



Reference number 3203

Member of the Fire Protection Association of Australia

Lot 2, DP 246696, 13 Kinsdale Close, Killarney Heights, NSW 2087.

Wednesday, 10 February 2021

Prepared and certified by:	Matthew Willis BPAD – Level 3 Certified Practitioner Certification No: BPD-PA 09337	Mathing	10/02/2021	
section 7.5, 7.5.1, applicable) of the Ru	mply with AS3959-2018 (inc 7.5.2, 7.5.3, 7.5.4 (where and Fire Services document shfire Protection 2019)?	Yes		
	nded AS 3959-2018 level of mpliance?	BAL-FZ		
ls referral to	the RFS required?	Yes		
	pment comply with the nents of PBP?	Yes		
Plans by "JJ Draft	ting" (Appendix 1) dated.	8/20		

© This document is copyright. It is a breach of copyright for this document to be used to support a development application or any other purpose for any persons/entities other than those for whom this document was prepared. Other than for the purpose for which this document has been prepared and subject to conditions prescribed under the Copyright Act no part of this document may in any form nor by any means be reproduced or stored in a retrieval system or transmitted without the prior written permission of the company (Bushfire Planning Services Pty Ltd ACN 115 714 826).







Bushfire Planning Services

15 Parkcrest Place Kenthurst NSW 2156 02 96543228 0428408577 mattw@bushfireconsultants.com.au

Bushfire Risk Assessment

Wednesday, 10 February 2021

Contact

Adrian Sammons and Tracey Cheale 13 Kinsdale Cl Killarney Heights NSW 2087

Subject Property

Lot 2, DP 246696 13 Kinsdale Close Killarney Heights NSW 2087





BUSHFIRE RISK ASSESSMENT CERTIFICATE

THIS FORM IS TO BE COMPLETED BY A RECOGNISED CONSULTANT IN BUSHFIRE RISK ASSESSMENT IN ACCORDANCE WITH SECTION 79BA 1(b) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 NO 203

Property Address	Lot 2, DP 246696, number 13 Kinsdale Close Killarney Heights
Description of the Proposal	Alterations and additions to an existing dwelling
Plan Reference	8/20
BAL Rating	BAL-FZ
Does the Proposal Rely on Alternate Solutions?	Yes

I, **Matthew Willis of Bushfire Planning Services Pty Ltd** have carried out a bushfire risk assessment on the above-mentioned proposal and property. A detailed Bushfire Assessment Report is attached which includes the submission requirements set out in Planning for Bushfire Protection 2019 together with recommendations as to how the relevant Specifications and requirements are to be achieved.

I hereby advise, in accordance with Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203:

1. That I am a person recognised by the NSW Rural Fire Service as a qualified consultant in bushfire risk assessment; and

2. That subject to the recommendations contained in the attached Bushfire Risk Assessment Report the proposed development conforms to the relevant specifications and requirements*

*The relevant specifications and requirements being specifications and requirements of the document entitled Planning for Bush Fire Protection prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other document as prescribed by Section 4.14 of the Environmental Planning and Assessment Act 1979 No 203.

I am aware that the Bushfire Assessment Report, prepared for the above-mentioned site is to be submitted in support of a development application for this site and will be relied upon by Northern Beaches Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with Planning for Bushfire Protection 2019.

	Wednesday, 10 February 2021
REPORT DATE	Wednesday, 10 February 2021
CERTIFICATION NO/ACCREDITED SCHEME	FPAA BPAD A BPD-PA 09337

Attachments:

- Bushfire Risk Assessment Report
- Recommendations

SIGNATURE: ---

DATE: ----- Wednesday, 10 February 2021





Contents.

1	Executive Summary.	5
2	General.	6
3	Block Description.	6
4	Vegetation.	8
5	Known constraints on subject block.	10
6	Slope.	10
7	Utilities.	11
7.1	Water.	11
7.2	Electricity	11
7.3	Gas	11
8	Access/Egress.	11
9	Compliance with Planning for Bushfire Protection setbacks.	12
10	Siting.	12
11	Construction and design.	13
12	Utilities.	14
12.1	Water.	14
12.2	Electricity and Gas.	14
13	Asset Protection Zone (APZ).	14
14	Landscaping.	14
15	Constraints on the subject block.	15
16	Access/Egress.	15
17	Compliance or non compliance with the specifications and requiremer bushfire protection measures.	nts for 15
18	Conclusions.	16
19	References.	18
20	Appendix 1 - Plans .	19





1 Executive Summary.

Bushfire Planning Services has been requested by Adrian Sammons and Tracey Cheale to supply a bushfire compliance report on lot 2, DP 246696, 13 Kinsdale Close, Killarney Heights.

The works proposed for the subject lot are for the alterations and additions to an existing dwelling, see attached plans for details.

The subject lot is on the western side of Kinsdale Close and at its closest point to the hazard the proposed new work has a separation distance to the west of approximately 6.556m.

The vegetation that is considered to be the hazard to this proposal is situated on land that slopes down slope away from the property at an angle of approximately 10.34°.

For the purposes of this assessment this vegetation is considered to be Forest.

The remaining vegetation within the study area is contained within the boundaries of established allotments and is managed land and of low threat to this proposal.

The calculations and assumptions outlined in this report show that the development will be required to comply with the construction requirements of AS 3959-2018 BAL-FZ and any additional construction requirements contained within section 7.5, 7.5.1,7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.

Aspect	North	East	South	West		
Vegetation type	Managed land	Managed land	Managed land	Forest		
Slope	N/A N/A		N/A	10-15 degrees downslope		
Setback within lot 2	N/A	N/A	N/A	6.556m		
Setback outside lot 2	N/A	N/A	N/A	0m		
Total setback	N/A	N/A	N/A	6.556m		
Bal level	N/A	N/A	N/A	BAL-FZ		

The following table is a summary of the pertinent findings of this assessment.

Note: The above table is a summary of the significant variables used to determine the highest BAL for this proposal. THIS TABLE IS NOT INTENDED FOR CONSTRUCTION! Only the highest BAL level is shown, aspects marked as N/A will still have a BAL. Refer to section 11 for construction requirements for these other aspects.





2 General.

This proposal relates to the alterations and additions to an existing dwelling on the subject lot and its ability to comply with the rules and regulations for building in a bushfire prone area.

The methodology used on this report is based on Planning for Bushfire Protection 2019 (PBP) as published by the New South Wales Rural Fire Service.

Any wording that appears in *blue italics* is quotes from Planning for Bushfire Protection 2019. Some of the measurements used in this report have been taken from aerial photographs and as such are approximate only.

3 Block Description.

The subject block is situated on the western side of Kinsdale Close in an established area of Killarney Heights.

The lot currently contains a multi-level class 1 dwelling.

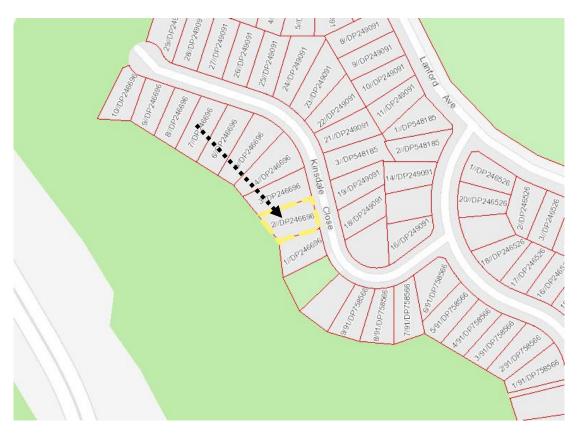
The lands surrounding the proposed site on the subject lot to a distance of at least 6.556m contain existing development or land that is otherwise not considered to be a significant bushfire hazard.

- Lot; 2
- DP; 246696.
- LGA; Northern Beaches.
- Area; 758.79 m².
- Address; 13 Kinsdale Close, Killarney Heights.

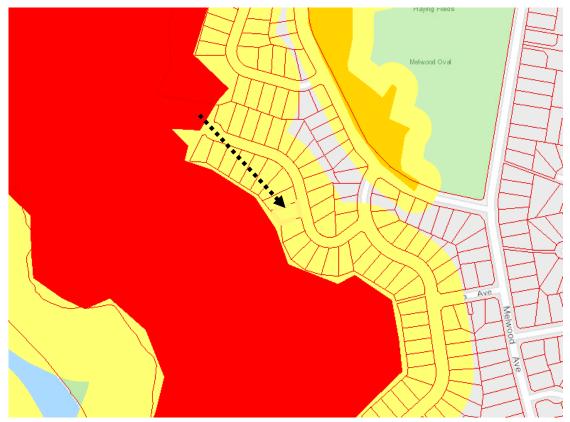
This section has been left blank.







Map 1 shows the cadastral layout around the subject lot.



Map 2 is an extract from the councils' bushfire prone land map. The map shows lot 2 to be within the buffer zone of category 1 bushfire vegetation.





4 Vegetation.

The study area for the vegetation is 140m surrounding the subject block.

The vegetation within the study area for this development is considered to be largely managed land.

The major potential hazard to this development is the vegetation within an area of undeveloped land to the west.

For the purpose of this assessment and compliance with Planning for Bushfire Protection this area of undeveloped land is considered to be Forest and is the hazard to this proposal.



Photo 1 - An overview of the vegetation within the general area.

This area has been left intentionally blank.







Photo 2 is a closer view of the vegetation in the area.

Table 1 outlines the vegetation orientation and distance from the development area.

Aspect	North	East	South	West
Vegetation type	Managed land	Managed land	Managed land	Forest
Setback within Iot 2		N/A	N/A	6.556m
Off-site setback	N/A	N/A	N/A	0m
Total setback	N/A	N/A	N/A	6.556m

Table 1 - Any aspect marked with "N/A" in the table above indicates that it is considered there is none or only a secondary hazard in that direction.

This area has been left intentionally blank.





5 Known constraints on subject block.

I have not been informed or know of any places of cultural or environmental significance within the boundaries of the subject block. Given the nature of the surrounding land it is considered highly unlikely that anything of significance will be affected by this development.

6 Slope.

The slope of the land beneath the hazard that is most likely to influence bushfire behaviour has been calculated by topographical map analysis to a distance of 100m from the subject lot. An extract of the topographical map for the area is shown below and the relevant slope analysis is shown in Table 2.

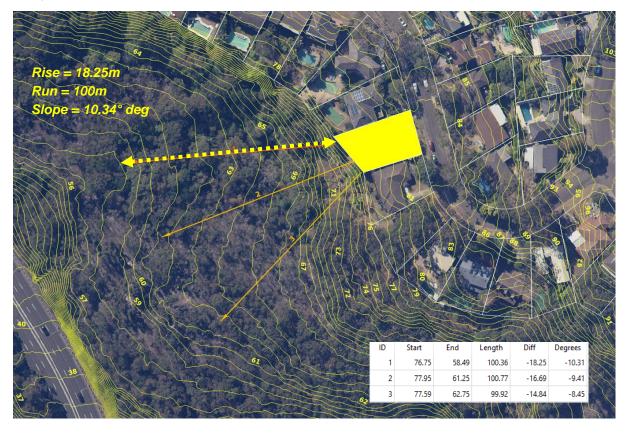


Table 2 shows the slope beneath the hazard.

Aspect	North	East	South	West
Slope	N/A	N/A	N/A	10-15 degrees downslope

Table 2 - Any aspect marked with "N/A" in the table above indicates that it is considered there is no hazard in that direction.



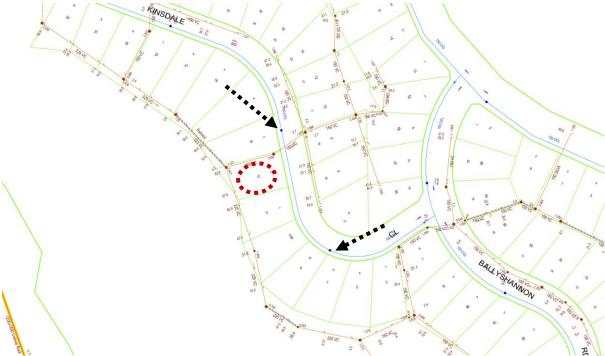


7 Utilities.

7.1 Water.

The subject block will be serviced by a reticulated water supply.

The following map is an extract from Sydney waters hydrant map. Hydrants are indicated by a blue dot on a blue line. As can be seen there is at least one hydrant point indicated within close proximity of the property.



7.2 Electricity

Mains electricity is available to the block.

7.3 Gas

It is unknown if either bottled or mains gas is to be altered or installed in this proposal.

8 Access/Egress.

Access to the development site will be via a short private driveway from Kinsdale Close.

All roads in the vicinity are considered to be capable of carrying emergency services vehicles and pedestrian access onto the lot is also considered to be adequate.





Analysis of development and recommendation.

9 Compliance with Planning for Bushfire Protection setbacks.

Based on the development design, vegetation classification, effective slope estimates and setback distance already outlined in this report the subject development will be required to comply with the deemed to satisfy construction requirements of AS 3959-2018 BAL-FZ and the RFS requirements on all fire prone aspects.

The following table is an extract from table A1.12.5 of Planning for Bushfire Protection 2019. This table is used to calculate the BAL for a proposal in an area with an FDI of 100.

The variables that have already been outlined in this assessment are highlighted in red with the highest BAL highlighted in yellow.

401	Kaith Variation Farmation		BUSH FIRE ATTACK LEVEL (
F	Keith Vegetation Formation	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL-12.5			
ž	Rainforest	< 17	17 -< 23	23 -< 34	34 -< 46	46 -< 100			
DOWNSLOPE	Forest (wet and dry sclerophyll) including Coastal Swamp Forest, Pine Plantations and Sub-Alpine Woodland	< 36	36 -< 45	45 -< 60	60 -< 77	77 -< 100			
ES –	Grassy and Semi-Arid Woodland (including Mallee)	< 19	19 -< 25	25 -< 36	36 -< 49	49 -< 100			
DEGREES	Forested Wetland (excluding Coastal Swamp Forest)	< 15	15 -< 20	20 -< 29	29 -< 41	41 -< 100			
and the second sec	Tall Heath	< 17	17 -< 22	22 -< 32	32 -< 44	44 -< 100			
15	Short Heath	< 10	10 -< 13	13 -< 20	20 -< 29	29 -< 100			
^0	Arid-Shrublands (acacia and chenopod)	< 7	7 -< 9	9 -< 14	14 -< 20	20 -< 100			
T	Freshwater Wetlands	< 5	5 -< 7	7 -< 11	11 -< 16	16 -< 100			
^	Grassland	< 11	11 -< 15	15 -< 23	23 -< 32	32 -< 50			

For the purpose of this assessment the western aspect has been chosen as the most potentially hazardous aspect due to the effective slope, potential run of fire and the prevailing fire weather of the area.

10 Siting.

Recommendation;

Nil.





11 Construction and design.

All new work is to be undertaken in accordance with the relevant requirements of the NCC and AS3959 2009. The following recommendations are a minimum level of construction. Constructing the proposal to a higher level than that recommended is allowable under AS3959.

Recommendation; all new work.

- 1. New construction shall comply with the requirements of section 3 of Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" and,
- New construction shall also comply with the requirements of BAL-FZ Australian Standard AS3959-2018 "Construction of buildings in bush fire-prone areas" or NASH Standard "National Standard Steel Framed Construction in Bushfire Areas" and any additional construction requirements contained within section 7.5, 7.5.1,7.5.2, 7.5.3, 7.5.4 (where applicable) of the Rural Fire Services document Planning for Bushfire Protection 2019.
- 3. New roofing valleys and guttering should be fitted with a non-combustible leaf protection to stop the accumulation of debris.

AS-3959 2018 is now available as PDF for free from;

https://infostore.saiglobal.com/en-au/standards/as-3959-2018-122340_saig_as_as_2685241/

AS 3959:2	2018		@ Current	F	
	Construction of buildings in bushfir Publisher: Standards Australia	e-prone areas		Free Including GST where applicable	AUD 🛩
Preview	Published: 14-11-2018 Available Formats: POF 9 Users - Englis Hardcopy - English	h, PDF S Users - English, PDF 3 Users - English, P	OF 1 User - English,	Product Format ?	~
	More into on product formats	Pick 1 user-PDF		Quantity 01 V ADD TO CAR	a 57
Abstract			~		" #

Note; With the introduction of Planning for Bushfire Protection 2019 in March of 2020 the shielding allowances of section 3.5 of AS3959 have been varied (in New South Wales) by section A1.8 of Planning for Bushfire Protection 2019.

In short, section A1.8 removes the ability to lower the BAL on the non-hazard aspect of any proposal that has been assessed as being "Flame Zone" unless the lowering of the level can be "justified with an appropriate performance-based demonstration of the shielding".

To date, the only justification that the Rural Fire Service will accept for the application of shielding to the non-hazard side of a proposal is if it can be proven that the flame length as calculated by use of the methodology as outlined in "Method 2" of AS3959 is not long enough to reach the aspect where shielding is to be applied.

The flame length for this proposal has been calculated and exceeds the available setback distance and therefore the RFS is highly unlikely to apply shielding to this proposal.





12 Utilities.

12.1 Water.

The proposed development will have access to a reticulated water supply. There is at least one hydrant indicated within the required distance from the dwelling.

Recommendation;

Nil.

12.2 Electricity and Gas.

Recommendation;

4. Any new electricity or gas connections are to comply with the requirements of table 7.4a of Planning for Bushfire Protection.

13 Asset Protection Zone (APZ).

The Asset Protection Zone is "An area surrounding a development managed to reduce the bushfire hazard to an acceptable level. The width of an APZ will vary with slope, vegetation and construction level".

Recommendation;

5. At the commencement of building works and in perpetuity the entire property shall be managed as an Asset Protection Zone in accordance with the requirements of Planning for Bushfire Protection, the RFS document Standards for Asset Protection Zones and in a manner that does not create a bushfire hazard to the property.

14 Landscaping.

Recommendation;

- 6. Any new fencing is to be constructed in accordance with section 7.6 of Planning for Bushfire Protection 2019.
- 7. Any new landscaping to the site is to comply with the principles of Appendix 4 and section 3.7 of Planning for Bush Fire Protection 2019. In this regard the following landscaping principles are, where applicable, to be incorporated into the development¹:
 - Suitable impervious areas being provided immediately surrounding the building such as courtyards, paths and driveways;

¹*Refer to referenced documents for a complete description.*





- Grassed areas/mowed lawns/ or ground cover plantings being provided in close proximity to the building;
- Restrict planting in the immediate vicinity of the building which may over time and if not properly maintained come in contact with the building;
- Maximum tree cover should be less than 30%, and maximum shrub cover less than 20%;
- Planting should not provide a continuous canopy to the building (i.e. trees or shrubs should be isolated or located in small clusters);
- When considering landscape species consideration needs to be given to estimated size of the plant at maturity;
- Avoid species with rough fibrous bark, or which retain/shed bark in long strips or retain dead material in their canopies;
- Use smooth bark species of trees species which generally do not carry a fire up the bark into the crown;
- Avoid planting of deciduous species that may increase fuel at surface/ ground level (i.e. leaf litter);
- Avoid climbing species to walls and pergolas;
- Locate combustible materials such as woodchips/mulch, flammable fuel stores away from the building;
- Locate combustible structures such as garden sheds, pergolas and materials such timber garden furniture way from the building; and
- Use of low flammability vegetation species.

15 Constraints on the subject block.

None known.

Recommendation;

Nil

16 Access/Egress.

All roads in the area are considered to be capable of handling emergency service vehicles. Access from the roadway onto the property is also considered to be adequate for firefighting purposes.

Recommendation

Nil

17 Compliance or non compliance with the specifications and requirements for bushfire protection measures.





APZ A defendable space is provided onsite. An APZ is provided and maintained for the life of the development.	Achievable with the implementation of the recommendations in section 13
SITING AND DESIGN: Buildings are sited and designed to minimise the risk of bush fire attack.	Achievable with the implementation of the recommendations in section 10
CONSTRUCTION STANDARDS: It is demonstrated that the proposed building can withstand bush fire attack in the form of wind, smoke, embers, radiant heat and flame contact.	Achievable with the implementation of the recommendations in section 11
ACCESS Safe, operational access is provided (and maintained) for emergency services personnel in suppressing a bush fire while residents are seeking to relocate, in advance of a bush fire, (satisfying the intent and performance criteria for access roads in sections 4.1.3 and 4.2.7).	Achievable with the implementation of the recommendations in section 16
 WATER AND UTILITY SERVICES: adequate water and electricity services are provided for firefighting operations Gas and electricity services are located so as not to contribute to the risk of fire to a building. 	Achievable with the implementation of the recommendations in section 12
LANDSCAPING: • it is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause Ignitions.	Achievable with the implementation of the recommendations in section 14

18 Conclusions.

Based on the above report and with the implementation of the recommendation contained within this report the consent authority should determine that this development can comply with the requirements of AS 3959-2018 and 'Planning for Bushfire Protection' guidelines.

The recommendations contained within this report are to be implemented in their entirety. Changing one aspect may have an adverse effect on the rest of the recommendations.

Bushfires are affected by many external influences such as climactic conditions, vegetation type, moisture content of the fuel, slope of the land and human intervention to name a few and are difficult to predict.

This report does not intend to provide a guarantee that the subject property will survive if a bushfire should impact the surrounding area. The purpose of this report is to show the





developments level of compliance or in some cases non-compliance with the New South Wales legislation regarding building in bushfire prone areas.

Where non-compliance is found measures will be suggested that should make the building less susceptible to the various attack mechanisms of a bushfire and comply with the performance requirements of the Building Code of Australia.

The opinions expressed in this report are based on the writers' experience and interpretation of the relevant guidelines and standards. Notwithstanding the above, these guidelines and standards are open to interpretation. All care has been taken to ensure that the opinions expressed in this report are consistent with past successful outcomes.

Some of the information used in the compilation of this assessment has been provided by the proponent or the proponent's representatives. While we believe this information to be true and have accepted the information in good faith however this company or its representatives will not accept any responsibility if the provided information is determined to be incorrect.

This document is to assist the consenting authorities with their assessment of this proposal. The recommendations contained in this assessment reflect the normal conditions that are typically applied by the consent authority for a proposal such as this however the conditions of consent for the proposal will be supplied by the certifying authority on approval of the development and may not necessarily be the same as the recommendations of this assessment.

The recommendations in this assessment are for planning guidance only, construction details and compliance with all building requirements are the responsibility of the Architect/Designer, Builder and Certifier.

To avoid confusion, unless specifically referenced by the consenting authority, it is strongly recommended that once this proposal has been approved that this document is no longer referenced and that only the official conditions of consent as reflected in documentation by the certifying body are used for construction guidance.

If any further clarification is required for this report, please do not hesitate to contact me using the details above.

Yours Sincerely

Mathin-

Matthew Willis Grad Dip Planning for Bushfire Prone Areas Bushfire Planning Services Pty Limited





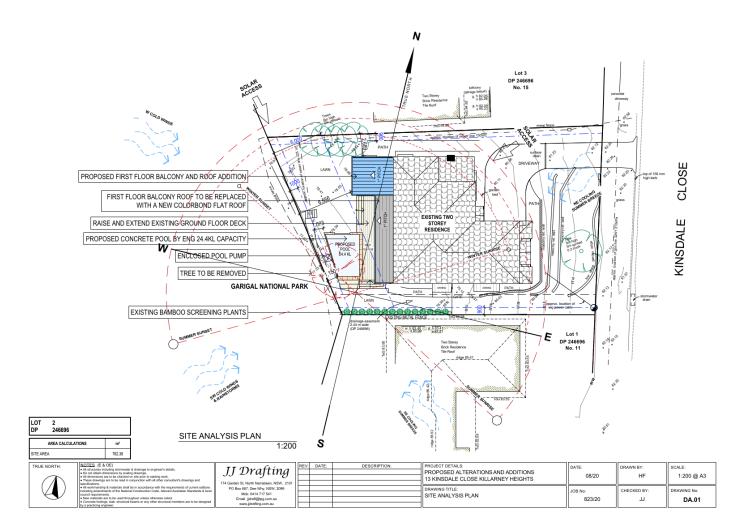
19 References.

- Australian Building Codes Board (2019). National Construction Code Volume One -Building Code of Australia. ABCB
- Australian Building Codes Board (2019). National Construction Code Volume two -Building Code of Australia. ABCB.
- *Keith, D.A. (2004).* Ocean Shores to Desert Dunes: The Native Vegetation of New South Wales and the ACT. NSW Department of Environment and Conservation.
- National Association of Steel Framed Housing (2014). "Steel Framed Construction in Bush Fire Areas. NASH
- Ramsay, C and Rudolph, L (2003) "Landscape and Building Design for Bush fire Areas". CSIRO Publishing, Collingwood.
- Resources and Energy NSW (2016). ISSC 3 Guide for the Managing Vegetation in the Vicinity of Electrical Assets. NSW Government
- Rural Fire Service NSW (2005) "Standards for Asset Protection Zones"
- Standards Australia (2018). "AS 3959, Construction of buildings in bush fire prone areas".
- Standards Australia (2018). "AS/NZS 1530.8.1 Methods for fire tests on building materials, components and structures Tests on elements of construction for buildings exposed to simulated bush fire attack Radiant heat and small flaming sources".
- Standards Australia (2018). "AS/NZS 1530.8.2 Methods for fire tests on building materials, components and structures Tests on elements of construction for buildings exposed to simulated bush fire attack Large flaming sources".
- Standards Australia (2014). "AS/NZS 1596 The storage and handling of LP Gas".



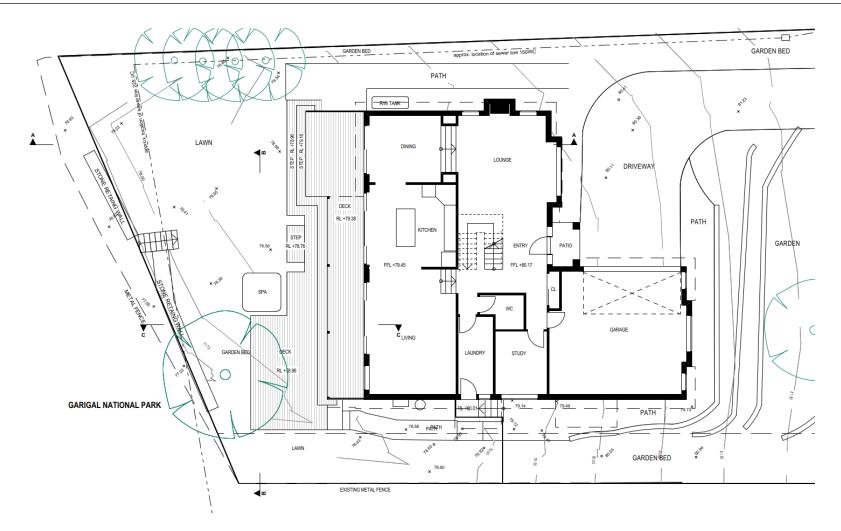


20 Appendix 1 - Plans .







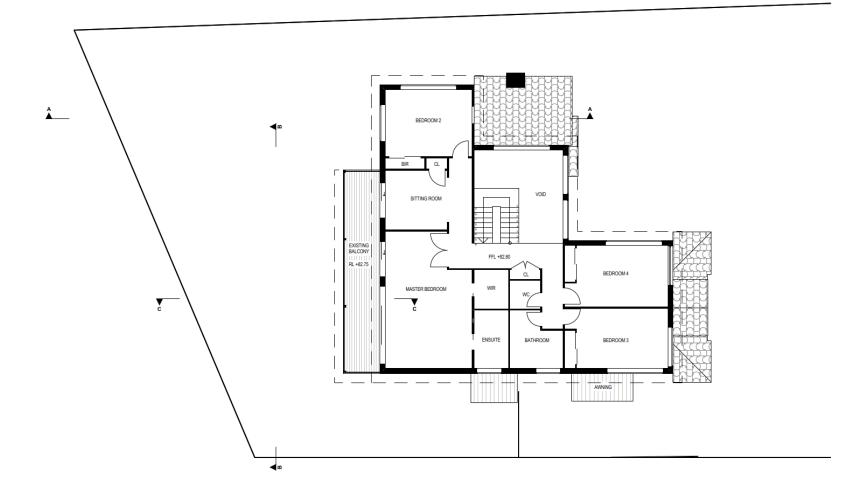


EXISTING GROUND FLOOR PLAN

	EXISTING OROUND I EGORT EAN										
	1:"	100									
TRUE NORTH:	NOTES (E & OE) + All structures inciding atomwater & drainage to engineer's details. • Do not obtain dimension by scaling drawings. + All dimensiona are to be checked on take prior to stating work. • These drawings are to be need in conjunction with all other consultant's drawings and spontizations.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	REV	DATE:		PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3		
$\langle \mathcal{A} \rangle$	 All workmanship & materials shall be in accordance with the requirements of current editions including amendments of the National Construction Code, relevant Australian Standards & local council requirements. New materials are lo be used throughout unless otherwise noted. Concrete footings, siab, structural beams or any other structural members are to be designed by a practicing engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au				DRAWING TITLE: EXISTING GROUND FLOOR PLAN	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.02		





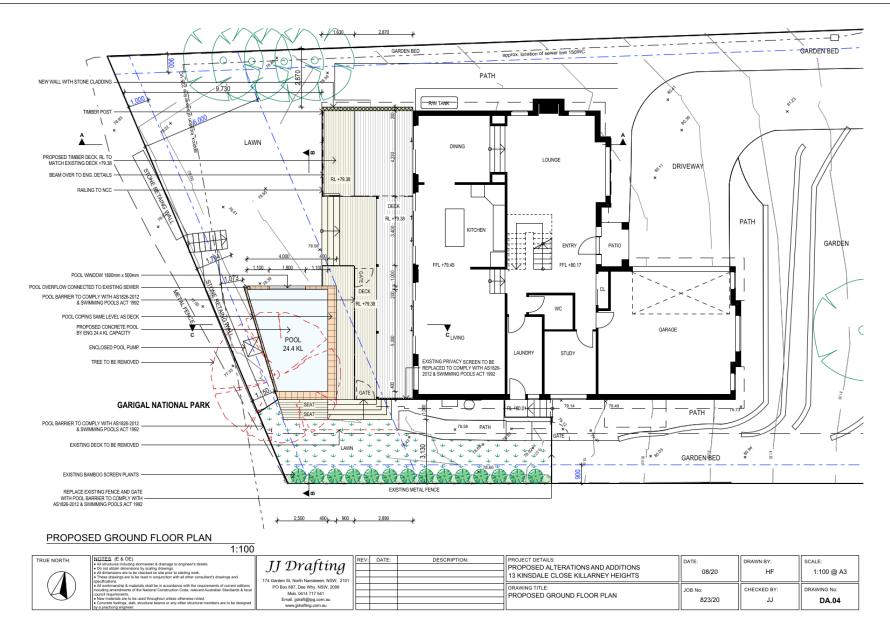


EXISTING FIRST FLOOR PLAN

	1:100						
TRUE NORTH:	NOTES (E. 8.0E) • All vinctures including dormwater & drainage to engineer's details. • All vinctures including of an engineer's details. • All dimensiona are to be checked on tall prior to starting work. • These drawings are to be read in conjunction with all other consultant's drawings and socieditations.	JJ Drafting 174 Garden St. North Narrabeen. NSW. 2101	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	scale: 1:100 @ A3
	 All workmanistig & materials shall be in accordance with the negatements of current editions including amendments of the National Construction Code, relevant Australian Standards & local council requirements. New materials are to be used throughout unless otherwise noted. Concrete floctings, stab, structural beams or any other structural members are to be designed by a practicing employee. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au		DRAWING TITLE: EXISTING FIRST FLOOR PLAN	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.03

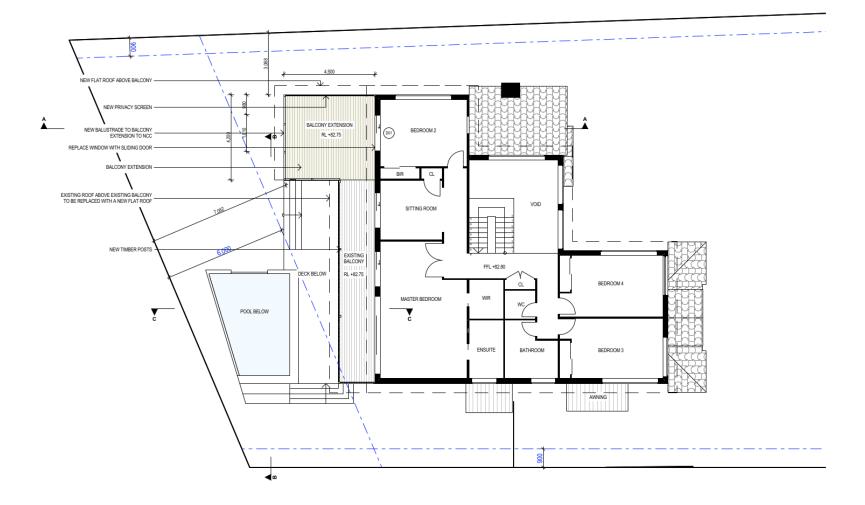










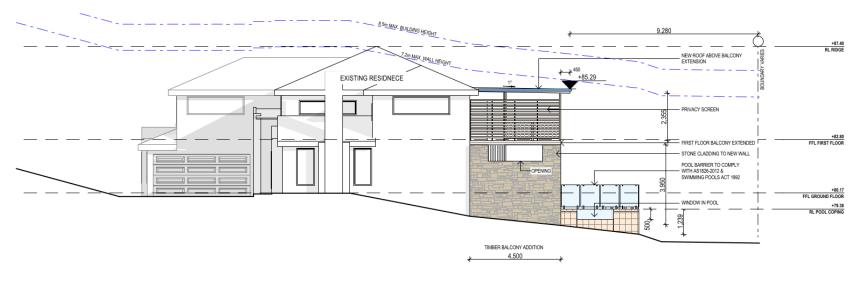


PROPOSED FIRST FLOOR PLAN

		1:100						
	NOTES (E & OE) All structures including dominater & drainage to engineer's details. • Do not obtain dimensions by usailing drawings. All dimensions are to be checked on raise prior to stating work. • These drawings are to be read in conjunction with all other consultant's drawings and specifications.	JJ Drafting 174 Garden St. North Narrabeen. NSW, 2101	REV:	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	scale: 1:100 @ A3
$\langle \mathcal{A} \rangle$	 All avortmanship & mathematics shall be in accordance with the requirements of current editions including amendments of the National Construction Code, relevand Australian Standards & local council requirements. New materials are to be used throughout unless or derivative noted. Concrete footings, statis, structural beams or any other structural members are to be designed by a practicing engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au			DRAWING TITLE: PROPOSED FIRST FLOOR PLAN	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.05





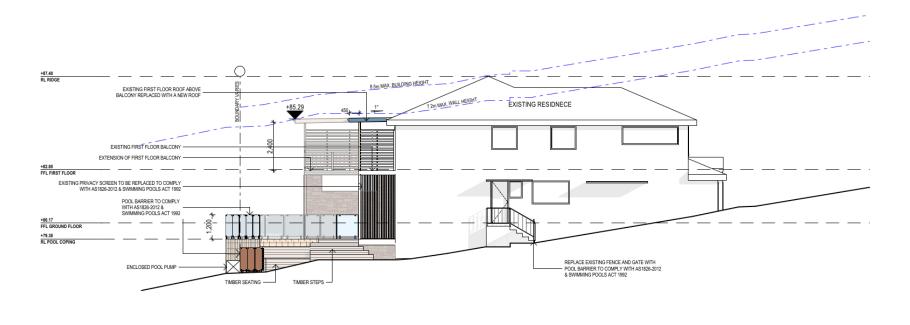


NORTH ELEVATION 1:100

NOTES (E & OE) • Al structures including dominater & divariage to anglinear's details. • Do not doubt and interestores by scaling drawings. • All dimensions are to be checked on all prior to charing work. • All dimensions are to be checked on all prior to charing work.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	REV:	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3
 All workmanzly & materials shall be in accordance with the regularments of current editories including amendments of the Halonal Construction Code, relevant Australian Standards & local council requirements. New materials are to be used throughout unities onthrwise noted. Concrete Society, skib, structural beams or any other structural members are to be designed by a pactioning engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au			DRAWING TITLE: NORTH ELEVATION	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.06







SOUTH ELEVATION 1:100

NOTES (F & OE) • All structures including dominater & drainage to origineer's details. • Oo not dottind imministic as by scaling drawings. • These drawing are to be checked on all prior to making and. • These drawing and in compretent with all other consultant's drawings and scoetCations.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	REV:	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3
 All exoframating & materials shall be in accordance with the requirements of current editors including amendments of the Matonial Construction: Code, relevant Australian Standards & local council requirements. New materials are to be used throughout unices oftennies noted. Concrete locations, stab. structural beams or any other structural members are to be designed by a particip anymer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au			DRAWING TITLE: SOUTH ELEVATION	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.07





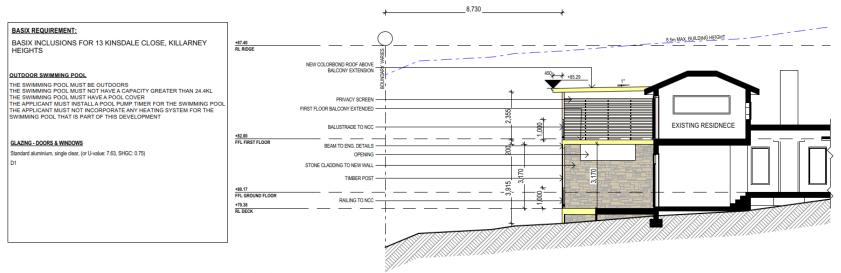


WEST ELEVATION 1:100

NOTES (F & OE) + All structures inducting stormwater & drainage to engineer's details. + Oo not obtain dimensions by scaling drawings. (*) These drawings are to be read in conjunction with all other consultant's drawings and scootdurations.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	REV	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3
 All anothermating is maintained shall be in accordance with the regularements of current editories including amendments of the National Constitution Code, relevant Australian Standards & local council requirements. New materials are to be used throughout unless otherwise noted. Concrete footings, stab, structural beams or any other structural members are to be designed by a practicing engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au			DRAWING TITLE: WEST ELELVATION	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.08







SECTION A-A

CARPENTRY: - TIMBER TO COMPLY WITH AS1170.2 OR AS4055.

BRICK AND BLOCKWORK: - CONSTRUCTION OF MASONRY BUILDINGS SHALL BE AS PER AS3700 OR AS4773.

1:100

NSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1684 AND 1720 AS APPLICABLE.

SPECIFICATION NOTES

FOOTINGS: - FOOTINGS TO BE IN ACCORDANCE WITH AS1480. - FOOTINGS TO BE IN ACCORDANCE WITH MCC VOL2 PARTS 3.2.3, 3.2.4 AND 3.2.5 - ALL REINFORCEMENTS SHALL CONFORM TO AS1302, AS1303 AND AS1304.

ALL WORKI

BEARERS AND JOISTS: - SHALL BE INSTALLED TO COMPLY WITH AS1684 AS AMENDED FOR TIMBER COMPONENTS OR AS3620 FOR LIGTHWEIGHT STEEL FRAMING SECTIONS OR AS PER THE NASH ALTERNATIVES TO AS 3623.

ANT CAPS: - SHALL BE INSTALLED IN ACCORDANCE WITH AS3660.

PROFILED STEEL ROOF: - NCC VOL2 PART 3.5.1. - DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH ASINZS 1562.

ROOFING: - COLORBOND ROOF CLADDING

CONCRETE: - SHALL BE IN ACCORDANCE WITH NCC VOL 1 PART B1.4 OR VOL 2 PART 3.2.3. SHALL BE IN ACCORDANCE WITH NCC VOL.1 PART B14 OR VOL.2 PART 3.2.3.
 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT EDITIONS OF THE ASSBO.

CONCRETE BLOCKS OR BRICKS: - TO COMPLY WITH TO AS4455 MANSORY BUILDING BLOCKS/PAVER.

TERMITE CONTROL: - TO BE IN ACCORDANCE WITH TO AS3660.1 - SHALL BE IN ACCORDANCE WITH NCC VOL.2 PART 3.1.3 OR VOL.1 PART B1.4. FLASHING AND CAPPINGS:

Examine New Control of NETAL RAINWATER GOODS REFER TO AS2180 - RASH PROJECTIONS ABOVE THE ROOF WITH TWO PART FLASHINGS CONSISTING OF AN APRON FLASHING AN OVER FLASHING, WITH AT LEAST 100m OVERLAP. - PROVIDE FOR INDEPENDENT MOVEMENT BETWEEN ROOF AND PROJECTION.

LIGHTING: - 40% OF NEW OR ALTERED LIGHT FIXTURES TO BE FITTED WITH FLUORESCENT, COMPACT FLUORESCENT, OR LIGHT-EMITTING-DIODE (LED) LAMPS

DOOR & WINDOWS:

 ALL FRAMED WINDOWS SHALL BE INSTALLED IN ACCORDANCE WITH AS2047-48 FOR ALUMINIUM WINDOWS AND AS2047 FOR TIMBER WINDOWS.
 ALUMINIUM FRAMED WINDOWS AND DOORS. WEATHER STRIPPING IS TO BE PROVIDED TO ALL EXTERNAL WINDOWS AND DOORS.

STAIRS, HANDRAILS AND BALUSTRADES:

- SOLID COLORBOND BALUSTRADE

NCC VOL 2 PARTS 3.9.1 AND 3.9.2 - RELATIONSHIP OF RISER TO GOING SHALL BE BETWEEN 1:2 AND 1:1.35 UNLESS OTHERWISE DIRECTED - RELATIONSHILL BE BETWEEN 1:2 AND 1:1.35 UNLESS OTHERWISE DIRECTED OR AS PERMITTED IN

451657 AS1657. - BALUSTRADES SHALL BE PROVIDED TO ALL LANDINGS, RAMPS, DECKS, ROOFS AND OTHER ELEVATED PLATFORMS WHERE THE VERTICAL DISTANCE FROM THAT LEVEL IS MORE THAN 1m ABOVE THE

ADJOINING FLOOR OR FINISHED GROUND LEVEL. - THE HEIGHT OF BALUSTRADE MUST BE A MINIMUM OF 1m HIGH ABOVE LANDING AND NOT LESS THAN 865mm ABOVE THE NOSINGS OF ANY STAIR TREADS OR FLOOR RAMP AND HAVE NO OPENING GREATER THAN 125mm

THE HEIGHT OF BALUSTRADE TO THE NEW STAIR CASES IS TO BE MEASURED A MINIMUM 865mm ABOVE THE NOSING LINE AND HAVE NO OPENING GREATER NO OPENING GREATER THAN 125mm.

SLIP RESISTANCE:

STORMWATER:

EAVES GUTTERS, VALLEY GUTTERS AND DOWPIPES - TO COMPLY WITH ASINZS 2179 FOR METAL AND ASI273 FOR UPVC COMPONENTS. - NEW DOWMPIPES TO BE CONNECTED INTO EXISTING STORMWATER LINE - COLORBOND GUTTERS AND DOWNPIPES

- MINIMUM SLOPE OF EAVES AND GUTTERS 1:200

GLAZING: - NCC VOL.1 PARTS B 1.4, D 3.12, F1.13 OR NCC VOL.2 PART 3.6

SMOKE DETECTORS/ALARMS: MCC VID, 2 PART 3/2 PRESIDE DETECTORS COMPLYING WITH THE REQUERENTS OF THE LOCAL MCC VID, 2 PART 3/2 PRESIDE VIDE ENTERNISTING REQUERTING IN THE INSTITUTION REQUERE DAM ANOMOLES IN THE ANTIONN'S MARTINE RETIRED IN ACCOMPACE WITH ASTRO-NOTIVALITIONS IN BULDINGS OF THE THAN CLASS 1 AND 10 MUST BE INSTALLED AND MANAGED TO DETERMINE DAME OF 5% - INDIALCH IONS IN BUILDINGS OTHER I HAVIDLASS I AND 10 MUST BE INSTALLED AND MANAGEL
 OUNPLY WITH NOC SPECE 22 a.
 - MULTIPLE ALARMS WITHIN HOUSES AND SOLE OCCUPANCY UNITS MUST BE HARD WIRED AND
 INTERCONNECTED.

WASTE MANAGEMENT:

TRAJE MONNUMERTIL - ALL WASTE SHALL BE TAKEN AWAY BY TRUCKS TO A SJITABLE LANDFILL OR RECYCLE DEPOT. - ALL WASTE SHALL BE COVERED DURING TRANSPORTATION. - WASTE GENERATED DURING CONSTRUCTION SHALL BE PLACED IN STEEL BINS AND TAKEN AWAY BY AN APPROVED CONTRACTOR TO A APPROVED LANDFILL SITE.

SEDIMENT CONTROL:

- A FILTER CLOTH SYSTEM SHALL BE INSTALLED TO STOP ANY SEDIMENT ENTERING COUNCILS STORMWATER SYSTEM.

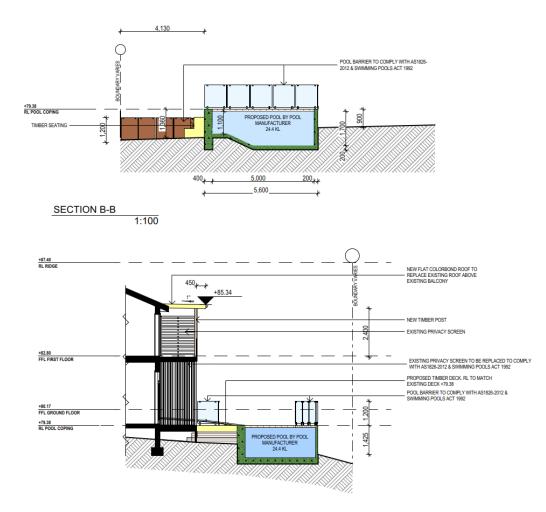
NOTE:

ALL PLANS ARE TO BE READ IN CONJUNCTION AND COMPLY WITH THE BASIX CERTIFICATE, BUSHFIRE AND GEOTECH REPORTS

NOTES, (F. & OE) • All structures inducting stormwater & drainage to engineer's details. • Do not obtain dimensions by scaling drawings. • These drawings are to be mad in conjunction with all other consultant's drawings and seedingtons.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	REV:	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3
 All exortmanticle & materials shall be in accordance with the regulariments of current elistions including amendments of the National Construction Code, relevant Australian Standards & local council regulariments. New materials are to be used throughout virtues otherwise noted. Concrete footings, stab, structural beams or any other structural members are to be designed by a catcing engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.ijdrafting.com.au			DRAWING TITLE: SECTION / BASIX	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.09







SECTION C-C

1:100

NOTES (E & OE) • Al structures including atormwater & drainage to engineer's details. • Do not obtain dimensions by scaling drawings. • Draw drawings are to be mad in conjunction with all other consultant's drawings and specifications.	JJ Drafting 174 Garden St, North Narrabeen, NSW, 2101	DATE:	PROJECT DETAILS: PROPOSED ALTERATIONS AND ADDITIONS 13 KINSDALE CLOSE KILLARNEY HEIGHTS	DATE: 08/20	DRAWN BY: HF	SCALE: 1:100 @ A3
 All workmanzhig & materials shall be in accordance with the requirements of current editions including amendments of the National Conduction Code, relevant Australian Standards & local council requirements. New materials are to be used throughout unless otherwise noted. Concrete footings, slab, structural beams or any other structural members are to be designed by a practicing engineer. 	PO Box 687, Dee Why, NSW, 2099 Mob. 0414 717 541 Email. jjdraft@tpg.com.au www.jjdrafting.com.au		DRAWING TITLE: POOL SECTIONS	JOB No: 823/20	CHECKED BY: JJ	DRAWING No: DA.10