



total earth care

Job No. C11653

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Date: 15/04/20
Rep: Tara Boreham

To	Care of	Site Location
Denis Smith Director, Planning and Property P: 02 8456 4752 M: 0400 777 115 E: denis.smith8@bigpond.com	Tomasz Planning Pty Ltd Suite 1, Level 1, 1073 Pittwater Rd, Collaroy Beach, NSW, 2097	9-11 Birdwood Ave, Collaroy NSW, 2745

Dear Denis

Thank you for inviting Total Earth Care to undertake the desktop research and site assessment to provide a biodiversity letter report for 9-11 Birdwood Ave, Collaroy NSW 2097, Lot 1/-/DP847020.

Thank you for providing the following documents to assist this assessment:

- Architectural Plans prepared by EDAA dated 27/09/19 and amended 23/03/20

1 Background

The Northern Beaches Council has recommended a site assessment to be carried out by a qualified environmental consultant to provide advice on the biodiversity values of the subject site to accompany the Development Application (DA).

1.1 Subject Site & Study Area

The site is a residential property consisting of a north facing, two-storey brick house, separate garage/shed, paved driveway and urban garden on a 1472 m² lot. The site is zoned as R2-Low Density Residential within the Northern Beaches Local Government Area (LGA) (formerly the Warringah LGA).



Figure 1 The site – 9-11 Birdwood Ave, Collaroy.

1.2 The Proposal

The proposal includes the demolition of the existing house and removal of the vegetation and garden beds to accommodate four (4) separate single-level senior living apartments and associated landscaping. The structure will consist of two (2) levels of apartments and one lower level for parking (see Appendix A – Site Plans). The development would require the removal of the urban gardens, and five (5) Coastal Banksia (*Banksia integrifolia*) of which one (1) is mature and four (4) are semi mature. A Coastal Banksia (*Banksia integrifolia*) located on the boundary of 7 Birdwood Ave will be retained.

2 Site Assessment & Desktop Study

A site assessment was carried out from 7:30am on the 23rd March 2020. The weather was overcast and approximately 17 °C. The vegetation within the site boundary and to the road edge was assessed, and incidental fauna sightings were recorded. A desktop study was conducted on the 11th March 2020 to assess Northern Beaches' LEP mapping, BioNet species records, Biodiversity Values mapping and relevant legislation.

3 Results

3.1 Flora

The vegetation on site predominately consists of exotic ornamental garden plants such as Lily of the Nile (*Agapanthus africanus*), Giant Bird of Paradise (*Strelitzia Nicolai*), Orange jessamine (*Marraya paniculata*), Blue lily turf (*Liriope muscari*), Bougainvillea (*Bougainvillea spp.*), Magnolia (*Magnolia spp.*), Common Fig (*Ficus carica*), Common Myrtle (*Myrtus communis*), Frangipani (*Plumaria obtuse*), Date palm (*Pheonix spp.*), Adam's Needle (*Yucca filamentosa*), Oleander (*Nerium oleander*), Bay laurel (*Laurus nobilis*), Bamboo (*Bambusoideae spp.*) and assorted succulent species with an understorey of buffalo lawn (*Bouteloua dactyloides*). There is a significant proportion of weeds including Pellitory (*Parietaria Judaica*), Asparagus fern (*Asparagus aethiopicus*), English ivy (*Hedera helix*), Japanese honeysuckle (*Lonicera japonica*), Green cestrum (*Cestrum parqui*), *Senna pendula*, Turkey rhubarb (*Acetosa sagittata*), Blackberry nightshade (*Solanum nigrum*), fleabane (*Conyza spp.*), Milk thistle (*Silybum spp.*) and Cobbler's pegs (*Bidens Pilosa*).

The native vegetation on site was limited to five (5) Coastal Banksia (*Banksia integrifolia*), a Native Tamarind (*Diploglottis australis*), Willow bottlebrush (*Callistemon salignus*) and Lilly Pilly (*Acmena smithii*). Due to the disturbance history of the site these species are likely to have been planted although *Banksia integrifolia* are representative of the indigenous vegetation of the locality. All species provide potential foraging and nesting habitat for urban fauna (see Figure and Figure 3).

3.2 Fauna

Native fauna identified on site includes the Laughing Kookaburra (*Dacelo novaeguineae*), Noisy minor (*Manorina melanocephala*), Little Corella (*Cacatua sanguinea*), and Rainbow Lorikeets (*Trichoglossus haematodus*). These bird species are highly mobile and adapted to an urban environment, therefore the removal of the vegetation on site is unlikely to affect their habitat extent. No nests or dreys were found on site, however the thick shrub vegetation may provide habitat for possums, bandicoots and nesting birds. Within the courtyard, exotic Bromeliad species and artificial pond could provide potential frog habitat, as does most ephemeral and still bodies of water and damp leaf litter (see Figure 4).



Figure 2 Example of planted canopy tree species, Coastal Banksia (*Banksia integrifolia*)



Figure 3 Dense exotic shrub vegetation providing good habitat for small marsupials



Figure 4 Artificial pond providing potential frog habitat

3.3 Desktop research

The following table reveals the mapped and ground truthed results of the relevant legislation, latest vegetation mapping for the Sydney region and the DPIE Biodiversity Values Map.

Table 1 Results of desktop research conducted 11/03/20

Mapping/Classification/ Legislative Tool	Results
NSW BioNet Atlas of Occurrence records (DPIE 2020)	<p>The BioNet Atlas returned ninety-seven (97) threatened fauna and seventeen (17) threatened flora within 5km of the site. See Figure 8 and Appendix D – BioNet Species Records.</p> <p>No threatened species were recorded on site. There are recent local records of the Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>), which may use Coastal banksia (<i>Banksia integrifolia</i>) as a feed tree as well as local records of Magenta Lilly Pilly (<i>Syzygium paniculatum</i>), however this is often planted as an ornamental street tree.</p>
Vegetation of the Sydney Metropolitan Area V 3.1 (OEH 2016)	<p>The land within the subject site is not mapped as a plant community type in the latest vegetation mapping (OEH 2016). Results from the site visit align with this. All vegetation on site was predominately exotic urban species, with a few commonly planted native canopy species. (See Figure 8).</p>
NSW Biodiversity Offset Scheme Entry Threshold (BOSET)	<p>The total area of the site is 0.15 ha which is below the 0.25 ha clearing threshold and does not trigger the requirement for a Biodiversity Development Assessment Report (BDAR). The site is not mapped on the Biodiversity Values Map. See Appendix B– BOSET Map Report for the BOSET report.</p>

Mapping/Classification/ Legislative Tool	Results
Warringah Local Environment Plan 2011	<p>The site is mapped as Class 4 Acid Sulfate Soil (Part 6, clause 6.1) under the Warringah LEP 2011 (see Figure 5). The objective is to ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage. Being class 4, it requires consent if works occur more than 2m below the natural ground surface or if the water table is likely to be lowered more than 2m below the natural ground surface.</p>  <p>Figure 5 Warringah LEP 2011 Acid Sulphate Soil Mapping.</p>
Warringah Development Control Plan 2011	<p>Wildlife Corridor:</p> <p>A small corner (approximately 200 m²) of the site falls within the Warringah DCP Wildlife Corridor mapping. However it is unlikely the vegetation in this portion of the lot contributes significantly to the wildlife corridor. There is no connectivity to other vegetation and nor does this part of the land contain native flora species. See (Figure 6).</p>  <p>Figure 6 Warringah DCP 2011 Wildlife Corridor Mapping.</p>


Mapping/Classification/ Legislative Tool	Results
State Planning Policy (Coastal Management) 2018 Environmental Policy (SEPP) (Coastal Management)	<p>The Site falls within the Coastal Use Area under the SEPP (Coastal Management) 2018, Area (Division Two, Part 4) (see Figure 7) The proposal does not refute the guidelines within this policy.</p>  <p>Figure 7 SEPP (Coastal Management) 2018 Coastal Use Zone</p>



Figure 8 Site location, locality and BioNet threatened species records.

4 Discussion

The works on the Subject Site include:

- a) the removal of the existing structure and garden including five (5) *Banksia integrifolia*;
- b) the development of a three-storey senior living development with four (4) separate single-level senior living apartments and landscaped gardens.

The desktop and site assessment conducted has determined that the site does not contain significant native vegetation, nor is it mapped as a native Plant Community Type on the latest vegetation mapping (OEH 2016).

No threatened flora or fauna species or ecological communities were identified on site. There are recent local records of the Grey-headed Flying-fox, which may use Coastal Banksia (*Banksia integrifolia*) as a feed tree, however there is no roosting habitat on site.

The vegetation on site predominately consists of landscaped urban exotics and planted native vegetation including five (5) Coastal Banksia (*Banksia integrifolia*), a Native Tamarind (*Diploglottis australis*), Willow bottlebrush (*Callistemon salignus*) and Lilly Pilly (*Acmena smithii*) which are to be removed as part of the proposed development. Fauna identified on site were highly mobile bird species and therefore the removal of the vegetation on site is unlikely to affect their habitat extent. No nests or dreys were found on site, however the thick shrub vegetation may provide habitat for possums, bandicoots and nesting birds. Within the courtyard, exotic Bromeliad species and artificial pond could provide potential frog habitat, but as does most ephemeral and still bodies of water and damp leaf litter.

5 Recommendations

Vegetation removal with the greatest significance was limited to the five (5) Coastal Banksia (*Banksia integrifolia*) and thick shrubs. It is recommended that the proposal include the planting of native flowering species as part of the landscape plan to provide similar foraging resources for native fauna such as nectarivorous birds. See Northern Beaches Council's Native Plant Species Guide – Narrabeen Ward, for a list of recommended native plant species for the area (<https://www.northernbeaches.nsw.gov.au/node/34931>).

Although no evidence of nesting was found on site, some areas of the vegetation is thick and provides suitable habitat for marsupials such as bandicoots and possums as well as nesting birds. It is recommended that an ecologist conduct a pre-clearance survey prior to any vegetation clearing or disturbance to prevent harm to native fauna species that may be nesting in the vegetation.

Please do not hesitate to contact me should you have any questions regarding this biodiversity report for 9-11 Birdwood Ave, Collaroy using the details provided below.

Kind Regards,



Tara Boreham | Project Ecologist

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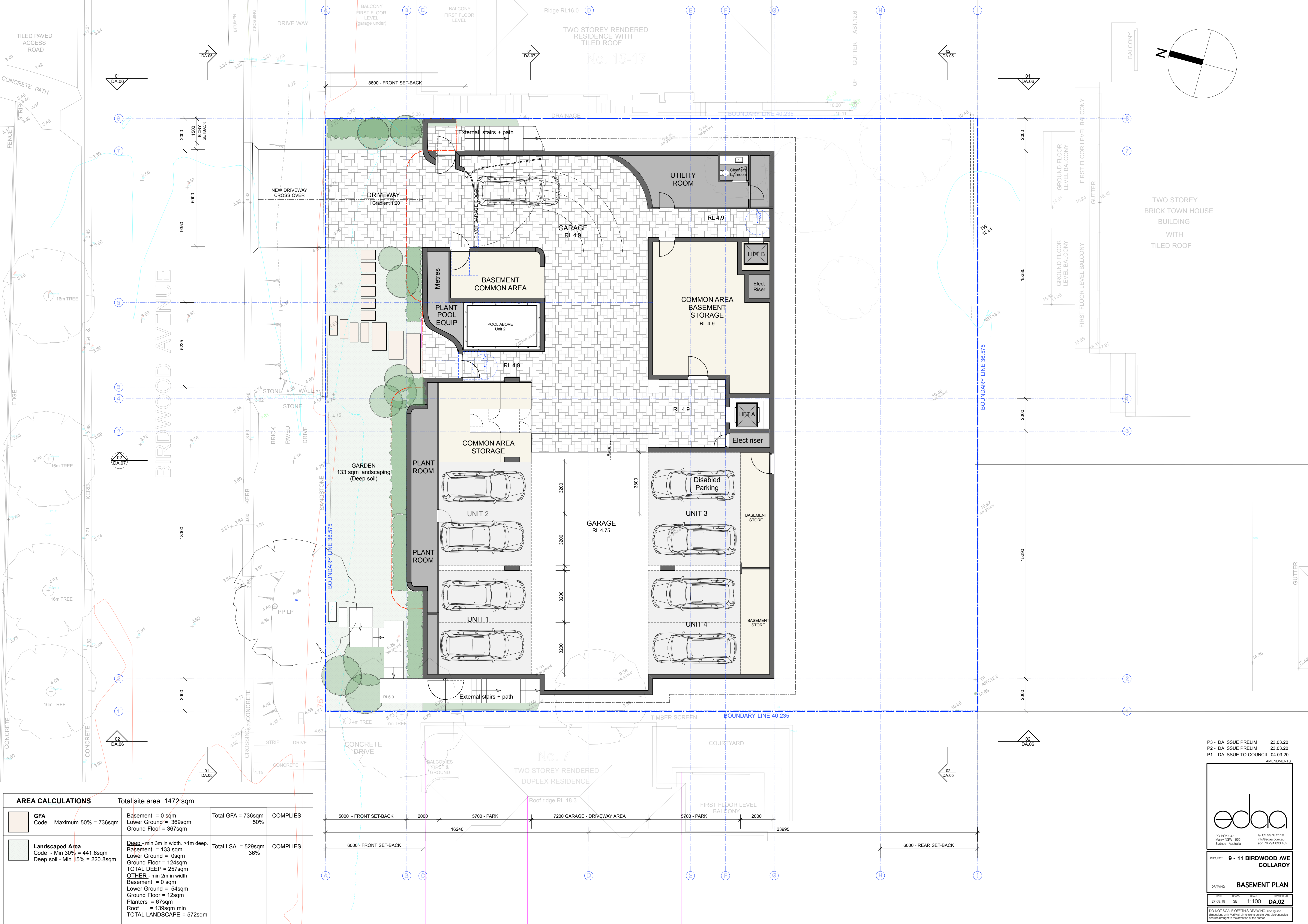
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6 References

- DPIE (2020). BioNet Threatened Biodiversity Data Collection (TBDC) [online] Available at: <https://www.environment.nsw.gov.au/asmslightprofileapp/Account/Login> [Accessed 12th March 2020]
- OEH (2016). *The Native Vegetation of the Sydney Metropolitan Area*. Version 3.1. Office of Environment and Heritage, Department of Premier and Cabinet, Sydney.

7 Appendix A – Site Plans



AREA CALCULATIONS		Total site area: 1472 sqm	
<div></div> GFA Code - Maximum 50% = 736sqm	Basement = 0 sqm Lower Ground = 369sqm Ground Floor = 367sqm	Total GFA = 736sqm 50%	COMPLIES
<div></div> Landscaped Area Code - Min 30% = 441.6sqm Deep soil - Min 15% = 220.8sqm	Deep - min 3m in width, >1m deep. Basement = 133 sqm Lower Ground = 0sqm Ground Floor = 124sqm TOTAL DEEP = 257sqm Other - min 2m in width Basement = 0 sqm Lower Ground = 54sqm Ground Floor = 12sqm Planters = 67sqm Roofs = 139sqm min TOTAL LANDSCAPE = 572sqm	Total LSA = 529sqm 36%	COMPLIES

P3 - DA ISSUE PRELIM23.03.20
P2 - DA ISSUE PRELIM23.03.20
P1 - DA ISSUE TO COUNCIL04.03.20
AMENDMENTS

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PROJECT

9 - 11 BIRDWOOD AVE
COLLAROY

DRAWING

BASEMENT PLAN

DATE

27.09.19

BY

SE

SCALE

1:100

DRAWING NO.

DA.02

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AREA CALCULATIONS		Total site area: 1472 sqm	
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<div></div> Landscaped Area Code - Min 30% = 441.6sqm Deep soil - Min 15% = 220.8sqm	Deep - min 3m in width, >1m deep. Basement = 133 sqm Lower Ground = 0sqm Ground Floor = 124sqm TOTAL DEEP = 257sqm OTHER - min 2m in width Basement = 0 sqm Lower Ground = 54sqm Ground Floor = 12sqm Planters = 67sqm Roof = 139sqm min TOTAL LANDSCAPE = 572sqm	Total LSA = 529sqm 36%	COMPLIES

5000 - FRONT SET-BACK
6000 - FRONT SET-BACK

A B C D E F G H I

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P2 - DA ISSUE PRELIM 23.03.20
P1 - DA ISSUE TO COUNCIL 04.03.20
AMENDMENTS

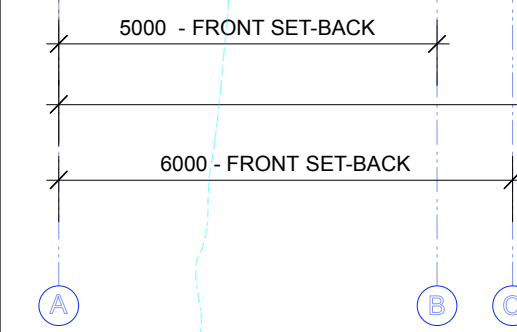
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PROJECT **9 - 11 BIRDWOOD AVE
COLLAROY**
DRAWING **LOWER GROUND
FLOOR PLAN**

DATE 27.09.19 ISSUE SE SCALE 1:100 DRAWING NO. DA.03

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AREA CALCULATIONS			
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<div></div> Landscaped Area Code - Min 30% = 441.6sqm Deep soil - Min 15% = 220.8sqm	Deep - min 3m in width, >1m deep. Basement = 133 sqm Lower Ground = 0sqm Ground Floor = 124sqm TOTAL DEEP = 257sqm Other - min 2m in width Basement = 0 sqm Lower Ground = 54sqm Ground Floor = 12sqm Planters = 67sqm Roof = 139sqm min TOTAL LANDSCAPE = 572sqm	Total LSA = 529sqm 36%	COMPLIES



6000 - REAR SET-BACK

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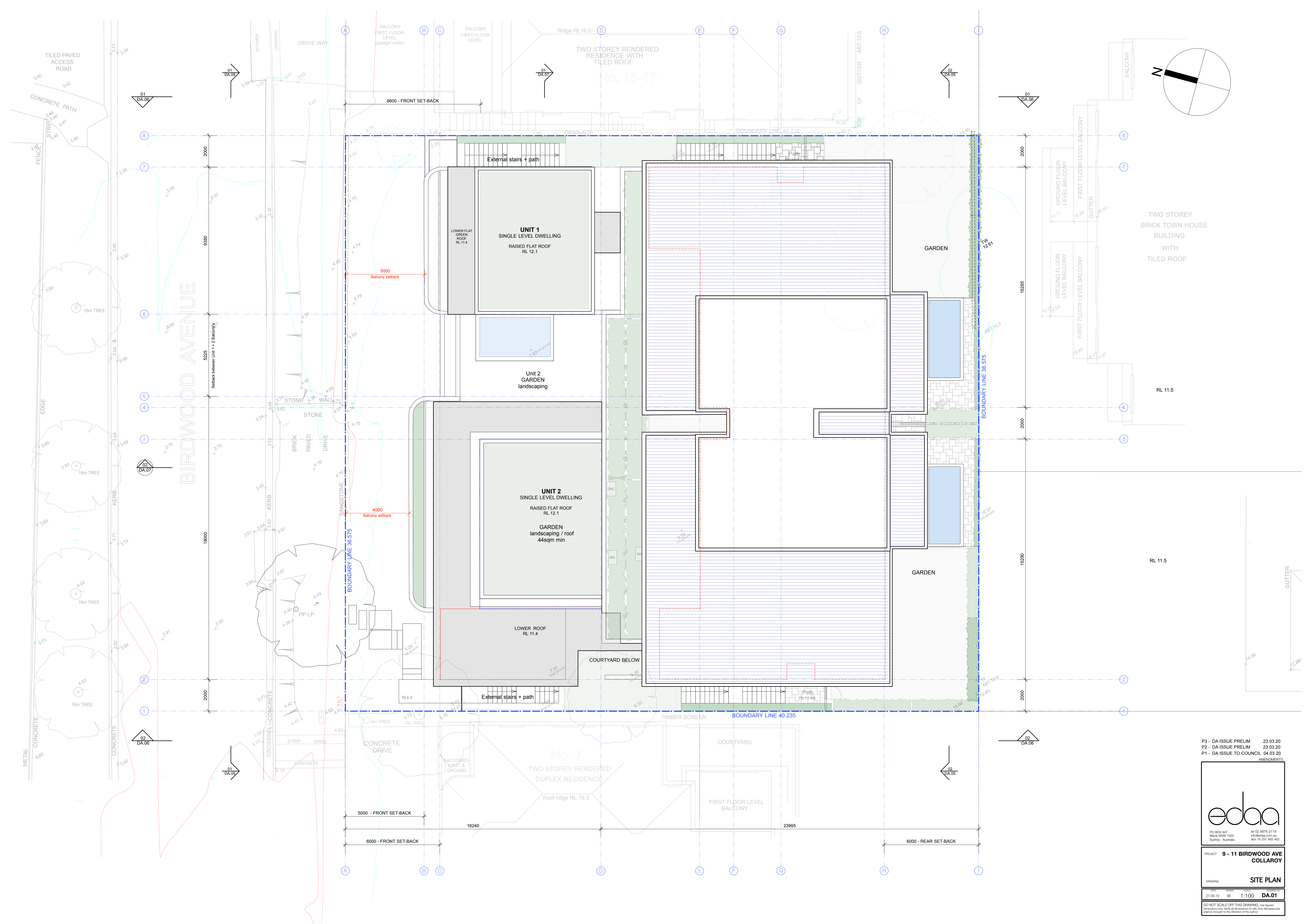
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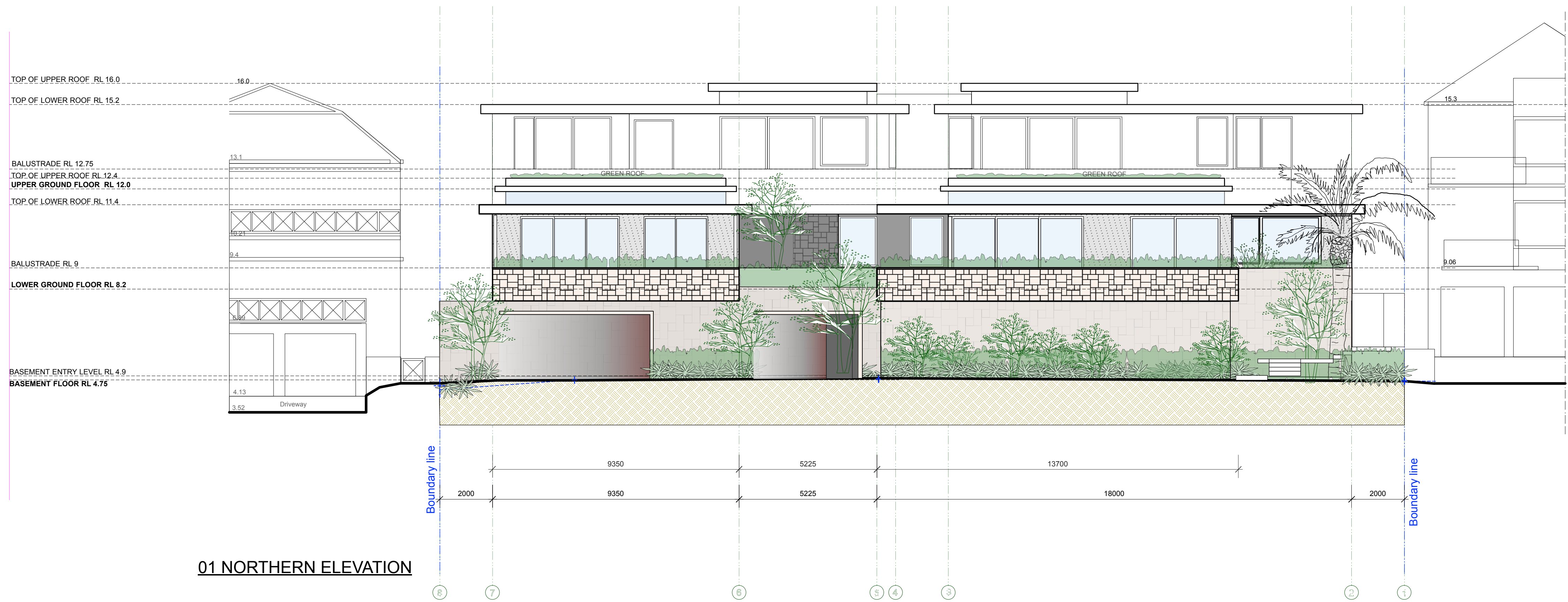
PROJECT **9 - 11 BIRDWOOD AVE**
COLLAROY
UPPER GROUND
FLOOR PLAN

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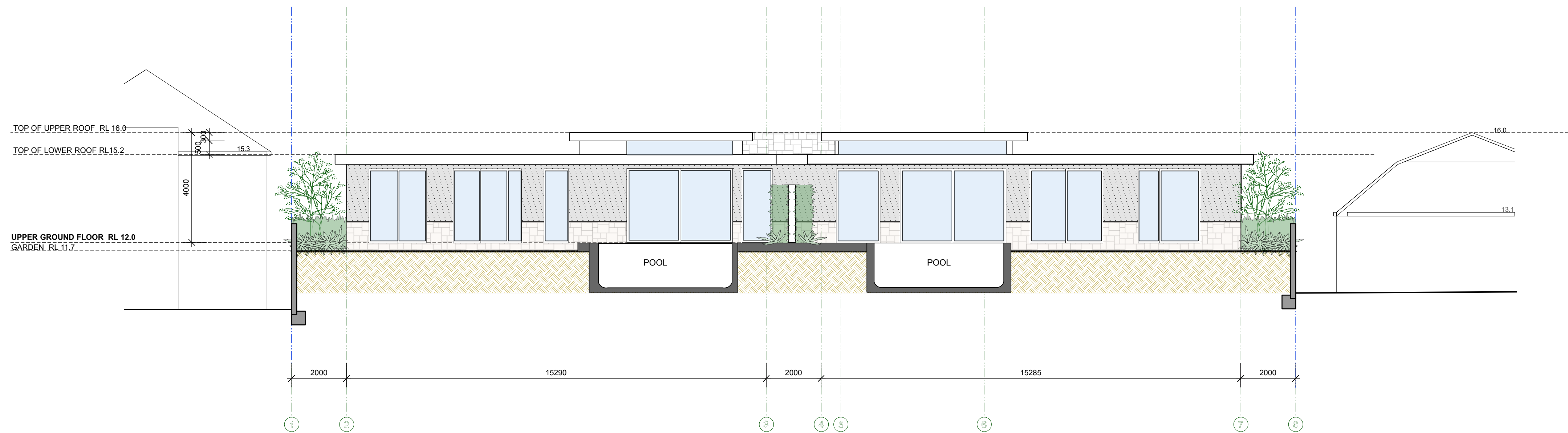
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01 NORTHERN ELEVATION



02 SOUTHERN ELEVATION

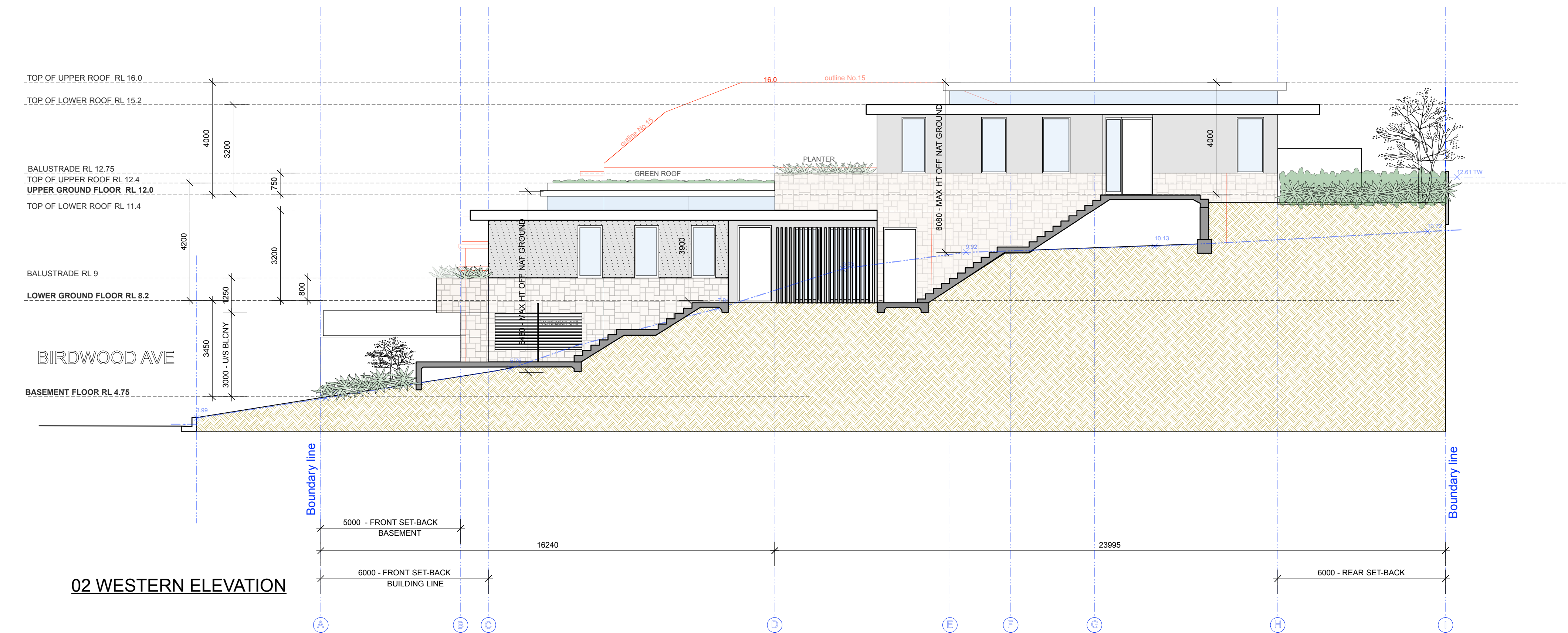
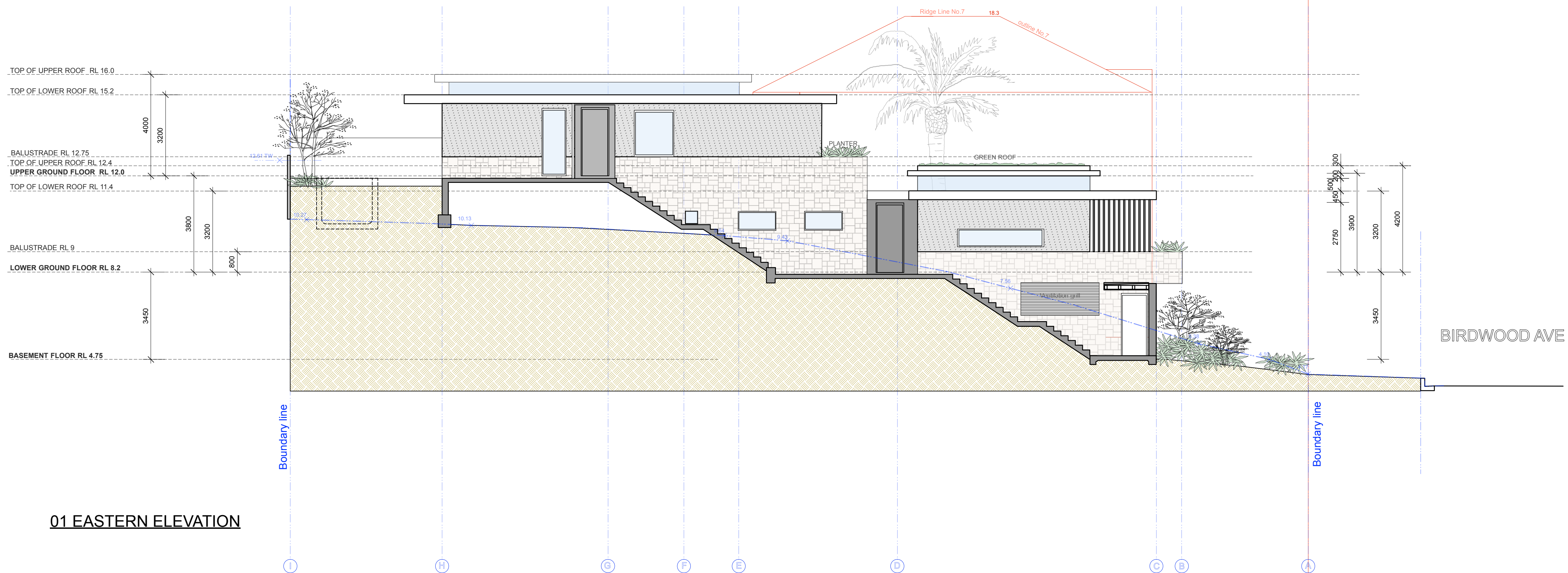
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PROJECT **9 - 11 BIRDWOOD AVE
COLLAROY**
ELEVATIONS

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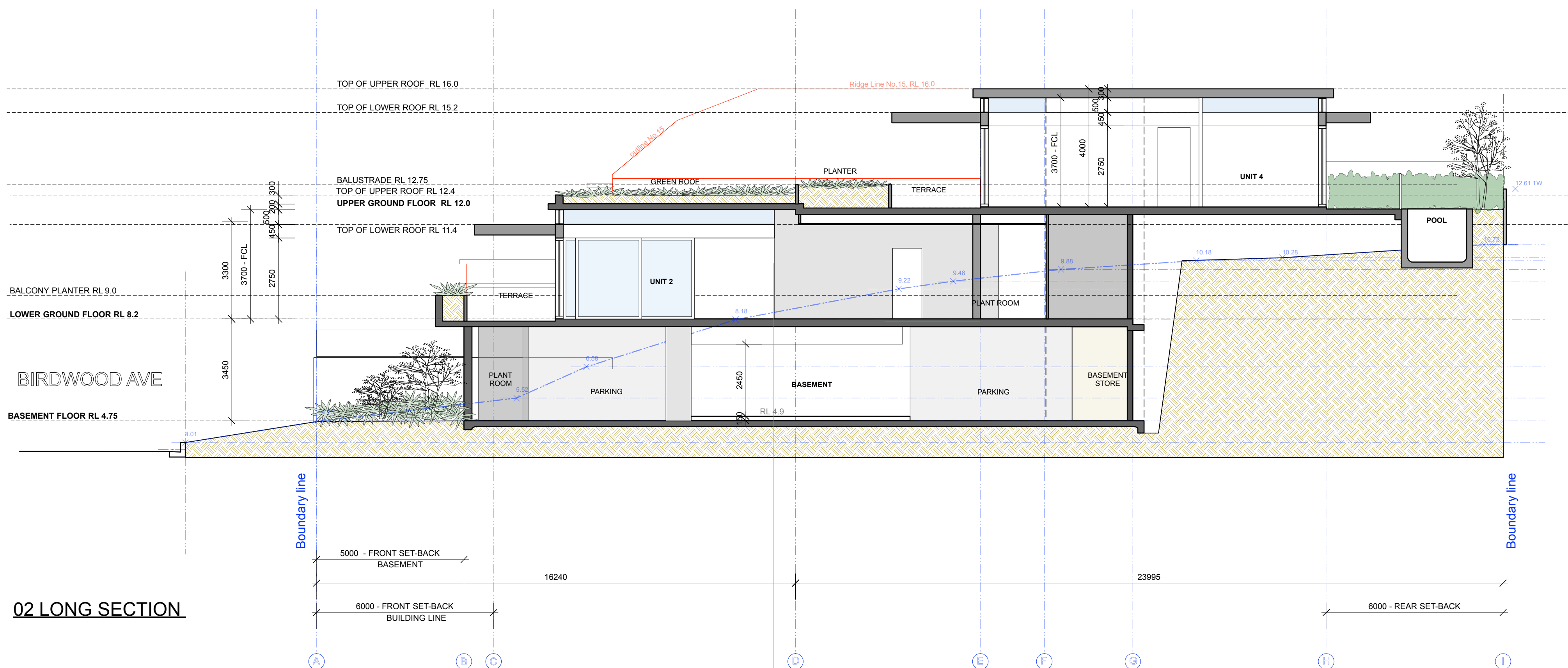
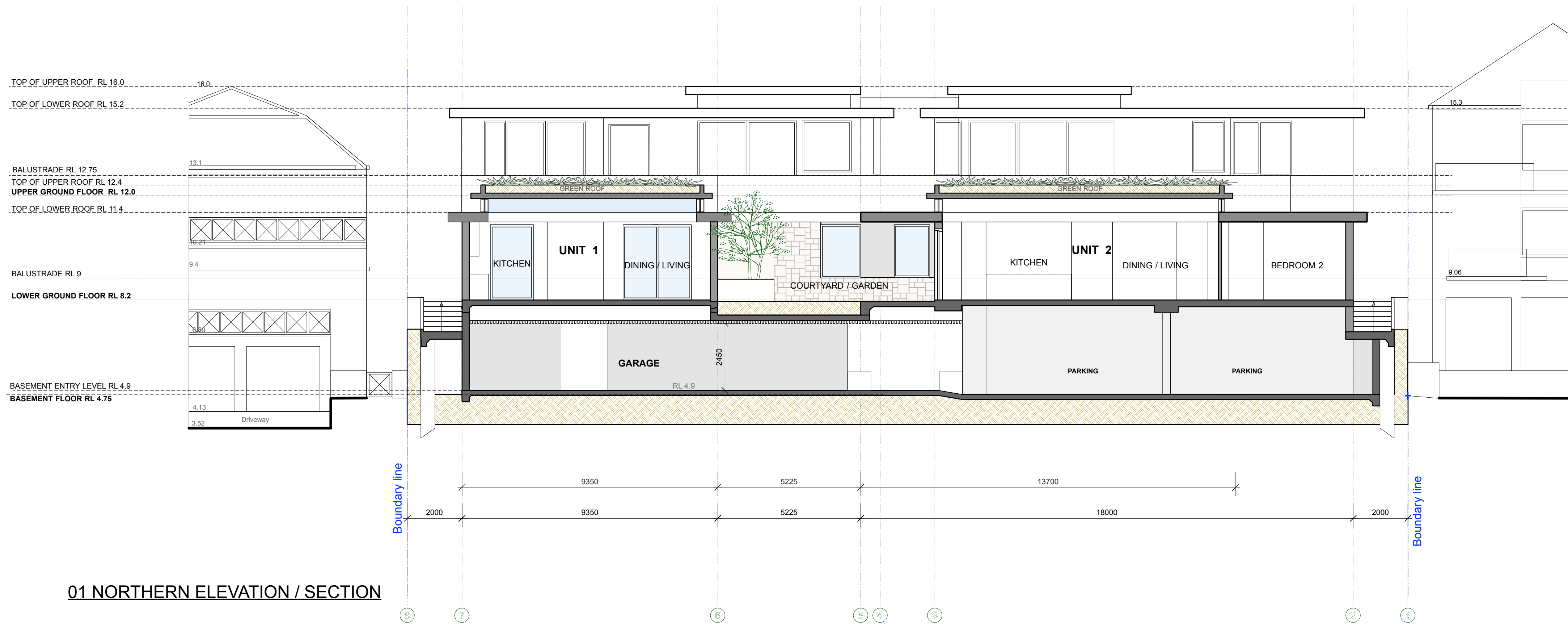
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AMENDMENTS

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PROJECT **9 - 11 BIRDWOOD AVE COLLAROY**

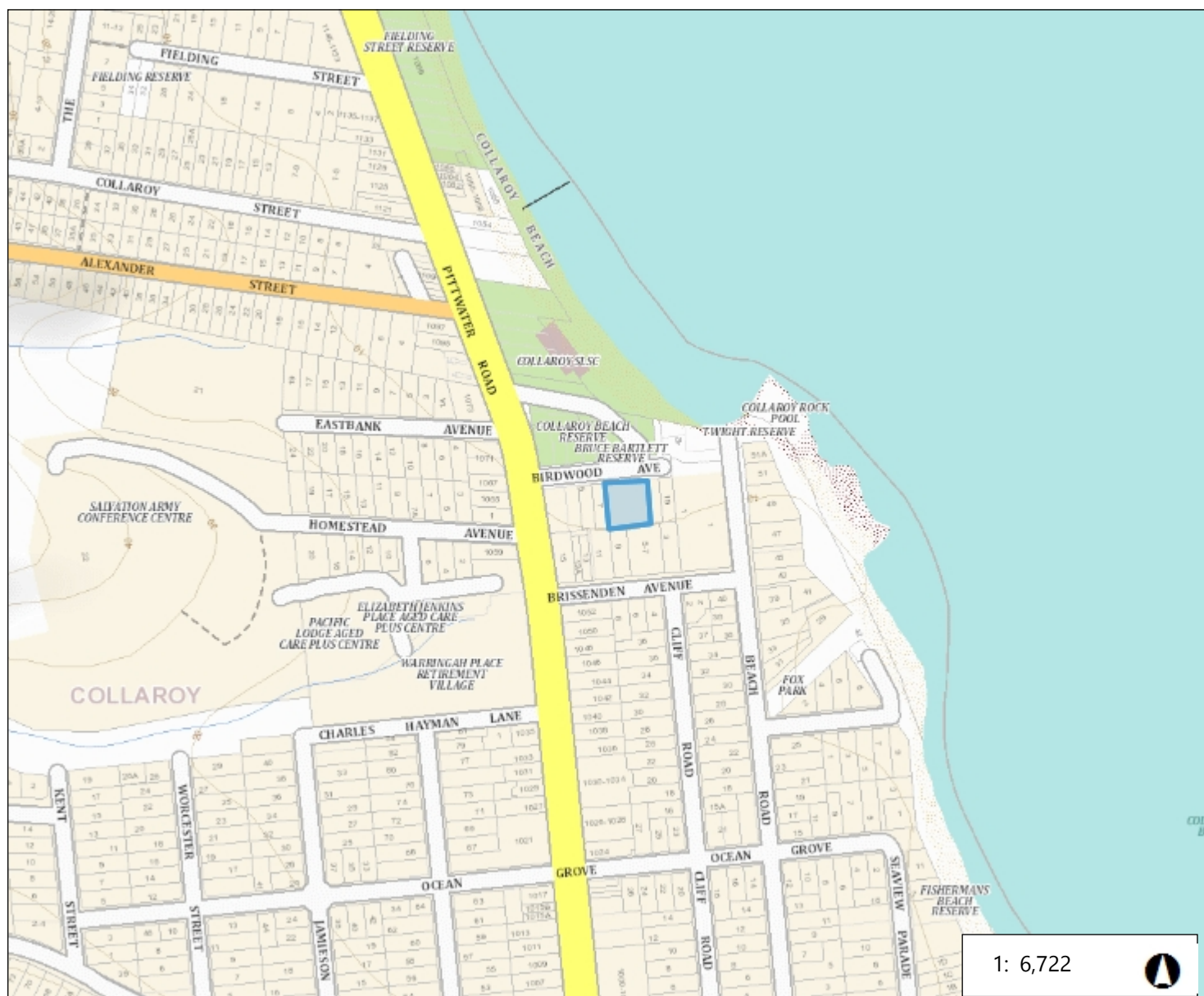
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8 Appendix B– BOSET Map Report

Biodiversity Offset Scheme (BOS) Entry Threshold Map



341.5 0 170.73 341.5 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION

Legend

- Biodiversity Values that have been mapped for more than 90 days
- Biodiversity Values added within last 90 days

Notes

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Biodiversity Values Map and Threshold Report

Results Summary

Date of Calculation	11/03/2020 4:43 PM	BDAR Required*
Total Digitised Area	0.15 ha	
Minimum Lot Size Method	LEP	
Minimum Lot Size	0.06 ha	
Area Clearing Threshold	0.25 ha	
Area clearing trigger Area of native vegetation cleared	Unknown [#]	Unknown [#]
Biodiversity values map trigger Impact on biodiversity values map(not including values added within the last 90 days)?	no	no
Date of the 90 day Expiry	N/A	

*If BDAR required has:

- at least one 'Yes': you have exceeded the BOS threshold. You are now required to submit a Biodiversity Development Assessment Report with your development application. Go to <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor> to access a list of assessors who are accredited to apply the Biodiversity Assessment Method and write a Biodiversity Development Assessment Report
- 'No': you have not exceeded the BOS threshold. You may still require a permit from local council. Review the development control plan and consult with council. You may still be required to assess whether the development is "likely to significantly affect threatened species" as determined under the test in s. 7.3 of the Biodiversity Conservation Act 2016. You may still be required to review the area where no vegetation mapping is available.

Where the area of impact occurs on land with no vegetation mapping available, the tool cannot determine the area of native vegetation cleared and if this exceeds the Area Threshold. You will need to work out the area of native vegetation cleared - refer to the BOSET user guide for how to do this.

On and after the 90 day expiry date a BDAR will be required.

Disclaimer

This results summary and map can be used as guidance material only. This results summary and map is not guaranteed to be free from error or omission. The State of NSW and Office of Environment and Heritage and its employees disclaim liability for any act done on the information in the results summary or map and any consequences of such acts or omissions. It remains the responsibility of the proponent to ensure that their development application complies with all aspects of the Biodiversity Conservation Act 2016.

The mapping provided in this tool has been done with the best available mapping and knowledge of species habitat requirements. This map is valid for a period of 30 days from the date of calculation (above).

Acknowledgement

I as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature _____ Date: 11/03/2020 04:43 PM

9 Appendix C – Site Species List

Table 2 Flora species list

Family	Exotic	Scientific Name	Common Name	BC Act Status	EPBC Act Status
Polygonaceae	*	<i>Acetosa sagittata</i>	Rambling Dock		
Myrtaceae		<i>Acmena smithii</i>	Lilly Pilly		
Bromelioideae	*	<i>Aechmea spp.</i>	Bromeliad		
Alliaceae	*	<i>Agapanthus africanus</i>	Lily of the Nile		
Asphodelaceae	*	<i>Aloe vera</i>	Aloe vera		
Asparagaceae	*	<i>Asparagus aethiopicus</i>	Asparagus Fern		
Poaceae	*	<i>Bambusoideae spp.</i>	Bamboo		
Proteaceae		<i>Banksia integrifolia</i>	Coast Banksia		
Asteraceae	*	<i>Bidens pilosa</i>	Cobbler's pegs		
Nyctaginaceae	*	<i>Bougainvillea spp.</i>	Bougainvillea		
Poaceae	*	<i>Bouteloua dactyloides</i>	Buffalo Grass		
Myrtaceae		<i>Callistemon salignus</i>	Willow Bottlebrush		
Solanaceae	*	<i>Cestrum parqui</i>	Green Cestrum		
Anthericaceae	*	<i>Chlorophytum comosum</i>	Spider Plant		
Anthericaceae	*	<i>Chlorophytum comosum</i>	Spider Plant		
Asteraceae	*	<i>Conyza spp.</i>	A Fleabane		
Athyriaceae		<i>Diplazium australe</i>	Austral Lady Fern		
Poaceae	*	<i>Ehrharta erecta</i>	Panic Veldtgrass		
Moraceae	*	<i>Ficus carica</i>	Common Fig		
Araliaceae	*	<i>Hedera helix</i>	English Ivy		
Lauraceae	*	<i>Laurus nobilis</i>	Bay Laurel		
Liliaceae	*	<i>Liriope muscari</i>	big blue lilyturf		
Caprifoliaceae	*	<i>Lonicera japonica</i>	Japanese Honeysuckle		
Magnoliaceae	*	<i>Magnolia spp.</i>	Magnolia		
Rutaceae	*	<i>Murraya paniculata</i>	Orange jessamine		
Myrtaceae	*	<i>Myrtus communis</i>	Common Myrtle		
Apocynaceae	*	<i>Nerium oleander</i>	Oleander		
Urticaceae	*	<i>Parietaria judaica</i>	Pellitory		
Apocynaceae	*	<i>Plumeria obtusa</i>	Frangipani		
Arecaceae	*	<i>Pheonix spp.</i>	Date palm		
Araliaceae	*	<i>Schefflera actinophylla</i>	Umbrella Tree		
Fabaceae (Caesalpinioideae)	*	<i>Senna pendula var. glabrata</i>	Senna		
Asteraceae	*	<i>Silybum spp.</i>	Milk thistle		

Family	Exotic	Scientific Name	Common Name	BC Act Status	EPBC Act Status
Solanaceae	*	<i>Solanum nigrum</i>	Black-berry Nightshade		
Strelitziaceae	*	<i>Strelitzia nicolai</i>	Giant bird of paradise		
Strelitziaceae	*	<i>Strelitzia spp.</i>	Bird of paradise		
Lamiaceae		<i>Westringia fruticosa</i>	Coastal Rosemary		
Agavaceae		<i>Yucca spp.</i>			

Table 3 Fauna species list

Family	Exotic	Scientific Name	Common Name	BC Act Status	EPBC Act Status
Cacatuidae		<i>Cacatua sanguinea</i>	Little Corella	P	
Columbidae	*	<i>Columba livia</i>	Rock Dove		
Alcedinidae		<i>Dacelo novaeguineae</i>	Laughing Kookaburra	P	
Meliphagidae		<i>Manorina melanocephala</i>	Noisy Miner	P	
Psittacidae		<i>Trichoglossus haematodus</i>	Rainbow Lorikeet	P	

BC Act Status – E4A critically endangered; E1 – endangered species; V – vulnerable; P - Protected.

EPBC Act Status - CE - critically endangered, E – endangered, V – vulnerable, X - Extinct.

10 Appendix D – BioNet Species Records

Table 4 Threatened flora within 5km of the Subject Site.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	No. of records
<i>Acacia terminalis</i> subsp. <i>terminalis</i>	Sunshine Wattle	E1	E	12
<i>Callistemon linearifolius</i>	Netted Bottle Brush	V,3		2
<i>Chamaesyce psammogeton</i>	Sand Spurge	E1		8
<i>Epacris purpurascens</i> var. <i>purpurascens</i>		V		3
<i>Eucalyptus camfieldii</i>	Camfield's Stringybark	V	V	13
<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	V	V	2
<i>Genoplesium baueri</i>	Bauer's Midge Orchid	E1,P,2	E	1
<i>Grammitis stenophylla</i>	Narrow-leaf Finger Fern	E1,3		1
<i>Grevillea caleyi</i>	Caley's Grevillea	E4A,3	CE	2
<i>Isotoma fluviatilis</i> subsp. <i>fluviatilis</i>			X	1
<i>Persoonia hirsuta</i>	Hairy Geebung	E1,P,3	E	23
<i>Pimelea curviflora</i> var. <i>curviflora</i>		V	V	18
<i>Prostanthera densa</i>	Villous Mint-bush	V	V	1
<i>Rhodamnia rubescens</i>	Scrub Turpentine	E4A		2
<i>Senecio spathulatus</i>	Coast Groundsel	E1		1
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	E1	V	10
<i>Tetratheca glandulosa</i>		V		73

BC Act Status – E4A critically endangered; E1 – endangered species; V – vulnerable; P - Protected.
 EPBC Act Status - CE - critically endangered, E – endangered, V – vulnerable, X - Extinct.

Table 5 Threatened flora within 5km of the Subject Site.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	No. of records
<i>Anous stolidus</i>	Common Noddy	P	C,J	3
<i>Anthochaera phrygia</i>	Regent Honeyeater	E4A,P	CE	1
<i>Apus pacificus</i>	Fork-tailed Swift	P	C,J,K	3
<i>Arctocephalus pusillus doriferus</i>	Australian Fur-seal	V,P		1
<i>Ardea ibis</i>	Cattle Egret	P	C,J	1
<i>Ardenna carneipes</i>	Flesh-footed Shearwater	V,P	J,K	2
<i>Ardenna grisea</i>	Sooty Shearwater	P	C,J	5
<i>Ardenna pacificus</i>	Wedge-tailed Shearwater	P	J	7
<i>Ardenna tenuirostris</i>	Short-tailed Shearwater	P	J,K	27
<i>Arenaria interpres</i>	Ruddy Turnstone	P	C,J,K	9
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E1,P	E	3
<i>Burhinus grallarius</i>	Bush Stone-curlew	E1,P		7
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	P	C,J,K	5
<i>Calidris alba</i>	Sanderling	V,P	C,J,K	8
<i>Calidris canutus</i>	Red Knot	P	E,C,J,K	2
<i>Calidris ferruginea</i>	Curlew Sandpiper	E1,P	CE,C,J,K	3
<i>Calidris ruficollis</i>	Red-necked Stint	P	C,J,K	11
<i>Calidris tenuirostris</i>	Great Knot	V,P	CE,C,J,K	4
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	V,P,3		1
<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo	V,P,2		61
<i>Caretta caretta</i>	Loggerhead Turtle	E1,P	E	4
<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		55
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V,P	V	4
<i>Charadrius leschenaultii</i>	Greater Sand-plover	V,P	V,C,J,K	3
<i>Charadrius mongolus</i>	Lesser Sand-plover	V,P	E,C,J,K	2
<i>Chelonia mydas</i>	Green Turtle	V,P	V	10
<i>Chlidonias leucopterus</i>	White-winged Black Tern	P	C,J,K	1
<i>Daphoenositta chrysoptera</i>	Varied Sittella	V,P		5
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	9
<i>Dermochelys coriacea</i>	Leatherback Turtle	E1,P	E	1
<i>Diomedea exulans</i>	Wandering Albatross	E1,P	E,J	4
<i>Egretta sacra</i>	Eastern Reef Egret	P	C	7
<i>Eubalaena australis</i>	Southern Right Whale	E1,P	E	1
<i>Fregata ariel</i>	Lesser Frigatebird	P	C,J,K	1
<i>Gallinago hardwickii</i>	Latham's Snipe	P	C,J,K	2

Scientific Name	Common Name	BC Act Status	EPBC Act Status	No. of records
<i>Glossopsitta pusilla</i>	Little Lorikeet	V,P		7
<i>Gygis alba</i>	White Tern	V,P		1
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	V,P		22
<i>Haematopus longirostris</i>	Pied Oystercatcher	E1,P		6
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V,P	C	22
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	V,P	V	10
<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		4
<i>Hirundapus caudacutus</i>	White-throated Needletail	P	C,J,K	5
<i>Hydroprogne caspia</i>	Caspian Tern	P	C,J	14
<i>Isodon obesulus obesulus</i>	Southern Brown Bandicoot (eastern)	E1,P	E	4
<i>Ixobrychus flavicollis</i>	Black Bittern	V,P		24
<i>Lathamus discolor</i>	Swift Parrot	E1,P,3	CE	7
<i>Limosa lapponica</i>	Bar-tailed Godwit	P	C,J,K	12
<i>Litoria aurea</i>	Green and Golden Bell Frog	E1,P	V	2
<i>Lophoictinia isura</i>	Square-tailed Kite	V,P,3		1
<i>Macronectes giganteus</i>	Southern Giant Petrel	E1,P	E	2
<i>Macronectes halli</i>	Northern Giant-Petrel	V,P	V	1
<i>Megaptera novaeangliae</i>	Humpback Whale	V,P	V	9
<i>Micronomus norfolkensis</i>	Eastern Coastal Free-tailed Bat	V,P		11
<i>Miniopterus australis</i>	Little Bent-winged Bat	V,P		30
<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V,P		101
<i>Myotis macropus</i>	Southern Myotis	V,P		38
<i>Neophema pulchella</i>	Turquoise Parrot	V,P,3		1
<i>Ninox connivens</i>	Barking Owl	V,P,3		14
<i>Ninox strenua</i>	Powerful Owl	V,P,3		141
<i>Numenius madagascariensis</i>	Eastern Curlew	P	CE,C,J,K	2
<i>Numenius phaeopus</i>	Whimbrel	P	C,J,K	2
<i>Onychoprion fuscata</i>	Sooty Tern	V,P		3
<i>Pandion cristatus</i>	Eastern Osprey	V,P,3		24
<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		2
<i>Petroica boodang</i>	Scarlet Robin	V,P		2
<i>Phascolarctos cinereus</i>	Koala in the Pittwater Local Government Area	E2,V,P	V	3
<i>Phascolarctos cinereus</i>	Koala	V,P	V	6
<i>Philomachus pugnax</i>	Ruff	P	C,J,K	2

Scientific Name	Common Name	BC Act Status	EPBC Act Status	No. of records
<i>Physeter macrocephalus</i>	Sperm Whale	V,P		2
<i>Plegadis falcinellus</i>	Glossy Ibis	P	C	2
<i>Pluvialis fulva</i>	Pacific Golden Plover	P	C,J,K	6
<i>Pluvialis squatarola</i>	Grey Plover	P	C,J,K	6
<i>Pseudomys novaehollandiae</i>	New Holland Mouse	P	V	1
<i>Pseudophryne australis</i>	Red-crowned Toadlet	V,P		37
<i>Pterodroma leucoptera</i>	Gould's Petrel	V,P	E	1
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	124
<i>Ptilinopus magnificus</i>	Wompoo Fruit-Dove	V,P		2
<i>Ptilinopus regina</i>	Rose-crowned Fruit-Dove	V,P		2
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V,P		4
<i>Puffinus assimilis</i>	Little Shearwater	V,P		2
<i>Rostratula australis</i>	Australian Painted Snipe	E1,P	E	3
<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		2
<i>Stercorarius longicaudus</i>	Long-tailed Jaeger	P	J	1
<i>Stercorarius pomarinus</i>	Pomarine Jaeger	P	C,J	1
<i>Sterna hirundo</i>	Common Tern	P	C,J,K	5
<i>Sternula albifrons</i>	Little Tern	E1,P	C,J,K	2
<i>Thalassarche cauta</i>	Shy Albatross	V,P	V	2
<i>Thalassarche melanophris</i>	Black-browed Albatross	V,P	V	4
<i>Tringa brevipes</i>	Grey-tailed Tattler	P	C,J,K	6
<i>Tringa incana</i>	Wandering Tattler	P	J	5
<i>Tringa nebularia</i>	Common Greenshank	P	C,J,K	2
<i>Tringa stagnatilis</i>	Marsh Sandpiper	P	C,J,K	1
<i>Tyto novaehollandiae</i>	Masked Owl	V,P,3		2
<i>Varanus rosenbergi</i>	Rosenberg's Goanna	V,P		48
<i>Vespadelus troughtoni</i>	Eastern Cave Bat	V,P		1
<i>Xenus cinereus</i>	Terek Sandpiper	V,P	C,J,K	2

BC Act Status – E4A critically endangered; E1 – endangered species; V – vulnerable; P – Protected.

EPBC Act Status – CE – critically endangered, E – endangered, V – vulnerable, C – Camba, J – Jamba, K – Rokamba