local wind frequencies (BoM).

An explanation of the features of the impact diagrams follows.

Impact Diagram features

The impact diagrams (example; Fig. 4) show wind directions for each impact with the wind rose below as reference.



*Note that winds are named for the source; East winds are **from** the East.*

Headwinds are Easterly (▽), tailwinds Westerly (△); there are two crosswinds from North and South (▷, ◁) and 4 intermediate winds.

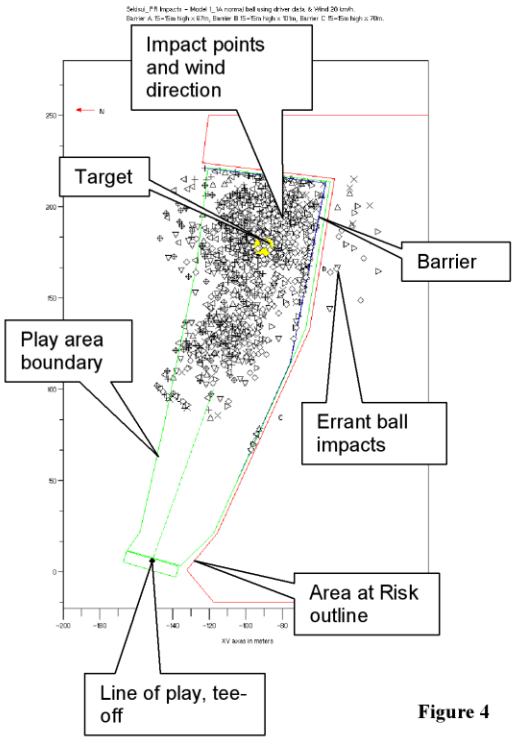


Figure 4

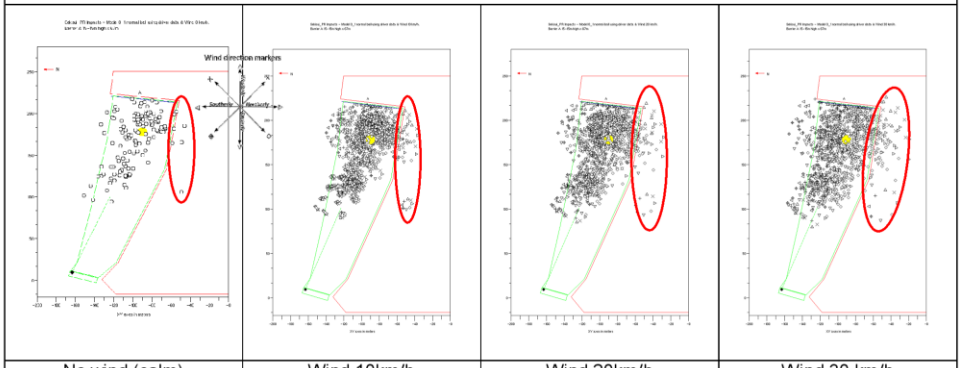
Measurements are in meters. Other features are identified by colour:

- tee and play area outlines in green,
- *Area at Risk* in red (impacts here are "errant" ball flights),
- barriers in blue, and
- indicative lines of play are shown as green dashes based on the yellow target.

The next diagrams show runs of the model (with the existing end barrier) at increasing wind speeds (wind speed range & frequency noted in captions).

The following diagrams show tee-offs 1 (below) & 3 (next). These are the left and right side bays respectively, with four wind speeds ranging from 0 to 30km/h from eight directions with the existing end barrier and normal flight (i.e. not RF) balls.

Increasing wind speeds – Tee-off 1, existing end barrier, normal balls, winds to 30km/h

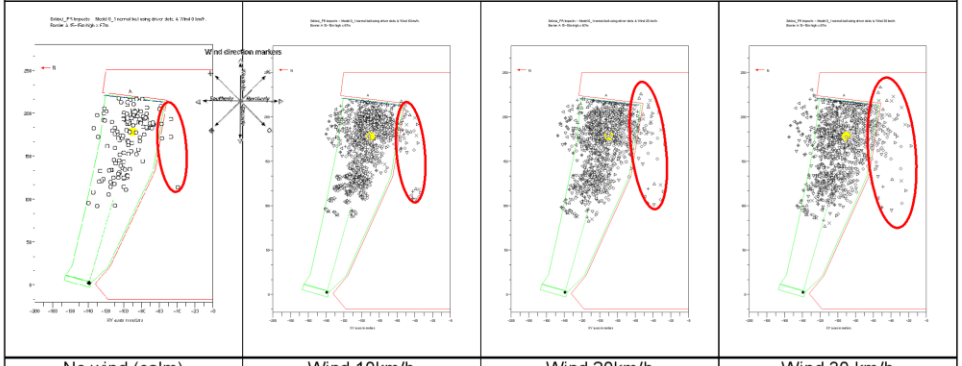


No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

At all wind speeds, errant balls are crossing into the *Area at Risk* on the right side (red circles).

Next; Impact diagrams for impacts from the right side tee-off 3, showing the increasing wind speeds.

Increasing wind speeds – Tee-off 3, existing end barrier, normal balls, winds 0 to 30km/h

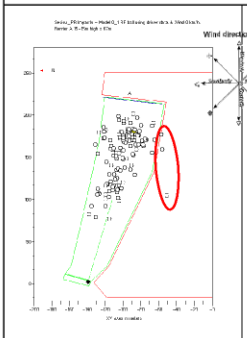
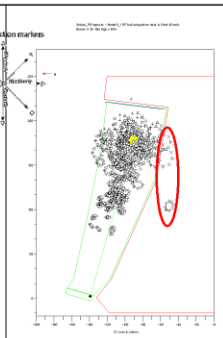
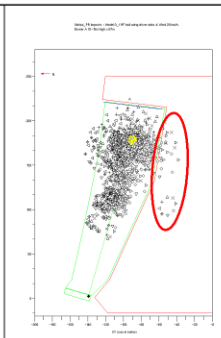
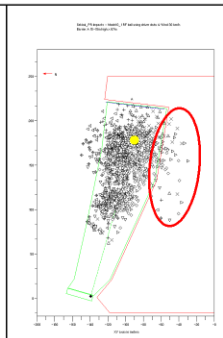


No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

With winds over 20km/h, the right side tee-off also shows errant ball impacts (red circled), when normal balls are modelled.

Reduced Flight Balls

The same parameters, but with reduced flight (RF) balls, are modelled next.

Increasing wind speeds – Tee-off 3, existing end barrier, RF balls, winds to 30km/h			
			
No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

Overall, RF balls also show impacts in the *Area at Risk*, regardless of wind speed, but fewer errant ball impacts than the normal balls and tighter dispersion patterns overall.

CONCLUSIONS

Without added barriers, ball flights are very likely to land in designated *Areas at Risk* under all wind conditions and with the existing end barrier. In the Castle Hill region, about 92% of winds are 25km/h or less; winds over this speed have about 8% frequency. Recommended barrier solutions are given below.

The range is more suited to Reduced Flight (RF) balls; using these means ball flights and impacts are less dispersed making barriers more effective for a given height. Use of normal balls will require very high barriers to significantly limit errant balls.

The following complicating factors are also mitigated by RF balls;

- the play area is relatively narrow along its length, so "spill" of impacts across the boundary is more likely than on a wider play area
- the effect of winds both up to 20km/h and over this speed.

Note: It is not possible to simulate the full range of golf shots under all conditions, nor will any barrier always stop errant balls. This analysis is limited by the wind information available, model parameters, and launch data collected.

Wind plays a role in errant ball flights; some commonly occurring higher winds (over 20km/h) are in directions that will increase the errant ball issues. Tailwinds can push balls down the range - for reduced flight balls, this is not expected to be a problem.

The recommended barriers below are intended to reduce the occurrence of errant balls to a low level; while generally effective (as described) in the modelling, these cannot cover every eventuality.

Reduced Flight (RF) balls compared to standard (normal) balls

Standard golf balls travel further, higher and faster than RF balls. Throughout, the analysis shows that it is difficult to protect the *Areas at Risk* if normal balls are used; boundary barriers 35 or 40m high would be required.

Winds

Cross winds from the North, NE, and NW along with Easterly headwinds are problematic on the right side boundary of the range. Relatively frequent Westerly and NW winds also affect the end of the range. Analysis is focussed on winds of 20-25km/h.

Recommendations

The existing 15m range end barrier is not considered in the recommendations and assumed to stay at 15m.

1. Reduced Flight Balls

If at all possible, the range should use only Reduced Fight balls that reduce the launch speed by 10%. This means the relative Coefficient of Restitution (CoR) should be about 85% of the normal ball CoR.

2. Barriers - Right side of Range (RF ball models)

Two adjacent barriers, one (B) 100m long by 25 high on the far end of the right side boundary and the second (C) 70m long and 25-15m high further down the range about 125m from tee centre line.

The indicative locations for these barriers are shown at right (Fig. 5).

Figure 5

There is a fairway indicated adjacent to the right side of the range. The assumption is that, as far as possible, barriers should be arranged so models show very few impacts in this *Area at Risk* or its buffer.

This can be achieved with the two barriers on the right edge of the Practice Range as shown in Fig. 5. The second new barrier (C) may reduce in height from the 25m down to 15m. The relative sizes are shown at right (Fig. 6).

The recommended barriers B and C reduce errant balls to public areas significantly but not completely.

A 30m barrier provides more protection, but at greater cost. The few errant ball flights are due to wind from the North, NW and NE, (33.3% in total, of these about 3.1% are 20km/h or more).

This is the recommended barrier siting and size.

The existing end barrier could be extended to join the B barrier, removing the sloped section.

Figure 6

Alternatively; Right side of Range (normal ball models)

This is not recommended; it is provided as advice if RF range balls cannot be used. As noted, it is assumed that the range currently uses normal balls (possibly "used").

Two adjacent barriers, with the same lengths as above; B at 100m long by 40 high and C at 70m long and 40-20m.

Models using *normal* balls require a barrier of at least 35m and preferably 40m high to reduce errant balls to a low level. These are significant structures and not common in Australia.

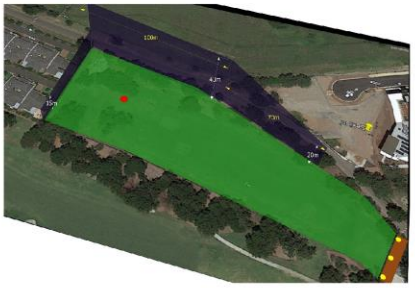


Figure 7

MODELLING DETAILS

As noted previously, the three dimensional (3D) modelling uses simulations based on launch parameters measured for over a hundred and thirty golf drives. It models ball flights as affected by winds from eight directions; at any tee-off and specific wind speed, over a thousand impacts are determined.

NOTE: It is not possible to simulate the full range of golf shots under all conditions, nor will any barrier always stop errant balls. This analysis is limited by the wind information available, model parameters, and launch data collected.

Tee Locations

The practice bay area is about 30m wide.

To provide a good coverage of this area, the three (3) tee-off points are used for modelling drives (shown in Fig. 8).

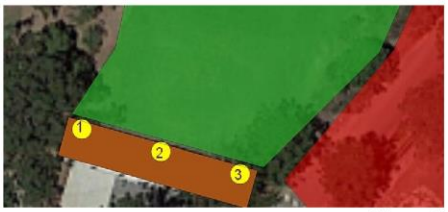


Figure 8

Lines of Play

Modelling uses *Lines of Play* based on a target ~ 180m from the bays (Fig. 9).

The use of convergent rather than parallel lines when modelling play will reduce the spread of modelled impacts as the dispersion is more centralised. In this situation, the presence of large trees to the side of the target is anticipated to encourage play to this target.

In the simulations, lines of play are "intended" rather than actual – the launch data includes an actual lateral angular deviation from this line (azimuth angle) due to player variation.

Dispersion of ball impacts around the line of play is affected by both player behaviour and environmental conditions;

- deviation of actual ball launch from the intended line of play (azimuth angles),
- side/ back spin and launch angle imparted to the ball by the club,
- relative elevation (topography), and the
- prevailing winds - speed and direction.

Ball impacts in the diagrams are the first point of impact; bounces and "run on" are not modelled, but inferences may be drawn and reflected in comments.

Figure 9

Reduced Flight & Normal Balls

It is not known whether the range uses normal or RF balls.

This report uses models that reflect the behaviour of normal balls for the current situation and additional modelling is provided for reduced flight (RF) balls, using a relative Coefficient of Restitution (CoR) provided by a ball manufacturer. In these models, the RF balls have 85% CoR compared to normal golf balls.

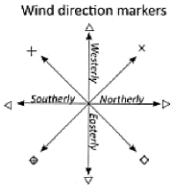
Topography

All models take topography (relative elevation) into account using elevation/ terrain data for the area from the official ELVIS elevation data sets. The models take account of terrain – tee and barrier heights are based on the relative terrain height at specific locations.

The official data does not necessarily include any recent earthworks; accuracy is given as 2m horizontal and shows there is an elevation difference of up to 6-8m from left to right across the range's playing area.

Winds - Castle Hill GC

Bureau of Meteorology (BoM) wind data is not available for Norwest/ Baulkham Hills.



The wind data used is from the next closest that has wind data - Parramatta North weather station (~ 10km distant); local geography may affect both actual speed and direction at the site of the range. The right side of the play area is affected by E, W, NE, N and NW winds. Headwinds are easterly and tail winds, westerly.

Ball flights are affected by winds and the simulations take this into account. The eight wind directions used (shown at right) are indicated by the same symbols in the impact diagrams.

Risk assessments

The wind data (Table 1) indicates that winds over 30 km/h are unusual and the risk level is initially set at 25 km/h (80%). Greater detail is given in Appendix 1.

TABLE 1 – **PARRAMATTA NTH (066124)**

Wind Frequency by Direction and Speed Range(km/h)

Frequency (%) Direction			Speed Range(km/h) 0-20	20-25	25-30	30+	Grand Total
Winds affecting Right side	W	△	11.9%	0.6%	0.6%	0.9%	**14.0%**
	NW	×	15.0%	0.5%	0.4%	0.4%	**16.3%**
	N	▷	6.6%	0.2%	0.2%	0.1%	**7.1%**
	NE	◇	8.6%	0.7%	0.4%	0.2%	**9.9%**
	E	▽	9.9%	1.0%	0.6%	0.4%	**11.9%**
Sub-total			*52.0%*	*2.9%*	*2.3%*	*2.1%*	*59.2%*
Other winds	SE	◈	11.8%	0.8%	0.7%	0.7%	**14.1%**
	S	◁	7.6%	0.5%	0.5%	0.6%	**9.2%**
	SW	+	9.7%	0.5%	0.6%	0.7%	**11.6%**
Sub-total			*29.2%*	*1.8%*	*1.8%*	*2.0%*	*34.9%*
Calm or Low winds			5.9%				**5.9%**
Grand Total			**87.1%**	**4.7%**	**4.1%**	**4.2%**	**100.0%**

***Note**: Meteorologists describe wind directions by the compass point of origin. A North wind comes **from** the North.*

Ball flights are affected by winds and the simulations take this into account. The range is aligned close to East-west and plays to the east. Easterly, NE, and SE headwinds and the North cross winds will move ball flights towards the left and right side of the play area. Tail winds from the west and NW may also push ball flights down the range.

The key concern is right side boundary; it has public accessible roads and planned residential areas. This study assesses the right hand side of the range and therefore the South, SE, and SW cross winds - expected to push ball flights to the left - should be less significant.

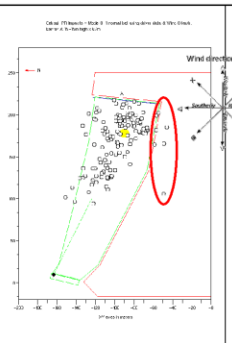
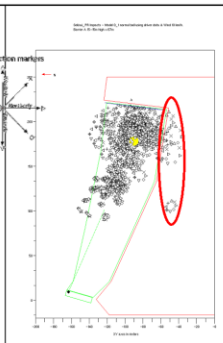
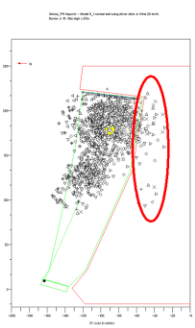
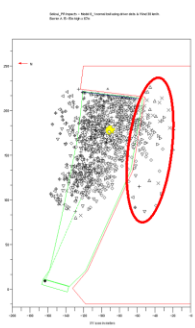
Wind effect

To demonstrate the effect of wind, the next sets of impact diagrams cover the flights of balls played from tee-offs 1 and 3, showing winds increasing to 40km/h from the eight (8) compass directions, without barriers. The impacts are modelled in three dimensions but shown in two.

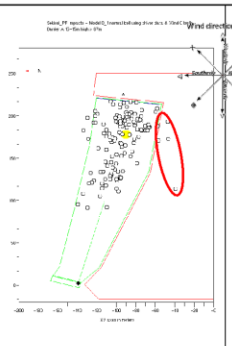
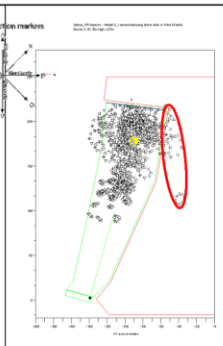
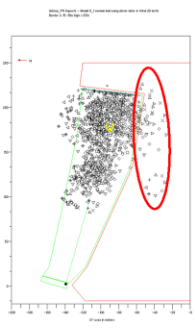
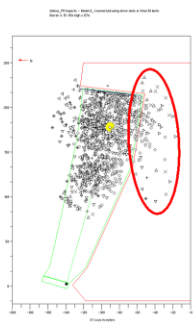
Note: these diagrams are also shown in the Introduction.

The models use wind directions based on the Line of Play under investigation for normal balls. Head winds are directly (0°) into the line of play, cross winds 90°, and tail winds 180°.

The spread (dispersion) of simulated impacts is shown below for increasing wind speed for the right and leftmost tee-offs; the last row shows the aggregate frequency for each wind speed range. The leftmost (tee-off 1) is shown here.

Increasing wind speeds – Tee-off 1, existing end barrier, normal balls, winds to 30km/h			
			
No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

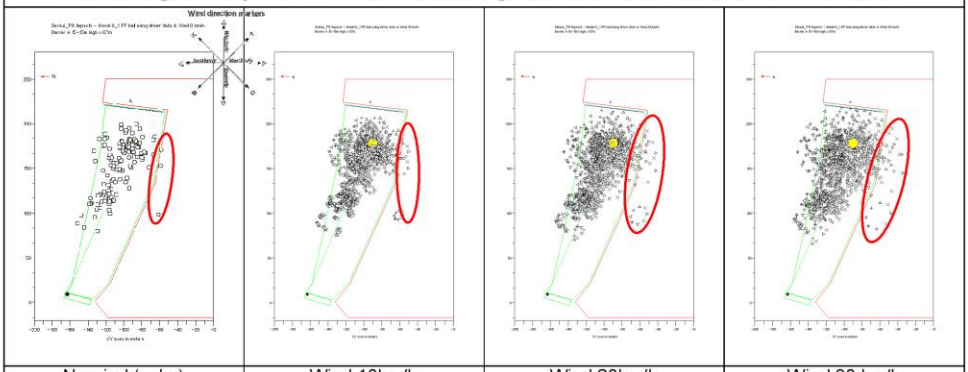
These diagrams show the first ground impact of the simulated ball flights as affected by winds of increasing speed. These are made by identifying the errant ball impacts (by symbol) in the red *Areas at Risk* and wind direction/ frequency.

Increasing wind speeds – Tee-off 3, existing end barrier, normal balls, winds to 30km/h			
			
No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

Play from both ends of the bays result in errant balls on the right side of the range, with more resulting from bays on the right hand side.

As wind speeds increase, the dispersion of impacts also increases. The areas outlined in red above show the main areas susceptible to errant balls from these tee-offs.

Reduced flight balls are modelled next and, predictably, these show fewer errant ball impacts in the *Area at Risk*.

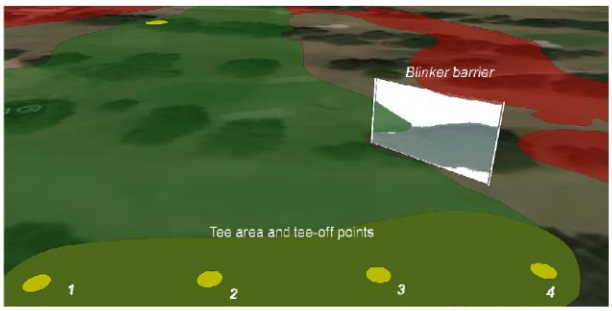
Increasing wind speeds – Tee-off 1, existing end barrier, RF balls, winds to 30km/h			
			
No wind (calm)	Wind 10km/h	Wind 20km/h	Wind 30 km/h
Calm 5.9%	*0-10 km/h 60.2%*	*10-20 km/hr 21.0%*	*Over 20 km/h 12.9%*

PROTECTIVE BARRIERS

Modelling the Proposed Barriers

There are two main types of locations for barriers – "blinker" (Fig. 10) and "boundary". In more detail, these are;

Blinker barriers interrupt the ball flight <u>early</u> - as the ball is rising (Fig. 11). These barriers are quite effective for balls played close by and offer good protection for problem areas without needing much height or width, but become less useful if hit-off points are spread out or distant.



Example only - **Figure 10**

One notable feature of these barriers is they are closer to the players and more visually intrusive.

Boundary barriers are placed to stop balls <u>late</u>; towards the end of their flight – at the point when these are descending rapidly (Fig. 11). To be effective, boundary barriers are generally longer and often higher.

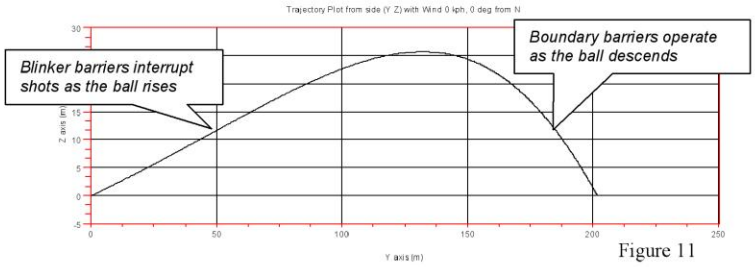


Figure 11

Boundary barriers provide the extended coverage often needed for ranges. This study considers the effectiveness of boundary barriers on the right side of the range.

This study looks only at the right side boundary that borders the development sites, public areas and access roads - the left side of the range is along the golf course proper and is out of scope.

Only boundary barriers are considered here, as there is little scope for blinker barriers.

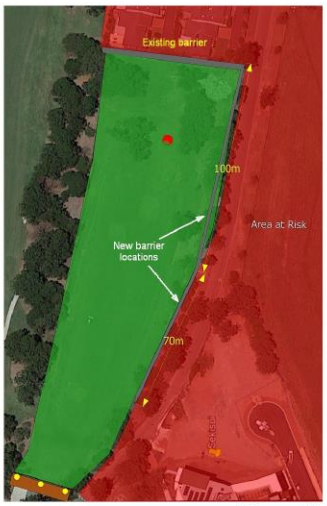


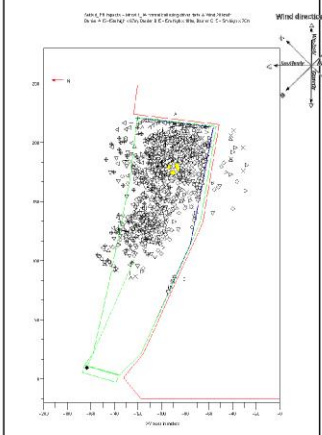
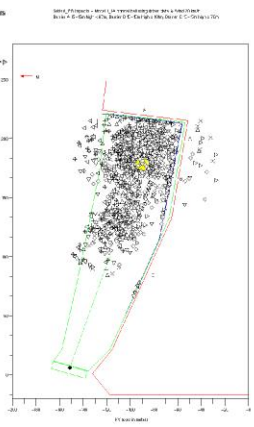
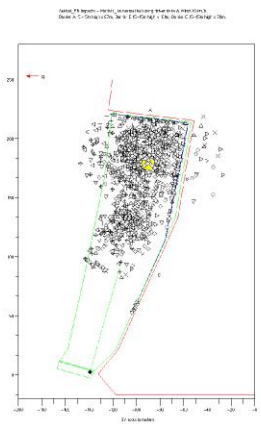
Figure 12

Boundary barrier - Right side Area at Risk

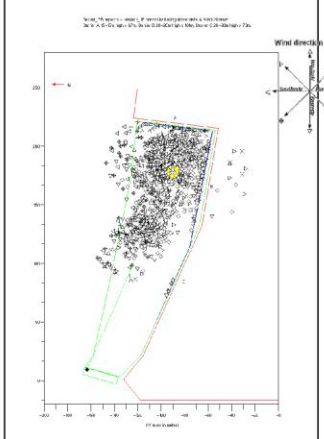
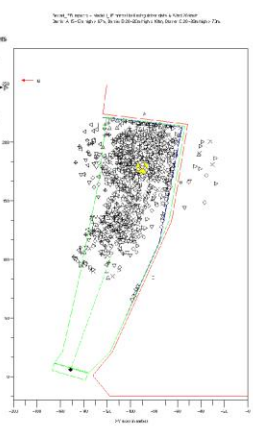
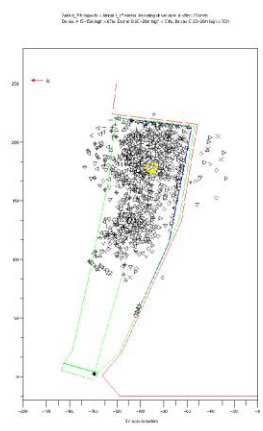
As noted previously, the right side area is planned for public and residential use. This barrier design follows the boundary of the Area at Risk.

It has two sections (170m total length - Fig. 12) modelled at various heights.

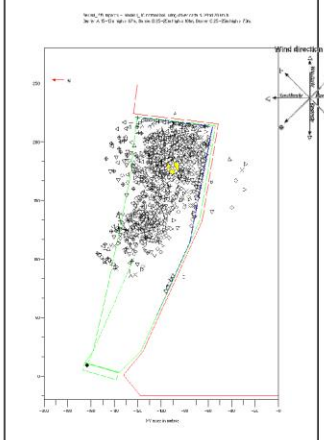
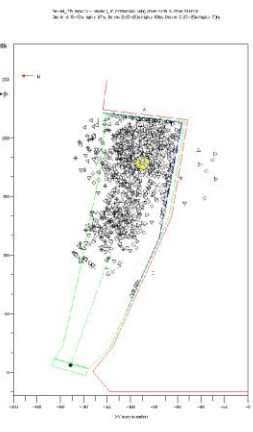
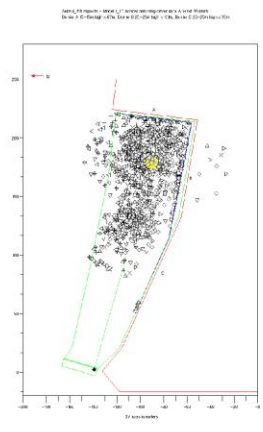
The first set of models look at the protective effect of both at 15m, then 20m, 25m, 30m, 35m and 40m high. Wind speeds of 20 and 25 km/h are used - noted in the headings.

Two barriers 100m & 70m x 15m high, normal balls, winds 20km/h		
		
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

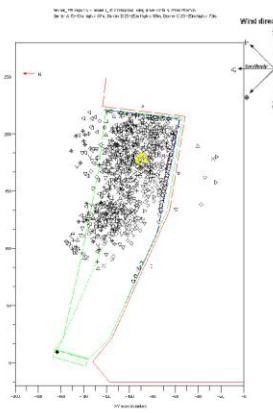
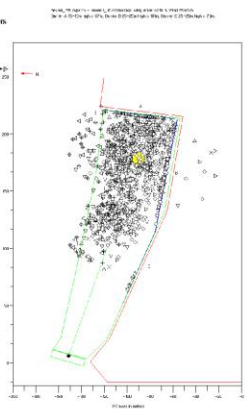
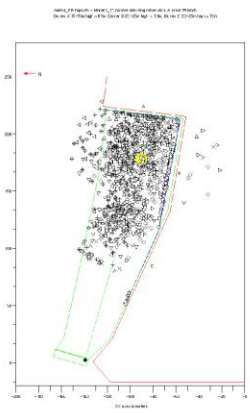
Barriers at 15m are not effective (above) when winds are at 20km/h, with numerous errant balls crossing into the Area at Risk.

Two barriers 100m & 70m x 20m high, normal balls, winds 20km/h		
		
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

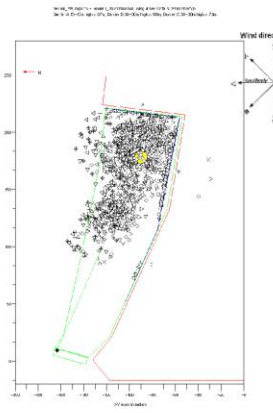
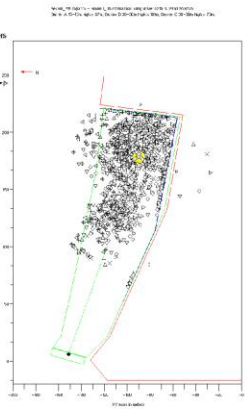
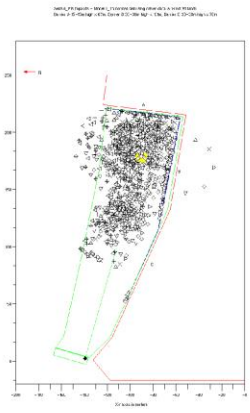
Increasing the height to 20m (above) still leaves many errant balls, even at the lower wind speed of 20km/h.

Two barriers 100m & 70m x 25m high, normal balls, winds 20km/h		
		
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

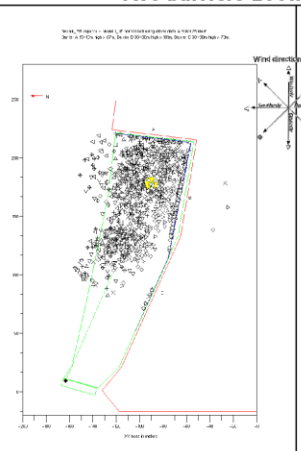
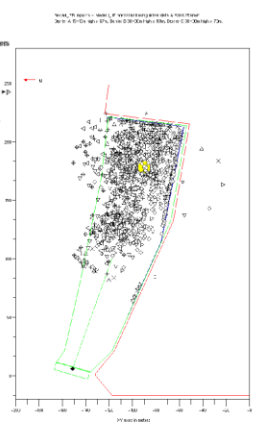
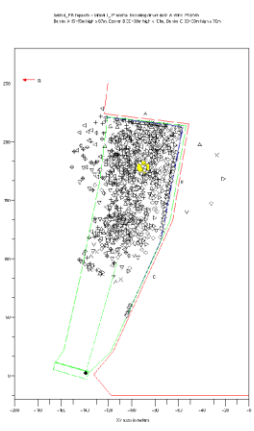
Modelling shows some improvement if the barriers are 25m; although more effective, these still allow errant balls affected by wind from the East, NE, North, NW and West. At higher wind speeds (25km/h) more errant ball impacts are seen (below).

Two barriers 100m & 70m x 25m high, normal balls, winds 25km/h		
		
Tee-off 1 wind 25km/h	Tee-off 2 wind 25km/h	Tee-off 3 wind 25km/h

If the barrier height is increased to 30m (below), modelling suggests the barrier is more protective but still allows some errant balls, even at lower wind speeds.

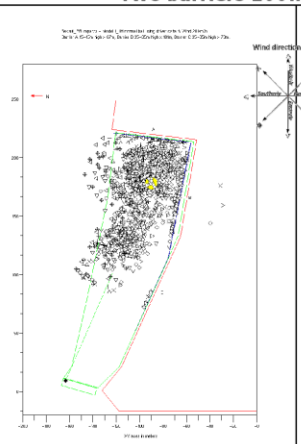
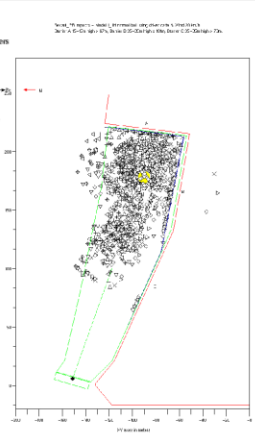
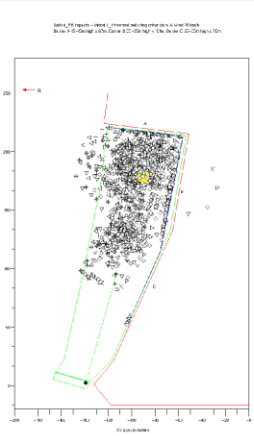
Two barriers 100m & 70m x 30m high, normal balls, winds 20km/h		
		
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

The 30m high barriers are showing an improvement in modelling, particularly from the left side tee-off with winds at 20km/h (above). This effect is also seen for 25km/h winds (below).

Two barriers 100m & 70m x 30m high, normal balls, winds 25km/h		
		
Tee-off 1 wind 25km/h	Tee-off 2 wind 25km/h	Tee-off 3 wind 25km/h

The narrowness of the play area in relation to the potential height of ball flights is a key factor contributing to the very high barriers required to stop most errant balls from the Castle Hill Practice Range. In addition, slices are often higher than hooked balls and these right turning ball flights will result if right handed players (the majority) miss-hit balls.

The next diagrams consider barriers over 30m high. Because of costs, the visual effect on neighbouring residences and potential environmental impacts, barriers this high are not common in Australia.

Two barriers 100m & 70m x 35m high, normal balls, winds 20km/h		
		
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

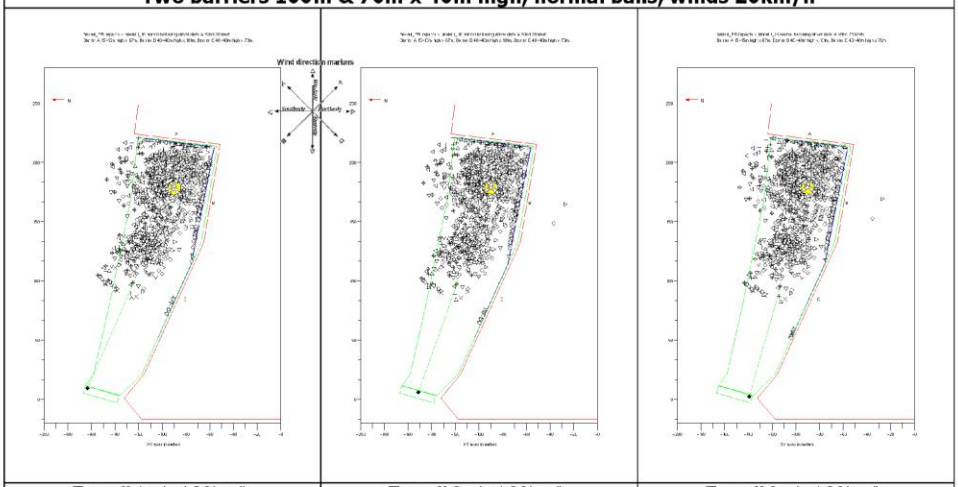
Although not completely protective, the 35m high barriers (previous) are more effective for balls from tee-offs 2 and 3 (centre and right side bays) when winds are at 20km/h from the NW, North, NE, and East (totaling 5.1% of winds - Table 2 at right).

For 40m barriers (next), the remaining errant balls shown occur for winds from the North and NE - these are less frequent over 20km/h (0.5% and 1.3% resp., see Table 2 again).

Table 2 - extract of wind speeds from Table 1 (p12)

Frequency (%) Direction			Speed Range(km/h) 0-20	Speed Range(km/h) 20+	Total
Winds affecting Right side	W	△	11.9%	2.1%	**14.0%**
	NW	×	15.0%	1.3%	**16.3%**
	N	▷	6.6%	0.5%	**7.1%**
	NE	◇	8.6%	1.3%	**9.9%**
	E	▽	9.9%	2.0%	**11.9%**
Sub-total			***52.0%***	***7.2%***	***59.2%***
Left side Winds			25.1%	15.7%	40.8%
Grand Total			**87.1%**	**22.9%**	**100.0%**

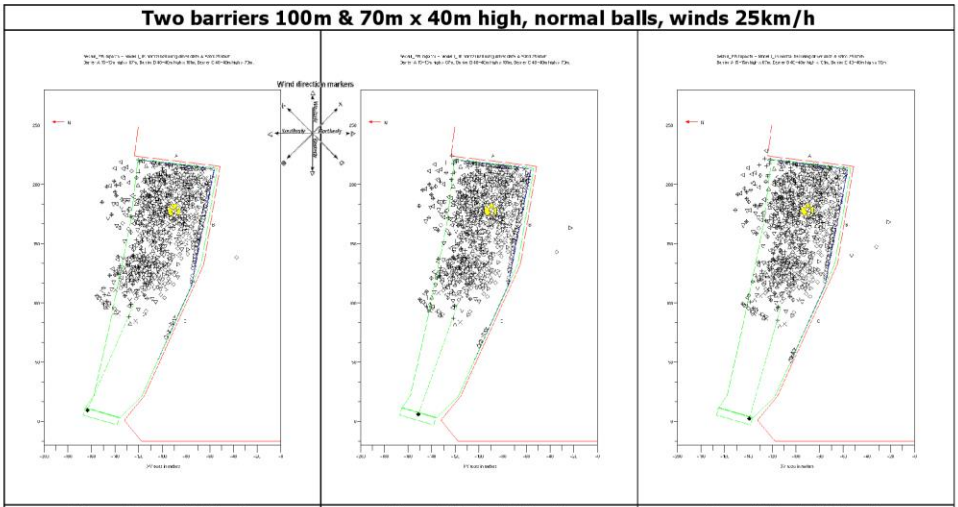
Two barriers 100m & 70m x 40m high, normal balls, winds 20km/h



Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

Models for these barriers show only two more errant balls for winds of 25km/h as shown in the impact diagrams.

Two barriers 100m & 70m x 40m high, normal balls, winds 25km/h



Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

An alternative to higher barriers is to use reduced flight (RF) balls on the Practice Range. This is explored next.

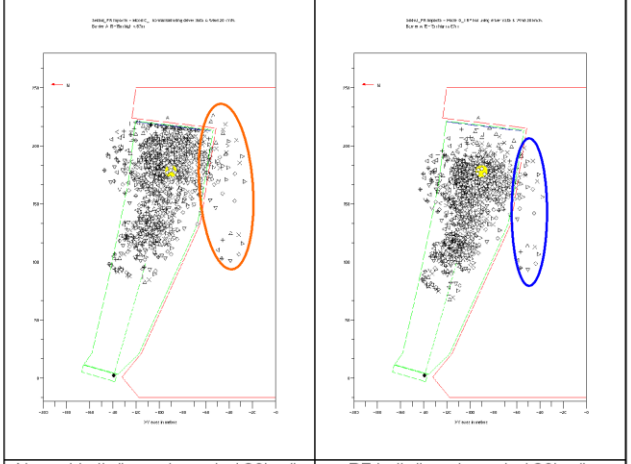
Reduced Flight Balls

Reduced flight (RF) balls are designed to reduce the launch speed of a golf ball without altering any of the other main factors determining the flight path. The effect should be a reduced flight that differs only in scale from a normal ball flight, and provides players a scaled flight that replicates the kinds of behaviour that a normal shot would show.

These are commonly used in practice ranges with smaller (shorter and/or narrower) play areas.

The reduced flight means that the dispersion pattern of impacts is reduced and that the height of the flight path is reduced as well. As a result, there are fewer errant ball impacts (Fig. 13 - circled) and barriers of a given height are more effective (as the overall flight path does not reach the same heights).

Comparing normal and RF balls, tee-off 3, existing barrier only



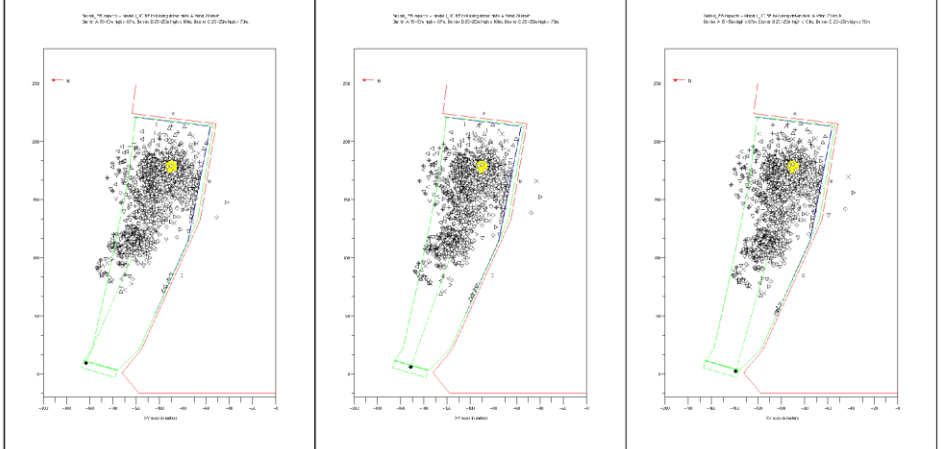
Normal ball dispersion, wind 20km/h	RF ball disperion, wind 20km/h

Figure 13

To model the RF balls, the recorded launch speed is adjusted down to account for the different Coefficients of Restitution (CoR) between normal and RF balls. This data was provided by a manufacturer.

Next, the RF ball option is investigated using various barrier heights, starting at 25m.

Two barriers 100m & 70m x 25m high, RF balls, winds 20km/h



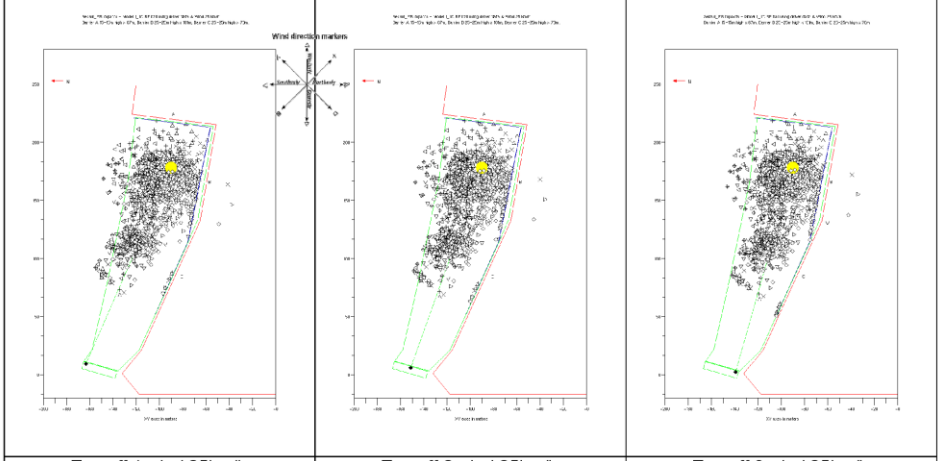
Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

The adoption of Reduced Flight balls reduces the number of errant ball flights for 25m high barriers at wind speeds of 20 and 25 km/h (refer p 17 for normal ball diagrams).

At with the RF balls and 25m barriers, the errant ball pattern is similar to the normal ball/35m barrier discussed previously (p19) winds at 20km/h from the NW, North, NE, and East (totaling 5.1% of winds - Table 2).

Models for these barriers and RF balls show the same errant balls for winds of 25km/h.

Two barriers 100m & 70m x 25m high, RF balls, winds 25km/h

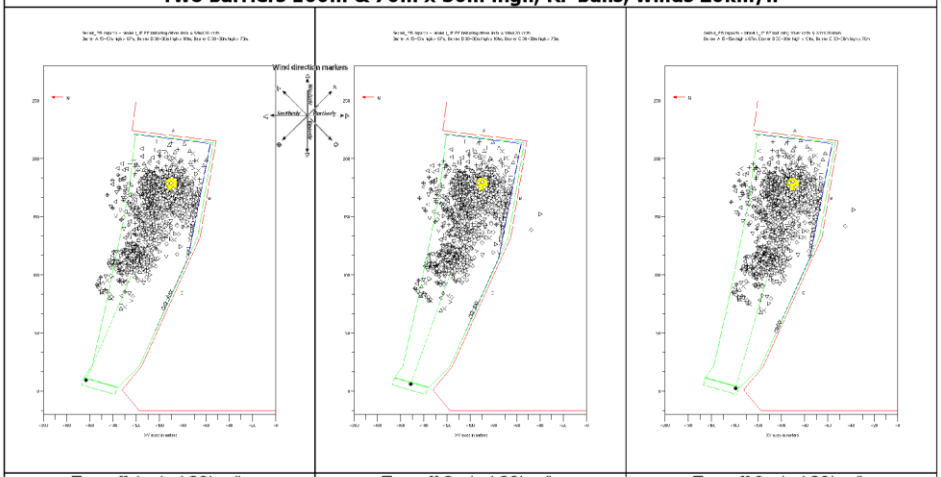


Tee-off 1 wind 25km/h	Tee-off 2 wind 25km/h	Tee-off 3 wind 25km/h

The next diagrams consider increasing the barrier height to 30m for RF ball models.

Increasing the barrier height to 30m for the RF ball models gives a similar errant ball pattern to the normal/40m high barrier models.

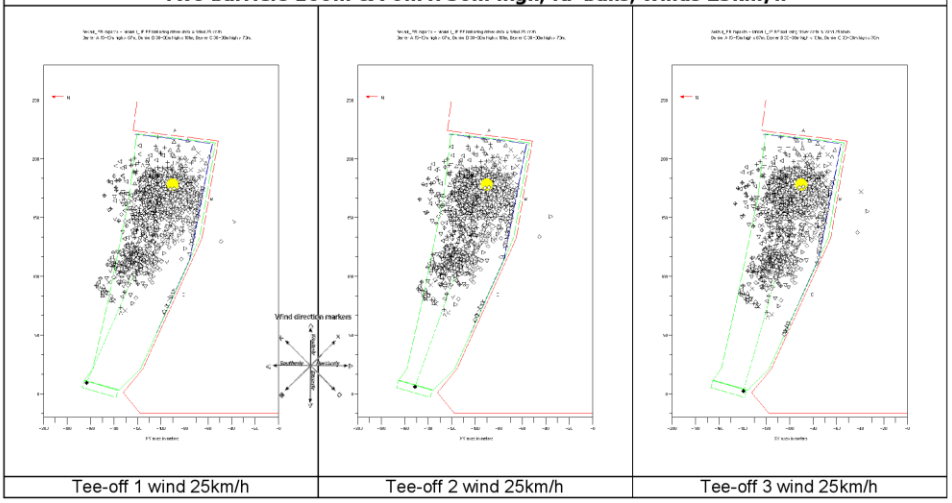
Two barriers 100m & 70m x 30m high, RF balls, winds 20km/h



Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

This has the effect of reducing the number of errant ball flights for 30m high barriers at wind speeds of 20 and 25 km/h (refer p 18 for normal ball diagrams) to those affected by the less frequent winds from NW, North and NE.

Two barriers 100m & 70m x 30m high, RF balls, winds 25km/h



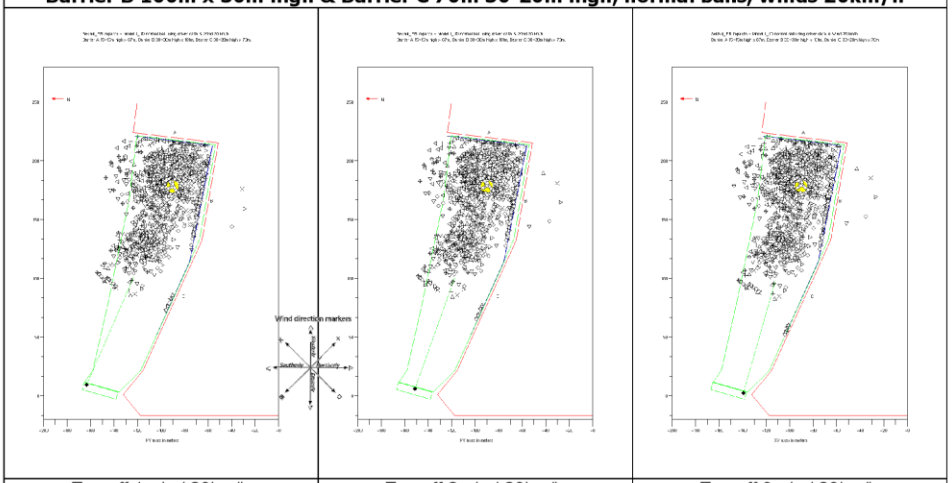
Tee-off 1 wind 25km/h	Tee-off 2 wind 25km/h	Tee-off 3 wind 25km/h

Modeling suggests that using reduced flight balls at this site will allow 25-30m high barriers to provide similar protection to the extremely high (35-40m) barriers that normal balls require.

Lower Start Height

These heights will be necessary for the B barrier, but there is one other possible modification - lowering the height of the C barrier at its start (closest to the bays). Modeling these suggests that the height could increase linearly along the C barrier from 20m high for normal balls, and from 15m high for the RF ball models.

Barrier B 100m x 30m high & Barrier C 70m 30-20m high, normal balls, winds 20km/h

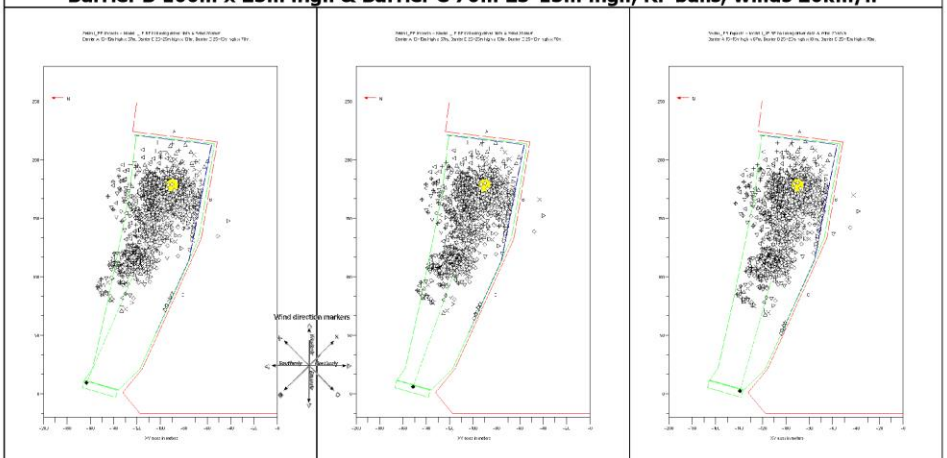


Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

This shows an identical impact pattern to the models with all barriers at 30m all the way along (refer first set of diagrams on p18), indicating the nearer end of Barrier C can be reduced to 20m.

A similar comparison can be done for RF balls (overleaf).

Barrier B 100m x 25m high & Barrier C 70m 25-15m high, RF balls, winds 20km/h



Tee-off 1 wind 20km/h	Tee-off 2 wind 20km/h	Tee-off 3 wind 20km/h

End of Range

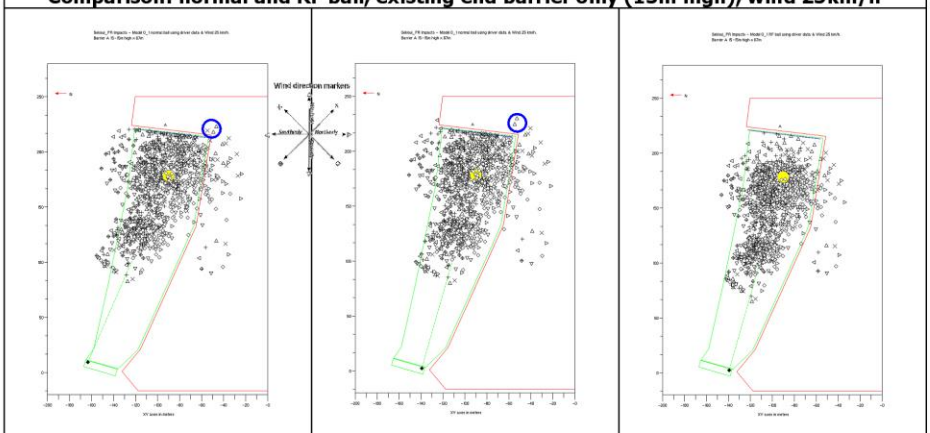
The end of the Practice Range play area has a residential area that may be at risk of errant balls impacts if normal flight balls are used. There is an existing netting barrier estimated to be 15m high protecting this area (supplied image Fig. 14).

The models suggest that there are few errant ball issues at the end of the range for tail winds over 20km/h (see below). The only issues are due to the sloped end on the right side (Fig. 15). If boundary nets are installed it is suggested that this panel be linked up and the end barrier made continuous at 15m high.

Another advantage of using RF balls is that the issues here are also less likely.

Figure 14

Comparison: normal and RF ball, existing end barrier only (15m high), wind 25km/h



Normal Ball, tee-off 1, wind 25km/h	Normal ball, tee-off 3, wind 25km/h	RF ball, tee-off 3, wind 25km/h

APPENDIX 1

Wind Information for Parramatta North

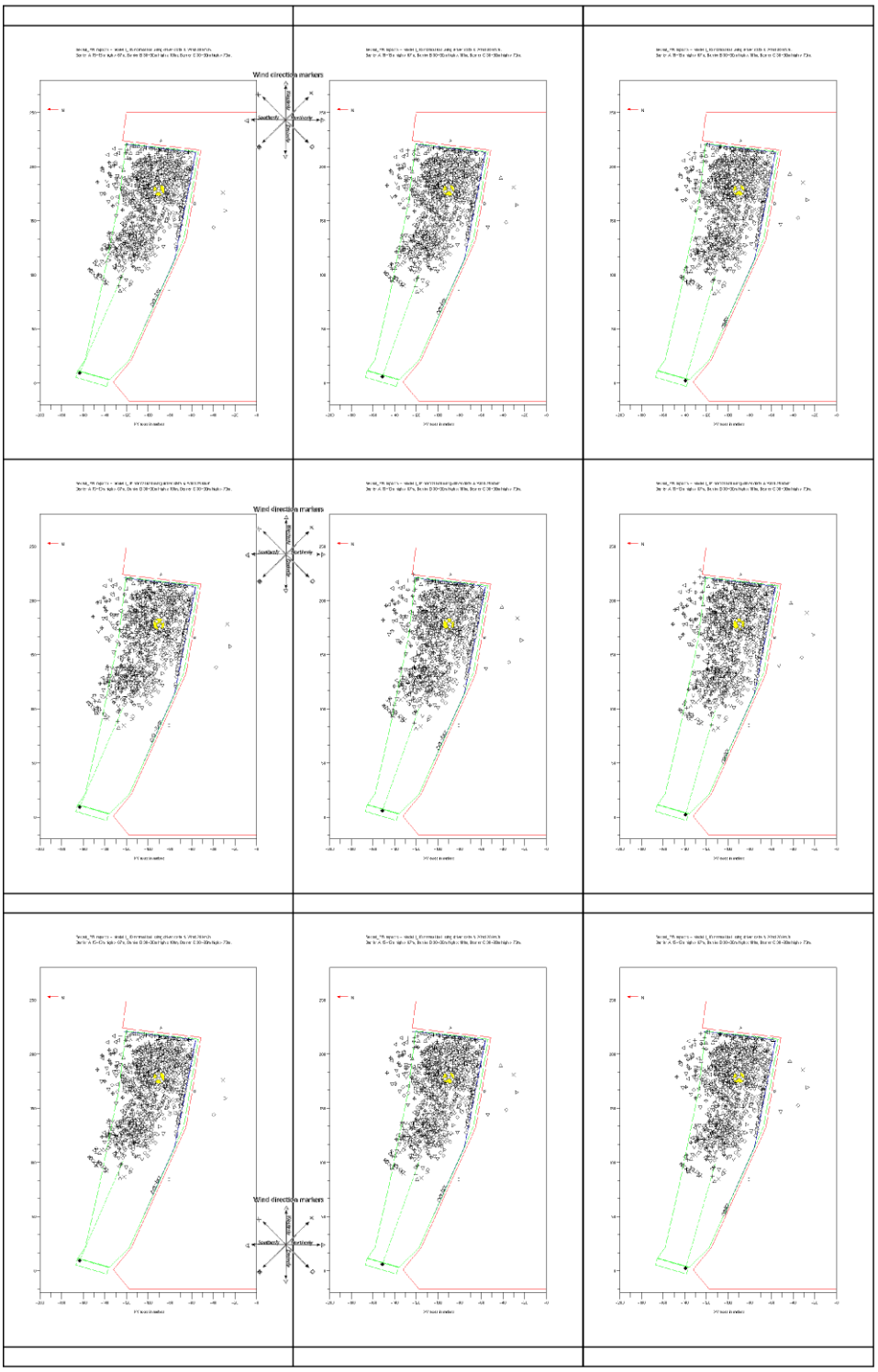
Details of Frequency by Direction and Speed

Station 066124		Frequency - Wind speed Ranges							
Average km/h				***0-20 Total***			***20-30 Total***	30+	**Grand Total**
Direction	Calm	0-10	10-20		20-25	25-30			
W		9.7%	2.3%	***11.9%***	0.6%	0.6%	***1.2%***	0.9%	**14.0%**
NW		12.6%	2.4%	***15.0%***	0.5%	0.4%	***0.9%***	0.4%	**16.3%**
N		5.3%	1.3%	***6.6%***	0.2%	0.2%	***0.4%***	0.1%	**7.1%**
NE		5.8%	2.8%	***8.6%***	0.7%	0.4%	***1.1%***	0.2%	**9.9%**
E		6.3%	3.6%	***9.9%***	1.0%	0.6%	***1.6%***	0.4%	**11.9%**
Sub-total		***39.7%***	***12.4%***	***52.0%***	***3.0%***	***2.2%***	***5.2%***	***2.0%***	***59.2%***
SE		7.7%	4.1%	***11.8%***	0.8%	0.7%	***1.5%***	0.7%	**14.1%**
S		5.4%	2.2%	***7.6%***	0.5%	0.5%	***1.0%***	0.6%	**9.2%**
SW		7.4%	2.3%	***9.7%***	0.5%	0.6%	***1.1%***	0.7%	**11.6%**
Calm/Light	5.9%	0.1%		***5.9%***					**5.9%**
Total	**5.9%**	**60.2%**	**21.0%**	***87.1%***	**4.7%**	**4.1%**	***8.8%***	**4.2%**	**100.0%**

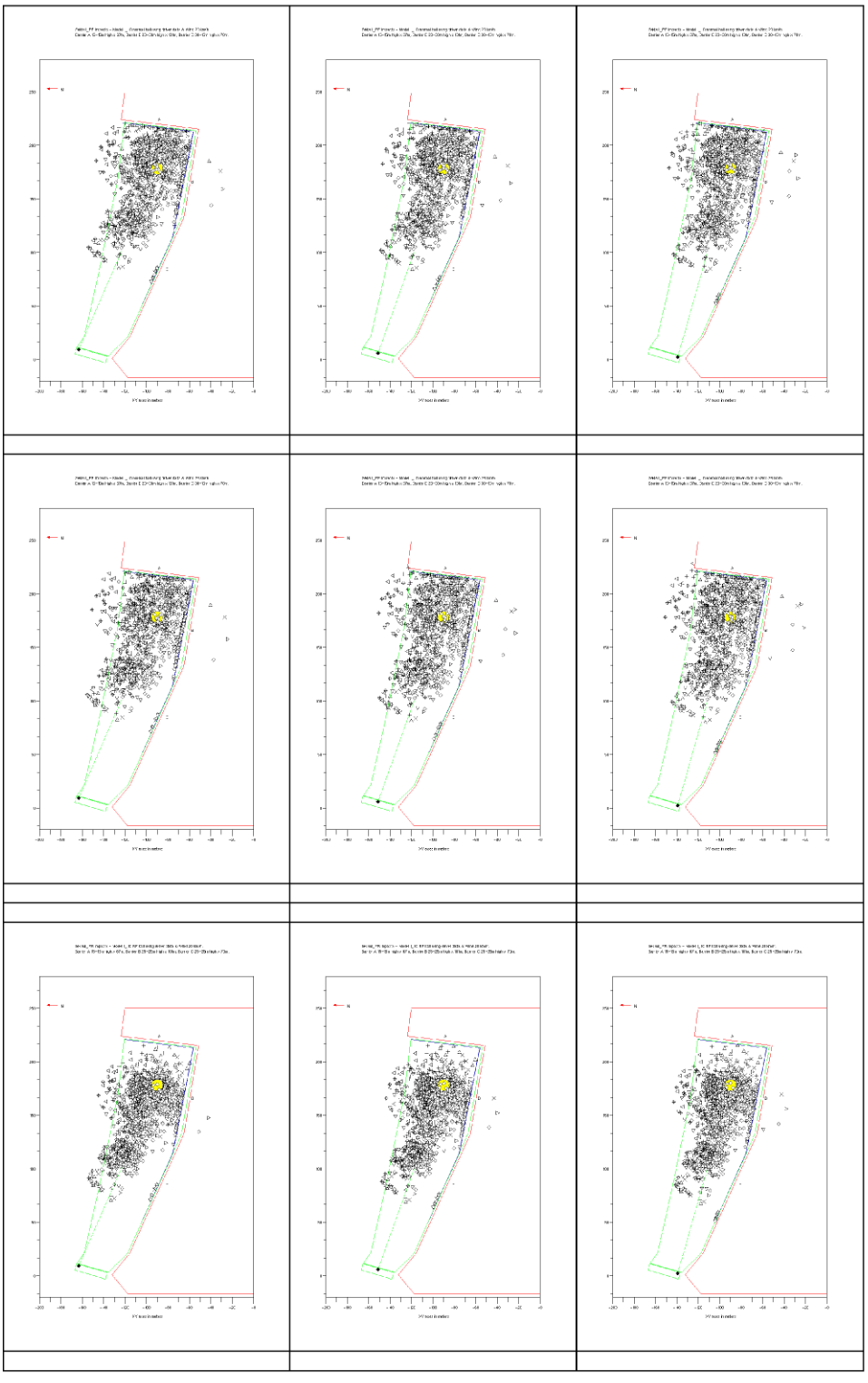
APPENDIX 2

Sample Trajectory Plots

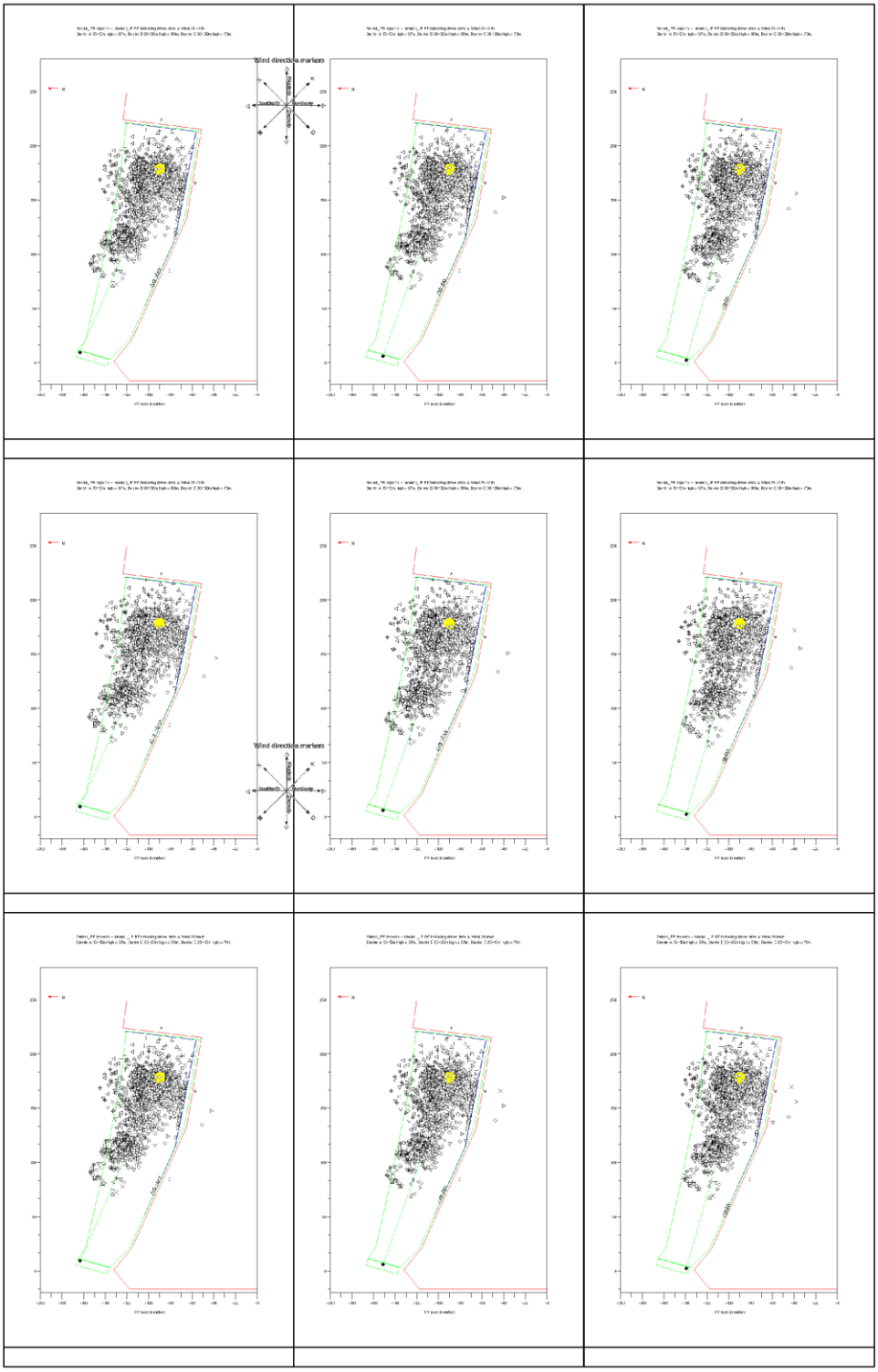
Castle Hill GC Practice Range



Castle Hill GC Practice Range



Castle Hill GC Practice Range



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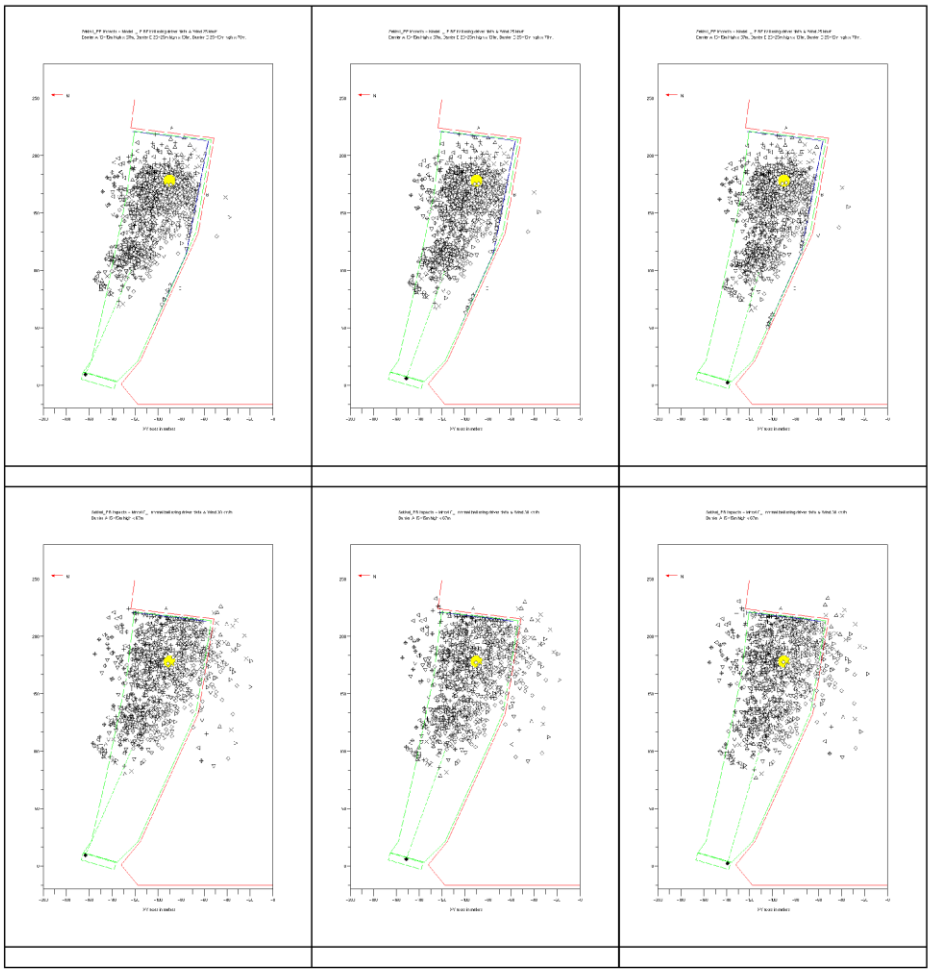
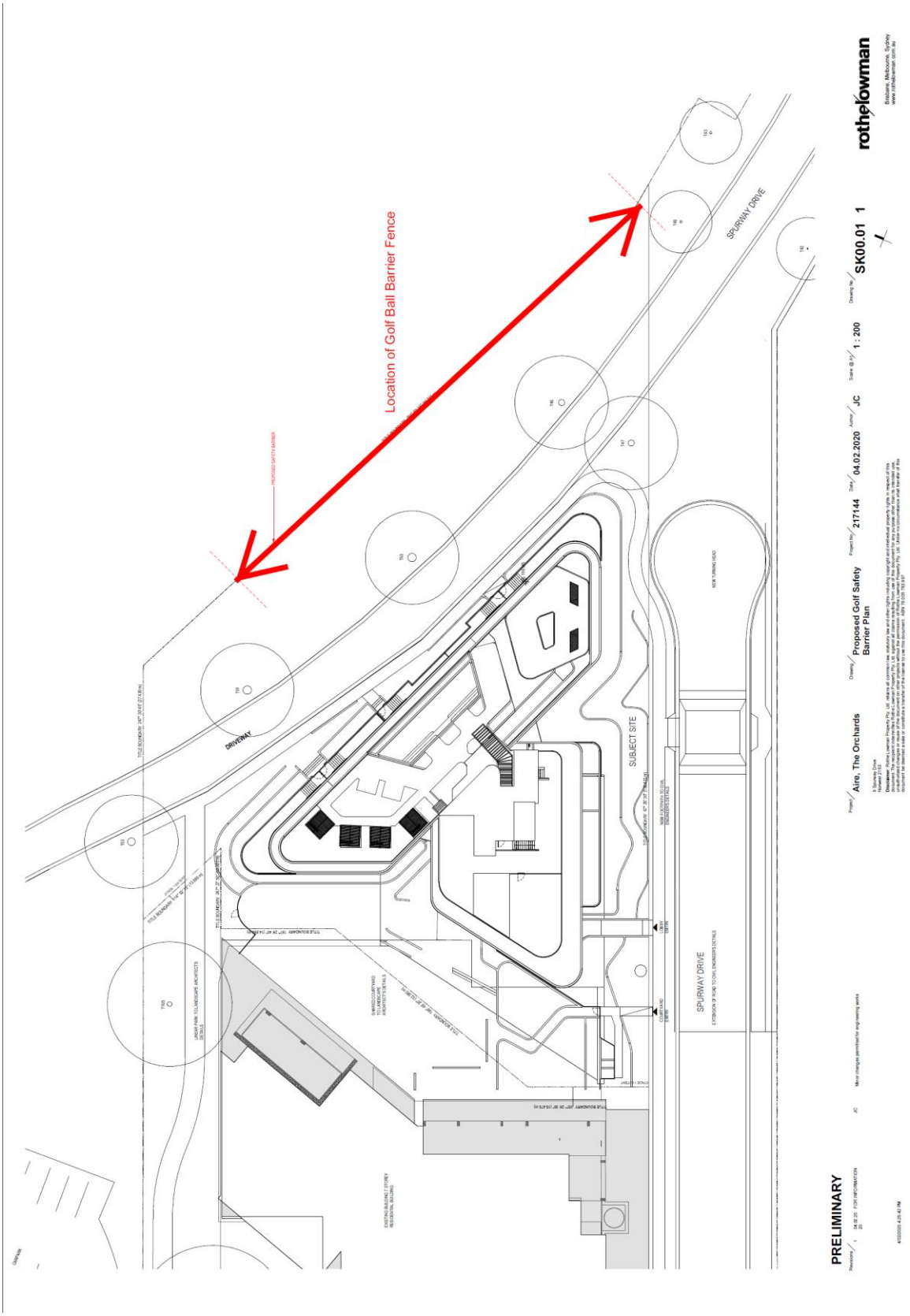
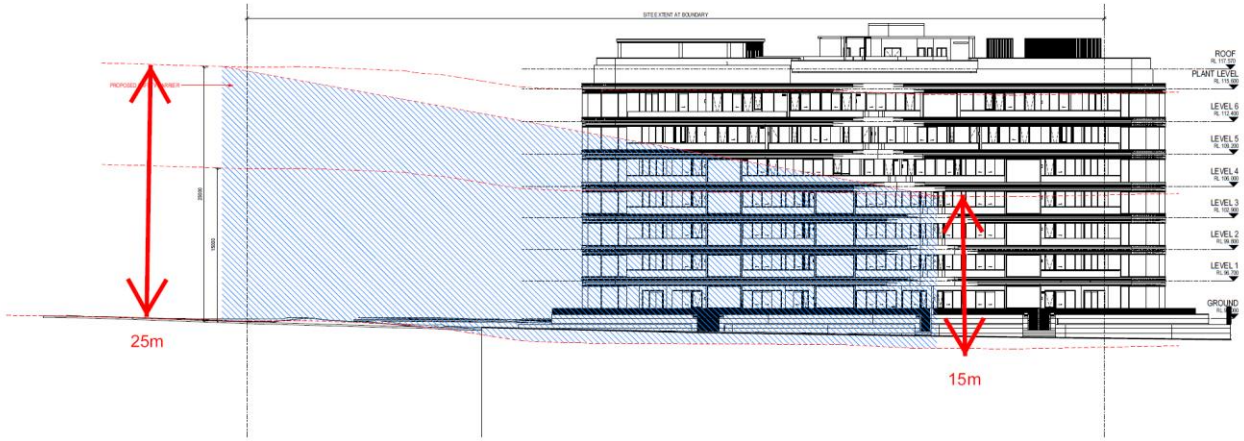


ATTACHMENT 10 – GOLF BALL SAFETY NET PLANS





PRELIMINARY

Revisions				
1	04.02.20	FOR INFORMATION	JC	Minor changes permitted for engineering works

4/02/2020 4:25:46 PM

Project: Aire, The Orchards
9 Spurway Drive
Norwest 2153

Drawing: Proposed Golf Safety Barrier Elevation

Project No: 217144

Date: 04.02.2020

Author: JC

Scale: @ A1: 1 : 200

Drawing No: SK00.02 1

rothelowman

Brisbane, Melbourne, Sydney
www.rothelowman.com.au

THE HILLS
Sydney's Garden Shire

MEETING MINUTES
DESIGN EXCELLENCE PANEL

Date:	14/08/19	**Time:**	10am to 11am
Location of Meeting:	The Hills Shire Council, Community Meeting Rooms 1 and 2		
Panel Members:	**Chairperson** – Nicholas Carlton, Manager Forward Planning, THSC **Panel Member** – Tony Caro, Independent Design Expert **Panel Member** – David Reynolds, Group Manager THSC		
Councillors:	None Present		
Council Staff:	Robert Buckham, Megan Munari, Bronwyn Inglis, Jessie Wiseman, Jennifer Lai		
Guests:	Nil		

BUSINESS ITEM AND MEETING MINUTES

1. Welcome and Opening
The Hills Shire Council is committed to achieving design excellence in the built form environment and ensuring new high-density buildings are of a high quality design.

The Hills Shire Design Excellence Panel (The Panel), is an advisory Panel which provides an opportunity for applicants to receive expert design feedback on their developments and to provide comments to assist The Hills Shire Council in its consideration for development application.

The Panel provides recommendations on the following:

- any development which contains a building with a height of 25 metres or more; or
- Any strategic planning matters for which design excellence is relevant.

The role of the Panel is to evaluate and critique design aspects of proposed development and provide recommendations on whether development exhibits "Design Excellence". The Design Excellence Panel (DEP), is an Independent Panel, not a SEPP 65 Panel and the absence of comment with reference to matters pertaining to SEPP 65 does not mean that matters assessed under SEPP 65 have been satisfactorily addressed.

2. Declaration of interest
Nil

3. Confirmation of previous minutes
Confirmed by email

4. Presentations

Item 4.2	10.00am – 11.00am
DA Number	**DA 1732-2019-HA**
Property Address	9 Spurway Drive, Norwest
Proposal	 Residential flat building comprising 57 apartments above basement car parking shared with an adjacent development.
Applicant representative address to the Panel	Ben Pomroy (Architect) – Rothe Lowman Nicola Eason (Architect) – Rothe Lowman Nick Metcalf (Landscape Architect) – Site Image Greg Dowling (Planner) – Dowling Urban Peter Valleau (Developer) – Sekisui House George Gesouras (Developer) – Sekisui House

DOCUMENTATION

The Design Excellence Panel reviewed the following documents:

- *Architectural Documentation,* various dates on drawings in set submitted to council 19/07/19 , by Rothe Lowman Property Pty Ltd
- *Clause 4.6 Request*, June 2019, by Dowling Urban
- *Statement of Heritage Impact*, October 2016, Comber Consultants
- *Landscape Development Application*, 06/06/19, submitted to council 19/07/19, by Site Image
- *SEPP 65 Design Quality Principles Statement*, 14/06/19, by Rothe Lowman Property Pty Ltd
- *Statement of Environmental Effects*, June 2019, by Dowling Urban

PANEL COMMENTS

The Panel thanks the applicant for their presentation. The divergences in the proposal from the approved master plan as well as the rationale supporting this are noted.

The Panel supported the use of different architectural firms for different buildings to promote architectural diversity across the broader development site.

Overall, the proposal represents an attractive and well-designed building, which will contribute to the quality of the built environment within the locality.

The Panel provided the following comments for further consideration by the applicant:

- The location of condenser units on balconies should be avoided. Opportunities to screen or incorporate them into dedicated plant spaces on the roof or individual floors is preferred, to maximise useability of balcony spaces. Consideration should also be given to the opportunity for BBQs and outdoor cooking to occur on all balconies within the development, including those where in-built facilities are not proposed.

- The Panel raised concern with the proximity of the private driveway along the north-eastern edge of the building, however noted the constraints arising from the retention of heritage trees, as well as the proposed landscaping treatments and level difference between the terrace spaces and the road provide intended to ensure satisfactory amenity for future residents.

- The Panel noted the proposed texture of external precast masonry finishes. The strong profile and contrasting texture of these spandrel and infill panels is essential to relieving the extent of solid areas across the facades and reducing the risk of the building design appearing "dated".

- There are inconsistencies between the photomontages and floor plans (living room radius, extent of glazing and internal column). These inconsistencies must be resolved and it is the view of the Panel that the internal column should be integrated into the facade to ensure that the useable, functional space is maximised for each unit.

- The applicant should consider further opportunities to allow natural light into all corridors on all levels from at least two locations. The Panel noted the rationale behind limiting windows/outlook from certain areas on the western side of the building, to minimise privacy impacts to the existing building to the west.

- The Panel encouraged the applicant to further consider and refine the layout of the units to ensure that all spaces are optimised in terms of functionality and amenity. The project would benefit from an interior design layout review taking into account the capacity to properly furnish primary/main living spaces. Consideration should be given to relationships between living/kitchen/dining areas and bathroom and bedroom doorways. Noting that families are likely to occupy 3 bedroom units, multiple living spaces may provide better amenity and functionality compared to single living areas of a larger scale.

PANEL CONCLUSION

The Panel have reviewed the plans and documentation provided and, subject to adjustments in response to the comments above, considers that the proposal exhibits design excellence. No further advice from the Panel is required unless the consent authority considers further advice necessary.

ATTACHMENT 12 – CLAUSE 4.6 VARIATION

The Orchards Stage 3 'D3'
9 Spurway Drive, Baulkham Hills
Clause 4.6 Request

Prepared on behalf of Sekisui House
September 2019

dowling urban
Suite 302 4-14 Buckingham Street Surry Hills NSW 2010
t: 02 9516 4377 | m: 0407 404 898 | greg@dowlingurban.com.au

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COVER

Proposed development when viewed looking north from new Spurway Drive.

This Clause 4.6 Request has been prepared by:
Greg Dowling, BAS (Env Pl) M Urb Des (Syd) MPIA,
Dowling Urban Pty Ltd, Suite 302 4-14 Buckingham Street, Surry Hills NSW 2010.

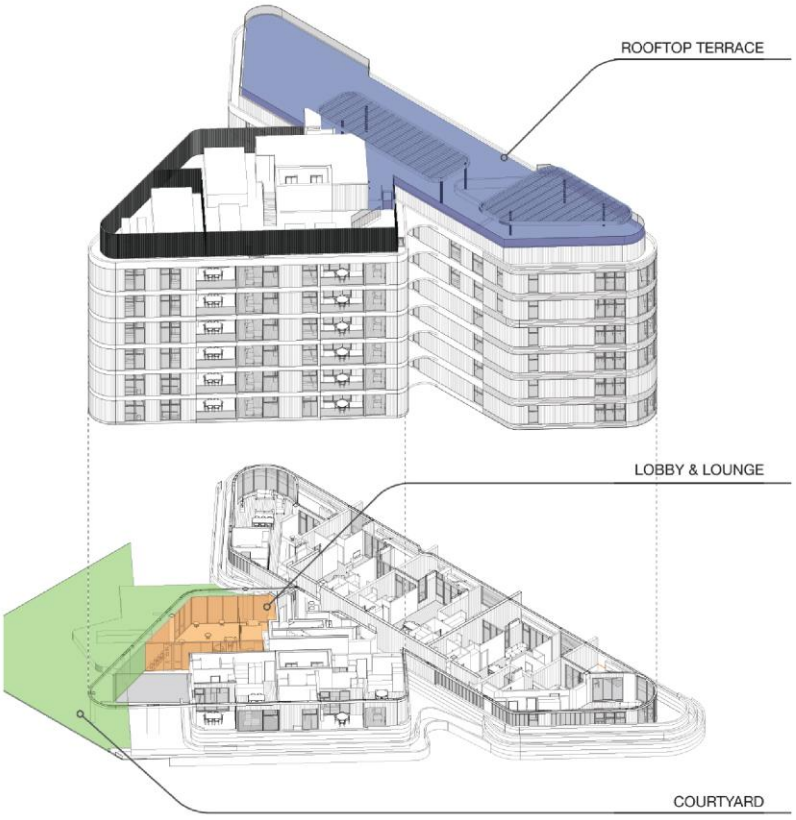
1 Introduction

This report has been prepared to supplement the Statement of Environmental Effects (SEE) for the proposed residential development in the Stage 3 DA of The Orchards at 9 Spurway Drive, Baulkham Hills to specifically request variations to development standards under Clause 4.6 of The Hills Local Environmental Plan 2012 (THLEP 2012).

In particular, this report assesses the cumulative potential impacts to relevant developments that may arise from the proposed variations. It also makes references to recent guidance from Land and Environment Court cases.

Referenced attachments to this report consists of an Extract of Masterplan Design Strategies (Turner), and Parking & Car Share Analysis and Recommendations (Phillip Boyle and Associates)

Details of the development proposal are contained within the SEE.



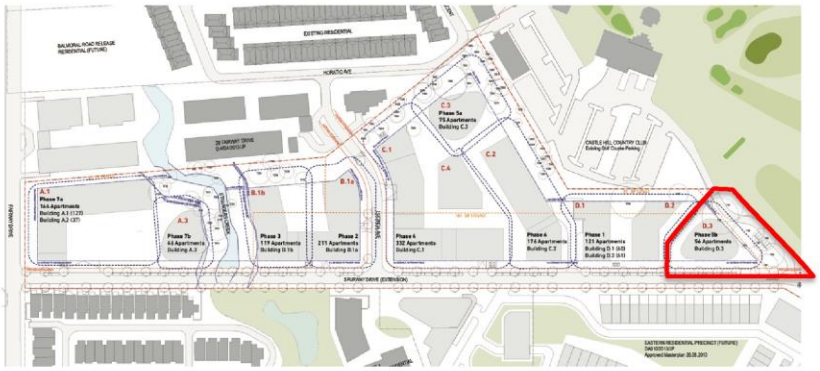
Extract of Architectural Statement (Source Rothlowman)

1.1 DEVELOPMENT OVERVIEW

The application represents the third stage of the concept development known as The Orchards which is the subject of a staged concept development consent for 1,300 dwellings, with a mix of 1, 2, 3 and 4 bedroom apartments across 10 buildings with associated car parking, roads, community amenities, publicly accessible parks and landscaping.

The proposed Stage 3 development application comprises a 7 storey building known as 'D3' containing 6,180 m2 of gross floor area utilised for 57 apartments in a mix of 1, 2, 3 and 4 bedrooms.

It also contains basement car parking spaces for 101 vehicles accessed from Spurway Drive via the basement of buildings D1 and D2 with on-site loading and waste collection, as well as landscaped private and communal open spaces, a publicly accessible new linear park with a pedestrian / cycle connection and a driveway to the Castle Hills Country Club and golf course.



Extract from master plan showing stages, phases and building numbers (source Turner).

1.2 SITE APPROVALS

1.2.1 Design Strategies

The masterplan prepared for the site was arrived at after addressing matters raised in consultations. The extracts at Appendix 1 from the Turner architectural design statement for the masterplan summarise the design strategies for the site, streets, setbacks, building envelopes, heights and amenity. These were adopted to optimise a better planning and design outcome for the site and form the basis of clause 4.6 variation requests for the site.

1.2.2 Staged Concept Development Consent

Staged concept development consent was granted to The Orchards Masterplan on 11 April 2018 (736/2017/JP) which included the variations sought within this clause 4.6 request. The Sydney Central City Planning Panel concluded as follows.

The Panel has considered the applicant's request to vary the development standards contained in The Hills Local Environment Plan 2012 Clause 4.3 relating to height of buildings, Clause 4.4 Floor Space Ratio and Clause 7.11 Residential Development Yield on Certain Land. The Panel considers compliance with the standards would be unreasonable and unnecessary in the circumstances of this case as the variations provide a better design outcome through provision of additional and improved open space, greater retention of significant trees and provides better building relationships to adjoining properties, and will not result in development inconsistent with this locality. The development as designed remains consistent with the underlying intent of the standard and the objectives of the zone.

The Panel is therefore satisfied that the Applicant's clause 4.6 variation requests have adequately addressed the matters required to be demonstrated in clause 4.6 of the The Hills LEP 2012 and that the proposed development will be in the public interest because it is consistent with the objectives of the relevant controls and the objectives for development within the R4 zone in which the development is proposed to be carried out. For the above reasons, the Panel is satisfied that the variations from the LEP development standards are in the public interest.

1.3 CASE LAW

This request has been prepared under Clause 4.6 of THLEP 2016 to justify the departures from development standards for height of building within clauses 4.3 as well as the apartment size and parking development standards within clause 7.11.

The request meets the objectives of clause 4.6(1),

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances,

and demonstrates for the purpose of clause 4.6(3):

(a) that compliance with the development standards is unreasonable or unnecessary in the circumstances of the case, and

(b) that there are sufficient environmental planning grounds to justify contravening the development standards.

Case law *(Winten V North Sydney Council, Wehbe V Pittwater, Four2five V Ashfield Council*) provides guidance when considering an exception to development standards:

- Is the planning control in question a development standard?

- What is the underlying object or purpose of the standard?
  - *Would the proposal, despite numerical non-compliance be consistent with the relevant environmental or planning objectives.*
  - *Is the underlying objective or purpose of the standard not relevant to the development thereby making compliance with any such development standard unnecessary;*
  - *Would the underlying objective or purpose be defeated or thwarted were compliance required, making compliance with any such development standard unreasonable;*
  - *Has Council by its own actions, abandoned the development standard.*
- Is compliance with the development standard consistent with the aims of Cl 4.6?
- Is compliance with the development standard unreasonable or unnecessary in the circumstances of the case?
- Are there sufficient environmental planning grounds (specific to the site and particular to the circumstances of the proposed development) to justify contravening the development standard and therefore is the objection well founded?

Recent case law (*Micaul Holdings v Randwick City Council, Moskovich v Waverley Council*) has also established that:

- the written request has to adequately address everything necessary in clause 4.6(3), rather than the consent authority being "satisfied directly";
- the consent authority must be personally satisfied that development will be "consistent with" the objectives of the zone and the development standard;
- being "consistent with" these objectives is not a requirement to "achieve" them but that development be "compatible" with them or "capable of existing together in harmony";
- establishing that "compliance with the standard is unreasonable or unnecessary" does not always require that the objectives of the standard are achieved but also that it may not be achieved or would be thwarted by a complying development;
- when a clause 4.6 variation request is being pursued, it is best to demonstrate how the proposal achieves a better outcome than a complying scheme.

2 Proposed Variations

In accordance with the determinations of the Staged Concept and Stage 2 development consents, this Stage 3 development application for the building 'D3' seeks to vary the prescribed development standards within THLEP 2012 relating to:

- Clause 4.3 – Height of buildings; and
- Clause 7.11 - Residential development yield on certain land.

The following describes the specific development standards that are contravened by the development proposal.

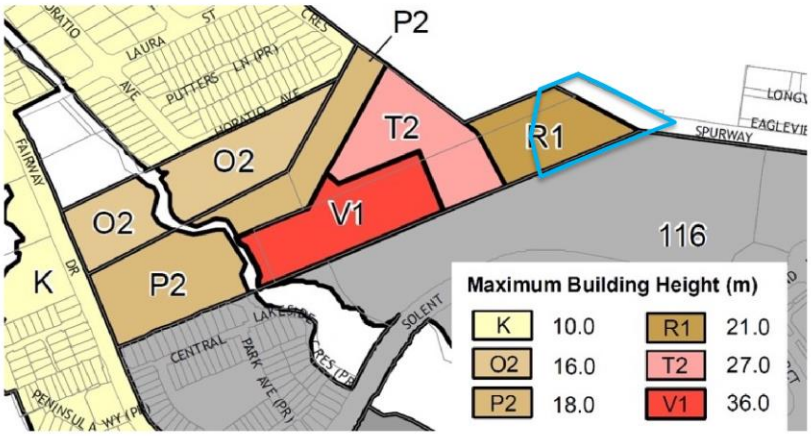
2.1 HEIGHT OF BUILDING VARIATION

The Height of Buildings development standard is contained in Clause 4.3(2) of The Hills LEP 2012 which states:

> *(2) The height of a building on any land is not to exceed the maximum height shown for the land on Height of Building Map.*

The site is subject to height of building development standard of 21 metres under clause 4.3 (category R1 on the LEP HOB Map).

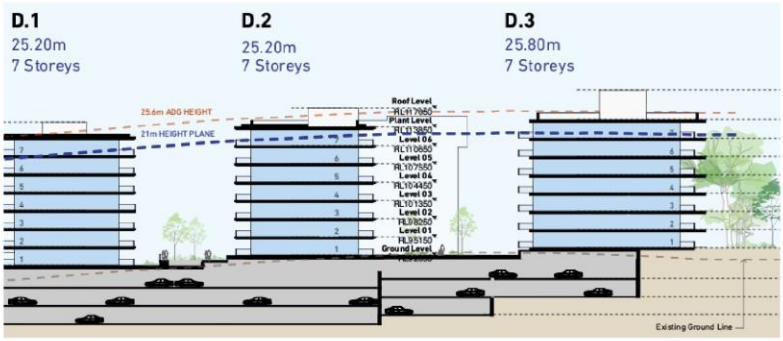
The proposed buildings will have a maximum roof height generally within 24.7 m to as a result of site ADG adjustments and approximately 28.9 m above existing ground level when including the lift overrun access to rooftop communal open space. The roof top level and exceptions are in general accordance with the masterplan (below).



Extract of Height of Buildings Map Source: THLEP 2012

As approved in the concept development consent, the modification to building heights across the whole site results from changes in topography and the floor-to-

ceiling heights required under the ADG to accommodate the intended storeys while allowing for contemporary floor to floor heights of 3.1m,.



Extract of approved Concept Plan envelope section showing heights

2.2 RESIDENTIAL DEVELOPMENT YIELD ON CERTAIN LAND

Clause 7.11 of the THLEP 2012 includes requirements specific to the subject site.

The clause enables the consent authority to grant consent to the erection of residential flat buildings with a maximum of 1,300 dwellings across the site. However, if development will result in more than 600 dwellings, the development must provide a prescribed mix of apartment typologies and parking.

The standards contravened under clause 7.11 consist of the range of apartment sizes under 5(c) and the rate of car parking provision under 5(d) of the clause.

2.2.1 Apartment Sizes

Clause 7.11 (5)(c) of the THLEP 2012 provides minimum standards for the mix of apartments and a range of apartment size types as summarised in the table below.

Table summarising clause 7.11 LEP apartment size provisions

Apartment Size	Mix	Type 1	Type 2	Type 3
Range		=<30%	=<30%	
Studio or 1 bedroom	=<25%	50-65m²	65-75m²	>75m²
2 bedroom		70-90m²	90-110m²	>110m²
3+ bedroom	=>10%	95-120m²	120-135m²	>135m²

As described in Section 3, the apartment mix complies with this provision with a minor variation to Studio and 1 bedroom apartments which comprise of 26.3% while 63% of apartments contain two bedrooms and 10.5% of apartments have 3 or 4 bedrooms.

As accepted in the concept development consent, there are minor variations to apartment sizes within some of the prescribed ranges proposed for this stage. This consists of the Type 2 2-bedroom and Type 3 1 and 2-bedroom apartments which

are proposed with minimum areas of 82 m2, 70 m2, and 106 m2 respectively. This represents 8 m2, 5 m2, and 4 m2 less than the range specified under the clause for these categories, noting that not all apartments in these type categories would be non-complying as reflected in the higher average sizes.

The table below shows the variances to the apartment type sizes from the LEP and concept development consent guidance as well as highlighting the increased sizes tor Type 3, 3 and 4 bedroom apartments to better cater to larger family households.

Table comparing LEP, Concept Plan Approval and Stage 3 apartment sizes

Apartment type	LEP m2	Concept guidance	Stage 3 av. m2	Units	Totals	%
Type 1 – 1 Bed	50-65	55	54	7		
Type 1 – 2 Bed	70-90	79	76	10		
Type 1 – 3+ Bed	95-120	110	-	0		
Sub Total					17	30%
Type 2 – 1 Bed	65-75	65	-	0		
Type 2 – 2 Bed	90-110	88	89	15		
Type 2 – 3+ Bed	120-135	120	130	1		
Sub Total					16	28%
Type 3 – 1 Bed	75 +	75	71	8		
Type 3 – 2 Bed	110 +	102	109	11		
Type 3 – 3 Bed	135 +	130	161	3		
Type 3 – 4 Bed	135 +	185	193	2		
Sub Total					23	42%
Total				57	57	100%

It should be noted that the variations do not lead to any increase in dwelling numbers but allow floor space to be reallocated to other type categories to better match local housing needs. A wide variety of apartments types is maintained while all remain well above the ADG minimums and and represent a high level of utility and amenity..

Accordingly, while minor variations are sought to three type category sizes, not all apartments within those types are outside their ranges while the maximum amount of Type 1 and 2 apartments comply with the LEP's ratio requirements.

Parking

Under clause 7.11 of the THLEP 2012, development must also provide a prescribed range of car parking as follows.

- *for each 1 bedroom dwelling—1 car parking space, and*
- *for each 2 or more bedroom dwelling—2 car parking spaces, and*

- *for every 5 dwellings—2 car parking spaces, in addition to the car parking spaces required for the individual dwelling.*

The car parking details are set out in the SEE and, as anticipated in the Concept and DA determination, there is a variation to the LEP parking requirements to reflect the site's access to future high levels of transport choice and mass transit services whereby the following rates have been adopted for the Stage 3 development application:

- for each 1 bedroom dwelling—1 car parking space,
- for each 2 bedroom dwelling—1.6 car parking spaces,
- for each 3 or 4 bedroom dwelling—2 and 3 car parking spaces, and
- for every 5 dwellings—1 car parking space, in addition to the car parking spaces required for the individual dwelling.

The Traffic Report notes that the proposed provision of parking spaces will moderately exceed more recent Planning Panel determinations reflecting a greater proportion of larger 2, 3 and 4 bedroom apartments which affect average rates.

The original rates of parking adopted for the staged concept development consent resulted from a clause 4.6 variation request that was informed by a study "*Parking and Car Share: Analysis and Recommendations*" prepared by Phillip Boyle and Associates. (Refer Appendices.)

The study made a number of recommendations to reduce car dependency including reducing the prescribed parking rates from 2 parking spaces for 2 bedroom apartments to an average of 1.5, and a halving of the visitor parking rate from a very high 2 spaces per 5 apartments to 1 space.

The Sydney Central City Planning Panel upheld these recommendations with Council support.

3 Clause 4.6 Assessment

3.1 ARE THE PLANNING CONTROLS DEVELOPMENT STANDARDS?

The planning controls in Clauses 4.3 and 7.11 relating to maximum building height, minimum apartments sizes and parking are development standards under the definition within the *Environmental Planning and Assessment Act 1979* as follows *(EP&A Act, Part 1 Section 4. Definitions)*

> ***development standards*** *means provisions of an environmental planning instrument or the regulations in relation to the carrying out of development, being provisions by or under which requirements are specified or standards are fixed in respect of any aspect of that development, including, ….*
>
> *(a) the area, shape or frontage of any land, the dimensions of any land, buildings or works, or the distance of any land, building or work from any specified point …*
>
> *(c) the character, location, siting, bulk, scale, shape, size, height, density, design or external appearance of a building or work,*
>
> *(g) the provision of facilities for the standing, movement, parking, servicing, manoeuvring, loading or unloading of vehicles,…..*

3.2 ASSESSMENT AGAINST THE PURPOSE/OBJECT OF THE STANDARD

3.2.1 Height of Building

The objectives of the height of building development standard under clause 4.3 are:

(a) to ensure the height of buildings is compatible with that of adjoining development and the overall streetscape,

(b) to minimise the impact of overshadowing, visual impact, and loss of privacy on adjoining properties and open space areas.

The objectives of the height of building controls will be satisfied by implementing the original concept which informed the Planning Proposal and subsequent masterplan. This provided for 7 and 12 storey buildings which has been retained in most circumstances.

In particular, underlying the height variation is the need to accommodate floor to ceiling height to achieve ADG requirements while also allowing for adjustments resulting from the slope of the land and necessary earth works altering the existing ground levels as shown in the attached extract from the design statement.

The design strategies within the masterplan architectural statement also set out the reasoning for further variations to the height standard in the distribution, site coverage and massing of floor area in order to achieve improved planning and design outcomes from the redevelopment as described.

The height and envelope strategies for the masterplan took into consideration the compatibility of heights with adjoining development and overall streetscapes as well as shadowing, visual, and privacy impacts on adjoining properties and open space areas.

LEP HEIGHT CONTROL

- 3m floor to floor
- Flat site assumed with no allowance for topography
- No allowance for roof top plant, roof articulation or lift overruns
- 6 storeys = 18m

HEIGHT REQUIRED TO ACHIEVE ADG OBJECTIVES

- 3.1m floor to floor to achieve 2.7m ceiling height (ADG 4C)
- 2m allowance for topographical changes
- 1m allowance for roof articulation
- No allowance for roof top plant or lift overruns
- 6 storeys = 21.6m

Extract from Masterplan Design Statement explaining need to adjust building height (Source: Turner)

The proposed variation for the Stage 3 DA is in keeping with the design strategy in reducing mid-winter shadowing impacts on existing development in building D2 adjoining as well as future proposed development opposite Spurway Drive proposed for 'The Greens' comprising of 15 to 26 storeys residential towers.

Accordingly, the objectives of the height standard are better served by minimising "the impact of overshadowing, visual impact, and loss of privacy" while ensuring "the height of buildings is compatible with that of" adjoining existing and proposed development and opens spaces as well as the overall streetscape and wider public domain.

Therefore, the proposed height variations better achieve the objectives for the standard which would be otherwise be potentially defeated if strict compliance was adhered to.

3.2.2 Residential development yield

The objectives of the residential development yield development standards under clause 7.11 are:

(a) *to ensure the provision of a mix of dwelling types in residential flat buildings, providing housing choice for different demographics, living needs and household budgets,*

(b) to ensure that development for residential flat buildings does not place an unreasonable burden on the provision of services, facilities and infrastructure in the area to which this clause applies,

(c) to provide opportunities for suitable housing density that is compatible with existing development and the future character of the surrounding area,

(d) to promote development that accommodates the needs of larger households, being a likely future residential use.

Objectives (b) and (c) of these provisions are satisfied in that the 1300 dwellings maximum is not being breached, thereby ensuring that the density remains compatible with existing development and future character of the surrounding area as well as available services, facilities and infrastructure.

The mix of dwelling sizes remains substantially as prescribed with only minor variance to some apartment type sizes thereby ensuring suitable housing choice for different demographics, living needs and household budgets as well as for larger households as set out in objectives (a) and (d).

The variance to parking standards are also compatible with objective (b) in particular, as a suitable variety of housing choice is being provided while appropriately responding to the area's significantly improved public transport infrastructure by discouraging excessive car ownership and visitation in an area of future high public transport accessibility.

3.3 IS COMPLIANCE CONSISTENT WITH THE REQUIREMENTS OF CL 4.6?

The aims of Clause 4.6 are:

(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,

(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

When the development is tested against the underlying objectives of the standards, compliance would not be inconsistent with the aims of the clause because the proposed height is a reflection of a considered masterplan design strategy for the entire development parcel as well as responding to the characteristics of the site and future planned context.

Further, the variances to the residential development yield provisions are minor in nature and still implement the nature and purpose of the provisions while the varied parking rates are in response to the proximity to new significant community investment in public transport with the implementation of Metro station at Norwest.

The proposed development is therefore a case where flexibility in the application of the development standards is justified in order to implement the objectives and intent of THLEP 2012 and remain consistent with the concept adopted for the larger development parcel.

The proposed exceptions to the development standards will result in a better planning and design outcome as follows.

- The provision of additional and improved open space available to the public, greater retention of significant trees, improved shadowing impacts and better building relationships while implementing intended development outcomes using well-reasoned massing and design strategies.
- Maintained mid-winter solar access for existing and proposed neighbouring residential apartments and surrounding public domains.
- The refinement of the prescribed apartment typologies to better meet demographic dwelling demand and local purchaser needs to ensure variety of suitable housing choice;
- Improved travel demand management through reduced parking provision to encourage less car use and better utilisation of the community investment in metro rail infrastructure and associated transport improvements but which still meets the ownership needs of residents.
- Parking provision that adequately meets the social needs of residents in a transforming locality while better implementing metropolitan planning strategies aimed at improving transport management and sustainability.

3.4 IS COMPLIANCE UNREASONABLE OR UNNECESSARY IN THE CIRCUMSTANCES?

Strict compliance with the relevant provisions of THLEP 2012 is considered unreasonable and unnecessary in the circumstances of the case as it would impede the considered implementation of the LEP Amendment that facilitated an accepted design masterplan and concept development consent in which the subject land is included.

Compliance would also impede the achieving of a better planning and design outcomes for the site as represented by the masterplan strategies as well as responding to the future planned context to maintain compatibility with surrounding areas, local needs for suitable housing, and metropolitan planning objectives in managing travel demand.

Further, strict compliance with the HOB and cl 7.11 standards wound tend to defeat the stated objectives of those standards while unnecessarily and unreasonably diminishing the planning and design outcomes outlined in Section 3.3 and justified in Section 3.5.

3.5 ARE THERE SUFFICIENT GROUNDS TO JUSTIFY CONTRAVENTION?

3.5.1 Building Height

As discussed above, the contravention of the building height standard results from two separate requirements.

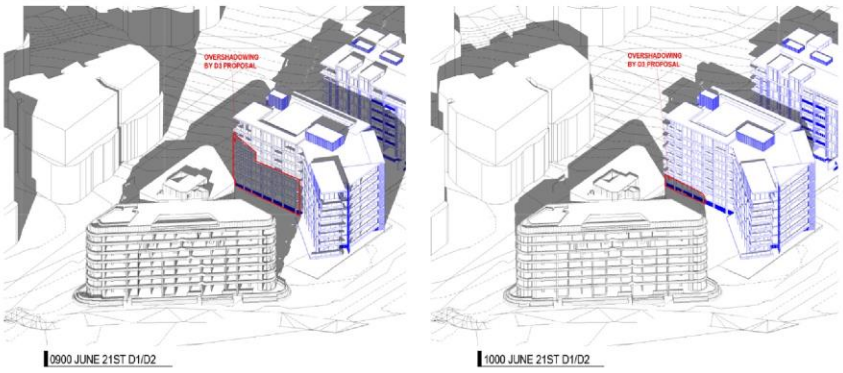
The first requirement is the need to adjust building heights to achieve ADG floor to floor height requirements and the practical consequences of a sloping site and alteration to existing ground levels. This contravention occurs in implementing the number of storeys and massing adopted for the concept which informed the Planning Proposal and subsequent drafting of the amendment to THLEP 2012.

Accordingly, the prescribed height of building standards did not adequately allow for these practical and foreseeable consequences for development, and accordingly sufficient grounds exist to the contravention of the height standard on this basis.

The second requirement derives from applying well-reasoned design strategies for massing, as set out on the Design Statement to the masterplan. This has been undertaken in order to achieve better planning and design outcomes for the site as described, and includes better building relationships between adjoining sites, the greater retention of significant trees and the provision of a publically accessible linear park.

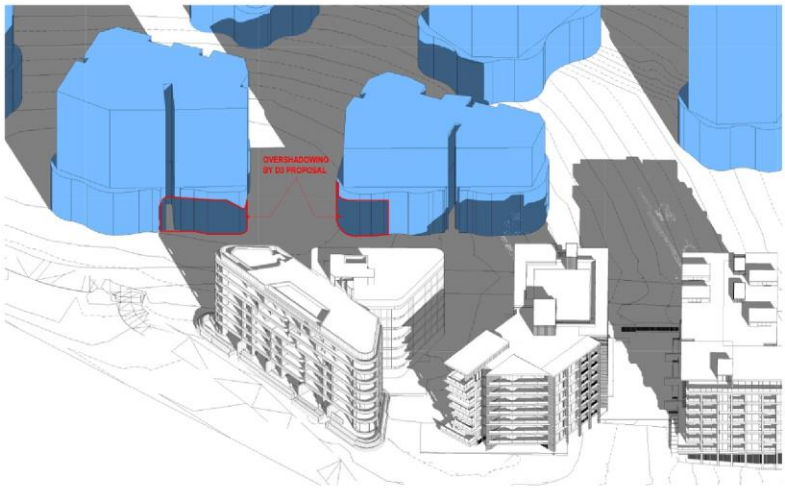
Potential impacts from the variation of height have been analysed by RotheLowman in plans TP0510, 11 and 12 which demonstrate that:

- The shadow impact on the adjoining building 'D2' is consistent with that anticipated in the concept approval and ensures that at least 70% of D2 apartments will achieve minimum ADG mid-winter solar access standards



Extract of Shadow Analysis on Building D2 (Source: RotheLowman)

- The shadow impacts on adjoining future development 'The Greens" is limited to the lower podium levels of two of the proposed towers south of Spurway Drive at its greatest effect which is considered more than reasonable in the future urban context and should not impede those developments achieving minimum ADG requirements.



Accordingly, given acceptable mid-winter shadowing effects on existing and proposed neighbouring developments and a satisfactory visual outlook from the public domain on Spurway Drive and the locality in general, it is considered that there are sufficient grounds to contravene the height standard in this circumstance.

3.5.2 Apartment Sizes

Similarly, the contravention of the residential yield standards is minor in nature and reflect the result of well-considered demographic and community assessments and local needs in particular for larger family 3 and 4 bedroom households.

Importantly, since no more dwellings or anticipated adverse impacts will occur than anticipated by THLEP2012, there is clearly sufficient grounds to justify the contravention of the development yield standards for apartment sizes to ensure apartment sizes are suitable for local needs.

In particular, the resultant apartment sizes are well in excess of ADG minimum standards and provide a variety of bedroom and size typologies to ensure future residents represent a mix of demographic characteristics that reflect the wider community while ensuring sufficient variety suitable for local housing needs.

3.5.3 Parking

An assessment of the parking rates adopted in the determination of the Concept Plan development consent took into account car ownership, vehicle based mode share and travel mode behaviour influences.

The contravention of the car parking standards is minor in nature and reflect the result of well-considered planning process as well as the implementation of emerging travel demand management approaches to parking provision. Importantly, since no more development or anticipated adverse impacts will occur than anticipated by THLEP2012 there is clearly sufficient grounds to justify the contravention of the development standards for parking.

Accordingly, there are sufficient grounds to justify the contravention of parking rates provided by technical analysis as well as State government planning policy, strategy and guidance.

3.6 IS THE REQUEST WELL FOUNDED?

This request under clause 4.6 of THLEP 2012 is considered to be well founded for the following reasons.

- The proposed development remains consistent with the objectives, nature and intent of THLEP 2012 and the concept staged development consent in which the subject land is included.
- The development as proposed is based on a well-reasoned masterplan design to achieve better planning and design outcomes appropriate the site as well as its location and context.
- Strict compliance with the height of building, apartment size and parking controls in the circumstance would result in unnecessary planning and design limitations and consequently, a diminished urban outcome.
- The variation to height of buildings is consistent with the concept approval which allowed for ADG requirements as well as responding to site conditions including for the retention of vegetation and the creation of public access ways and a linear park.
- The variation to apartment sizes is minor in nature while all apartments remain well above the ADG minimums and provide a variety of types that respond to local needs reflected in the LEP provisions.
- The variation to parking provisions better reflects metropolitan planning policy for accessibility to mass public transport and is well supported by technical analysis to achieve improved sustainability.

- The proposed development is wholly consistent with the underlying objectives of the development standards which might be defeated by strict compliance.
- The proposed variations do not add significantly to the overall impact to adjoining land uses and activities.
- The non-compliances do not result in any additional adverse environmental impacts on the amenity of the surrounding area in general.

4 Conclusion

The proposed exceptions to the development standards contained in The Hills Local Environment Plan 2012 Clause 4.3 Height of Buildings and Clause 7.11 Residential Development Yield on Certain Land will result in a better planning and design outcome as set-out in Section 3.5

It is concluded from the strategies and assessments within and referenced in this report, that the proposed contraventions to the development standards as described, do not undermine or frustrate the underlying objectives to those standards.

In summary, the proposed contravention to standards will result in a better planning and design outcome as follows.

- Support of a well-reasoned approved concept that takes into account the need to adjust heights to achieve ADG standards as well as re-massing to provide additional open space available to the public and greater retention of significant trees.
- Maintained mid-winter solar access for existing and proposed neighbouring residential apartments and surrounding public domains.
- The refinement of the prescribed apartment typologies to better meet demographic dwelling demand and local purchaser needs to ensure variety of suitable housing choice;
- Improved travel demand management through reduced parking provision to encourage less car use and better utilisation of the community investment in metro rail infrastructure and associated transport improvements but which still meets the ownership needs of residents.
- Parking provision that adequately meets the social needs of residents in a transforming locality while better implementing metropolitan planning strategies aimed at improving transport management and sustainability.

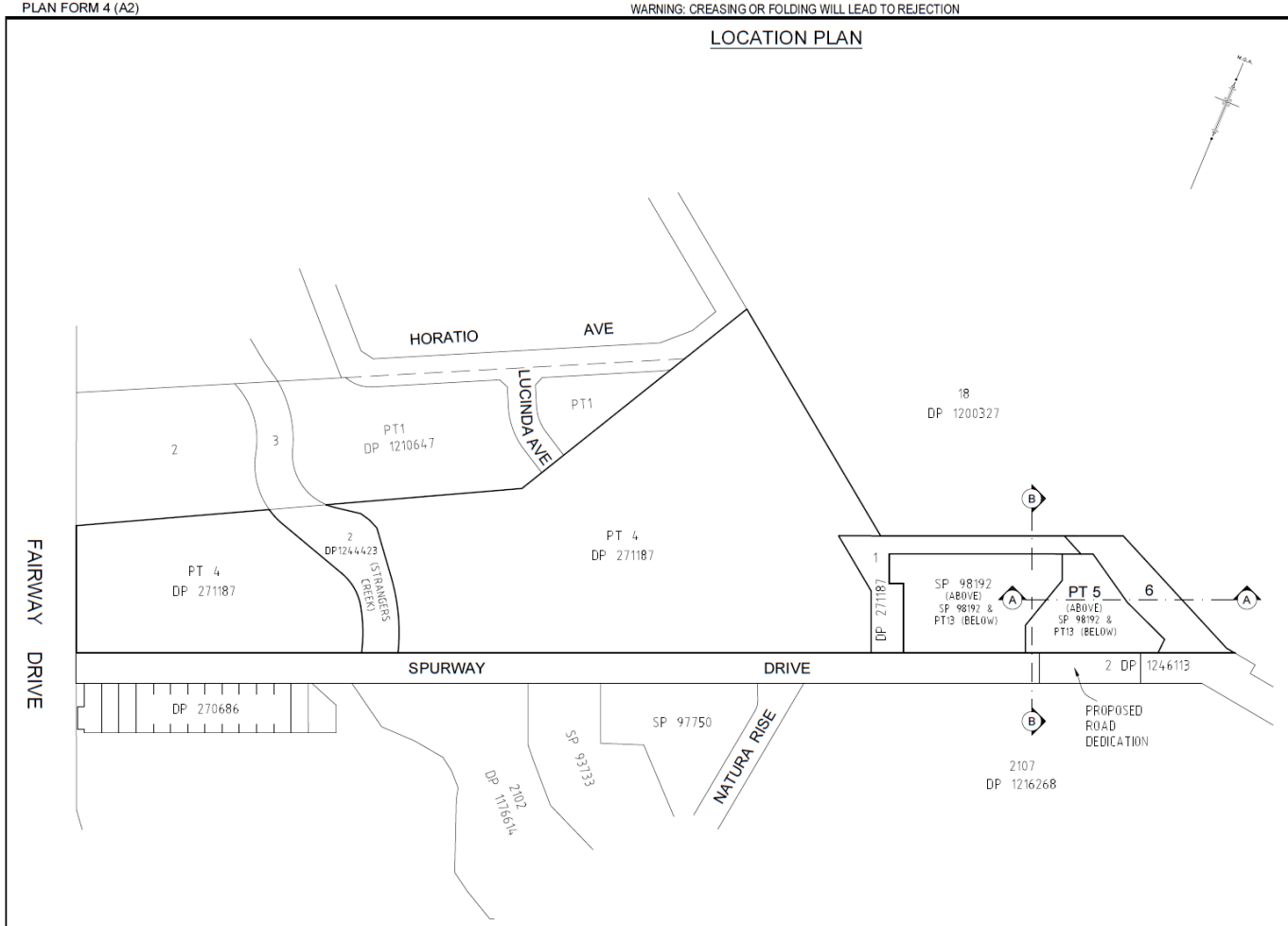
The exceptions will not result in development inconsistent with the locality. The development as designed remains consistent with the underlying intent of the standard and the objectives of the respective zone.

It is therefore considered that strict compliance with the height of building, and residential development yield development standards is unreasonable and unnecessary in the circumstances and that that there are sufficient environmental planning grounds to justify contravening the development standards as proposed.

Further, this written request has adequately addressed the matters required to be demonstrated in establishing the above and that the proposed development will be in the public interest because it is consistent the objectives of the standards and the objectives for development within the respective zone.

PLAN FORM 4 (A2) WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION Sheet 1 of 7 sheets

LOCATION PLAN



THIS SHEET IS BEING CONTINUALLY UP-DATED TO SHOW THE CURRENT SUBDIVISION PATTERN OF THE SCHEME. FOR DETAILS OF SUCH UP-DATES AND ADDITIONAL AND REPLACEMENT SHEETS ADDED SEE SCHEDULE BELOW.

SCHEDULE OF CHANGES TO BE SCHEME

LOT No.	DETAILS	SHEET No.

Subdivision certificate no.:
Date:

Surveyor: MATTHEW GRAHAM SMITH
Surveyors ref: 41917 029DP

Registered:

COMMUNITY/~~PRECINCT/NEIGHBOURHOOD~~ PLAN

DP

ATTACHMENT 13 – SUBDIVISION PLAN