

Brighton Council

ATTACHMENTS PLANNING AUTHORITY 1 OCTOBER 2024







LOCALITY SKETCH Not to Scale





NOTES

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DOCUMENT CONTROL SCHEDULE						
	DRAWING	CONTENT		SHEET	REV	
GENERAL						
	C01	COVER SHEET, LOCALILTY MAP	P AND DRAWING LIST	1	E	
	C01A	GENERAL NO	TES	2A	A	
ENGINEERING PLANS						
	C02	OVERALL PL	AN	2	D	
	C03	ROAD ACCESS & VE	HICLE PLAN	3	D	
	C03b	WATER, SEWER & STOR	MWATER PLAN	3b	E	
	C04	ALANAH COURT LONG SECTION	AND TYPICAL SECTION	4	C	
	C04B	ALANAH COURT CROS	SS SECTION	4B	В	
	C05	VEHICLE ACCESS LON	IGSECTIONS	5	D	
	C05a	ACCESS CROSS S	ECTIONS	5A	D	
	C05b	TYPICAL RETAINING W	VALL DETAIL	5B	D	
	C06	TYPICAL CROSS SECTIO	₩ WITHDRAWN	6	A	
	C07a	PIPE LONGSECTION	I: SEWER	7a	А	
	C07b	PIPE LONGSECTION: ST	TORMWATER	7b	D	
HYDRAULIC ANALYSIS	C08	STORMWATER CATCHMEN	T & RUNOFF PLAN	8	D	

10 ALANAH CT, OLD BEACH

NOT FOR CONSTRUCTION

CLIENT:

				AMENDMENT DESCRIPTION	DATE
GLIENT: AS	Α	FOR PLANNING APPROVAL	06/06/2023		
			В	FOR PLANNING APPROVAL	20/11/2023
0 10 20 30 40 50mm	Integral Consulting Engineers	APPROVED:	C	NOTES SHEET ADDED TO CONTROL SCHEDULE	15/02/2024
	Civil ∞ Structural ∞ Project Management	82,00	D	NOTES SHEET ADDED TO CONTROL SCHEDULE	22/04/202
PRINT REDUCTION BAR A1 SHEET	m: 0417 650 474		E	NOTES SHEET ADDED TO CONTROL SCHEDULE	21/05/2024
ALL RIGHTS RESERVED STEPHEN COLE. NO REPRODUCTION UNLESS	e: team@integralengineers.com.au w: www.integralengineers.com.au	Stephen Cole, Principal Engineer B Eng (Civil & Environmental), CPEng			
WRITTEN CONSENT GIVEN	a: Unit 10, 11 Morrison St, Hobart, 7000	WST Accreditation: Engineer Civil CC5900 T			

TE /2023 /2023 /2024	3 LOT 10 AL COVEF	SUBDIVISION ANAH CT, OLD BEACH R PAGE			
/2024 /2024	SCALE DRAWN DATE	1:100 E.LEGG SEP 2023	DRAWING No.	C01	E
	DRAWN DATE	E.LEGG SEP 2023	22190	C01	E

GENERAL NOTES	DEVE
1. BEFORE COMMENCING ANY EARTHWORKS YOU MUST CONTACT DIAL BEFORE YOU DIG 1100	6. ALL N
REGARDING THE LOCATION OF UNDERGROUND ASSETS ON SITE 2. PRIOR TO COMMENCING WORKS, THE CONTRACTOR MUST SUBMIT AN APPLICATION FOR (WS02A) AND RECEIVE A PERMIT TO CONSTRUCT NEW TASWATER INFRASTRUCTURE (WS02P)	7. MANI RESE 8. PROV
3. PIPE DEPTHS ARE SHOWN TO INVERT ONLY. ALLOW EXTRA 100MM DEPTH FOR BEDDING 4. ALL CONCRETE IS GRADE N25 U.N.O.	CONN TO TA SUPF
 ALL WORKS TO COUNCIL STANDARD SPECIFICATIONS AND DRAWING U.N.O CONNECTIONS TO EXISTING TASWATER AND COUNCIL SERVICES TO BE TO TASWATER AND COUNCIL STANDARDS AND APPROVAL 	9. ALL F WITH SECT
7. ALL AREAS OF FILL OR DISTURBANCE TO BE REINSTATED WITH MINIMUM OF 100MM OF APPROVED TOPSOIL & SEEDED WITH APPROVED SEED MIX	10. ALI 02-2(
8. MARKERS TO BE PLACED FOR TELSTRA CONDUIT LOCATION UNDER ACCESSES	11. AL
9. WATER CONNECTIONS TO EXISTING TAS WATER SERVICES TO BE UNDERTAKEN BY TASWATER AT DEVELOPER'S COST	12. MIN AUST
SOIL AND WATER MANAGEMENT	13. CLE ACCO
SOIL & WATER MANAGEMENT IS TO COMPLY WITH BEST PRACTICE TO PREVENT ANY TRANSFER OF SOIL MATERIAL OUTSIDE OF THE AREA SPECIFICALLY NECESSARILY DISTURBED FOR CONSTRUCTION OF THE SUBDIVISION. PARTICULAR ATTENTION SHALL BE PAID TO ENSURE THAT NO SOIL MATERIAL IS TRACKED ONTO ROADS & FOOTPATHS OR TO ENTER COUNCILS STORMWATER SYSTEM. ALL ASPECTS & PROTECTION MEASURES IN CONNECTION WITH SOIL & WATER MANAGEMENT ARE TO COMPLY WITH THE REQUIREMENTS COUNCILS DEVELOPMENT ENGINEER. THE CONTRACTOR SHALL SUBMIT A SOIL & WATER MANAGEMENT PLAN PRIOR TO STARTING WORK ON SITE.	WATER NO 1. CONN DEVE 2. HOUS PLAN
REFER SOIL AND WATER MANAGEMENT CODE OF PRACTICE FOR HOBART AND REGIONAL COUNCILS.	INDIV WITH
ROAD AND STORMWATER NOTES	3. DETE
1. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE TASMANIAN COUNCILS STANDARDS FOR SUBDIVISIONS AND IPWEA AND AWA STANDARD DRAWINGS WHERE APPLICABLE.	4. ALL F 5. HYDF IPWE
 ALL SERVICES WITHIN THE ROAD RESERVATION TO BE LOCATED IN ACCORDANCE WITH TSD -G02 	6. ALL F ACCC
 ALL PIPEWORK UNDER ROADS AND DRIVEWAYS TO BE BACKFILLED WITH FCR. ALL SIDE ENTRY PITS TO BE CONSTRUCTED IN ACCORDANCE WITH TSD-SW09 OR TSD-SW10 UNLESS OTHERWISE APPROVED BY THE MUNICIPAL ENGINEER. 	7. ALL V VERS STAN
SEWER NOTES	GUID
5. CONNECTIONS TO EXISTING SEWER MAINS TO BE CARRIED OUT BY TASWATER AT THE	8. WATI

ELOPERS EXPENSE.

MAINTENANCE STRUCTURES TO BE IN ACCORDANCE WITH WSA SEW1300 SERIES.

HOLE LIDS TO BE IN ACCORDANCE WITH AS3996:2006 & WSAA. CLASS 'D' IN ROAD ERVES AND CLASS 'B' IN NON TRAFFICABLE AREAS.

VIDE 100Ø SEWER CONNECTION TO EACH LOT AS INDICATED ON THE PLAN. SEWER NECTION I.O'S TO BE RAISED TO THE SURFACE AND PROTECTED WITH A POLY COVER ASWATER APPROVAL PER STD DWG MRWA S-301 & 302 & TASWATER SEWER CODE PLEMENT.

PIPEWORK UNDER ROADS, DRIVEWAYS AND TRAFFICABLE AREAS TO BE BACKFILLED FOR IN ACCORDANCE WITH STD DWG MRWA-S-201. TRAFFICABLE COVERS TO MRWA Г **4.15.2**.

L WORKS TO BE IN ACCORDANCE WITH THE SEWERAGE CODE OF AUSTRALIA WSA 014-3.1 MRWA VERSION 2.0 & TASWATER SUPPLEMENT.

L WORKS MUST BE INSPECTED AND TESTED BY TASWATER PRIOR TO BACKFILL.

NIMUM PIPE COVER TO BE PER STD DWG MRWA-S-201 OF THE SEWERAGE CODE OF TRALIA WSA 02-2014-3.1 MRWA VERSION 2.0

EARANCES BETWEEN SEWER & OTHER UNDERGROUND SERVICES TO BE IN ORDANCE WITH WSA 02-2014-3.1 MRWA VERSION 2.0 TABLE 4.2

DTES

NECTIONS TO EXISTING WATER MAINS TO BE CARRIED OUT BY TASWATER AT ELOPERS EXPENSE.

SE CONNECTION TO EACH LOT TO BE DN25 PE 100 PN 16 PIPE AS INDICATED ON THE IS. IN ACCORDANCE WITH TWS-W-0002. EACH LOT IS TO BE SUPPLIED WITH AN /IDUAL 20MM DIAMETER METER WITH INTEGRAL DUAL CHECK VALVE AND GATE VALVE A PVC BOX AS SPECIFIED BY TASWATER.

ECTOR TAPE IS TO BE INSTALLED OVER ALL NON-METALLIC WATER MAINS.

FIRE HYDRANT COMPONENTS TO BE DN100.

RANT ROAD MARKING INDICATORS SHALL BE INSTALLED IN ACCORDANCE WITH SEC.8 EA TAS "FIRE HYDRANT GUIDELINES"

PIPEWORK UNDER ROADS AND DRIVEWAYS TO BE BACKFILLED WITH FCR IN ORDANCE WITH WAT-1201-V.

WORKS MUST BE TO THE WATER SUPPLY CODE OF AUSTRALIA WSA 03 -2011-3.1 SION 3.1 MRWA EDITION V2. AND TASWATER'S SUPPLEMENTS, TASWATER'S NDARD DRAWINGS TW-SD-W-20 SERIES, WATER METERING POLICY / METERING DELINES, BOUNDARY BACKFLOW CONTAINMENT REQUIREMENTS & AS3500.1:2003.

TER MAINS > = 100mm TO BE mPVC OR oPVC TYPE 2 CLASS 16 PIPE OR <100mm TO

BE PE PIPE CLASS 16.

- V3.1 03-2011

12. FOR WATERMAINS OF 200MM DIA OR LESS THE HORIZONTAL CLEARANCE TO OTHER SERVICES OR SERVICE STRUCTURES SHALL BE PROVIDED IN ACCORDANCE WITH WSA 03-2011-3.1 MRWA ED VERS 2 AND TASWATER SUPPLEMENT.

			No.	AMENDMENT DESCRIPTION	DA
CLIENT: ASCE MI Pty Ltd			Α	NOTE SHEET ADDED	15/02
0 10 20 30 40 50mm	Integral Consulting Engineers	APPROVED:			
	Civil ∞ Structural ∞ Project Management	82,00			
PRINT REDUCTION BAR A1 SHEET	m: 0417 650 474				
ALL RIGHTS RESERVED STEPHEN COLE NO REPRODUCTION LINESS	e: team@integralengineers.com.au w: www.integralengineers.com.au	Stephen Cole, Principal Engineer B Eng (Civil & Environmental), CPEng			
WRITTEN CONSENT GIVEN	a: Unit 10, 11 Morrison St, Hobart, 7000	WST Accreditation: Engineer Civil CC5900 T			

ALL WORKS MUST BE INSPECTED AND TESTED BY TAS WATER PRIOR TO BACKFILL. 10. MINIMUM PIPE COVER TO BE PER TABLE 5.4.2.1 OF TAS WATER SUPPLEMENT TO WATER SUPPLY CODE OF AUSTRALIA WSA V3.1 03-2011 & TAS WATER SUPPLEMENT.

11. THRUST BLOCKS TO BE IN ACCORDANCE WITH WATER SUPPLY CODE OF AUSTRALIA WSA

TE	3 LOT SU	BDIVISION	
/2024	10 ALANA	AH CT, OLD BEACH	
	GENERAL	NOTES	
	SCALE NA		DRAWING No. REVISION
	DRAWN E.LE	EGG	22190 $CO1A(A)$
	DATE SEP	2023	



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<u>GENERAL NOTES</u>

LAYOUT OF FUTURE LOTS IS FOR DISCUSSION PURPOSES ONLY.

ROAD ALIGNMENT AND LOT LAYOUT SHOWN MAY CHANGE IN THE FUTURE AND ONLY TO BE TAKEN IN CONSIDERATION FOR ACCESSIBILITY FROM ALANAH COURT.

EXTENSION OF ALANAH COURT TO OCCUR AS FAR AS TURNING HEAD, SEE SHEET 5 FOR DETAILS.

CLIENT:	ASCF MI Pty Ltd		No.	AMENDMENT DESCRIPTION FOR PLANNING APPROVAL	DATE 06/06/2023	3 LOT SUBDIVISION 10 ALANAH CT. OLD BEACH		
0 10 20 30 40 50mm	Integral Consulting Engineers	APPROVED:	B C	FOR PLANNING APPROVAL ROAD CROSS SECTIONS	20/11/2023 14/03/2024	OVERALL PLAN		
PRINT REDUCTION BAR A1 SHEET	Civil ∞ Structural ∞ Project Management m: 0417 650 474 e: tar@cirtegragengingers.com au	Status Cale Dispised Excitons	D	CHANGES TO DRIVEWAY ALIGNMENT	22/04/2024	SCALE 1:500		REVISION
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	EXISTING SECTION		<		
DESIGN LEVEL		48.589 48.906	49.540	50.279	
EXISTING LEVEL		48.59	87.67	50.28	
CHAINAGE		8.0	14.0	20.0	
CUT FILL		0.000	0.059	0.000	

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ALANAH CRT

AMENDMENT DESCRIPTION No. CLIENT: ASCF MI Pty Ltd 06/06/ A FOR PLANNING APPROVAL 20/11/2 B FOR PLANNING APPROVAL APPROVED: C CHANGES TO DRIVEWAY ALIGNMENT 22/04 Integral Consulting Engineers 0 10 20 30 40 50mm BCL Civil ∞ Structural ∞ Project Management PRINT REDUCTION BAR | A1 SHEET n: 0417 650 474 2: team@integralengineers.com.au v: www.integralengineers.com.au 1: Unit 10, 11 Morrison St, Hobart, 7000 Stephen Cole, Principal Engineer B Eng (Civil & Environmental), CPEng WST Accreditation: Engineer Civil CC5900 T ALL RIGHTS RESERVED STEPHEN COLE. NO REPRODUCTION UNLESS WRITTEN CONSENT GIVEN

DATE	3 LOT	SUBDIVISION		
)6/06/2023 20/11/2023	10 AL/	ANAH CT, OLD BEACH		
2/04/2024	ALANA	AH COURT LONG SECTION AND TYPICAL S	SECTION	
	SCALE	1:100	DRAWING No.	REVISION
	DRAWN	E.LEGG	22190 C.04	
	DATE	SEP 2023		











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CLIENT:



CLIENT: ASCF MI Pty Ltd	ł
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- 0 10 20 30 40 50mm PRINT REDUCTION BAR | A1 SHEET
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- Integral Consulting Engineers

 Civil ∞ Structural ∞ Project Management

 m:
 0417 650 474
- m: 0417 650 474 e: team@integralengineers.com.au w: www.integralengineers.com.au a: Unit 10, 11 Morrison St, Hobart, 7000

APPROVED:	
Stephen Cole, Pr B Eng (Civil & En	incipal Engineer
WST Accreditatio	on: Engineer Civil CC5900 T

No.	AMENDMENT DESCRIPTION	DATE
Α	FOR PLANNING APPROVAL	13/03/2
В	CHANGES TO DRIVEWAY ALIGNMENT	22/04/2

TE	3 LOT	SUBDIVISION			
/2024	10 AL/	ANAH CT, OLD BEACH			
72024	ALANA	AH COURT CROSS SECTIONS			
	SCALE	1:100	DRAWING No.		REVISION
	DRAWN	E.LEGG	22190	C04h	(\mathbf{R})
	DATE	SEP 2023	22100		



Lot 1 SCALES: HORIZONAL 1:100 VERTICAL 1:100



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Lot 2 SCALES: HORIZONAL 1:100 VERTICAL 1:100

CLIENT: ASCF MI Pty Ltd

0 10 20 30 40 50mm PRINT REDUCTION BAR | A1 SHEET

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Integral Consulting Engineers Civil ∞ Structural ∞ Project Management

0417 650 474

team@integralengineers.com.au www.integralengineers.com.au Unit 10, 11 Morrison St, Hobart, 7000



No.	AMENDMENT DESCRIPTION	DATE	3 LOT SUBDIVISION		
Α	FOR PLANNING APPROVAL	06/06/2023	10 ALANAH CT. OLD BEACH		
В	FOR PLANNING APPROVAL	20/11/2023			
C	DRAFT FOR COUNCIL COMMENT	18/03/2024	VEHICLE ACCESS LONGSECTIONS		
D	CHANGES TO DRIVEWAY ALIGNMENT	22/04/2024		DRAWING No.	REVISION
			OURLE 1:100		
			DRAWN E.LEGG	22190 C05	(ח)
			DATE SEP 2023		

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					0,5					0,44]					
					Ĥ												
		50.08%	3.05%	2.74%	25000 4.20%	3.385	% 4.9	02%	3.97%	6633 0.95 % (.50% 00%	6 8.4	49%		-10.04% -	5 <u>7.8</u> 6	%
DATUM 46.00					-0	16%											
DESIGN LEVEL	66.799	50.630	50.691	50.744	50.789	51.289	51.289	51.387	51.467	51.476	51.914	51.914		52.098	51.912	51.4 <i>77</i>	
EXISTING LEVEL	49.80	50.18	50.70 50.73	50.91	51.02	51.02	51.04	51.15 51.15	51.23	51.26	51.26	51.26	51.30	51.32	51.35	51.48	51.48
CHAINAGE	1.58	3.24	5.24	7.15	8.24	8.24	8.46	10.46	12.46	13.46	13.47	13.68		15.85	17.69	18.45	
CUT FILL	0.000	0.455	9E0.0-	-0.167	-0.226	0.274	0.252	0.219 0.233	0.238	0.220	0.657	0.651		0.780	0.558	0.000	

Section 1 SCALES: HORIZONAL 1:100 VERTICAL 1:100



Section 2 SCALES: HORIZONAL 1:100 VERTICAL 1:100

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CLIENT:





				0,07			
			2.00%	30389	7.59	%	
		50.00%	3.00%	5.15%	0.0%	-3.32%	
DESIGN LEVEL	48.49	48.98	49.10	49.23	49.89	49.89	49.74
EXISTING LEVEL	48.50	48.58	60.64	07.67	49.40	49.50	50.15
CHAINAGE	2.03	3.01	7.00	64.6	9.43	9.69	14.29
CUT FILL	-0.004	0.404	0.041	- 0.176	0.492	0.449	-0.4.05

Section 3 SCALES: HORIZONAL 1:100 VERTICAL 1:100

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TE	3 LOT SUBDIVISION	
/2024	10 ALANAH CT, OLD BEACH	
/2024	VEHICLE ACCESS CROSS SECTIONS	
	SCALE 1:100	DRAWING No. REVISION
	DRAWN E.LEGG	22190 С05А (п)
	DATE SEP 2023	

RETAINING WALL CONSTRUCTION NOTES

- 1. MORTAR SHALL BE CEMENT : LIME : SAND RATIO THUS:1 : 0-0.25 : 3
- 2. BLOCKS TO BE GRADE 12 TO A.S. 2733
- 3. GROUT MAX. AGGREGATE SIZE 10mm SLUMP 230 +/- 30 MIN.
- CHARACTERISTIC STRENGTH 20 MPa.
- 4. CLEANOUT HOLES ARE TO BE PROVIDED TO THE BASE OF ALL CORES. AT THE END OF EACH DAYS BLOCK LAYING, & BEFORE THE WALL IS FILLED, MORTAR DROPPINGS ARE TO BE WASHED OUT REINFORCEMENT TIED AND HOLES BLOCKED OFF.
- 5. RETAINING WALL FOOTINGS ARE TO BE FOUNDED ON APPROVED TRIMMED SUBGRADE WITH A MIN. BEARING CAPACITY OF 150 KPa.
- 6. CONCRETE STRENGTH(MPa)/SLUMP(mm) FOOTINGS 25/90
- 7. 50 COVER TO FOOTING BASE REINFORCEMENT
- 8. ALL CORES SHALL BE GROUT FILLED TO ONE COURSE ABOVE FINISHED SURFACE LEVEL.
- 9. ALLOW MIN. 14 DAYS AFTER FILLING BLOCKS PRIOR TO BACKFILLING BEHIND WALL.
- 10. CORE FILL TO BE PLACED WITH A PENCIL VIBRATOR.
- 11. MOIST CURE WALL CONCRETE FOR 14 DAYS PRIOR TO WATERPROOFING.
- 12. BACK OF WALL TO BE COATED WITH MIN. 2 COATS OF AN APPROVED BITUMINOUS PAINT, LINED WITH FORTECON PROTECTED BY COREFLUTE OR SIMILAR SACRIFICIAL SHEETING.
- 13. PROVIDE EXPANSION JOINTS AT MAX. 10m CRS. PROVIDE R10 DOWEL BARS ACROSS JOINTS AT 400 CRS., GREASED AND CAPPED ONE END

REINFOR CH	CING LAP ART
SIZE	LAP LENGTH U.N.O.
N12	500
N16	650
N20	800
N24	1000
N28	1150
N32	1300
N36	1450

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RETAINING WALL - RW1

SCALE 1:10

CLIENT: ASCF MI Pty Ltd

0 10 20 30 40 50mm

PRINT REDUCTION BAR | A1 SHEET

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- Integral Consulting Engineers Civil ∞ Structural ∞ Project Management m: 0417 650 474
- e: team@integralengineers.com.au w: www.integralengineers.com.au a: Unit 10, 11 Morrison St, Hobart, 7000

APPROVED:	
	Buch
Stephen Cole, Pri B Eng (Civil & En WST Accreditatio	ncipal Engineer vironmental), CPEng n: Engineer Civil CC5900 T

No.	AMENDMENT DESCRIPTION	DATE	3 LOT SUBDIVISION	
Α	FOR PLANNING APPROVAL	14/03/2024	10 ALANAH CT. OLD BEACH	
С	DRAFT FOR COUNCIL COMMENT	18/03/2024		
D	CRASH BARRIER DETAIL	21/05/2024	CRASH BARRIER DETAIL	
			SCALE 1:10	DRAWING No. REVISION
			DRAWN E.LEGG	22190 C05B(D)
			DATE SEP 2023	



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	No.	AMENDMENT DESCRIPTION	DAT		
GLIENT: AS	Α	FOR PLANNING APPROVAL	21/05/		
0 10 20 30 40 50mm	Integral Consulting Engineers	APPROVED:			
	Civil ∞ Structural ∞ Project Management m: 0417 650 474 e: team@integralengineers.com.au w: www.integralengineers.com.au	200			
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WRITTEN CONSENT GIVEN	a: Unit 10, 11 Morrison St, Hobart, 7000	WST Accreditation: Engineer Civil CC5900 T			



NEW SEWER MAN HOLE CONSTRUCTED OVER END OF EXISTING PIPE	
EXISTING SEWER PIPE. NOT CURRENTLY SHOW TASWATER SEWER PLAN. NO DEFECTS OBSERVED IN CCTV REPORT. PROPOSED TO BE TAKEN OVER BY TASWATER	WN ON
EXISTING SECTION	
150Ø PVC 31.19m @ 26.23%	29.97
	28.8 <i>1</i> 0
31.18	196.761

TE	3 LOT SUBDIVISION	
/2024	10 ALANAH CT, OLD BEACH	
	SEWER LONGSECTIONS	
	SCALE 1:100	DRAWING No. REVISION
	DRAWN E.LEGG	22190 C07a(A)
	DATE SEP 2023	





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21/05/2024	

STORMWATER LONGSECTION

CLIENT: ASCF MI Pty Ltd APPROVED: Integral Consulting Engine 0 10 20 30 40 50mm ers

OCHE

Stephen Cole, Principal Engineer B Eng (Civil & Environmental), CPEng WST Accreditation: Engineer Civil CC5900 T

No.	AMENDMENT DESCRIPTION	DA
Α	FOR PLANNING APPROVAL	06/06
В	FOR PLANNING APPROVAL	20/11/
C	EXISTING SEWER PIPE LOCATED AND SHOWN	15/02/
D	UPDATED STORMWATER LINE	21/05/

			Ľ.			
PRINT	REDUC	TION BA	R	A1	SHEET	

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Civil ∞ Structural ∞ Project Management

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SW.Ex

EXISTING STORMWATER MANHOLE	
EXISTING SECTION OF PIPE	>
300Ø PVC SN8 SCJ 32.68m @ 25.68%	
CALCULATED 0.124m³/s SYSTEM CAPACITY =0.124m³/s	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CCC.07
	NC0.07
32.68m	V7.CCI

TE	3 LOT	SUBDIVISION	
6/2023	10 AL	ANAH CT, OLD BEACH	
/2023 /2024	STORM	/WATER LONGSECTIONS	
/2024	SCALE	1:100	DRAWING No. REVISION
	DRAWN	E.LEGG	22190 C07h(n)
	DATE	SEP 2023	



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CATCHMENT ANALYSIS OF PROPOSED 3 LOT SUBDIVISION.

PRE DEVELOPMENT ASSESSMENT 5% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION= 0.152m³/s

1% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION= 0.211m³/s

POST DEVELOPMENT ASSESSMENT

10% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION = $0.124 \text{ m}^3/\text{s}$ SYSTEM CAPACITY ESTIMATED TO BE $0.124 \text{ m}^3/\text{s}$. 5% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION = $0.161m^3/s$ SYSTEM CAPACITY EXCEEDED BY 0.032m³/s.

1% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION= 0.223m³/s SYSTEM CAPACITY EXCEEDED BY $0.099 \text{m}^3/\text{s}$. OVERFLOW FROM HW2.1 AND SW1.1 TO BE DIRECTED INTO NEIGHBOURING BUSHLAND.

CATCHMENT ANALYSIS OF POSSIBLE FUTURE DEVELOPMENT POST DEVELOPMENT ASSESSMENT

5% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION INCLUDING FUTURE LOTS= 0.221m³/s SYSTEM CAPACITY EXCEEDED BY $0.097m^3/s$.

1% AEP STORM, 10 MINUTE STORM EVENT RUNOFF FROM SUBDIVISION INCLUDING FUTURE LOTS= 0.306m³/s SYSTEM CAPACITY EXCEEDED BY 0.182m³/s.

THE EXISTING STORMWATER PIPE SW. EX HAS INSUFFICIENT CAPACITY FOR ADDITIONAL HARDSTAND AREAS TO BE CONSTRUCTED ON THE CATCHMENT ABOVE.

ANY FUTURE DEVELOPMENT ON THE HILL ABOVE THE CURRENT PROPOSED DEVELOPMENT WILL NEED TO BE DESIGNED IN A WAY THAT DOES NOT OVERLOAD THIS PIPE, AND PROVIDES A SAFE MEANS FOR WATER TO DRAIN FROM THE HILL.



3 LOT	SUBDIVISION			
10 ALA	ANAH CT, OLD BEACH			
STORM	/WATER CATCHMENT & RUNOFF PLAN- 3	LOT SUBDIV	ISION	
SCALE	1:750	DRAWING No.		REVISION
DRAWN	E.LEGG	22190	C08	(n)
DATE	SEP 2023		000	
	3 LOT 10 ALA STORM SCALE DRAWN DATE	3 LOT SUBDIVISION 10 ALANAH CT, OLD BEACH STORWWATER CATCHMENT & RUNOFF PLAN- 3 SCALE 1:750 DRAWN E.LEGG DATE SEP 2023	3 LOT SUBDIVISION 10 ALANAH CT, OLD BEACH STORWWATER CATCHMENT & RUNOFF PLAN- 3 LOT SUBDIV SCALE 1:750 DRAWN E.LEGG DATE SEP 2023	3 LOT SUBDIVISION 10 ALANAH CT, OLD BEACHSTORWWATER CATCHMENT & RUNOFF PLAN- 3 LOT SUBDIVISIONSCALE1:750DRAWNE.LEGGDATESEP 2023

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STORMWATER ASSESSMENT

FOR A PROPOSED 3 LOT SUBDIVISION AT

10 ALANAH COURT, OLD BEACH

I.C.E. Project No: 22190

Client name: ASCF MI Pty Ltd

Document No. 22190-01 (Rev A)

11/06/2024

Document Approved by:

Stephen Cole BEng (Civil & Environmental) CPEng Principal Civil / Structural Engineer Integral Consulting Engineers Pty Ltd *WST Accreditation: Engineer Civil CC5900 T*

1. Introduction

This stormwater management report presents a hydrological analysis of the proposed stormwater infrastructure for the 10 Alanah Court Subdivision in Old Beach. It evaluates the effects of post-development conditions on stormwater runoff. The assessment calculations were done using Autodesk's Civil 3D software, using rainfall data imported from the Bureau of Meteorology.

Appendix 1 contains the stormwater assessment results, and Appendix B shows the data behind the calculations.

2. Existing Site Conditions

The proposed development consists of one property, 10 Alanah Court, Old Beach. The total area of this property is 3.24Ha. The stormwater catchment area that drains to the stormwater system for this development is 1.45Ha and is contained entirely within the property.

The existing site is covered by predominantly scrubby bushland. One corner of the property was previously used as a quarry and is currently under rehabilitation.

The Aspect is southerly. Slope varies from flat at the top of the hill, to 25% towards the proposed lots.

The average annual rainfall is approx. 495mm (source: BOM Hobart Airport station, 10km away from the site).

The underlying geology is Jurassic Dolerite.

3. Stormwater Runoff and Drainage Assessment for the Proposed Development

Drainage System Overview

The area of the proposed development of 3 lots and the associated road extension is 0.27 Ha, 19% of the catchment. The remainder of the catchment will remain unchanged.

Currently, runoff from the subject property flows onto the properties below as a sheet flow.

The proposed stormwater drainage system for the development consists of a stormwater cut-off drain above the 3 lots and a piped stormwater connection for each lot. The cut-off drain and pipe are proposed to be connected to the top end of an existing DN300 stormwater main that flows down to Baskerville Rd.

Minor Stormwater Event

The minor stormwater event, the 5% Annual Exceedance Probability (AEP) flow, has been analysed.

Since most of the catchment will remain unchanged, the increase in flow due to the development is small. The main issue however is that flows from the catchment will be concentrated into the top of the existing stormwater pipe, SW1.1 on the design drawings.

The calculated flow into SW1.1 for the 5% AEP event is 0.156m3/sec. The calculated capacity of the existing stormwater pipe downstream from here is 0.124m3/sec. Therefore the existing pipe is unable to contain all of the 5% AEP flow from the development.

The estimated flow in the catchment prior to the development is 0.152m3/sec. This is also greater than the estimated capacity of the existing pipe.

A calculation has been done to determine what higher-frequency, lower-intensity rainfall event will be contained entirely within the pipe. This calculation found that the 20% AEP event will be contained within the pipe. This rainfall event is shown in the hydraulic grade line analysis on the stormwater pipe long section.

All higher intensity events will result in some surcharge from the stormwater manhole SW1.1. The design includes a 300mm high berm on the low side of the manhole to direct the overflow water into the bushland on the neighbouring property, 89 Baskerville Rd, Old Beach.

For larger storm events and if the inlet pipe blocks, headwall HW2.1 will overflow. The design includes a swale to direct the overflow water into the neighbouring bushland.

The owner of 89 Baskerville Rd, Old Beach has been notified about this development.

Major Stormwater Event

The minor stormwater event, the 5% Annual Exceedance Probability (AEP) flow, has also been analysed.

The finction of the stormwater system for the the major event will operate in a similar way to the minor event, where some of the stormwater will be contained within the stormwater main, and part of it will surcharge from manhole SW1.1 and / or headwall HW2.1. The difference is that the amount of surcharge or overflow will be higher.

The berm on the low side of the manhole and the overflow channel from the headwall have been designed to contain all of the surcharge flow for the major stormwater event, and direct it into the neighbouring bushland.

Management of the Existing Stormwater Main

As previously stated, the existing DN300 stormwater in 31 Baskerville Rd has insufficient capacity to contain all of the minor stormwater flow from the development and the upstream catchment.

A subdivision is planned for the land above the current proposed development. When that subdivision is implemented, additional stormwater capacity will be needed to drain that area down to Baskerville Rd or Alanah Court. To achieve an optimal drainage system for that subdivision, it is recommended that the design for that additional sotmrwater capacity be done for that future subdivision, and not as part of the current proposal.

Therefore this design allows for utilising the existing DN300 stormwater main and provision for overflow, and no additional drainage infrastructure below SW1.1.

4. Stormwater Quality Control

My opinion is that stormwater treatment infrastructure for this development would be impractical for Council to maintain.

Therefore I propose that Stormwater quality treatment is offset via a cost contribution from the developer to the Council, in accordance with the Brighton Council Stormwater Quality Control Contributions Policy.

5. Stormwater Quantity Control

We have been advised by the Council that the downstream stormwater network is at capacity.

The proposed development will result in a small increase in flows, 9L/s for the minor storm event and 12L/s for the major storm event.

A stormwater detention system on this slope for the small number of blocks is impractical to construct and maintain.

Therefore to ensure the development does not increase stormwater flows, I propose that the developer make a cost contribution to the Council for a larger stormwater detention system downstream. This contribution should be calculated proportionate to the additional flow created by the development relative to the total detention volume and the construction cost of the additional detention capacity.

6. Conclusion

This report and the associated calculations demonstrates that the subdivision design drawings sufficiently address all of the stormwater management requirements, with the following exceptions:

stormwater quality - it is proposed that the developer make a cost contribution towards larger infrastructure for these things in a more practical location.

stormwater detention -it is proposed that the developer make a cost contribution towards larger infrastructure for these things in a more practical location.

The existing stormwater main downstream from the development has insufficient capacity for the 1% and 5% AEP flows. The system has been designed so that overflows from this stormwater system will be directed into 89 Baskerville Rd. The owner of the property has been notified. It is recommended that additional stormwater capacity be designed as part of the proposed future development of the catchment above.

7. Appendices

Appendix 1: Stormwater Catchment and Run-off Plan

Appendix 2: Detailed Stormwater Calculations

Appendix 3: Photos



Appendix 1: Stormwater Catchment and Run-off Plan

Appendix 2: Detailed Stormwater Calculations

Pre Development Assessment – 5% AEP

SW1.1 1	SW1.2	SW1.4	(m)	Name Stat.	SW1.4	SW1.2	SW1.1	Ex 1	(m)	Struct. ID Exit	SW1.4	SW1.2	SW1.1	Ex 1	(m)	Struct. ID D	SW1.2 - SV SW1	SW1.1 - SV SW1	SW Ex - SV SW1		ripe rioi
01.03 11	64.7	0.184 1	(sq	Dra	0.005	0.004	0		(m	Ho Hf	0.225	0.3	0.3		(ct	Q	.4 SW	.2 SW	.1 Ex :		-
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7.8	5.94	6	(min)	Time of Q	0	0	0		(m)	К	1.449	2.449	5.968		(m/s)	<	1709.69	996.16	11834.87	(sq. m)	Diamage
75.31	81.42	81.22	(mm/hr)	Rainfall					(m)	He	0.08	0.06	0.11		(m)	đ	1709.6	2705.8	14540.7:	(sq. m)	Ci di li de
0.15	1 0.01	4 0.03	(cu.m/s	r Q=CIA/K	0	0	0		(m)	I.	3 0.11	B 0.13	7 0.28		(m)	dc	.0	0	2 0		
ž	E	61	e (cu. m/:	c Known	0	0	0		(m)	Total	0.1	32 0.3	33 1.8		(m)	v^2/2g	.5 854.	.5 498.	.5 5917.	(sq. m)	
0	0	0	sec)	Q Longitu	0 0	0 0.3	0 1.9		(m)	m	07 39.7	06 38.6	17 30.7		(m)	EGLo	84 854	08 1352	44 7270.	(sq. m)	
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0.124	0.011	0.019	u. m/set (tal Gutti [0	0	0			8	41.088	39.761	38.626		n)	311	0.019	0.03	0.152	u. m/set (2000
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_			(m)	Gutter Wi	7.97	1.142	4.126			£	0.19	0.374	1.934		(m)	Ea	0.019	0.03	0.152	(cu. m/se	Dian Q
•			(m)	c Spread T					(m)	На	41.08	39.76	. 38.620		(m)	EGLa	0.22	0.0	0.0	(m)	ripe bia.
3 0.10	1 0.56	2 0.37		W/T	0.1	0.37) 1.93		(m)	Ea	:	1 39.70	3 37.04	29.1	(m)	U/STOC	5 0.06	3 0.26	3 0.47	(cu.m/s	J nu Q
3 Grate inl	4 Grate inl.	8 Grate inl		Inlet Type	9	4	4				42.86	7 40.50	2 38.77	5 30.00	(m)	Surface	7 1.67	1 3.69	4 6.70	9(m/s)	Verocity
Ð	Ę	ē.	(m)	e Grate Le							12 Case B	14 Case B	'2 N/A	ذر		E Step4*	5 1.44	5 2.44	9 5.96	(m/s)	I I VEIDUITY
1	4	4	(m)	nį Grate W							N/A	N/A	Case A			Step7*	19 0.7	19 0.2	¥8 0.0	(min)	
	1	1	(m)	fid Ourb O							Case E	Case D	N/A			Step 14	42 40.8	48 39.3	94 36.6	(m)	
1	1	1	(m)	per Ourb C												*	38 39	387 36.	392 28	(m)	TEA HIACICI
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.124	.011	.019	1/set (cu. m.	ept F Bypass													2.2	7.2	24.0		
0	0	0	oes,	Fic													0%	8%	0%		

Pre Deve	lopment	Assessment -	1% AEP
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SW1.1	SW1.2	SW1.4		Name		SW1.4	SW1.2	SW1.1	Ex 1		Struct. ID	SW1.4	SW1.2	SW1.1	Ex 1		Struct. ID	SW1.2 - S\	SW1.1-S\	SW Ex - SV		Pipe
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11834.87	996.16	. 1709.69	(sq. m)	Drain. Area A		0	0	0		(m)	千	0.027	0.041	0.211		(cu. m/se	Q	SW1.2	SW1.1	Ex 1		To
0.5	0.5	0.5		Runoff Coeff. C		0	0	0		(m)	Нb	64.532	36.425	33.603		(m)	-	64.532	36.425	33.603	(m)	3D Length
7.8	5.94	6	(min)	Time of Conc.		0	0	0		(m)	문	1.579	2.69	6.505		(m/s)	<	1709.69	996.16	11834.87	(sq. m)	Drainage.
104.239	112.053	111.801	(mm/hr) (Rainfall Intens. (0	0	0		(m)	He	0.099	0.08	0.14		(m)	đ	1709.69	2705.85	14540.72	(sq. m)	Drainage , F
0.171	0.016	0.027	cu. m/set (Q=CIA/Kc K		0	0	0		(m)	. <u>.</u>	0.136	0.156	0.295		(m)	dc	0.5	0.5	0.5	0	Runoff Co. /
0	0	0	cu. m/sec)	nown Q S	-	0	0	0		(m)	Fotal E	0.127	0.369	2.158		(m) (/^2/2g E	854.84	498.08	5917.44	sq. m) (s	vrea X "C" A
ц	4	4		al Slope C	ongitudi	0.226	0.449	2.298		m) (ш У	39.845	38.997	31.148	0	m) (:GLo F	854.84	1352.92	7270.36	sq. m) (r	rea X "C" T
0.02	0.02	0.02		ross C lope Sx S		0.099	0.08	0.14		m)	+(P/gam E	39.823	38.98	28.99	0	m)	HGL0 S	6	5.94	7.8	nin) (r	ime of Cc Ti
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4	4	4) (m	tter dth Spi		7.79	1.087	3.187		(п	н	0.226	0.449	2.298		1) (n	E	0.027	0.041	0.211	ı. m/sei (m	tal Q Pip
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0	0	0	m/sec)	ASS Bypass														2.20%	7.28%	4.00%		e

Post Development Assessment – 10% AEP

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2.1	1.2	1.3	_	me			/2.1	/1.3	11.2	/1.1	1		uct. ID	NAGEDE	2.1	1.3	1.2	1.1			uct. ID	2.1	1.2 - SV S	1.1 - SV S	Ex - SV S		e
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0.5	0.75	0.75		Coeff. C	Runoff					0		(m)	н	Iraulic Eng	2.878	64.546	36.39	33.735		(m)	-	2.878	64.546	36.39	33.735	(m)	3D Length
	5.9		(min)	Conc.	Time of							(m)	문	ineering C	1.27	1.73	2.42	5.78		(m/s)	<	10682.8	1709.6	996.10		(sq. m)	Drainage
9 60.55	4 69.29	69.12	(mm/hr)	Intens.	Rainfall							(m)	He	lircular Nc	1 0.	5 0.08	3 0.08	1 0.10		(m)	đ	3 10682.	9 1709.6	3 2705.8) 13388.6	(sq. m)	Drainage
4 0.0	0.0	0.02	(cu. m/s	Q=CIA/k			0	0	0	0		(m)	Ŧ	.22 Third	3 n/a	7 0.13	0.0	3 0.20		(m)	dc	8	0.1	0.1	4		e Runoff (
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0	0	0	sec)	Q SL	nal Slo	Longit	1.1	0	0	0 1.		(m)			82 39.	54 39.	99 39.	05 30.0		(m)	EGLo	1.4 534	26 1282	12 2029	0 7370	(sq. m	"C" Area X
4	.02	.02		Slope	pe Cross	ıdi	045 0	241 0	381 0	308 0		(m)	y+(P/		081 38	776 39	054 39	358 28	0	(m)	HGLo	.1.4	.26	.39	.78) (min)	"C" Time
0.02	0.02	0.02		Sx Slope	Cross		.963	.087 0	.082 0	.103 1			gam DI		998 (.757 (.039 (.953	0		аř С	G	6	5.94	0	(min)	of Cc Time
0.05	0.05	0.05	(cu.	Sw Flow	s Bypa	Prev).741).417).313	022		(m)	Eai		.009	0.003	0.002	0		(m)	Tota	9	6	6.62 6	9.009 6	(mm	of Cc Rain
0	0.003	0	m/sec (cu.	Flov	iss Gut	Tota	1.062	0.2	0.221	0.487			ß		0.025	0	0	0		(m)	l Pipe EGL	0.554	9.126	7.355	0.528	/hr) (cu.	"I" Run
0.09	0.017	0.025	m/set (m)	 Dep 	er	-	0	0	0	-0.822			ç		39.105	11.658	39.768	39.048		(m	i HO	0.09	0.025	0.038	0.124	m/set (cu	off "Q' Kno
0	0	0	(m	oth d Wi	Gu		0	0	0.47	2.445			heta Op		39.023	41.504	39.469	37.343) (n	5	0	0	0	0	.m/se(cu	own Q To
1	ц	1) (n	dth Sp	tter		0	5.528	1.101	0		(1	Т		1.062	0.241	0.381	1.808		= (r	œ	0.09	0.025	0.038	0.124	ı. m/sei (n	tal Q Pi
4	-1	1	=	read T M			0	0	0	0		n) (в		39.122 -	41.658 -	39.768	39.048		n) (3La L	0.3	0.225	0.3	0.3	1) (o	pe Dia. Fi
0.135 (0.519 (0.425 (I/T			1.062	0.241	0.381	1.808		m)	Ð.		•	'	39.707	37.59	29.15	m)	I/STOC	0.487	0.078	0.233	0.491	:u.m/set (ull Q III
Grate inle	ombinat	Grate inle		nlet Type											38.585	42.862	40.504	38.841	30.001	(m)	Surface E	6.892	1.958	3.29	6.939	m/s)	locity Fi
1	1	1	(m)	Length	Grate										Case B	Case B	Case B	N/A			Step4*	5.255	1.735	2.423	5.781	(m/s)	Velocity D
1		1	(m)	Width	Grate										N/A	N/A	N/A	CaseA			Step 7*	0.005	0.62	0.25	0.097	(min)	Sec Time
1		1	(m)	Length	Opening	Curb									Case A	Case D	Case D	N/A			Step 14*	38.0	41.418	39.38	37.2	(m)	Invert Ele
1		1	(m)	Height	Opening	Curb																5 37.35	3 39.48	7 37.2	4 28.8	(m)	v Invert Elé
0.0	0 0.01	0.02	(cu. m/s	Flow Qi	Intercept																	A N/A	2 N/A	9 N/A	5 N/A	(m)	V Crown D
Ø	7 0.00	2 0.00	er (cu. m/s	Flow Qb	t Bypass																	25.33	3.00	5.77	25.68		rc Stope
0	1 SW1.1	3 SW1.2	ec)	Structure	Bypass																	%	%	%	%		

Post Development Assessment – 5% AEP

				No.									#Line									#Line						#Line
ωн	2 S	1 S		7		_	4	ω	N	4	0 E		(0			4 T	зs	2 2	1 S	0 E		(0)	4 S	ω S	2 2	1 S		P
W2.1	W1.2	W1.3		lame			HW2.1	SW1.3	SW1.2	SW1.1	1×1		Struct. ID	אוועאטב ט		W2.1	W1.3	W1.2	W1.1	× 1		Struct. ID	w2.1	W1.2 - SV	W1.1-SV	W Ex - SV		ipe
98.748	64.7	0.184	(m)	Stat.			0.058	0.011	0.008	0		(m)	ExitHo			0.3	0.225	0.3	0.3		(m)	D	HW2.1	SW1.3	SW1.2	SW1.1		From
11594.29	996.16	1709.69	(sq. m)	Area A	Drain.		0.044	0	0	0		(m)	Ŧ	NOAL - HY		0.119	0.029	0.045	0.161		(cu. m/se	Q	SW1.1	SW1.2	SW1.1	 反1		To
0.5	0.7	0.7		Coeff. C	Runoff					_		(m)	Н			2.87	64.54	36.3	. 33.73		(m)	-	2.87	64.54	36.3	33.73	(m)	3D Length
8.1	5 5.9	0.	(min)	Conc.	Time of							(m)	нc	Sincering of	in option of	1.68	i 1.81	2.53	6.21		(m/s)	<	3 11594.2	3 1709.6	9996.1	0.	(sq. m)	Drainage
5 74.13	4 81.42	5 81.22	(mm/hr)	Intens.	Rainfall		0	0	0	0		(m)	He		Neon los No	9	2 0.09	8 0.08	3 0.11		(m)	٩	9 11594.2	9 1709.e	3 2705.8	0 14300.1	(sq. m)	, Drainag
6 0.1:	0.0	4 0.0	(cu. m/s	Q=CIA/k			0	0	0	0		(m)	I		oo Third	3 n/a	6 0.1	9 0.10	8 0.2		(m)	dc	0	0.1	5	4		e, Runoff (
61	17	8	er (cu. m/:	c Known			0 0.0	0	0	0		(m)	Total		1	0.1	12 0.1	0.3	36 1.9		(m)	v^2/2g	.5 5797.	75 1282.	75 747.	0	(sq. m)	o Area X "
0	0 0	0	sec)	Q SL	nal Slo	Longitu	44 1.3	0 0.2	0 0.4	0 2.0		(m)				45 39.3	67 39.8	29 39.3	69 30.9		(m)	EGLo	15 5797	26 1282	12 2029.	0 7826.	(sq. m)	'C" Area X
-1	.02 0	.02 0		Slope:	pe Cross	<u>d</u>	369 1.	263 0.	418 0.	087 0.		(m)	y+(Ρ/ε			86	315 39.	335 39.	337 28.	0	(m)	HGLo	.15 8	.26	.39	.53	(min)	"C" Time c
0.02	0.02	0.02		Sx Slope	Cross		224 0	095	0 680	118 1			gam DI			9.24 0	788 0	315 0	968	0		St,	3.16	6	5.94 6	0	(min)	of Cc Time
0.05	0.05	0.05	(cu. r	Sw Flow	Bypa	Prev.	.985	0.49 (.369 (.329 ((m)	Eai			.015 (.004	.002	0		(m)	Tota	8.16 7/	68	.594 79	.168 74	(mm,	of Cc Rain
0 NA	0 NA	0 NA	n/sec(cu.	Flow	ss Gutt	Tota	1.398	0.223	0.246	0.581 -			ß			0.044 3	0	0 0	0 0		(m)	l Pipe EGL	4.136	1.224	9.276	4.108	/hr) (cu.	"I" Run
NA	NA	NA	m/set (m)	/ Dep	er		0	0	0	0.743			ç ₁			9.429	41.68 4	9.805	9.327		(m)	HG	0.119	0.029	0.045	0.161	m/set (cu.	off"Q' Kno
NA	NA	NA	(m	th d Wio	Gut		0	0	0.469	2.385			neta Cp			39.284	41.513	39.476	37.358		(m	5	0	0	0	0	m/sei (cu	wn Q Tot
N/	N,	Ķ) (т	dth Sp	tter		0	5.426	1.07	0		(n	Ŧ			1.398	0.263	0.418	2.087) (n	Ξ.	0.119	0.029	0.045	0.161	. m/se(m	alQ Pij
z	z	z	-	read T M			0	0	0	0		ר (ו	m			39.458	41.68	39.805	39.327		ר (ו	9La U	0.3	0.225	0.3	0.3) (0	be Dia. Fu
AG	A	A G		T/T			1.398	0.263	0.418	2.087		n)	۵					39.707	37.59	29.15	n) (/STOC	0.487	0.078	0.233	0.491	u. m/sei (i	V D III
rate inle N	ombinat N	rate inle N	(1let Type L	0											38.585 (42.862	40.504	38.841	30.001	m)	Surface E S	6.892	1.958	3.29	6.939	n/s) (.	elocity Fi V
IA I	IA I	IA I	m) (ength V)rate (Case B	Case B	Case B	V/A			step4*	5.693	1.812	2.538	6.213	m/s) (elocity D S
VA	VA	٩A	(m)	Width	Grate											N/A	N/A	N/A	Case A			Step7*	0.008	0.594	0.239	0.09	'min)	Sec Time
NA	NA	NA	(m)	Length	Opening	Qurb										Case A	Case D	Case D	N/A			Step14*	38.06	41.418	39.387	37.24	(m)	Invert Elev
NA	NA	NA	(m)	Height	Opening	Qurb																	37.354	39.482	37.29	28.85	(m)	Invert Elev
0.124	0.045	0.029	(cu. m/se	Flow Qi	Intercept																		N/A	N/A	N/A	N/A	(m)	Grown Dr.
0.03		0	(cu. m/se	Flow Qb	Bypass																		25.33%	3.00%	5.77%	25.68%		(Slope
7 OFFSITE	3 SW1.1	3 SW1.2	эc)	Structure	Bypass																		6	0,	0	0,		

Post Development Assessment – 1% AEP

HW2.1	SW1.2	SW1.3		Name			HW2.1	SW1.3	SW1.2	SW1.1	Ex 1		Struct.		HW2.1	SW1.3	SW1.2	SW1.1	Ex 1		Struct.	sw2.1	SW1.2	SW1.1.	SW Ex -		Pipe
-			(m)	Stat								(m	D E							(m	D	HW	- SV SW	- SV SW	SV SW		Fro
98.748	64.7	0.184		ſ			0.131	0.011	0.008	0			ťН		0.3	0.225	0.3	0.3				2.1	1.3	1.2	1.1		З
11594.	996.	1709.	(sq. m)	Area A	Drain.		0.0		0.0			(m)	푹		0.1	0.0	0.0	0.2		(cu. m.	Q	SW1.1	SW1.2	SW1.1	E×1		То
29	16	69		Que	Run		99	0	78	0		(m)	윤		79	29	45	21		/se (m)	-		~		63	(m)	3DL
0.75	0.75	0.75	-	ff. C	off		0	0	0	0					2.878	34.546	36.39	33.735				2.878	34.546	36.39	33.735		_ength
.00	5.0		min)	Conc.	Time of							(m)	문		2.5	1.8	0.6	6.7		(m/s)	<	11594.:	1709.0	996.		sq. m)	Drainag
16 7	94 8	8	(mm	Inter	Rain		0	0	0	0		(m)	He		33	12	32	52		(m)	đ	29 115	59 17	16 27	0 143	(sq.	e. Drai
4.136	1.421	1.224	/hr) (d	IS.	fall		0	0	0	0		<u> </u>	-		0.3 r	0.095	0.3 r	0.141		~	0	94.29	09.69	05.85	00.14	Э.	nage, R
0.17	0.01	0.02	cu. m/s	2=CIA/K								m)	<u>ب</u>		ı/a	0.14	1/a	0.29		m)	dc	0.7	0.7	0.7			lunoff C
9	7	100	ier (cu.	C Knov			0	0	0	0		(m)	Tota			13		8		(m)	v^2/	75 86	75 12	75 7	0	(sq.	òi Area
0	0	0	m/sec)	vn Q S	п	-	0.099	0	0.078	0		0	-		0.327	0.167	0.02	2.325		_	2g E	95.72	82.26	47.12	0	m) (;	X "C" A
	0.0	0.0			al Slop	ongituc	1.87	0.26	0.40	2.46		m)	<u></u>		39.83	39.81	39.71	31.31		m)	:GLo	8695.7	1282.2	2029.3	10725.	sq. m)	rea X "O
4	Ñ	Ñ		Slope	e Gross	-	б 	8	6	5		(m)	у+(Р,		õõ	33	5	.7 28	0	(m)	HGL	N	6	ö	4	(min	C" Time
0.02	0.02	0.02		SX SI	ő		L.549	0.095).385	0.141			/gam D		39.51	9.786	9.694	3.991	0		s	8.16	6	5.94	0	۔ ٦	of Q Ti
0.0	0.0	0.0		ope Sw	ross		1.47	0.4	0.36	1.82			-		0.03	0.00	0.00				-	8.1	_	6.59	8.16	nin)	me of C
	01		(cu. n	Flow	Bypas	Prev.	7 1	0	U	0		(m)	Eai		4	44	0	0		(m)	Total	5 74	6 81	4 79	3 74	(mm/	k Rain '
0 N	0 N	0 N	n/sei (c	F	ss G	Т	.942	.223	0.41	.995			0	_	.099	0	.078	0		(î	Pipe E	.136	.224	.276	.111	hr) (c	1" R
A	A	A	u. m/se	W	utter	ital	_		_	-0.6			Β		39.936	41.68	39.792	39.707		n)	GLi	0.179	0.029	0.045	0.22	u. m/se	ınoff "Ç
NA	NA	NA	"(m)	Depth					0	2			C-the		39	8 41	39	37		(m)	HGLi			0.		: (cu. m	Know
N,	Ň	Ņ	(m	d Mi	G		0	0	.469	.286			ब ट्र		609	513	.772	.381		(n	ت	0	0	0	0	l/set (ct	nQ To
	-	-		dth	itter		0	5.426	0.869	0			0		1.942	0.263	0.415	2.467		ب		0.179	0.029	0.045	0.221	ı. m/se	tal Q
NA	NA	NA	(m)	Spread					.0			(m)	Ha		40.	41	39.	39.		(m)	EGLa		.0			(m)	Pipe D
NA	NA	NA		T W			0	0	005	0		(m	5	-	002	.68	802	707		(m	č	0.3	225	0.3	0.3	(cr	ia. Ful
				-			1.942	0.263	0.415	2.467							39.707	37.59	29.15		STOC	0.487	0.078	0.233	0.491	. m/set	õ
Grate i	Combii	Grate i		In let Ty											38.5	42.8	40.5	38.8	30.0	(m)	Surfac	6.8	1.9	ω	6.9	(m/s)	Velocit
ntei NA	nat NA	nle NA	(m)	pe Len	Gra										585 Cas	362 Cas	i04 Cas	341 N//	01		e E Ste	392	958	.29	339	(m/	y Fi Velo
				gth	ਰਿ										se B	se B	se B	-			p4*	6.36	1.812	2.538	6.752	s)	ocity D
NA	NA	NA	(m)	Width	Gra te										N/A	N/A	N/A	Case A			Step7*	0.0	0.5	0.2:	0.0	(min)	Sec Tim
NA	NA	NA	(m)	Leng	Op e.	Qurb									Cas	Cas	Cas	N/A			Step	8	94 4	30 За	8	(m)	e Inve
7	7	7	(îth F	ning C	0									еA	e D	еA				114*	38.06	1.418	9.387	37.24	(rt Elev li
Å	IA	ΊA	m)	leight	Dpening	նութ																37.35	39.48	37.2	28.8	m)	וvert El
_			(cu. 1	Flow	f Inter-																	54 N/A	32 N/A	9 N/A	35 N/A	(m)	ev Qrow
0.124	0.45	0.25	n/sec (c	Q:	cept B																						'n Drc Si
0.09	_	_	u. m/se	low Qb	ypass																	25.339	3.009	5.779	25.689		lope
7 OFFS	0 SW1.:	0 SW1.2	эс)	Struct	Bypas																	ð	6	6	6		
H	[10		ture	ŝŝ																						

Post Development Assessment, Assumed Development of Catchment Above – 5% AEP

				No.							#Line	*URB							#Line						#Line
ωн	2 S	1 S		z	4	ω	N	4	0 E		(0	AN DR	4 H	ω S	N S	1 S	0 E		(0)	4 s	ω S	2 S	1 S		P
W2.1	W1.2	W1.3		lame	HW2.1	W1.3	W1.2	3W1.1	¥ 1		Struct. ID	AINAGE L	W2.1	W1.3	W1.2	W1.1	× 1		struct. ID	w2.1	W1.2 - SV	W1.1 - SV	W Ex - SV		ipe
98.74	64.	0.18	(m)	Stat.	0.25	0.0	0.01			(m)	Exit Ho	DESIGN M	0	0.22	0.	0		(m)	D	HW2.1	SW1.3	SW1.2	SW1.1		From
8 11594	7 996.	4 1709	(sq. m)	Drain.	0.1	2	6 0.1	0		(m)	Ŧ	ANUAL - H	3 0.2	5	3 0.0	3 0.3		(cu. m.	Ø	SW1.1	SW1.2	SW1.1	Ex 1		То
.29	. 16	8		Are Run	88	0	148	0		(m)	븅	Hydrauli	248	.04	062	306		/se (m)	-		•		60	(m)	3DL
0.75	0.75	0.75	(п	off Co Tii	0	0	0	0		(n	I	ic Engine	2.878	4.546	36.39	3.735		î	<	2.878 1	4.546	36.39	3.735	(S)	ength Dr
8.16	5.94	6	lin)	ne of Cc F	0	0	0	0		5	0	ering Circ	3.51	1.968	0.873	7.313		1/s)		1594.29	1709.69	996.16	0	q. m) (ainage , [
102.726	112.053	111.801	mm/hr)	Rainfall I	~	~	0	0		(m)	문	cular No.	0.3	0.114	0.3	0.172		(m)	a	11594.29	1709.69	2705.85	14300.14	sq. m)	Drainage
0.5	0.0		(cu. m.	Q=CIA/						(m)	프	22 Third	n/a	0.1	n/a	0.1		(m)	dc		0	0	-		Runoff
248	123	.04	'se((cu. I	Kc Know	0	0	0	0		(m)	Tota.	Edition		167 (_	7 662		(m)	v^2/;	.75 86	.75 128	.75 74	0	(sq.1	Co Area
0	0	0	n/sec)	vn Q Lor	0.189	0	0.148	0		(n			0.629	0.197	0.039	2.728		(п	2g EG	95.72 8	32.26 1	47.12 2	0	n) (sc	X "C" Are
占	0.02	0.02		ıgitudir C	2.521	0.312	0.917	2.9) (~		40.391	40.337	40.155	31.75	0	1) (5	3695.72	282.26	2029.39	0725.1	ı.m) (.	a X "C" T
0.02	0.02	0.02		ross Slot	1.892	0.114	0.878	0.172		'n)	ı+(P/gam		39.763	40.286	40.116	29.022	0	m)	-IGLo	8.16	6	5.94	0	min)	ime of Cc
0.0	0.0	0.0		Cross SI	2.0	0.6	0.50	2.5			₽		0.06	0.00	0.00				đ	8		6.5	8.16	(min)	Timeof
5)5)5	(cu. m	or Prev. E	17 2.	74 0.)9 0.	24 1.		(m)	Eai		0.	8)4 0.	0		(m)	Total	16 102.	6 111.	17 109.	37 102.	(mm/h	Cc Rain "
0 NA	0 NA	0 NA	/sec (cu.	3ypa Tota	646	276	925	911			ß		189 4	0 4	148 4	0		(m)	Pipt EGL	726	801	504	697	ır) (cu.	" Runo
N N	N	N,	m/se(m	l Gutt De	0	0	0	-0.6			ç		0.581	1.729	0.304	40.14		(n	Ŧ	0.248	0.04	0.062	0.306	m/ser (ci	off "Q' Kn
_			-	pth d (0	0	0.467	2.284			theta		39.952	41.532	40.265	37.412		5	9Ľi	0	0	0	0	J. m/set (own Q
A	VA	VA	m)	Gutter Wi	_	5.189	0.23	-			£		2.640	0.313	0.93	2.9		(m)	E	0.248	0.0	0.062	0.306	cu. m/se	otal Q
NA	NA	NA	(m)	c Spread	0	G	7 0.0	0		(m)	Ha		5 40.7	2 41.7	3 40.3	9 40		(m)	EGLa		4 0.2	2	0	e(m)	Pipe Di
NA	NA	NA		T W/T	0	0	05	0		(m)	Ea		06	29	17 39	14 3	N	(m)	TS/N	0.3	25 (0.3	0.3 ((cu.r	a. Full C
Gra	Q	Gra		Inte	2.646).312	0.93	2.9							9.707	37.59	9.15	(m	OC Su).487	0.078).233).491	n/set (m/	2 Vel
te inle N	nbinat N	te inle N	(1	rt Type G									38.585 (42.862 (40.504 C	38.841 N	30.001	Ŭ	rface E S	6.892	1.958	3.29	6.939	1) (S,	ocity Fi V
Ä	A	A	n)	rate Lenε									Case B	Jase B	Case B	٩/A			3tep4*	6.919	1.968	2.779	7.313	n/s)	elocity D
NA	NA	NA	(m)	Grate Wi									N/A	N/A	N/A	Case A			Step7*	0.00	0.54	0.21	0.07	(min)	Sec Time
NA	NA	NA	(m)	d Qurb O									Case /	Case [Case /	N/A			Step 14	38	7 41.4	8 39.	7 37	(m)	Invert L
NA	NA	NA	(m)	per Curb										0					*	1.06 3	418 3	387	.24 :	(m)	gev Inver
			(cu	Oper Inte																7.354 N/i	9.482 N/+	37.29 N/+	28.85 N/+	(m)	t Elev Crc
0.124	0.062	0.04	I. m/set (u	ercept FB																A	A	4	A		own Drc S
0.182	0	0	cu. m/seu	lypass Flu																25.33%	3.00%	5.77%	25.68%		lope
OFFSITE	SW1.1	SW1.2	0	Bypass S																					

Post Development Assessment, Assumed Development of Catchment Above – 1% AEP

Appendix 3: Photos

Photo 1: Proposed Lot 1
Photo 2: Proposed Lot 3

Photo 3: View of the site, from the end of the
existing road.
Photo 4: View of the site including existing fire trail
Photo 5: view of the site including the rear of lots where the stormwater line will be constructed



BUSHFIRE HAZARD REPORT 3 LOT SUBDIVISION & BALANCE 10 ALANAH COURT, OLD BEACH



CERTIFIED BY N M CREESE

21st December 2023

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ATTACHMENT 1 - SUBDIVISION PLAN

ATTACHMENT 2 - BUSHFIRE HAZARD MANAGEMENT PLAN

ATTACHMENT 3 - PLANNING CERTIFICATE

Disclaimer:

AS 3959:2018 cannot guarantee that a habitable building will survive a bushfire attack, however the implementation of the measures contained within AS 3959:2018, this report and accompanying plan will improve the likelihood of survival of the structure. This report and accompanying plan are based on the conditions prevailing at the time of assessment. No responsibility can be accepted to actions by the landowner, governmental or other agencies or other persons that compromise the effectiveness of this plan. The contents of this plan are based on the requirements of the legislation prevailing at the time of report.

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1. SUMMARY:

This Bushfire Hazard Report has been prepared to support the development of a new 3 lot and balance residential subdivision at 10 Alanah Court, Old Beach. The site is subject to a bushfire prone areas overlay under the under the relevant planning scheme and has also been deemed to be bushfire prone due to its proximity to the areas of bushfire prone vegetation surrounding the site.

This report identifies the protective features and controls that must be incorporated into the design and construction works to ensure compliance with the standards. Fire management solutions are as defined in *AS 3959:2018 Construction of Buildings in Bushfire-Prone Areas and C13.0 Bushfire Prone Areas Code, Tasmanian Planning Scheme - Brighton (Code)*.

All lots have been designed to achieve a bushfire attack level of BAL-19 (or lower) of *AS 3959:2018* in accordance with *C13.0* the *Code*. New habitable buildings on these lots are to be constructed to this level, or greater, with the establishment and maintenance of the specified Hazard Management Areas to ensure ongoing protection from the risk from bushfire attack. A reduced bushfire attack level may be permitted where the separation distance between the bushfire prone vegetation and the building exceeds that required for BAL-19, subject to a revised assessment at the time of application for building approval.

Compliance with the following provisions of the *Code* will be required:

- C13.6.1 Provision of hazard management areas
- C13.6.2 Public and fire fighting access
- C13.6.3 Provision of water supply for fire fighting purposes

The effectiveness of the measures and recommendations detailed in this report and *AS 3959:2018* is dependent on their implementation and maintenance for the life of the development or until the site characteristics that this assessment has been measured from alter from those identified. No liability can be accepted for actions by lot owners, Council or governmental agencies which compromise the effectiveness of this report.

This report has been prepared and certified by Nick Creese, principal of Lark & Creese Surveyors. Nick is a registered surveyor in Tasmania and is accredited by the Tasmanian Fire Service to prepare Bushfire Hazard Management Plans (scope 1, 2, 3a, 3b & 3c.

Site survey was carried out on 24th November 2022.



2. LOCATION:

Property address:	10 Alanah Court, Old Beach
Title owner:	Thinking of Marketing Pty Ltd
Title reference:	C.T. 184468/11
PID N°:	2270100
Title area:	3.241 Ha
Municipal area:	Brighton
Zoning:	General Residential/Rural



Image 1: Site location (Source The LIST)

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3. SITE DESCRIPTION:

The site is located at the end of Alanah Court, approximately 600m north east of the intersection of Clives Avenue and East Derwent Highway, Old Beach. The site is located at an elevation range of approximately 40-100 metres, with grades typically falling to the south and south west in the order of 10-15°.

At the time of assessment the site was undeveloped and was vegetated by a mix of grassed areas in the east and areas of native trees and shrubs in the north and south. At the northeast corner of the site was part of a disused quarry.

The allotments to the north and east consisted of a disused quarry and areas of native trees and shrubs.

To the south and west of the site was a well-established area of residential allotments, Baskerville Road, Alanah Court, Clives Avenue, Shelmore Drive, and Tandara Court. The residential allotments included dwellings, sheds, accesses, and gardens. The roads included grassed nature strips, concrete footpaths, and bitumen carriageways. A new residential subdivision has just been completed to the west of the site and included bitumen roads and vacant lots. Minimal vegetation existed across the lots.

Reticulated water supply is available to the site with domestic water supply requirements reliant on TasWater mains supply.





Image 2: Aerial image of site and surrounds (Source: *The LIST*)





Image 3: Looking south east towards development site.



Image 4: Looking west towards development site.

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Planning Controls:

Planning controls are administered by the Brighton Council under the *Tasmanian Planning Scheme - Brighton.* The site is subject to the Natural Assets Code and Bushfire-prone Areas Code overlays and is zoned General Residential and Rural.



Image 5: Council zoning and overlays

Red [.]	General Residential
rtea.	Conordination
Cream:	Rural
Cieani.	INUIAI
Green hatch:	Natural Assets Code
Green naton.	Natural Assets Code
Whole site:	Ruchfiro propo Aroos Codo
whole site.	Dustille-profile Areas Code

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Fire History:

From the Fire History overlay detailed within *The LIST* map imagery, three bushfire events are mapped within a 2 km range of the site.

Year	Name	Area	Cause
1967	1967 Fire	±200,000 ha	Unknown
2006	Mt Direction	±25 ha	Unknown
2013	Mt Direction MTNRA001S	±456 ha	Planned



Image 6: Bushfire History (Source: The LIST)

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4. PROPOSED DEVELOPMENT:

A 3 lot and balance area subdivision is proposed for the site. Access to the new residential lots will be from a new road extension on Alana Court with new water, sewer and stormwater services to be installed.



Image 7: Subdivision layout



5. BUSHFIRE ATTACK LEVEL:

Fire Danger Index (FDI): The Fire Index Rating for Tasmania is adopted as 50.

Vegetation Assessment:

Following assessment of the characteristics of the site, the vegetation types, separation distances from development site and slope under the vegetation have been identified as shown in Table 1 below:

Lot N°	Direction:	Vegetation type:	Distance (m):	Slope:
	North	Forest	0-100	17° up
1	East	Forest	0-100	3° down
I	South	LTV	0-100	11° down
	West:	LTV	0-100	16° down
	North	Forest	0-60	17° up
		Grass	60-100	10° up
2	East	Forest	0-100	5° down
Z	South	LTV	0-100	11° down
	West	Forest	0-53	Level
		LTV	53-100	16° down
	North	Forest	0-60	18° up
		Grassland	60-100	14° up
2	East	Forest	0-100	3° down
3	South	LTV	0-100	11° down
	West	Forest	0-60	Level
		LTV	60-100	16° down
	North:	Forest	0-100	11° up
	Northeast:	Forest	0-20	12° up
		Grassland	20-55	13° up
		Forest	55-100	14° up
4	East:	Forest	0-100	Level
	South:	Forest	0-20	9° down
		LTV	20-100	
		Forest	55-65	
	West:	Grassland	0-10	8° down
		LTV	10-100	

Table 1: Site Assessment



NOTE: The vegetation identified above has been assessed in consideration of *Table 2.3* and *Figures 2.4 (A)-(H), AS 3959:2018* as follows

The majority of the vegetation within the subject property consisted of eucalypts, 5-15 metres in height, with an understory of smaller trees and shrubs with a foliage coverage of >30% and is assessed in accordance with *Figure 2.4(B)* as *Open Forest A-03* resulting in a vegetation classification of **A: Forest**. The vegetation within the reminder of the allotment consisted of grasses that were more than 100 mm in height and have been assessed in accordance with *Figure 2.4(H)* as *Closed Tussock Grassland G-21* resulting in a vegetation classification of **G: Grassland**.

To the south and west of the site was an extensive area of well-established residential allotments and several roads. The residential allotments included dwellings, sheds, accesses, and gardens. Baskerville Road to the south included grassed nature strips and a bitumen carriageway. Childs Drive, Clives Avenue, Alanah Court, Shelmore Drive, Tandara Court, and Wigram Court, to the west of the site consisted of grassed nature strips, grassed nature strips, and bitumen carriageways. As such the vegetation to the south and west has been classified as **Low Threat Vegetation** (LTV) in accordance with *Part 2.2.3.2 (e) & (f), AS 3959:2018*.



Vegetation Classification:

In consideration of vegetation classifications under *Table 2.3* and *Figures 2.4 (A)-(H), AS 3959:2018* and as detailed above, the predominant vegetation, separation distances from development site and slope under the classified vegetation is assessed as shown in Table 2 below:

Direction:	Vegetation Type:	Distance (m):	Slope:	Exclusions:	
	LOT 1				
North:	A: Forest	0-100	17° up	No	
East:	A: Forest	0-100	3° down	No	
South:	LTV	0-100	11° down	2.2.3.2 (e) & (f)	
West:	LTV	0-100	16° down	2.2.3.2 (e) & (f)	
		LOT 2			
North:	A: Forest G: Grassland	0-60 60-100	17° uр 10° up	No No	
East:	A: Forest	0-100	5° down	No	
South:	LTV	0-100	11° down	2.2.3.2 (e) & (f)	
West:	A: Forest LTV	0-28 28-100	Level 16° down	No 2.2.3.2 (e) & (f)	
		LOT 3			
North:	A: Forest G: Grassland	0-60 60-100	18° up 14° up	No No	
East:	A: Forest	0-100	3° down	No	
South:	LTV	0-100	11° down	2.2.3.2 (e) & (f)	
West:	A: Forest LTV	0-60 60-100	Level 16° down	No 2.2.3.2 (e) & (f)	
	LOT 4				
North:	A: Forest	0-100	11° up	No	
East:	A: Forest	0-100	Level	No	
South:	A: Forest LTV A: Forest	0-20 20-100 55-65	9° down	No 2.2.3.2 (e) & (f) No	
West:	G: Grassland LTV	0-10 10-100	8° down	No 2.2.3.2 (e) & (f)	





Image 8: Aerial image of assessed vegetation (Source The LIST)

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Image 9: Predominate vegetation to the north of site - A: Forest



Image 10: Predominate vegetation to the east of site - A: Forest

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Image 11: Predominate vegetation to the south of site - Low Threat Vegetation



Image 12: Predominate vegetation to the west of site – **Low Threat Vegetation** 16



Bushfire Attack Level (BAL):

Based on the predominant vegetation detailed above, and the separation distances available between the predominant vegetation and the development, the BAL applicable for a compliant building area within each lot has been determined from *Table 2.6, AS 3959:2018* as follows:

LOT	Direction	Vegetation	Slope	HMA per	Boundary
N°		Classification		Table 2.6	setback
	North	A: Forest	17° up	23-<32 m	8m ***
4	East	A: Forest	3° d	27-<38 m	0m **
I	South	LTV	11° d	N/A	0m
	West	LTV	16° d	N/A	0m
	North	A: Forest	17° up	23-<32 m	8m ***
C	East	A: Forest	5° d	34-<46 m	0m **
2	South	LTV	11° d	N/A	0m
	West	A: Forest	Level	23-<32 m	0m **
	North	A: Forest	18° up	23-<32 m	4m ++
3	East	A: Forest	3° d	27-<38 m	7m ++
5	South	LTV	11° d	N/A	0m
	West	A: Forest	Level	23-<32 m	0m **
4	North	A: Forest	11° up	23-<32 m	23m <<
	East	A: Forest	Level	23-<32 m	23m <<
4	South	A: Forest	9° d	34-<46 m	0m **
	West	G: Grassland	8° d	13-<19 m	0m

Table 2: Assessed Bushfire Attack Level for each lot

** Boundary setbacks are 0m as a result of clearing of the HMA required to the north and east for Lot 3 and within Lots 1, 2 & 3.

*** Boundary setback of 8m is required as a result of the bushfire threat associated with the vegetation on the northern side of the road within Lot 4.

++ A 20m HMA is to be established outside boundaries of Lot 3 to north and east to provide minimum setback to classified vegetation. A Part 5 Agreement will be required to ensure on-going management of this area.

<< Lot 4 is the balance area and has numerous possible building areas. This site currently has limited development potential due to its Rural zoning and disused

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quarry site in the east with the most likely building area to be as shown on the BHMP. This land is likely to be subdivided in the future subject to rezoning. Any future building areas will be considered at that time.



6. COMPLIANCE:

The site has been assessed as being within 100 metres of bushfire prone vegetation and compliance is assessed against the provisions of *C13.0, Bushfire Prone Areas Code* in the following manner:

C13.6.1 Provision of hazard management areas:

That subdivision provides for hazard management areas that:

- (a) facilitate an integrated approach between subdivision and subsequent building on a lot;
- (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and
- (c) provide protection for lots at any stage of a staged subdivision.

A1	Acceptable Solutions		
(a)	TFS or an accredited person certifies that there is an insufficient increase in		
	risk from bushfire to warrant the provision of hazard management areas as part		
	of a subdivision; or		
(b)	The proposed plan of subdivision;		
	(i) Shows all lots that are within of partly within a bushfire-prone area,		
	including those developed at each stage of a staged subdivision;		
	(ii) Shows the building area for each lot;		
	(iii) Shows hazard management areas between bushfire-prone vegetation		
	and each building area that have dimensions equal to or greater than,		
	the separation distances required for BAL-19 in Table 2.6 of Australian		
	Standard AS 3959:2018 Construction of buildings in bushfire-prone		
	areas; and		
	(iv) Is accompanied by a bushfire hazard management plan that		
	addresses all the individual lots and that is certified by the TFS or		
	accredited person, snowing nazard management areas equal to , or		
	greater than, the separation distances required for BAL-19 in Table		
	2.6 of Australian Standard AS 3959:2018 Construction of buildings in		
	bushtire-prone areas; and		
(C)	If hazard management areas are to be located on land external to the proposed		
	subdivision the application is accompanied by the written consent of the owner		
	of the land to enter into an agreement under section 71 of the Act that will be		
	registered on the title of the neighbouring property providing for the affected		
	land to be managed in accordance with the bushfire hazard management plan.		

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The proposed subdivision has been assessed as being compliant with the Acceptable Solutions (b) as follows.

- (i) The plan of subdivision shows all lots within or partly within a bushfire-prone area.
- (ii) The plan of subdivision shows compliant building areas for all proposed allotments.
- (iii) Each lot is capable of complying with the hazard management requirements of at least those required for BAL-19.
- (iv) The attached hazard management plan shows hazard management areas for each lot that are equal to or greater than the distances required for BAL-19.

Lots assessed as **BAL-19** are: LOTS: 1 - 4

Compliance with the requirements of C13.6.1(b)(iii) is dependent on the establishment of a Hazard Management Area within Lot 4 to provide sufficient separation between the building areas on Lots 1, 2 & 3 and the classified vegetation. In accordance with C13.6.1 A1(c), a Part 5 Agreement is to be registered on the titles to the lots to ensure the establishment and maintenance of this HMA in a low fuel condition. Establishment of this HMA is the responsibility of the developer and is to occur prior to the Council sealing of the Plan of Survey. On-going management is to be the responsibility of the owner of Lot 4. Provisions are to be contained within the Part 5 to permit dispensation of these requirements should that portion of Lot 4 be subdivided into residential allotments, or permanently maintained on a low fuel condition as a result of an approved use on the site.





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Hazard Management Area requirements (boundary setbacks)				
Direction	North	East	South	West
Lot 1	8m	0m	0m	0m
Lot 2	8m	0m	0m	0m
Lot 3	4m	7m	0m	0m
Lot 4	23m	23m	0m	0m
HMA establishment recommendations	4m 7m 0m 0m 23m 23m 0m 0m • Establishing non-flammable areas around the dwelling such as pat patios, driveway, lawns etc. • Locating dams, orchards, vegetable garden, effluent disposal areas on the bushfire prone side of the building. • Providing heat shields and ember trap on the bushfire prone side of 1 dwelling such as non-flammable fencing, hedges, separated gard shrubs and small tress, • Store flammable materials such as wood piles, fuels and rubbish heat are stored away from the dwelling. • Replace highly flammable vegetation with low flammability species. S Tasmanian Fire Service web site (www.fire.tas.gov.au) publications - F resisting garden plants. • Provided separation between significant trees such that groups are greater than 20 metres in width, and more than 20 metres of the otl groups of significant trees. Note that the retention of some trees or screen a dwelling from windborne embers. • Trim lower branches of retained trees to a minimum of 2 metres abor ground level. • Strips of vegetation less than 20 metres in width and not within 20 met of the site or other areas of bushfire-prone vegetation may be benefitias an ember trap, wind breaks etc.		ling such as paths, t disposal areas etc re prone side of the separated garden and rubbish heaps ability species. See u) publications - Fire that groups are no metres of the other of some trees can of 2 metres above not within 20 metres n may be beneficial branches etc.	
 Ongoing Management practices Slash or mow grasses to less than 100 mm. Remove dead and fallen vegetation including branches, bark and regularly. Trim any regrowth branches of retained trees within HMA that a than 2m above ground level 		es, bark and leaves HMA that are less		

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C13.6.2 Subdivision: Public and fire fighting access

That access roads to, and the layout of roads, tracks and trails, in a subdivision:

- (a) allow safe access and egress for residents, firefighters and emergency service personnel;
- (b) provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;
- (c) are designed and constructed to allow for fire appliances to be manoeuvred;
- (d) provide access to water supplies for fire appliances; and
- (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.

A1	Acceptable solutions		
(a)	TFS or an accredited person certifies that there is insufficient increase in risk		
	from bushfire to warrant specific measures for public access in the subdivision		
	for the purposes of fire fighting; or		
(b)	A proposed plan of subdivision showing the layout of roads, fire trails and the		
	location of property access to building areas is included in a bushfire hazard		
	management plan that;		
	(i) demonstrates proposed roads will comply with Table E1, proposed		
	private accesses will comply with Table E2 and proposed fire trails will		
	comply with Table E3; and		
	(ii) is certified by the TFS of an accredited person.		

The proposed subdivision has been assessed as being compliant with the Acceptable Solutions (b) as follows.

- (i) The attached plan of subdivision shows the layout of roads, fire trails and the location of the property accesses to the building areas in compliance with *Table C13.1, Table C13.2* and *Table C13.3.* Note variation in turning area in accordance with *C13.6.2 P1.*
- (ii) This bushfire hazard report and attached bushfire hazard management area plan has been certified by N.M. Creese, an accredited bushfire practitioner BFP-118, scope 1 ,2 ,3A, 3B & 3C.

The development requires the construction of a short extension to the Alanah Court carriageway and is to comply with the requirements of *Table C13.1*. A temporary turning head at the end of Alanah Court is installed. Due to site constraints, a 'Y' turning area is proposed in accordance with *C13.6.2 P1*.

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P1	Performance Criteria
A p veh reg	roposed plan of subdivision shows access and egress for residents, fire-fighting icles and emergency service personnel to enable protection from bushfires, having ard to appropriate design measures, including:
(a)	A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to: appropriate design measures, including: (i) two way traffic; (ii) all weather surfaces; (iii) height and width of any vegetation clearances; (iv) load capacity; (v) provision of passing bays; (vi) traffic control devices; (vii) geometry, alignment and slope of roads, tracks and trails; (viii) use of through roads to provide for connectivity; (ix) limits on the length of cul-de- sacs and dead-end roads; (x) provision for parking areas; (xi) provision for parking areas; (xii) perimeter access; and (xiii) fire trails; and
(b)	 the provision of access to: (i) bushfire-prone vegetation to permit the undertaking of hazard management works; and (ii) fire fighting water supplies; and
(C)	Any advice from the TFS

Due to the limitations associated with slope in the vicinity of the termination of the new road, a variation on the design of the turning area is proposed. A 'Y" design turning area has been designed by the engineer to facilitate a 3 point turn of a standard medium-rigid fire appliance. This area is to be of a compacted gravel formation and lies within the proposed road corridor extension and will be transferred to the Brighton Council in conjunction with the extension of the sealed portion of Alanah Court. Improved separation between the turning area and the unmanaged vegetation on the down-slope side is facilitated through the creation of the HMA within Lot 4 to the east of Lot 1 which is to be maintained in a low fuel condition in accordance with the requirements of this report. The turning area lies within an area proposed for a future subdivision road extending to the east and north (subject to rezoning and Council approval) which will provide for connector roads to land to the north, and additional turning areas.

Table	Table C13.1 Standards for Roads			
Elem	nents	Requirement		
A	Roads	Unless the development standards in the zone require a higher standard, the following apply; (a) Two-wheel drive, all-weather construction; (b) Load capacity of at least 20t, including for bridges and culverts;		

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(c) Minimum carriageway width is 7m for through road, or
5.5m for dead-end or cul-de-sac road;
(d) Minimum vertical clearance of 4m;
(e) Minimum horizontal clearance of 2m from the edge of the carriageway;
(f) Cross falls of less than 3 degrees (1:20 or 5%);
(g) Maximum gradient of 15 degree (1:3.5 or 28%) for sealed
roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;
(h) Curves have a minimum inner radius or 10m;
(i) Dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;
(j) Dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and
(k) Carriageways less then 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS 1743-2001 road signs-
Specifications.

New private accesses must be constructed from the edge of the turning area to the property boundaries of the lots in compliance with *Table C13.2*. Access to the building areas on each lot is less than 30m in length and is to comply with the requirements of *Element A, Table C13.2*. No standards apply.

Should an access exceed 30m in length, access is to comply with the requirements of *Element B, Table C13.2.* Where this occurs, construction of the access to the building area and on-site turning is not required at the time of subdivision however is to be installed at the time of development of a building required to comply with the standards.

Tabl	Table C13.2 Standards for Property Access			
Elen	nents	Requirement		
A	Property access length is less than 30m; or access in not required for a fire appliance to access a firefighting water point	There are no specified design and construction requirements.		
В	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	 The following design and construction requirements apply to property access; (a) All-weather construction; (b) Load capacity of at least 20t, including for bridges and culverts; (c) Minimum carriageway width of 4m; (d) Minimum vertical clearance of 4m; (e) Minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) Cross falls of less than 3 degrees (1:20 or 5%); 		



		 (g) Dips less than 7 degrees (1:8 or 12.5%) entry and exit angles; (h) Curves with a minimum inner radius of 10m; (i) Maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and (j) Terminate with a turning area for fire appliances provided by one of the following; (i) A tuning circle with a minimum outer radius of 10m; or (ii) A property access encircling the building; or (iii) A hammerhead 'T' or 'Y' turning head 4m wide and 8m long. 	
С	Property access length is 200m or greater.	The following design and construction requirements apply to property access: (a) The requirements of B above; and (b) Passing bays of 2m additional carriageway width and 20m length provided every 200m.	
D	Property access length is greater than 30m, and access is provided to 3 or more properties.	The following design and constructions requirements apply to property access: (a) Complies with requirement b above; and (b) Passing bays of 2m additional carriageway width and 20m length must be provided every 100m.	



C13.6.3 Provision of water supply for fire fighting purposes

That an adequate, accessible and reliable water supply for the purposes of fire fighting can be demonstrated at the subdivision stage to allow for the protection of life and property associated with the subsequent use and development of bushfire-prone areas.

In a	In areas serviced with reticulated water by the water corporation		
A1	Acceptable solutions		
(a)	TFS or an accredited person certifies that there is an insufficient increase in risk		
	from bushfire to warrant the provision of a water supply for fire fighting purposes;		
(b)	A proposed plan of subdivision showing the layout of fire hydrants, and building		
	areas, is included in a bushfire hazard management plan approved by the TFS or		
	accredited person as being compliant with Table E4; or		
(C)	A bushfire hazard management plan certified by the TFS or an accredited person		
	demonstrates that the provision of water supply for fire fighting purposes is		
	sufficient to manage the risks to property and lives in the event of a bushfire.		

In accordance with *Acceptable Solution A1(b)* all lots are assessed as being within a bushfire prone area and must be provided with a fire fighting supply of water from a reticulated supply in compliance with the provisions of *Table C13.4, E1.6.2,* the *Code* as follows:

Та	Table C13.4 Reticulated water supply for Fire Fighting				
Element		Requirement			
A	Distance between buildings area to be protected and water supply	 The following requirements apply: (a) The building area to be protected must be located within 120m of a fire hydrant; and (b) The distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area. 			
B	Design criteria for fire hydrants	 The following requirements apply: (a) Fire hydrant system must be designed and constructed in accordance with TasWater Supplements to Water Supplement to Water Supply Code of Australia WSA 03-2001-3.1 MRWA 2nd Editions; and (b) Fire hydrants are not installed in parking areas. 			
С	Hardstand	 A hardstand area for fire appliances must be: (a) No more the 3m from the hydrant, measured as a hoselay; (b) No closer than 6m from the building area to be protected; (c) A minimum width of 3, constructed to the same standard as the carriageway; and (d) Connected to the property access by a carriageway equivalent to the standard of the property access. 			

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The building area within each allotment has been identified as being within a 120metre hose lay of the proposed fire hydrant located in Alanah Court in compliance with *Table C13.4*.

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LARK & CREESE

62 Channel Highway, Kingston 7050 Ph 6229 6563 info@larkandcreese.com.au Version 3.1 15th October 2020



7. CONCLUSIONS & RECOMMENDATIONS:

This Bushfire Hazard Report and Bushfire Hazard Management Plan have been prepared to support application for planning approval for a subdivision at 10 Alanah Court, Old Beach. The report has reviewed the bushfire risks associated with the site, and determined the fire management strategies that must be carried out to ensure the development on the site is at reduced risk from bushfire attack.

Provided the elements detailed in this report are implemented, the development on the site is capable of compliance with *AS 3959:2018* and *C13.6 Bushfire-Prone Areas Code* and any potential bushfire risk to the site is reduced.

The proposed lots have been assessed as compliant with bushfire attack levels (BAL) detailed in Table 2. The Council approval issued for the development should contain conditions requiring that the protective elements defined in this report and *C13.6*, *Bushfire-Prone Areas Code* be implemented during the construction phase. Any new building required to comply with this assessment must be constructed to the bushfire attack level described in Table 2, within the prescribed building areas noted on the Bushfire Hazard Management Plan. Should the extent or classification of the bushfire prone vegetation surrounding the site alters from that assessed by this report, building on the lots affected by this variation may be constructed to a lower level subject to the preparation of a revised assessment.

Lot No.	Compliant BAL
1 - 4	BAL-19

Table 3: Compliant BA	AL for each lot
-----------------------	-----------------

- Each lot contains a building area with minimum setbacks required for BAL-19 in accordance with *C13.6.1 Provision of hazard management areas*. Hazard Management Areas are to be established at the time of subdivision with on-going management to be the responsibility of each lot owner. A Part 5 Agreement is to be established to require management of the HMA within Lot 4 to the east and north of Lot 3 in a low fuel condition. This area is to be established at the time of subdivision with on-going management to be the responsibility of each lot owner.
- The new public road is to comply with the requirements of *Table 13.1 Standards for Road.* This is to include a temporary turning area at the end of Alanah Court. Private accesses are to be constructed from Alanah Court to the boundary of each property in accordance with *Table C13.2 Property Access*.
- A fire hydrant is proposed within the Alanah Court Road Reserve and is to comply with the requirements of *Table C13.4. Reticulated water supply for fire fighting.*

All works required by this report are to be completed prior to the Council sealing the final Plan of Survey unless noted otherwise.

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Although not mandatory, any increase in the construction standards above the assessed Bushfire Attack Level will afford improved protection from bushfire and this should be considered by the owner, designer and/or builder prior to construction commencing.

Hazard Management Areas must be established and maintained in a minimal fuel condition in accordance with this plan and the TFS guidelines. It is the owner's responsibility to ensure the long-term maintenance of the hazard management areas in accordance with the requirements of this report.

This report does not recommend or endorse the removal of any vegetation within or adjoining the site for the purpose of bushfire protection without the explicit approval of the local authority.

N M Creese Bushfire Hazard Practitioner BFP-118 Scope 1, 2, 3A, 3B & 3C





8. REFERENCES:

- AS 3959:2018 Construction of Buildings in Bushfire Prone Areas.
- Tasmanian Planning Scheme Brighton.
- The LIST Department of Primary Industry Parks Water & Environment.

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9. GLOSSARY

AS 3959:2018	Australian Standards AS 3959:2018 Construction of buildings in bushfire-prone areas.
BAL (Bushfire Attack Level)	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per metre squared, and the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire. The following BAL levels, based on heat flux exposure threshold are used within AS3959:2018; BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40, BAL-FZ.
Bushfire	An unplanned fire burning vegetation.
Bushfire Hazard Management Plan	A plan showing means of protection from bushfire in a form approved in writing by the Chief Officer.
Bushfire-Prone Area	An area that is subject to, or likely to be subject to, bushfire attack. Land that has been designated under legislation; or
	Has been identified under environmental planning instrument, development control plan or in the course of processing and determining a development application.
Carriageway (also vehicular access)	The section of the road formation which is used by traffic, and includes all the area of the traffic lane pavement together with the formed shoulder.
Classified vegetation	Vegetation that has been classified in accordance with Clause 2.2.3 of AS3959:2018.
Distance to	The distance between the building, or building area to the classified vegetation.
FDI (Fire Danger Index)	The chance of a fire starting, its rate of spread, its intensity and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both long- and short-term drought effects.
Fire Fighting Water Point	Means the point where a fire appliance is able to connect to a water supply for fire fighting purposes. This includes a coupling in the case of a fire hydrant, offtake or outlet, or the minimum water level in the case of a static water body (including a dam, lake or pool).
Gradient under	The slope of the ground under the classified vegetation.
Hazard Management Area	The area between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for fire fighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.
Hose lay	The distance between two points established by a fire hose laid out on the ground, inclusive of obstructions.
Predominate vegetation	The vegetation that poses the greatest bushfire threat to the development site.
Water supply - Reticulated (Fire hydrant)	An assembly installed on a branch from a water pipeline, which provides a valved outlet to permit a supply of water to be taken from the pipeline for fire fighting.
Water supply - Static	Water stored on a tank, swimming pool, dam, or lake, that is available for fire fighting purposes at all times.

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BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993

1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

Street address:

10 ALANAH COURT, OLD BEACH

Certificate of Title / PID:

C.T. 184468/11 PID 2270100

2. Proposed Use or Development

Description of proposed Use and Development:

SUBDIVISON

Applicable Planning Scheme:

TASMANIAN PLANNING SCHEME - BRIGHTON

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
SUBDIVISON PROPOSAL	Lark & Creese Pty Ltd	21/12/2023	50444-02
BUSHFIRE HAZARD REPORT	N.M. Creese	21/12/2023	50442-02

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

The following requirements are applicable to the proposed use and development:

E1.4 / C13.4 – Use or development exempt from this Code	
Compliance test	Compliance Requirement
E1.4(a) / C13.4.1(a)	Insufficient increase in risk

E1.5.1 / C13.5.1 – Vulnerable Uses	
Acceptable Solution	Compliance Requirement
E1.5.1 P1 / C13.5.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
E1.5.1 A2 / C13.5.1 A2	Emergency management strategy
E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan

E1.5.2 / C13.5.2 – Hazardous Uses	
Acceptable Solution	Compliance Requirement
E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.
E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas		
	Acceptable Solution	Compliance Requirement	
	E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk	
V	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')	
	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement	

	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access					
	Acceptable Solution	le Solution Compliance Requirement				
\mathbf{N}	E1.6.2 P1 / C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1. (TURNING AREA ONLY)				
	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk				
	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables (EXCLUDING TURNING AREA)				

	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes						
	Acceptable Solution	Compliance Requirement					
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk					
Ŋ	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table					
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective					
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk					
	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table					
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective					

5. Bushfire Hazard Practitioner							
Name:	NICHOLAS MARK CREESE	Phone No:	62296563				
Postal Address:	62 CHANNEL HIGHWAY KINGSTON, TAS, 7050	Email Address: info@larkandcreese.com.au					
Accreditati	on No: BFP – 118	Scope:	1, 2, 3A, 3B, 3C				

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 1979* that the proposed use and development:

Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or

✓ The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate
 ✓ is/are in accordance with the Chief Officer's requirements and compliant with the relevant Acceptable Solutions identified in Section 4 of this Certificate.

Signed: certifier							
Name:	N.M. Creese	Date:	21/12/2023				
		Certificate Number:	50442-02				
		(for Practition	ner Use only)				



Amended Submission to Planning Authority Notice

Council Planning Permit No.	SA 2023 / 00019		Cou	ncil notice date	31/07/2023		
TasWater details							
TasWater Reference No.	TWDA 2023/01014-BTN		Date Ame	e of response ended date	28/02/2024 18/06/2024		
TasWater Contact	Jake Walley	e Walley Phone No.			0467 625 805		
Response issued to							
Council name	BRIGHTON COUNCIL						
Contact details	development@brighton.tas.gov.au						
Development details							
Address	10 ALANAH CT, OLD BEACH			Prop	perty ID (PID)	9352107	
Description of development	Subdivision - 3 Lots + Balance (CT 184468/11)						
Schedule of drawings/documents							
Prepare	ed by	Drawing/document No.			Revision No.	Date of Issue	
Integral Consulting	Engineers	22190 Sheet (C03b		E	21/05/2024	
Conditions							

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater imposes the following conditions on the permit for this application:

CONNECTIONS, METERING & BACKFLOW

- 1. A suitably sized water supply with metered connection and sewerage system and connection to each lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
- 2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
- 3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

ASSET CREATION & INFRASTRUCTURE WORKS

- 4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.
- 5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and sewerage to TasWater's satisfaction.
- 6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
- 7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
- 8. Prior to the issue of a Certificate of Water and sewerage Compliance (Building and/or Plumbing) all



additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development, are to be completed generally as shown on, and in accordance with, the plans listed in the schedule of drawings/documents, and are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.

- 9. After testing/disinfection, to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
- 10. At practical completion of the water and sewerage works and prior to applying to TasWater for a Certificate of Water and Sewerage Compliance (Building and/or Plumbing), the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
 - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved.
 - b. A request for a joint on-site inspection with TasWater's authorised representative must be made.
 - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee.
 - d. Work As Constructed drawings and documentation must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.

Upon TasWater issuing a Certificate of Practical Completion, the newly constructed infrastructure is deemed to have transferred to TasWater.

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- 12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
- 13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
- 14. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

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<u>Advice:</u> Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

- 16. Pipeline easements, to TasWater's satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater's standard pipeline easement conditions.
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The developer must locate the existing TasWater infrastructure and clearly show it on the .dwg file. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost.

DEVELOPMENT ASSESSMENT FEES

18. The applicant or landowner as the case may be, must pay a development assessment fee of \$389.86 and a Consent to Register a Legal Document fee of \$248.30 to TasWater, as approved by the Economic Regulator and the fee will be indexed, until the date paid to TasWater.

The payment is required within 30 days of the issue of an invoice by TasWater.

Advice General

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(a) a meter; and

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Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

TasWater Contact Details



Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au



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Response issued to							
Council name	BRIGHTON COUN	CIL					
Contact details	development@bi	development@brighton.tas.gov.au					
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TasWater Contact Details



Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au



30150_50441_04 ATTACHMENT 3 AGENDA ITEM 6.1

NATURAL VALUES ASSESSMENT



10 ALANAH COURT, OLD BEACH

For

THINKING OF MARKETING PTY LTD

SEPTEMBER 2024

LARK & CREESE PTY LTD D. Summers (BAppsc)



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1. Summary

The following is an assessment of the natural values within a 2150m2 study site, 10 Alanah Court, Old Beach (C.T.184468/11) on behalf of Thinking of Marketing Pty Ltd. Currently, the property is classified as General Residential (Zone Number 8) and Rural (Zone Number 20), as listed under the Tasmanian Planning Scheme (TPS). This report assesses the possible impacts of the proposed works on existing ecological functions and potential natural values within the proposed development footprint to assist local, State and Commonwealth agencies during the assessment process. The study site was assessed by Doug Summers, 11 July 2024.

Legislative Implications

Threatened Flora

- No threatened plant species listed under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* had previously been recorded on site or, at the time of assessment,
- Assessment indicates previous land use and vegetation management practices have resulted in some modification within the 2150m2 study. However, native vegetation within the site represents potential habitat values for the Broadleaf New Holland Daisy and Double jointed speargrass recorded within 5km of the site,
- Whilst the proposal is likely to result in a loss of potential habitat values for threatened flora species identified, it is unlikely the scale of disturbance will result in a significant loss of potential habitat for threatened flora species identified. No further assessment or permit under Section 51 of Tasmania's *Threatened Species Protection Act 1995*. No formal referral to the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

Vegetation Communities

- TASVEG 4.0 classify vegetation within the allotment as *Bursaria / Acacia* woodland/forest (NBA),
- At the time of assessment, flora surveys found the vegetation structure and species composition occupying the allotment are consistent with TASVEG 4.0 NBA classification. No DVG was recorded within the allotment,
- Site plans indicate the proposal will require the removal of approx. 2150m2 of NBA veg community. NBA is not listed as a threatened vegetation community under Schedule 3A of Tasmania's *Nature Conservation Act 2002*. No further assessment or permit required under *Nature Conservation Act 2002* or *Land Use Planning and Approvals Act 1993*.

Threatened Fauna

- Two observations of Tasmanian Devils were recorded within 500m of the site. One burrow recorded. Assessment by N. Mooney concluded the burrow was not a natal den, potentially occupied by a variety of species (echidna, rodents, rabbits and possibly the southern potoroo) but also indicates there is a possibility the burrow is used as occasionally as a layup by dispersing immature devil or quoll. Whilst the proposal will impact potential habitat values, it is anticipated the proposal will result in disturbance only, and not result in a significant loss of core or priority denning habitat. Post construction pressure such as domestic pets can potentially cause further disturbance or displacement for these species and non-threatened species. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*,
- The site is within Swift Parrott Important Breeding Area. No core foraging habitat recorded (*Eucalyptus globulus & E. ovata*). Assessment for potential nesting habitat (nesting hollows) did not record eucalypts exceeding 70cm diameter at breast height (dbh). Therefore, it is anticipated no further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*,



- The proposed development site is within range boundaries for the Eastern-barred Bandicoot. Assessment indicates proposed works will impact potential foraging habitat for these species but not expected works will result in a significant loss of potential foraging or refuge habitat for these species. Post construction pressure such as domestic pets can potentially cause further disturbance or displacement for these species and non-threatened species. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*,
- A survey for potential Masked owl nesting habitat did not record any eucalypts >70cm dbh. The proposal is not expected to result in loss of potential nesting or roosting habitat for this species. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the *Commonwealth's Environment Protection and Biodiversity Conservation Act 1999*,
- Site assessment indicates vegetation within the study site represents a Nil likelihood of suitable nesting habitat for the Tasmanian Wedge-tailed eagle and White-bellied sea eagle or Grey Goshawk. No nests recorded nests within 500m or 1km line of sight. Unlikely the proposal will disturb breeding or nesting activity within 5km of the site. No referral or further assessment is required under Tasmania's *Threatened Species Protection Act 1995* or the *Commonwealth's Environment Protection and Biodiversity Conservation Act 1999*,
- Whilst the proposal is likely to impact potential foraging habitat for threatened fauna, it is unlikely the proposal will result in a significant loss or likely to exceed the *Significant Impact Guidelines* for threatened fauna recorded within 5km of the site. No further assessment or permit under Section 51 of Tasmania's *Threatened Species Protection Act 1995*. No formal referral to the Commonwealth's Department of Environment under *Significant Impact Guidelines* necessary. No further assessment or referral required under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*.

Weed Management

• Boneseed recorded within the study site is listed as a 'Declared' weed and a Weed of National Significance under Tasmania's *Weed Management Act 1999*. Landowners have a legislative responsibility to manage Boneseed within the allotment in accordance with the Statutory Weed Management Plan for Boneseed. Given the presence of this invasive weed species, it is recommended best hygiene practice mechanisms are implemented prior to commencement of works to ensure management objectives to control and contain are achieved.

Planning implications

C7.0 Natural Assets Code

Assessment indicates the removal of native vegetation to facilitate development will trigger provisions within the TPS and Brighton Local Planning Provisions C7.0 Natural Assets Code. It appears the works do not comply with Acceptable Solutions. However, assessment indicates that future development within the Natural Assets Values Code Performance Criteria P1 & P2.1 for Alternative solutions.

General

Assessment by a specialist ecologist (N. Mooney) found the burrow recorded was not occupied at the time of assessment and unlikely to represent a natal den for the Tasmanian devil or quoll species. Whilst the proposal will impact the burrow and surrounding habitat values, N. Mooney assessment indicates the burrow is not considered a significant habitat for these species. Therefore, it is expected proposal will not:

- Significantly impact critical or quoll or devil habitat values,
- Lead to a long-term decrease in the size of populations, reduce area of occupancy of a significant population, fragment an existing population or destroy habitat critical to the survival of species,
- Disrupt the breeding cycle of an important population,
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.



As such, it is unlikely the proposal will result in "significant impacts" to potential Tasmanian devil habitat as described in the EPBC Act. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or Commonwealth's *Environmental Protection Biodiversity Conservation Act 1999*.

Management prescriptions to address the construction phase of the development and potential future works or land use should include:

- Prior to commencement of works implement a hygiene management plan including in accordance with *Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment* (*Edition 1, 2004*) ensuring contractors have washed down vehicles and machinery to prevent accidental importation of new weed species and *Phytophthora cinnamomi* and other plant pathogens during the construction phase.
- Implement the Statutory Weed Management Plan for Boneseed. Ensure all weed material is disposed of in accordance with Management Act. Unlikely hygiene facility for vehicles/machinery existing the site required,
- Prior to commencement of works implement a Soil & Water management plan following guidelines set out in Environmental Best Practice Guidelines for all development detailing location for fencing, locations of temporary stockpile sites for waste material, construction material and parking,
- Stage removal of vegetation to avoid blanket clearance and avoid any unnecessary traffic outside the development footprint.



2. Proposal

Purpose

The owner and proponent engaged Lark and Creese to detail the ecological values supported within a small area of land within Alanah Court, Old Beach (C. T. 184468/11) as part of a subdivision development application to the Brighton Council for the construction of a 3 lot subdivision and associated turning head to assist local, State and Commonwealth agencies during the assessment process. The study site was assessed by Doug Summers 11 July 2024.

Scope

The survey focuses on impacts within the study site, 10 Alanah Court, Old Beach (C. T. 184468/11), assessing the proposed access corridor and development site, including:

- Potential threatened flora and fauna habitat values including species of conservation significance within the development footprint and implications regarding the Tasmanian *Threatened Species Protection Act* 1995 and the Commonwealth *Environmental Protection and Biodiversity Conservation Act* 1999,
- Vegetation types within the study site including descriptions on the distribution, condition composition and conservation significance of vegetation types and conservation status under Local, State and Commonwealth policy and legislation,
- Impact on surrounding vegetation communities and natural values, and
- Demonstrate the site has capacity to accommodate proposed development / works.

Site description

The small 2150m2 study site currently supports two zones. The western boundary supports some road formation is zoned General Residential (Zone Number 8). The 2150m2 study site allotment is zoned Rural Zone Number 20) under TPS. This eastern section zoned Rural is also subject to Schedule Specific Area Plan: Old Beach Quarry Specific Area Plan, Local Planning Scheme Ref Number Clause BRI-S5.0 and boarded by similarly zoned allotments to the east and south with land to the north and west zoned General Residential (Centre coordinates (519031E, 5259389N, GDA2020, MGA55).

Aboriginal Cultural heritage

A desktop assessment of the site using the Aboriginal Heritage Register (PS0337839, 17th July, 2024)) indicates no Aboriginal or Cultural Heritage sites have been identified or documented within the study site.

Geology

A desktop assessment (Listmap geological layer – Geology Units 250K) indicates the proposed development site supports a geology described as Late Carboniferous to Triassic sedimentary sequences of Lithic sandstone, siltstone and mudstone with some coal and basal quartz sandstone. A desktop survey (LISTmap) found no geomorphic conservation features or geoconservation sites within the property.

Limitations

The natural values assessment of the proposed access and subdivision footprint identified by designers/proponents was undertaken in July 2024. Every effort was made to sample the range of habitats within the study site. Many plant species have seasonal growth and flowering, patchy distribution. During the flora and fauna survey it is possible some species were missed, particularly grass species, and not recorded at time of survey. Whilst every effort was made to survey the range of habitat to overlap likelihood occurrence. Optimum survey times are usually spring to summer, however their potential for occurrence is discussed. The survey was also limited to vascular plant species and did not include mosses, lichens and fungi. Surveys for threatened fauna were limited to the likelihood of species the study site represented potential range habitat and the identification of tracks, scats and other signs.





Figure 1 - Locality map of study site, 10 Alanah Court, Old Beach (C.T.184468/11).



Figure 2 – Image of 2150m² study site, subdivision site plan, 10 Alanah Court, Old Beach



3. Flora Assessment

Methodology

Survey methodology is based on 'Site Examination for Threatened and Endangered Plant Species' supported by methodology outlined in "Manual for Assessing Vegetation Condition in Tasmania". The report also specifically addresses possible environmental issues that may arise under the Tasmanian Planning Scheme (TPS) particularly in relation to the Biodiversity Code. Vegetation classification is in accordance with TASVEG 4.0, as described in '*From Forest to Fjaeldmark: Descriptions of Tasmania's vegetation* (Kitchener & Harris 2013).

Vascular plant species nomenclature is consistent with de Salas & Baker (2014) for scientific names. Fauna species scientific and common names is in accordance with fauna listed in the *Natural Values Atlas* report for the site (NRE). Any features surveyed measured using Trimble R12(i) RTK GNSS, GDA94, MGA55.

Initial assessment

A desktop assessment of natural values data bases recording of flora and fauna listed as threatened under the *Threatened Species Protection Act 1995* and *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*, vegetation communities listed under Tasmania's Nature Conservation Act 2002 including additional conservation values. Remote assessment resources using:

- The LIST (Land Information Systems Tasmania), Department of Natural Resources and Environment, Tasmania,
- Department of Natural Resources and Environment's *Natural Values Atlas Report (10 Alanah Court, Old Beach 7/3/2024,)* 5km search radius 523141E, 5264120N, GDA94, MGA55,
- TASVEG 4.0 vegetation classification, Land Information Systems Tasmania, Department of Natural Resources and Environment, Tasmania,
- Forest Practices Authority's *Biodiversity Values Database* generated report, 5km search radius 523137E, 5264119N, GDA94, MGA55,
- Commonwealth Department of the Environments' *Protected Matters Search Tool*. 5km search radius 523141E, 5264120N, GDA94, MGA55, Report created 12-Jul-2024.

Site assessment

Site assessment was conducted on the 11 July 2024 See Figure 3 for location of 2150m2 study site and vegetation condition assessment boundary. No vascular plant species listed under Schedule 3, 4 or 5 of the *Threatened Species Protection Act 1995* or listed in the *Commonwealth Environment Protection & Biodiversity Conservation Act 1999* have previously been recorded on site, or at the time of assessment. Assessment of the proposal impacts against the planning provisions in the TPS, *Threatened Species Protection Act 1995* and *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*. Assessment of habitat values and vegetation type including small scale surveys of disturbed sites, differences due to geology, drainage, hilltops and ridgeline outcrops. Maps were generated from LISTmap & Google Earth. Vegetation mapping (TASVEG 4.0 & Natural Values Atlas).

Land use

Whilst the history of land use and management of vegetation within the study site is unclear. Land to the north is an old quarry and significantly disturbed. The study site is within the attenuation zone of the quarry. At the time of assessment, the study site was in a near natural state however, weed species are well established throughout.

Flora assessment objectives

- Broad scale habitat value and vegetation type assessment,
- Small scale assessment such as disturbed sites, open areas, existing tracks, variations due to geology, elevated outcrops, and areas with poor drainage,



• Assessment of the proposal impacts against the planning provisions in the TPS, *Threatened Species Protection Act 1995* and *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*.

Native vegetation communities

Desktop Vegetation type & Classification

The 2150m2 study site is defined by proposed tenure boundary. Generally, study sites would be a minimum 1ha however, surrounding vegetation will provide context for vegetation type and condition. TASVEG 4.0 classify vegetation within the study site as *Bursaria - Acacia* woodland (NBA). TASVEG 4.0 vegetation classification and mapping was undertaken mainly using a desktop analysis based on aerial photography and can differ from site assessment vegetation mapping, particularly at a small scale. However, TASVEG 4.0 can be useful in determining and understanding the potential range of habitat values that could be present.



Figure 3 – Image showing TASVEG 4.0 distribution of vegetation communities surrounding and within the subject property. Agricultural / Modified land (FAG), Extra – Urban miscellaneous (FUM), Urban land (FUR), dry *Eucalyptus viminalis* woodland on sediments (NBA), dry *Eucalyptus viminalis* woodland grassy facies (NBA), *Bursaria - Acacia* woodland (NBA) (REF: LISTmap).

On-site Vegetation type & Classification

Flora surveys found previous land use and topography within the allotment have dictated the distribution of native vegetation types and classification that occupies the 2150m2 study site. The has a south to south-east aspect with gradients in the order of 10-15°. Assessment indicates previous land use and management has resulted in an alteration of landform.



Site assessment and that of surrounding bushland indicates the vegetation community is generally consistent with TASVEG 4.0 classification *Bursaria spinosa / Acacia dealbata- A. mearnsii* woodland (NBA). However, *Eucalyptus viminalis* is the dominant emergent canopy species with *Bursaria spinosa / Acacia dealbata- A. mearnsii* and *Exocarpos cupressiformis* sparse.

Generally, the understorey in NBA is typically grassy with 70% coverage dominated by *Themeda triandra* and *Rytidosperma* species. However, the grass layer was sparse and patchy with no *Themeda triandra* recorded. Other species included *Poa labillardierei*, *Austrostipa sp flavescens* and graminoids *Lepidosperma spp*. The ground cover included sparse *Astroloma humifusum*.

Eucalyptus viminalis is generally not present in the canopy of NBA vegetation community as per description in *From Forest to Fjaeldmark* - Kitchner & Harris 2013. Dry *E. viminalis* grassy woodland/forest is characteristically low to medium height (15-2-) open grassy forest dominated by *E. viminalis*. The understorey is generally grassy with low shrubs sparse. The structure and species composition can depend on fire regimes (Kitchner & Harris 2013). Despite the presence of *E. viminalis* within the canopy and DVG community identified to the south-east, it is unlikely the vegetation occupying the small study site could be considered dry *E. viminalis* woodland/forest grassy facies vegetation community. In addition, the vegetation is not consistent with Lowland grassland community identified to the north-east.

Table 1 – Assessment	of vegetation	within	the	study	site	against	benchmarks	for	Bursaria	A	lcacia
woodland (NBA) vegeta	tion communit	у.									

Understorey Life Forms	LF	Benchmark	Recorded #	Benchmark	Recorded
	Code	# spp	spp	Cover (%)	Cover (%)
Immature Canopy tree	ICT	1	1	5	
Tree (sub-canopy) / Large Shrub	Т	3	4	5	
Medium / Small shrub	S	6	4	15	
Prostrate and Mat forming shrubs	PS	3	2	5	<5
Herb and Orchids	Η	12	9	5	>5
Grasses	G	6	4	50	25
Large Sedge/Rush/Sagg/Lily	LSR	3	1	15	15
Medium to Small	MSR	1	1	5	5
Sedge/Rush/Sagg/Lily					
Ground Fern and fern allies	GF	1	1	5	<5
Scramblers/Climbers/Epiphytes	SCE	1	1	5	<5
Mosses and Lichens	ML	1	2	5	>5





Figure 4 – Image of typical grassy understorey structure and species composition within the study site.



Figure 5 – Image showing typical understorey structure and species composition near the southern boundary of the study site.





Figure 6 – Image showing mosaic of *Lepidosperma laterale* and grasses within the study site.



Figure 7 – Image showing typical sparse vegetation structure within the proposed works site.



4. Introduced Plants

Boneseed recorded within the study site is listed as a Declared weed species and a Weed of National Significance (WoNS) under the Tasmanian *Weed Management Act 1999*. Spear thistle rosettes were recorded within a disturbed site and whilst generally associated as an Agricultural weed, when established, thistles can become an environmental weed.

Given the site supports a 'Declared' and WoNS it is important best hygiene practice / management mechanisms are adopted and implemented prior to and during the construction phase and include post construction activities regarding future land use /management and importation of landscaping materials. In line with best hygiene practices (*Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment (Edition 1, 2004)*, it is recommended all machinery and earthmoving equipment are washed down offsite prior to commencement of works to mitigate the accidental introduction of additional weed species and plant pathogens such as *Phytophthora cinnamomi*. Providing the movement of machinery and vehicles is limited to the access and development site footprint, it is not anticipated a hygiene facility at the entry/exit point is required.

Phytophthora cinnamomi (Pc)

Pc is an introduced mould that attacks the roots of susceptible plant species causing the roots to rot. Dieback, caused by Pc and other factors, is a listed "Key Threatening Process" under both the Federal *Environment Protection and Biodiversity Conservation Act 1999* and Tasmanian *Threatened Species Protection Act 1995*. Pc cannot be eradicated from an area once it has become infested.

Forest Practices Authority Technical Note No. 8: *Management of* Phytophthora cinnamomi *in production forest* indicates NBA vegetation community present within the study site is not considered highly susceptible to *Phytophthora cinnamomi*. However, individual species present such as *Epacris* species are susceptible to Pc. Recent survey of the Natural Values Database indicated no *Pc* infestation within the EMZ or within 1km of the property.

Species	Comments	Distribution	Recommendations		
Plant species listed as 'Declared' weed species under the Tasmanian <i>Weed Management Act 1999</i> (WMA) & Priority and ranking of Boneseed classification from Statutory Weed Management Plans (SWMP)					
Boneseed (Chrysanthemoides monilifera)	Declared weed species. Weed of National Significance Zone B: Containment. Priority Rank 4	Plants recorded throughout.	Plants range form seedlings to mature plants 1.5m high. In accordance with Statutory Weed Mgt Plan, any future works associated with developing the subdivision must implement best practice hygiene principles, including a Soil & Water Mgt Plan, to mitigate spread of Boneseed and the accidental introduction of new weed species during the construction phase.		
Plant species listed as	'Environmental' weed	l species			
Sweet briar	Environmental	Distribution limited	Remove. Monitor for new plants.		
(Rosa rubiginosa)	weed species	to a single plant (see Figure 3).			
Sweet pittosporum (Pittosporum undulatum)	Environmental weed species	Distribution limited to a single mature plant (see Figure 3).	Remove. Monitor for new plants.		

Table 2 - Weed species present on site. (Excludes exotic grass, century plant and Plantago species).





Figure 8 – Image showing location of Boneseed (yellow) and Sweet Pittosporum (green) within the study site.



Figure 9 – Young Boneseed within the study site.





Figure 10 – Image of Boneseed infestation.



Figure 11 -Sweet Pittosporum on the northern boundary of the proposed works site.





Figure 12 – Image of non-declared and non-environmental weed species *Fumaria sp, Thistle spp,* and *Gallium spp* geminating within the study site.



Figure 13 - Image showing extent of non-declared and non-environmental weed species *Fumaria sp, Thistle sp,* and *Gallium sp* geminating within the study site.



5. Potential Flora and Fauna Habitat Values

Flora

Flora assessment for species listed under *Threatened Species Protection Act 1995* and Commonwealth *Environment Protection & Biodiversity Conservation Act 1999* was undertaken assessing potential habitat values. A survey of the small site found the proposed development site is significantly modified through previous land use and management practices. At the time of assessment native bushland within the study represents potential habitat for some threatened flora species recorded within 5km such as *Austrostipa bigeniculata*. However, the shaded, south-east facing site is not considered favourable for the Broadleaf new holland daisy (*Vittadinia muelleri*) previously recorded within 500m of the site. Other species of conservation significance such as the clubbed spider-orchid (*Caladenia clavigera*) previously recorded within 500m was not recorded.

Vegetation type

Whilst the site is small, surrounding vegetation structure and species composition can provided context. Despite the presence of *Eucalyptus viminalis* in the canopy species and the proximity of dry *Eucalyptus viminalis* woodland/forest vegetation community to the south-east of the site, vegetation occupying the small study site is generally consistent with TASVEG 4.0 *Bursaria / Acacia* woodland (NBA) vegetation community. NBA is not listed as threatened under Tasmania's

Fauna

A desktop assessment of the Department of Natural Resources and Environment's Natural Values Atlas Report (10 Alanah Court, Old Beach 7/3/2024,) 5km search radius 523141E, 5264120N, GDA94, MGA55, and Commonwealth Department of the Environments' Protected Matters Search Tool. 5km search radius 523141E, 5264120N, GDA94, MGA55, Report created 12-Jul-2024 for fauna species listed under Threatened Species Protection Act 1995 and Commonwealth Environment Protection & Biodiversity Conservation Act 1999 was undertaken assessing potential habitat values.

The Natural Values Database indicates two previous observations of the Tasmanian Devil within 500m of the site. Both observations were recorded in 2019 at the same location, approximately 220m to the southeast of the site. Devils are recorded Statewide, but densities are higher in coastal scrub and range from coastal heath, open dry sclerophyll and mixed sclerophyll-rainforest where shelter and food are available and will hide in dens but at night it can roam up to 16 km and although not territorial, have a home range. In line with Foresty Practices Authority (Fauna Technical Note #10: *Identifying Tasmanian Devil and Spotted-tailed quoll habitat*), the surrounding mosaic of agricultural land juxtaposed to bushland constitutes potential refuse / foraging habitat for this species. For Devils to persist in the landscape they must have an adequate food supply, enough den sies for breeding and daily movements, and structural features for refuge and foraging (Jones *et al* 2006)

Eastern and Spotted-tailed Quoll & Eastern-Barred Bandicoot

The site is considered to be within range boundaries for Eastern Quolls and the Eastern-Barred Bandicoot. The eastern quoll prefers a habitat consisting of a mosaic of agricultural land adjacent to bushland constituting potential refuse / foraging habitat for insects and worms from the soil. However, instead of nesting under vegetation, The Eastern quoll will use dens as refuge and for birthing. Numbers have been declining in Tasmanian, in large due to predation by cats. A survey of the site recorded characteristic shaped diggings that can be associated with the Eastern-barred bandicoots however the common Brown bandicoot and Potoroo also make similar shaped diggings.

Swift Parrot

The study site is within Swift Parrot Important Breeding Area however, assessment did not record potential foraging habitat (*Eucalyptus globulus & E. ovata*). Assessment for potential nesting habitat values found the study site found *Eucalyptus viminalis* recorded on site did not exceed 70cm diameter at breast height (dbh).

that constitute potential nesting habitat for the Swift parrot. Technical Note No. 3: Identifying foraging and nesting habitat (Forestry Practices Authority), (Table 2 & 3 respectively) indicates vegetation within in the allotment represents:

- 'Nil' as no core foraging trees (E. globulus & E. ovata) recorded within the study site and,
- 'Nil' potential nesting habitat in dry sclerophyll as there are no trees that are greater than 70cm dbh in any one hectare,

Tasmanian Wedge-tailed eagle, White-bellied sea eagle and Grey Goshawk

Tasmanian Wedge-tailed eagle generally require ≥ 10 ha of relatively undisturbed forest with trees exceeding 27m in height that are protected from strong prevailing north-west winds. Habitat nesting modelling for potential Tasmanian Wedge-tailed eagle nesting sites below 850 metres indicates the study site represents a Nil - Low likelihood of suitable habitat for these raptor species. Ground assessment indicates the open canopy, exposed ridge top development site does not support preferred nesting habitat for these species. The site is within range boundaries of the Grey Goshawk, listed as Vulnerable under the Tasmanian *Threatened Species Protection Act 1995*. An interim technical note prepared by David Young (2020) provides guidance for Goshawk nesting habitat categories. Site assessment indicates the location of the proposed development site does not represent preferred nesting habitat values and lacks suitable vegetation / tree types commonly associated with nesting / roosting habitat. A desktop assessment indicates no nest have been recorded within 500m or within 1km line of sight.

Masked Owl

The site is also within potential range boundaries for the Tasmanian Masked Owl. This subspecies occurs only in Tasmania and listed as endangered under the Tasmanian *Threatened Species Protection Act 1995* and Vulnerable under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* due to small population and ongoing habitat loss. Nesting habitat generally consists of eucalypt forests and woodlands containing old growth trees with suitable hollows (>15cm) for nesting/roosting but will also nest in isolated old growth trees with suitable hollows. A survey for potential hollow bearing trees found no eucalypts exceeding 70cm dbh. However, this does not mean that hollows are not present with some *E. viminalis*, regardless of age, showing characteristics, such as senescence from wind damage, that can generate nesting hollows.





6. Discussion



Figure 14 – LH image showing location of the study site (temporary gravel turning area) and 20m wide buffer for bushfire management within land zoned Rural under TPS. RH image showing location of Natural Assets Code Priority Vegetation overlay (Ref: Tasmanian Planning Scheme – Code Overlay). (Ref: Lark & Creese, Development Application – Subdivision Dwg #50444-02)

Assessment indicates approx. $550m^2$ of native vegetation classified as *Bursaria / Acacia* woodland (NBA) vegetation community will require removal to construct a temporary gravel turning area and comply with Tasmanian Fire Service construction standards for the 3 Lot subdivision development. To comply with Tasmania Fire Service standards, the subdivision proposal requires the clearance and conversion of appro. $1500m^2$ of NBA establishment of a 20m wide buffer on the northern boundary for bushfire management purposes.

Flora

Threatened flora species

At the time of assessment, a survey found NBA vegetation community occupying the study site, and despite the presence of weed species, was considered in good condition. Whilst not recorded within study site, assessment indicates the western margin of the vegetation community could represent potential habitat for the Narrow-leaf new holland daisy but considered unlikely within the vegetation community itself. Assessment found NBA vegetation community represents potential habitat for the Doublejointed speargrass (*Austrostipa bigeniculata*). Mature inflorescences are required for identification (Nov-Jan). Whilst proposed works are likely to result in the loss of potential habitat values for some threatened flora species, it is anticipated impacts to native vegetation is unlikely to result in a significant loss of potential habitat for described threatened flora previously recorded within 5km.

Vegetation community distribution and structure

Site assessment indicates the vegetation within and surrounding the study site had a vegetation structure and species composition generally consistent with TASVEG 4.0 *Bursaria / Acacia* woodland (NBA) (Kitchner & Harris 2013). NBA is not listed as Vulnerable under Schedule 3A of Tasmania's *Nature Conservation Act 2022*. No further assessment or permit required under this Act.

Under the Statewide Planning Scheme and Brighton Local Provisions Schedule the NBA vegetation community is within the Natural Assets Code and classified as high priority vegetation. Designs indicate the proposed footprint is the minimal amount required. Not expected the location of the site will result in a fragmentation of the vegetation to the north and east.





Figure 15 - Image showing TASVEG 4.0 distribution of vegetation communities surrounding and within the subject property. Agricultural / Modified land (FAG), Extra – Urban miscellaneous (FUM), Urban land (FUR), dry *Eucalyptus viminalis* woodland on sediments (NBA), dry *Eucalyptus viminalis* woodland grassy facies (NBA), *Bursaria - Acacia* woodland (NBA) (REF: LISTmap).

Persistence potential is defined as the probable level (High/Medium/Low) of long-term sustainability for the vegetation community being assessed. Tables within the TASVEG Vegetation Condition Manual provide the criteria that should be considered to determine persistence potential. Table 3a: Criteria to determine Persistence Potential level based on plant regeneration indicates the vegetation community has Medium Persistence Potential, in that:

- Some regeneration but modified through past/current land management,
- Native species provide more than half the cover in all the life forms,
- There is a mixture of species in the Dominant Life Form,
- Sufficient areas between existing vegetation structure for other species to germinate and become established,
- Unsure of burning regime in place, but considered appropriate,
- No grazing of livestock,
- Some weeds (<25%) and presence of high threat weeds,
- No evidence of *P. cinnamomi* infection in susceptible vegetation.

Table 3 – Threatened plant species previously recorded within 5 km radius of the study area with discussion on likelihood of potential habitat within the study site and listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA), and the Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999* (EPBCA). Flora surveys was not limited to threatened flora species listed under TSPA & EPBCA but also included species considered within potential range and suitable habitat.

CONSERVATION STATUS							
Species	Species TSPA EPBCA Observations/Comments						
No Threatened Flora Previously Recorded Within 500m							

Nov - heast and ociated ng the ted ntial val of this ler the
sment. y deep driest found in s and m habitat of this ler the
sment.
sment. acalypt nticipated to result proposal ies. No PA.
sment. Nov - found in act I will not further
sment. Nov - heast and ociated ng the ted t in a s or or further
sment. Oct-



<i>Caladenia</i> <i>caudata</i> Tailed spider- orchid	vulnerable	Vulnerable	Not previously recorded on site or at the time of assessment. Flowers required for the identification of this orchid species (Oct-Nov) Prefers heathy and open eucalypt forests and woodland, often with sheoaks and in sandy loamy substrates. It is unlikely the NBA occupying the site represent potential habitat. Not expected proposed works will result in a significant loss of potential habitat, impact populations or impact long term, survival of this species. No referral or further assessment required under the TSPA.
<i>Calytegia sepium</i> subsp <i>sepium</i> Swamp blindweed	rare	-	Not previously recorded on site or at the time of assessment. Generally associated with riparian zone, riverbanks and the margins of forests in the North of the State. No referral or further assessment required under the TSPA.
<i>Dianella amoena</i> Grassland flaxlilly	rare	Endangered	Not previously recorded on site or at the time of assessment. Distribution in Tas generally limited to the midlands growing in native grasslands and grassy woodlands. NBA within the site represents marginal potential habitat and unlikely to result in a significant loss. No referral or further assessment required under the TSPA or EPBCA.
<i>Diuris palustris</i> Swamp doubletail	endangered	-	Not previously recorded on site or at the time of assessment. Flowers required for identification. Flowers from Sept-Dec with peak around Oct. Distribution in Tas generally limited to coastal areas in grassy open eucalypt forest, sedgy grassland and heathland with tea-tree and paperbark on poorly drained sandy peat and loams, usually in sites that are wet in winter. Proposal will not impact potential habitat. No referral or further assessment required under the TSPA.
Eucalyptus amygdalina x risdonii			Not previously recorded on site or at the time of assessment. Intergrades with <i>E. viminalis</i> . Distinguished by fruit at nodes and juvenile leaves. Hybridises with <i>E. amygdalina</i> distribution is Tas restricted to greater Hobart area occupying Permian mudstone up to 150 m above sea level. Habitat includes low open forest on very sunny ridges and north-west facing upper slopes. The clearance and modification of NBA vegetation will not result in the loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Eucalyptus risdonii</i> Risdon peppermint	rare	-	Not previously recorded on site or at the time of assessment. Intergrades with <i>E. viminalis</i> . Distinguished by fruit at nodes and juvenile leaves. Known to hybridises with <i>E. amygdalina</i> . Distribution is Tas restricted to greater Hobart area occupying Permian mudstone up to 150 m above sea level. Habitat includes low open forest on very sunny ridges and north-west facing upper slopes. The clearance and modification of NBA vegetation will not result in the loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Glycine</i> <i>latrobena</i> Clover glycine	vulnerable	Vulnerable	Not previously recorded on site or at the time of assessment. This species recorded in dry sclerophyll forest, native grassland and woodland, usually on flat sites with loose, sandy soil. Flowers help in detection (Oct-Dec). Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA or EPBCA.
Haloragis heterophylla Variable raspwort	rare	-	Not previously recorded on site or at the time of assessment. This perennial is generally associated with damp <i>Themeda</i> grassland and gassy woodland in the Midlands and across the East Coast. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required

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			under the TSPA or EPBCA.
Hovea tasmanica Rockfield purplepea	rare	-	Not previously recorded on site or at the time of assessment. Endemic to TAS. Can be confused with <i>H. corrickiae</i> but can be separated by differing habitat. Distribution in Tas is usually dry, rocky ridges or dolerite slopes in forest and riverine scrub. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
Hyalospermja demissum Moss sunray	endangered	-	Not previously recorded on site or at the time of assessment. Has been recorded from rock pavements, shallow stony soils and dry sandy places, mostly inland areas in the Midlands. Flowers can aid in the detection of tiny much-branched annual herb (Sept-Dec). Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Isoetopsis</i> graminifolia Grass cushion	vulnerable	-	Not previously recorded on site or at the time of assessment. Distribution is limited to 15 locations in the northern and southern midlands in areas dominated by <i>Themeda</i> grasslands. Flowers required for identification (Sept-Nov). Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Lachnagrostis robusta</i> Tall blowngrass	rare	-	Not previously recorded on site or at the time of assessment. Similar to <i>L. punicea</i> ssp. <i>filifolia</i> . Distribution in Tas is generally limited to marshy, estuarine habitat and moist sandy flats, predominantly around the north-east and the east coast. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Lepidium</i> <i>hyssopifolium</i> Soft peppercress	endangered	Endangered	Not previously recorded on site or at the time of assessment. Mature inflorescences with fruit required to confirm identification (Jan-May). Native habitat of this species is the growth suppression zone beneath large trees in grassy woodlands and grasslands. Recent observations in Tas indicate the species is now found primarily under large exotic trees on roadsides and home yards. generally, occupies dry, warm fertile areas on flat ground on weak acid to alkaline soils. Assessment indicates the proposed development site does not constitute potential habitat. Anticipated the proposal will not impact populations or impact survival of this species. No referral or further assessment required under the TSPA or EPBCA.
<i>Lepilaena</i> <i>paterntifolia</i> Spreading watermat	rare	-	Not previously recorded on site or at the time of assessment. Distribution in Tas generally inhabits coastal lagoons, creeks, inlets and estuaries and brackish inland lagoons from the midlands, north-east, east coast. Proposed development site does not constitute potential habitat. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA.
Ozothamnus reflexifolius Reflexed everlasting bush	vulnerable	Vulnerable	Not previously recorded on site or at the time of assessment. This species known from a single site in the Meehan Range. The subpopulation is centred on a large dolerite rock plate occurring in Allocasuarina <i>verticillata</i> woodland, open heath. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA.
Parietaria debilis Shade pellitory	rare	-	Not previously recorded on site or at the time of assessment. Generally recorded growing around muttonbird rookeries. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA

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<i>Phyllangium</i> <i>divergens</i> Wiry mitewort	vulnerable		Not previously recorded on site or at the time of assessment. Widespread distribution in Tas occurring in mostly near-coastal situations where it grows on rock plates on a variety of substrates. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA.
Pterostylis wapstrarum Fleshy greenhood	endangered	Critically Endangere d	Not previously recorded on site or at the time of assessment. This orchid is endemic to Tas. Distribution is restricted to the Midlands and south-east of Tas where it occurs in native grassland and probably grassy woodland. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA or EPBCA.
<i>Pterostylis ziegeleri</i> Grassland greenhood	vulnerable	Vulnerable	Not previously recorded on site or at the time of assessment. Endemic to Tas. Indicates this species is limited to the north and east of Tas and Midlands growing in native grassland or grassy woodland on well-drained clay loam derived from basalt. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA or EPBCA.
<i>Ruppia</i> magacarpa Largefruit seatassel	rare	-	Not previously recorded on site or at the time of assessment. Perennial aquatic herb. The proposal will not result in a loss of potential habitat. No referral or further assessment required under the TSPA.
Rytidosperma indutum Tall wallabygrass	rare	-	Not previously recorded on site or at the time of assessment. Mature inflorescences required for identification (Nov-Jan). Distribution in Tas generally limited to mudstone and dolerite substrate in open dry sclerophyll woodlands. Whilst the NBA vegetation represents potential habitat, it is unlikely the level of disturbance will result in a significant loss of potential habitat and not expected to impact populations or persistence of this species. No referral or further assessment required under the TSPA.
Scleranthus fasciculatus Spreading knawel	vulnerable	-	Not previously recorded on site or at the time of assessment. Can resemble <i>S. biflorus</i> Distribution in Tas is restricted to a few locations in the midlands and south-east in conjunction with siler tussock grassland / grassy woodland needing the gaps between tussocks for protection and survival. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Senecio</i> <i>squarrosa</i> Leafy fireweed	rare	-	Not previously recorded on site or at the time of assessment. Distribution in the south with populations at Cambridge, Kingston, Blackmans Bay and Dunalley and generally associated with dry sclerophyll forest. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Stenopetalum</i> <i>lineare</i> Narrow threadpetal	endangered	-	Not previously recorded on site or at the time of assessment. Oly recorded in 6-7 sites in TAS recorded in low grass covered dunes, coastal heathy woodland and open grassy forest. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.
<i>Teucrium</i> <i>corymbosum</i> Forest germander	rare	-	Not previously recorded on site or at the time of assessment. This species predominantly found in <i>Allocasuarina verticillata</i> coast and inland woodland, <i>Eucalyptus viminalis</i> woodland and native grasslands in the east. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.



<i>Velleia paradoxa</i> Spur velleia	vulnerable	-	Not previously recorded on site or at the time of assessment. Requires flowers for identification (Nov to Jan). Prefers dry sites within grassy woodlands & grassland. Whilst the NBA vegetation represents potential habitat, it is unlikely the level of disturbance will result in a significant loss of potential habitat and not expected to impact populations or persistence of this species. No referral or further assessment required under the TSPA.
<i>Vittadina cuneate</i> var. <i>cuneata</i> Fuzzy new- holland daisy	rare	-	Not previously recorded on site or at the time of assessment. Species prefers areas of low precipitation on both fertile and infertile soils predominantly found in dry sclerophyll forest around Hobart., midlands extending up into the north-east. Whilst the NBA vegetation represents potential habitat, it is unlikely the level of disturbance will result in a significant loss of potential habitat and not expected to impact populations or persistence of this species. No referral or further assessment required under the TSPA.
<i>Vittadinia gracilis</i> Woolly new- holland daisy	rare	-	Not previously recorded on site or at the time of assessment. Can be confused with other species. In Tas this species is known from dry sites on dolerite and basalt. Predominantly found in dry sclerophyll forest around Hobart, into the midlands and extending up the north-east. Whilst the NBA vegetation represents potential habitat, it is unlikely the level of disturbance will result in a significant loss of potential habitat and not expected to impact populations or persistence of this species. No referral or further assessment required under the TSPA.
Vittadinia muelleri	rare	-	Not previously recorded on site or at the time of assessment. Can be confused with other species but distinguished by deep mauve flowers. In Tas this species is known from the driest sites on fertile soils in the Hobart area. Predominantly found in dry sclerophyll forest around Hobart, into the midlands and extending up the north-east. Whilst the NBA vegetation represents potential habitat, it is unlikely the level of disturbance will result in a significant loss of potential habitat and not expected to impact populations or persistence of this species. No referral or further assessment required under the TSPA.
Xanthoparmelia jarmaniae		-	Not previously recorded on site or at the time of assessment. Unlikely the proposal will result in a loss of potential habitat. No referral or further assessment required under the TSPA.

Note: Information outlined above is derived from Department of Natural Resources and Environment (NRE) *Natural Values Atlas, Forestry Practices Authority* (FPA) *Biodiversity Values Database, Threatened Species Unit* for potential habitat values and descriptions and Author's experience.

Fauna

Devils, Quolls & Eastern-barred bandicoots

The site is within the range boundaries for Devils the Eastern Quoll and the Eastern-barred bandicoot. Two Tasmanian Devil observations were recorded 220m to the south-east in 2019 E:523204, N:5264106, GDA94, MGA55). Assessment recorded one den (see Figure 16). The den had a single opening approx. 80-90mm high and 120mm wide. The den is located on a south facing slope (5-10°) in *Bursaria - Acacia* woodland clear of understory. Assessment in accordance with survey guidelines indicates the opening was generally clear of debris however, cobwebs were recorded 600mm within the burrow. There was little

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evidence of an access track. A search around the site found no other openings. No evidence such as scats were recorded. The opening of the den is relatively small 90mm high opening perhaps indicating it is too small for a Tasmanian Devil. Assessment recorded two openings that potentially represents disused dens. In accordance with Table 1: Activity type, potential impacts, and survey recommendations for the Tasmanian devil, and assessment with ecologist Nick Mooney was undertaken (See Appendix C).



Figure 16 – Map showing location of the burrow recorded within *Bursaria* - *Acacia* woodland (NBA) E:523204, N:5264106, GDA94, MGA55).



Figure 17 – Image showing environs surrounding the burrow located within Bursaria - Acacia woodland.





Figure 18 - Image showing the size of the den opening (pen is 140mm long).



Figure 19 – Image showing potential old burrows recorded within the study site.

Site plans indicate the vegetation within the assessment site is to be cleared and converted to comply with bushfire standards. Given the extent of works it is likely this potential burrow will be impacted. Whilst not listed as a threatened species under the Tasmanian *Threatened Species Protection Act 1995*, The Eastern quoll is listed as endangered under the Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999*. The table below is a listing of threatened fauna recorded within 5km of the site providing comments on potential habitat availability and any evidence recorded.

Table 4- Threatened fauna species previously recorded within 5 km radius of the study area with discussion on likelihood of potential habitat within the study site and listed under the Tasmanian *Threatened Species Protection Act 1995* (TSPA), and the Commonwealth's *Environmental Protection, Biodiversity Conservation Act 1999* (EPBCA). Flora surveys was not limited to threatened flora species listed under TSPA & EPBCA but also included species considered within potential range and suitable habitat.

CONSERVATION STATUS						
SPECEIES	TSPA	EPBC	COMMENTS			
Threatened Fauna within 500 metres						

<i>Sarcophilus harrisii</i> Tasmanian devil	endangered	Endangered	Not previously recorded on site or evidence within the study site at the time of survey. Previously recorded 250mto the south-east. Site assessment by N. Mooney (site survey and trail camera) concluded the burrow showed not signs of activity, concluding the burrow is not a maternal den, but is potential used by other wildlife including a lay-up by dispersing immature devil or quoll but indicating the burrow does not represent significant habitat. Given these findings, it is not expected further assessment, or referral is required under the TSPA or EPBCA.
		Threatene	d Fauna within 5000 metres
Accipiter novaehollandiae Grey Goshawk	endangered	-	Not previously recorded on site or at the time of assessment. Vegetation within exposed study site, or within 500m of the site does not represent suitable nesting habitat. No nest recorded with 500m or 1km line of sight. Unlikely the proposal will impact priority nesting habitat or breeding activities. Anticipate no further assessment or referral is required under the TSPA.
Aquila audax fleayi Tasmanian Wedge-tailed eagle	endangered	Endangered	Not previously recorded on site or at the time of assessment. No nest within 500m or 1km within line-of-sight. Proposed development envelope will impact bushland that represent suitable nesting habitat. Anticipate the proposal will not impact priority nesting habitat or breeding activities. Anticipate no further assessment or referral is required under the TSPA or EPBCA.
<i>Dasyurus</i> <i>maculatus</i> Spotted-tailed quoll	rare	Vulnerable	Not previously recorded on site or at the time of assessment. Site assessment by N. Mooney (site survey and trail camera) concluded the burrow showed no signs of activity, concluding the burrow is not a maternal den, but is potential used by other wildlife including a lay-up by dispersing immature quoll but indicating the burrow does not represent significant habitat. Given these findings, it is not expected further assessment, or referral is required under the TSPA or EPBCA.
Dasyurus viverrinus Eastern Quoll	_	Endangered	Site assessment by N. Mooney (site survey and trail camera) concluded the burrow showed no signs of activity, concluding the burrow is not a maternal den, but is potential used by other wildlife including a lay-up by dispersing immature quoll but indicating the burrow does not represent significant habitat. Given these findings, it is not expected further assessment, or referral is required under the TSPA or EPBCA.
Haliaeetus leucogaster White-bellied sea eagle	vulnerable	-	Not previously recorded on site or at the time of assessment. Proposed development will not encroach into areas that represent suitable nesting habitat. Anticipate the proposal will not impact priority habitat, nesting or breeding activities. Anticipate no further assessment or referral is required under the TSPA.
Lathamus discolor Swift parrot	endangered	Critically Endangered	Not previously recorded on site. Site within Swift Parrot Important Breeding Area. No core foraging habitat (<i>Eucalyptus ovata & E.</i> <i>globulus</i>) recorded within the study site. Assessment found vegetation represents a 'Nil' likelihood of potential nesting habitat. No further assessment or referral is required under the TSPA or EPBCA.
Perameles gunnii Eastern-barred bandicoot	-	Vulnerable	Not previously recorded on site or at time of assessment. Occupies a variety of habitats from forest, woodland and urban environments including bushland juxtaposed to open grassland. Dry sclerophyll bushland may constitute potential refuge habitat for open area to the east. Assessment indicates the works will impact potential refuge habitat, but unlikely works footprint will result in a significant loss of potential habitat under Significant Impact Guidelines. No further assessment or referral required under EPBCA.
<i>Sarcophilus</i> <i>harrisii</i> Tasmanian Devil	endangered	Endangered	v



<i>Tyto</i> novaehollandiae Masked owl	endangered	Vulnerable	Not previously recorded on site or evidence within the study site at the time of survey. Assessment did not record any tree species that represent potential nesting habitat. Not expected the removal of NBA will result in a loss of potential nesting habitat under Significant Impact Guidelines. Anticipate no further assessment or referral is required under the TSPA or EPBCA.
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Note: Information outlined above is derived from Department of Natural Resources and Environment (NRE) *Natural Values Atlas, Forestry Practices Authority* (FPA) *Biodiversity Values Database, Threatened Species Unit* for potential habitat values and descriptions and Author's experience.

Planning implications

C7.0 Natural Assets Code

In accordance with Brighton Council's Natural Assets Code Table C7.3.1 the eastern two thirds of the temporary parking area and vegetation occupying the 20m wide buffer are within the Priority Vegetation Area overlay and identified as *Bursaria / Acacia* woodland (NBA). C7.7.2 Natural Assets Code it appears the proposal is not consistent with designated development envelope attached to the approved subdivision and does not satisfy A1 Acceptable Solutions. However, assessment indicates the proposal addresses Performance Criteria P1.1, in that:

Clearance of native vegetation within a priority vegetation area must be for:

- (a) Subdivision for an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmania Fire Service or an accredited person: Site plans indicate native vegetation impacted by proposed works is the minimum area necessary to construct and maintain a turning area to comply with Tas Fire Service for the three Lot subdivision,
- (b) Subdivision for the construction of a single dwelling or an associated outbuilding; Proposed infrastructure associated with bushfire standards for a 3 Lot subdivision,
- (c) subdivision in the General Residential Zone or Low Density Residential Zone; The western third of the study site is within land Zone General Residential with remaining land zoned Rural (see Figure ?),
- (d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design; Approved subdivision and released land available for residential development,
- (e) Subdivision involving clearance of native vegetation where it is demonstrated that on-going preexisting management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence, Assessment indicates Bursaria / Acacia Woodland (NBA) vegetation community occupying study site is in fair to good condition. Land use to the north has impacted biodiversity values Long term persistence is good however, future persistence is limited,
- (f) Subdivision involving clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site, assessment indicates the 2150m² works footprint within approx. 7.5ha of vegetation is considered insignificant relative to that of the surrounding priority vegetation,

P1.2

Works association with subdivision within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:

- a) the design and location of any works, future development likely to be facilitated by the subdivision, and any constraints such as topography or land hazards: the location of the proposed works and vegetation impacted by proposed works is the minimum area necessary to construct a turning area to comply with Tas Fire Service for the three Lot subdivision,
- b) any particular requirements for the works and future development likely to be facilitated by the subdivision; Proposed works are a necessary requirement to comply with TAS Fire Service regulations,
- c) the need to minimise impacts resulting from bushfire hazard management measures through siting and fire-resistant design of any future habitable buildings; the location of the proposed works and



vegetation impacted is the minimum area necessary to construct a turning area to comply with Tas Fire Service for the three Lot subdivision,

- *d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;* the extent of vegetation impacted is the minimum area necessary to construct a turning area to comply with Tas Fire Service for the three Lot subdivision,
- e) any on-site biodiversity offsets; and, Not applicable,
- *f)* any existing cleared areas on the site, the location of the proposed works and vegetation impacted by proposed works is the minimum area necessary to construct a turning area to comply with Tas Fire Service for the three Lot subdivision,



Figure 20 – Image showing the delineation of General Residential (red) and Rural (yellow) within the 2150m2 study site. Land zoned rural also delineates the High Priority Vegetation boundary (Ref: Tasmanian Planning Scheme – Planning Zone Overlay).

7. Conclusions

Threatened fauna

Tasmanian Devil, Spotted-tailed and Eastern quoll

Habitat loss and fragmentation have been identified as possibly the most important conservation issues for Devils (Jones et al 2008) and other carnivore species such as the Eastern quoll. The loss of maternal dens is thought to significantly impact the abundance of devils in a particular area, but it also indicates that Devils are thought to be less susceptible to habitat loss and fragmentation that other carnivore species as they are highly mobile. The Tasmanian Devil have previously been recorded 220m to the south-east of the site in 2019. One small burrow with a single opening was recorded within the study site. Assessment in accordance with Table 1: Activity type, potential impacts, and survey recommendations for the Tasmanian devil, by Nick Mooney concluded that it was unlikely the burrow is currently occupied and unlikely to represent a maternal den for the Tasmanian devil. Whilst the proposal will impact this burrow, Mooney indicates the scale of the proposal is considered small (<1ha) and will not impact critical denning habitat and not considered a threatening process for this species. No further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995*, or the Significant Impact Guidelines issued by the Commonwealth's Department of Environment.

Raptor species

Site assessment found the proposed development site does not represent potential nesting habitat values for the Tasmanian Wedge-tailed eagle, White-bellied sea eagle or Grey Goshawk. Site assessment also indicates NBA vegetation does not support critical nesting habitat values for the endangered Swift parrot or Masked owl. Not anticipated further assessment or referral required under Tasmania's *Threatened Species Protection Act 1995* or the Commonwealth's Department of Environment under *Significant Impact Guidelines*.

Threatened flora



Native vegetation community NBA within and beyond the proposed development footprint represents potential habitat for the threatened Broadleaf New Holland daisy and Double jointed speargrass previously recorded within 5km. Whilst not recorded, assessment indicates the proposal will result in the minor loss of potential habitat values for these species. However, it is unlikely the scale of disturbance will result in a significant loss of potential habitat values for these two threatened flora species identified. As such, it is not expected further assessment, or a permit is required under Section 51 of Tasmania's *Threatened Species Protection Act 1995*. No formal referral to the Commonwealth's Department of Environment under *Significant Impact Guidelines* is required.

Vegetation communities

At the time of assessment, vegetation structure and species composition of native vegetation within and surrounding the existing disturbance is generally consistent with TASVEG 4.0 NBA vegetation community classification. NBA is not listed as a threatened vegetation community under Schedule 3A of Tasmania's *Nature Conservation Act 2002*. The vegetation is within Brighton Council's Natural Assets Code as classified as high priority vegetation. No further assessment or referral under Tasmania's Nature Conservation Act 2002 or the Land Use Planning and Approvals Act 1993.

Introduced plant species

Boneseed recorded within the study site and surrounding bushland is listed as a 'Declared' and Weed of National Significance weed species under the Tasmanian *Weed Management Act 1999*. Given the presence of 'Declared' weed species, it is recommended best hygiene practices are implemented prior to commencement of future works including implement the Statutory Weed Management Plan for Boneseed, implement a Soil & Water Management Plan and best practice site management to mitigate the accidental spread of weed seeds throughout the property and avoid the introduction of additional weed seeds and plant material, including the plant pathogens such as Pc.

General

In accordance with Table 1: Activity type, potential impacts, and survey recommendations for the Tasmanian devil, Assessment by a specialist ecologist (N. Mooney) found the burrow recorded was not occupied at the time of assessment and unlikely to represent a natal den for the Tasmanian devil or quoll species. Whilst the proposal will impact the burrow and surrounding habitat values, N. Mooney assessment indicates the burrow is not considered a significant habitat for these species. Therefore, it is expected proposal will not:

- Significantly impact critical or quoll or devil habitat values,
- Lead to a long-term decrease in the size of populations, reduce area of occupancy of a significant population, fragment an existing population or destroy habitat critical to the survival of species,
- Disrupt the breeding cycle of an important population,
- Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.

Therefore, it is unlikely the proposal will result in "significant impacts" to potential Tasmanian devil habitat as described in the EPBC Act. No further assessment or referral is required under Tasmania's *Threatened Species Protection Act 1995* or Commonwealth's *Environmental Protection Biodiversity Conservation Act 1999*.

Management prescriptions to address the construction phase of the development and potential future works or land use should include:

• Prior to commencement of works implement a hygiene management plan including in accordance with *Tasmanian Washdown Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment (Edition 1, 2004)* ensuring contractors have washed down vehicles and machinery to prevent accidental importation of new weed species and *Phytophthora cinnamomi* and other plant pathogens during the construction phase.



- Implement the Statutory Weed Management Plan for Boneseed. Ensure all weed material is disposed of in accordance with Management Act. Not expected a hygiene facility for vehicles/machinery existing the site will be required,
- Prior to commencement of works implement a Soil & Water management plan following guidelines set out in Environmental Best Practice Guidelines for all development detailing location for fencing, locations of temporary stockpile sites for waste material, construction material and parking,
- Stage removal of vegetation to avoid blanket clearance and avoid any unnecessary traffic outside the development footprint.



8. References

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9. Appendix A - Vascular plants species list.

VASCULAR PLANT SPECIES LIST 10 Alanah Court, Old Beach

I - Introduced; E - Endemic; D - Declared weed under Tas *Weed Management Act 1999;* WoNS – Weed of Nation Significance, e - Environmental weed

DICOTYLEDON

ASTEI I	RACEAE Carduus sp	Thistle	
Ι	Chrysanthemoides monilifera	Boneseed	D, WoNS
	Lagenophora stipitata		
	Senecio minimus		
BRAS	SICACEAE		
Ι	Raphanus sp	Wild radish	
CARY	OPHYLLACEAE		
Ι	Stellaria sp	Chickweed	
CASU	ARINACEAE		
	Allocasuarina verticillata		
EPAC	RIDACEAE		
	Epacris impressa	Common heath	
ERICA	ACEAE		
	Acrotriche serrulata	Ants delight	
	Astroloma humifusum	Native cranberry	
	Lissanthe strigosa subsp. subulata		
FABA	CEAE		
	Acacia dealbata subsp dealbata	Silver wattle	
	Acacia melanoxylon	Blackwood	
	Acacia mearnsii	Black wattle	
	Pullendea juniperina	Bush pea	
FUMA	RIACEAE		
Ι	Fumaria muralis		
GENT	IANACEAE		
Ι	Centaurium erythraea	Century plant	
GOOD	DENEACEAE		
	Goodenia ovata	Hop-Native primrose	
HALO	RAGACEAE		
	Gonocarpus tetragynus		
LAUR	ACEAE		



Cassytha pubescens	dodder
MYRTACEAE Eucalyptus viminalis var. viminalis Leptospermum scoparium	Common Teatree
OXALIDACEAE Oxalis perennans	
PITTOSPORACEAE Bursaria spinosa I Pittosporum undulatum	Prickly box Sweet pittosporum e
PROTEACEAE Banksia marginata	Banksia
RUBIACEAE I Galium albescens	Cleavers
ROSACEAE Acaena echinate / novae-zelandiae	Buzzy
SANTALACEAE Exocarpos cupressiformis	Native cherry
SAPINDACEAE Dodonaea viscosa	Broadleaf hopbush
MONOCOTYLEDONAE	
CYPERACEAE Lepidosperma ensiforme	
JUNCUSACEAE Juncus spp	Pale rush

LOMANDRACEAE

Lomandra longifolia

POACEAE

Agrostis capillaris Anthoxanthum odoratum Aira caryophyllea Dactylis glomerata Cocksfoot Deyeuxia quadriseta Reed bentgrass Austrodanthonia caespitosa Common wallaby grass Austrodanthonia geniculata Kneed wallaby grass Austrostipa aphylla leafless speargrass Austrostipa flavescens I Holcus lanatus Fog grass Poa labillarderei var. labillardierei Silver tussock grass Poa sieberiana var sieberiana Grey tussock grass

38

Sagg

10. Appendix B - Tree plan & register.

NGINEERING SURVEYORS

LARK E



Figure 21 – Tree plan of study site showing location and approx. extent of the associated tree protection zones. (Centre coordinates 519031E, 5259389N, GDA2020, MGA55).

Ta	bl	e 4	 Tree 1	register,	study	site,	10	Alana	h C	Court,	Old	Beach	۱.

#ID	Species	Diameter at	Tree	Comments / Action	
		Breast	Protection		
		Height (cm)	Zone (m)		
1	Acacia mearnsii	44	5.28	No hollows. Retain.	
2	Eucalyptus viminalis	63	7.44	No hollows. Works may encroach into the	
				TPZ. May require Arborists assessment for	
				impacts.	
3	Eucalyptus viminalis	25	3.00	No hollows. Retain.	
4	Eucalyptus viminalis	55	6.60	No hollows. Retain.	
5	Eucalyptus viminalis	23	2.76	No hollows. Remove.	
6	Eucalyptus viminalis	25	3.00	No hollows. Retain.	
7	Eucalyptus viminalis	46	5.52	No hollows. Retain.	
8	Eucalyptus viminalis	39	4.86	No hollows. Retain.	
9	Eucalyptus viminalis	30	3.60	No hollows. Removal due to being within	
				bushfire buffer area.	
10	Eucalyptus viminalis	53	6.36	No hollows. Removal due to being within	
				bushfire buffer area.	

essment of burrow use on proposed subdivision behind Alanah Crt, Old Beach, Nick Mooney, 2024



Assessment of burrow use on proposed subdivision behind Alanah Crt, Old Beach

In mid-August 2024 I was asked by Doug Summers to assess a burrow in grassy woodland in a proposed subdivision behind Alanah Court.

We visited the site on 20/8/24 examining the burrow and setting trial cameras over the burrow and approaches, retrieving such on 29/8/24.

At my inspection the burrow showed no obvious signs of activity. It was about 10cm in diameter and went into the hillside for at least 60cm turning out of site. Some cobwebs and fragile dry vegetation were across the burrow suggestive but not conclusive of little recent use. I could find no guard hairs on the outer walls of the burrow. It was well drained as far as I could determine, and did not smell and I could hear nothing inside (with the naked ear).

Natal Tasmanian devil dens in my experience are much more complex and at the observed diameter would have at least guard hairs on the burrow walls since it would be tight squeeze for a mother devil (at this time of year hair shedding is well under way. If in use they also usually have a distinctive smell (rich and rather pleasant to me) and often breathing and activity can be faintly heard.

The cameras functioned through the period and pictures showed a cat (tabby and very fat) and Tasmanian pademelon (Fig 1.). Scat of these wallaby were also abundant through the scrubby woodland. In one picture the cat was sniffing the burrow.



Figure 1. Typical picture of a pademelon (the burrow is immediately behind the fore paws) and a cat sniffing the burrow.

In my experience this would likely have resulted in some defense activity by a devil if breeding there.

I conclude the burrow is not a natal den although it may be used irregularly by a variety of species (e.g., echidna, rodents, rabbits and possibly southern potoroo) and just possibly occasionally (as a lay-up) by dispersing immature devil or quoll). As such, however interesting it is likely no more significant than many local layups in dense vegetation, less well formed burrows and logs.

Nick Mooney Wildlife Biologist 2 Torrens St, Richmond nickjmooney@gmail.com, 0428 886143 P.S. (My credentials for these opinions are more than 50 years assessing, surveying and managing Tasmanian wildlife, 35 of those with DPIPWE including starting the government response to DFTD within then DPIPWE. Since leaving the department in 2009 I have routinely conducted field assessments (including pre-clearance assessments) at mines and other developments and have provided many expert opinions to the department and other consultants doing likewise).



12. Appendix D - Supporting documentation.

12. Tippenam D Supporting documentation.				
Author	Description / Summary			
Lark & Creese Pty Ltd	Development Application – Subdivision: 10 Alanah Court, Old Beach			
	30150_50441_01			
N. Mooney	Assessment of burrow use on proposed subdivision behind Alanah Crt,			
	Old Beach.			

Definitions of terms

Term /	Definition
Acronym	
BAL	Bushfire Attack Level
BHA	Bushfire Hazard Assessment
C.T.	Certificate of Title
DVG	Dry Eucalyptus viminalis woodland vegetation community
NBA	Dry Eucalyptus viminalis on sediments woodland vegetation community
EPBC	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
FAG	Agricultural / Modified land
FPA	Forestry Practices Authority
FRG	Regenerating land
FWU	Weed infestation
HMA	Hazard Management Area
TPS	Tasmanian Planning Scheme
LUPA	Land Use Planning and Approvals Act (1993) Tasmania.
NBA	Bursaria / Acacia woodland
NCA	Nature Conservation Act 2002 (Tasmanian)
NRE	Department of Natural Resources and Environment
Pc	Phytophthora cinnamomi
TPZ	Tree Protection Zone
TSPA	Threatened Species Protection Act 1995 (Tasmanian)
WMA	Weed Management Act 1995 (Tasmanian)
WCPA	Waterways and Coastal Protection Area



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30150_50441_04

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RESULT OF SEARCH

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SEARCH OF TORRENS TITLE

VOLUME	FOLIO
184468	11
EDITION	DATE OF ISSUE
1	28-Jun-2023

SEARCH DATE : 21-Jul-2023 SEARCH TIME : 12.41 PM

DESCRIPTION OF LAND

Parish of FORBES Land District of MONMOUTH Lot 11 on Sealed Plan 184468 Derivation : Part of 847 Acres Gtd. to C S Henry & R Dry Prior CT 140781/2

SCHEDULE 1

E125136 TRANSFER to THINKING OF MARKETING PTY LTD Registered 28-Sep-2018 at 12.02 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP184468 EASEMENTS in Schedule of Easements SP184468 COVENANTS in Schedule of Easements SP101150 & SP140781 COVENANTS in Schedule of Easements SP140781 FENCING COVENANT in Schedule of Easements SP101150 FENCING PROVISION in Schedule of Easements E125132 MORTGAGE to AET CORPORATE TRUST PTY LTD Registered 28-Sep-2018 at 12.03 PM M718517 MORTGAGE to MOVE HOMES PTY LTD Registered 28-Sep-2018 at 12.04 PM M812451 CAVEAT by Jonathon Charles Root, Commissioner of State Revenue (including Power of Sale) Registered 28-Feb-2020 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



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SCHEDULE OF EASEMENTS

NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.

SP 184468 PAGE 1 OF \$PAGE/S

Registered Number

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

(1) such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and

(2) any easements or profits a prendre described hereunder.

Each lot on the plan is subject to:-

EASEMENTS OR COVENANTS

(1) such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and

(2) any easements or profits a prendre described hereunder.

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

Each Lot on the Plan is burdened by the restrictive covenants created by and more fully set forth in Sealed Plan 140781.

All-existing rights and restrictions are to be carried forward from provious titles.

Lot 2 is subject to drainage right over the land marked DRAINAGE EASEMENT 2.50 WIDE in favour of Brighton Council.

Lots 5, 6 & 7 are subject to a drainage right over the land marked DRAINAGE EASEMENT & PIPELINE & SERVICES EASEMENT 3.70 WIDE in favour of Brighton Council.

Lots 5, 6 & 7 are subject to a PIPELINE AND SERVICES EASEMENT in gross in favour of the Tasmanian Water and Sewerage Corporation Pty Limited, its successors and assigns ("TasWater") over the land marked DRAINAGE EASEMENT & PIPELINE & SERVICES EASEMENT 3.70 WIDE.

Lot 6 is subject to a drainage right over the land marked DRAINAGE EASEMENT VARIABLE WIDTH in favour of Brighton Council.

Lots 7 & 8 are subject to a drainage right over the land marked DRAINAGE EASEMENT 3.00 WIDE in favour of Brighton Council.

Lot 9 is subject to a drainage right over the land marked DRAINAGE EASEMENT 2.50 WIDE in favour of Brighton Council.

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Lot 9 is subject to a PIPELINE AND SERVICES EASEMENT in gross in favour of the Tasmanian Water and Sewerage Corporation Pty Limited, its successors and assigns ("TasWater") over the land marked DRAINAGE EASEMENT & PIPELINE & SERVICES EASEMENT 3.50 WIDE.

Lot 10 is subject to a PIPELINE AND SERVICES EASEMENT in gross in favour of the Tasmanian Water and Sewerage Corporation Pty Limited, its successors and assigns ("TasWater") over the land marked PIPELINE & SERVICES EASEMENT 2.50 WIDE.

(ODE ANNEXONE FACE						
SUBDIVIDER: CERTANE CT PTY LTD (MORTGAGEE IN POSSESSION) 140781/2 SOLICITOR & REFERENCE: Summer Lawyers 9615	PLAN SEALED BY: DATE: 5.4.2023 SA 2017 00006 REF NO. Council Delegate					
NOTE: The Council Delegate must sign the Certificate for the purposes of identification						

(USE ANNEXURE PAGES FOR CONTINUATION)

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Volume Number: 184468



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		ANNEXURE TO	Registered Number
	SCH	EDULE OF EASEMENTS	05 1011C0
		PAGE 2 OF 5 PAGES	SP 104400
		6	
SUBDIVIDE FOLIO REFI	r: Cei Erenc	RTANE CT PTY LTD (MORTGAGEE IN P E: 140781/2	OSSESSION)
Lot 11 is subje Sewerage Co EASEMENT &	ect to a rporatic & PIPEL	PIPELINE AND SERVICES EASEMENT in gross in Pty Limited, its successors and assigns ("TasW JNE & SERVICES EASEMENT 3.70 WIDE. DRAINAGE RIGHT	s in favour of the Tasmanian Water and /ater") over the land marked DRAINAGE
EASEMENT 3	ect to a 3.70 Wi	DE-in-favour of Brighton-Gouncil. and DRAINAGE	ASEMENT 2.50 WIDE in favour of Brighton Council.
Lots 1-5 are s constructed. ^L A bushfire has	ubject t ots 1-5 in Q, R & S : card ma ot 6 is su	or a restrictive building envelope. No building to the clusive are each together with a Bushfire Hazaro Manageme shown over Lot 11 on the Plan. Lot 5 is together with an EMB anagement area marked G HI J X. M is to be creat bject to an EMBANKMENT EASEMENT (PRIVATE) in favour	te east of the line marked A B C D E F is to be int Easement over the land marked G, H, I, J, K, L, M, N, O, P, ANKMENT EASEMENT (PRIVATE) over the Land marked shown over Lot 6 or the Plan. Isod over the balance area. of Lot 6 over the land marked EMBANKMENT
DEFINITIONE The PIPELINE	ASEMEN of 11 is su 1, N, O, P 2 AND	IT shown over Lot 6 on the Plan. Jbject to a Bushfire Hazard Management Easement in favour C, R & S shown over Lot 11 on the Plan. SERVICES EASEMENT is defined as follows:-Lo EA	of Lots 1, 2, 3, 4 & 5 over the land marked G, H. I, J, K. L, ts 8, 9 & 10 are subject to an EMBANKMENT SEMENT in favour of Brighton Council over the Land
THE FULL RI	GHT AI	ND LIBERTY for the TasWater at all times to:	rked EMBANKMENT EASEMENT shown over Lots 8, 9 10 on the Plan.
(1) other	entei person	r and remain upon the Easement Land with or wit s duly authorised by it and with or without machin	hout employees, contractors, agents and all ery, vehicles, plant and equipment;
(2) Easer	inves nent La	stigate, take soil, rock and other samples, survey, and for any purpose or activity that TasWater is a	open and break up and excavate the uthorised to do or undertake;
(3)	insta	II, retain, operate, modify, relocate, maintain, insp	ect, cleanse and repair the Infrastructure;
(4)	rema	ove and replace the Infrastructure;	
(6)	run a	and pass sewage, water and electricity through an	nd along the Infrastructure;
(6) requir	do al ed by a	If works reasonably required in connection with su any law:	ich activities or as may be authorised or
	(a)	without doing unnecessary damage to the Ea	sement Land; and
	(b)	leaving the Easement Land in a clean and tidy	y condition; and
(7) any o perso highw	if the f the pro ns auth ay at a	Easement Land is not directly accessible from a eceding activities TasWater may with or without e iorised by it, and with or without machinery, vehic ny then existing vehicle entry and cross the Lot to	highway, then for the purpose of undertaking employees, contractors, agents and all other les, plant and equipment enter the Lot from the o the Easement Land; and
(8) purpo the Lo	use t ses on ot.	the Easement Land as a right of carriageway for t other land, TasWater reinstating any damage tha	he purpose of undertaking any of the preceding It it causes in doing so to any boundary fence of
PROVIDED A	LWAY	S THAT:	
(1) writter comp	The n conse liance v	registered proprietors of the Lot in the folio of the ent of TasWater first had and obtained (which can with any conditions which form the consent:	Register ("the Owner") must not without the not be unreasonably refused) and only in
NOTE: Ev	rery ar rporat	nnexed page must be signed by the parti e body be signed by the persons who ha	ies to the dealing or where the party is a ve attested the affixing of the seal of that

Search Time: 12:42 PM

Volume Number: 184468

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Registered Number ANNEXURE TO SCHEDULE OF EASEMENTS 184468 PAGE 3 OF \$ PAGES b SUBDIVIDER: CERTANE CT PTY LTD (MORTGAGEE IN POSSESSION) FOLIO REFERENCE: 140781/2 alter, excavate, plough, drill or otherwise penetrate the ground level of the Easement Land; (a) install, erect or plant any building, structure, fence, pit, well, footing, pipeline, paving, tree, (b)shrub or other object on or in the Easement Land; remove any thing that supports, protects or covers any Infrastructure on or in the Easement (C) Land: do anything which will or might damage or contribute to damage to any of the Infrastructure (d) on or in the Easement Land: in any way prevent or interfere with the proper exercise and benefit of the Easement Land by (e) TasWater or its employees, contractors, agents and all other persons duly authorised by it; or permit or allow any action which the Owner must not do or acquiesce in that action. (f)TasWater is not required to fence any part of the Easement Land. (2)The Owner may erect a fence across the Easement Land at the boundaries of the Lot. (3)The Owner may erect a gate across any part of the Easement Land subject to these conditions: (4)the Owner must provide TasWater with a key to any lock which would prevent the opening of (a) the gate; and if the Owner does not provide TasWater with that key or the key provided does not fit the lock, (b) TasWater may cut the lock from the gate. If the Owner causes damage to any of the Infrastructure, the Owner is liable for the actual cost to (5)TasWater of the repair of the Infrastructure damaged. If the Owner fails to comply with any of the preceding conditions, without forfeiting any right of action, (6)damages or otherwise against the Owner, TasWater may: reinstate the ground level of the Easement Land; or (a) remove from the Easement Land any building, structure, pit, well, footing, pipeline, paving, (b) tree, shrub or other object; or (C) replace anything that supported, protected or covered the Infrastructure. **INTERPRETATION** "Infrastructure" means infrastructure owned or for which TasWater is responsible and includes but is not limited to: sewer pipes and water pipes and associated valves; (a) telemetry and monitoring devices; (b) (C) inspection and access pits;

power poles and lines, electrical wires, electrical cables and other conducting media (excluding telemetry (d) and monitoring devices);

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

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		Registered Number						
	PAGE 4 OF 5 PAGES	SP 184468						
SUBDIV FOLIO I	IDER: CERTANE CT PTY LTD (MORTGAGEE IN PO REFERENCE: 140781/2	DSSESSION)						
(e)	markers or signs indicating the location of the Easement L restrictions with respect to the Easement Land or the Infra	and, the Infrastructure or any warnings or istructure;						
(f)	anything reasonably required to support, protect or cover a	any of the Infrastructure;						
(g)	any other infrastructure whether of a similar nature or not t for the piping of sewage or water, or the running of electric or managing that activity; and	to the preceding which is reasonably required city, through the Easement Land or monitoring						
(h)	where the context permits, any part of the Infrastructure.							
he BUS	HEIRE HAZARD MANAGEMENT EASEMENT is defined as	follows:						
he Bush ushfire r vea and	fire Hazard Management means a systematic process to coo isk with the aim of limiting the adverse offects of bushfire on t hazard management areas.	ordinate, direct and control activities relating to the bushfire-prone vegetation, each building-						
See pag	ges 5 and 6 for continuation. BY MORTGAGEE IN POSSESSION CERTANE CT PTY LTI SON CT PTY LTD AND PREVIOUSLY KNOWN AS AET CO	<u>D ACN 106 424 088 (PREVIOUSLY KNOWN</u> RPORATE TRUST PTY LTD) OF THE LAND						
	SED IN CERTIFICATE OF TITLE VOLUME 140781 Folio 2 F	PURSUANT TO REGISTERED MORTGAGE						
WITH DE Executed by its Solo bursuant and who or renova Witness (Print Full Full Post	ALING NUMBER E125132 by CERTANE CT PTY LTD ACN 106 424 088 e Director and Secretary of Summer Lawyers Pty. Ltd. to Power of Attorney with NSW Registered BK 4741 NO 841 declares that he has received no notice of alteration tion of the said Power of Attorney in the presence of: Signature):	Paul Nathan Reese Sole Director and Secretary of Summer Lawyers Pty. Ltd.						
	: Every annexed page must be signed by the part	ies to the dealing or where the party is						

Volume Number: 184468



Issued Pursuant to the Land Titles Act 1980



ANNEXURE TO SCHEDULE OF EASEMENTS

PAGE 5 OF & PAGES

SP 184468

Registered Number

SUBDIVIDER: CERTANE CT PTY LTD (MORTGAGEE IN POSSESSION) FOLIO REFERENCE: 140781/2

SIGNED BY MORTGAGEE MOVE HOMES PTY LTD ACN 122 551 115 OF THE LAND COMPRISED IN CERTIFICATE OF TITLE VOLUME 140781 Folio 2 UNDER REGISTERED MORTGAGE WITH DEALING NUMBER

<u>E718517</u>

Executed by MOVE HOMES PTY LTD ACN 122 551 115

by its authorised officer pursuant to section 127

of the Corporation Act 2001

Marilyn Anne Ernst Sole Director and Secretary of Move Homes Pty Ltd

EMBANKMENT EASEMENT means

A right for the dominant owner to enter the land marked "EMBANKMENT EASEMENT" on the Plan to carry out works to retain and maintain earthworks and drainage associated with a local highway (as defined in the Local Government (Highways) Act 1982) <u>BUT</u> that the servient owner may develop the land for the purpose of either:

(a) providing access to the servient land; or

(b) to maintain the stability of the servient land.

if the servient owner first obtains the written consent of the Brighton Council.

EMBANKMENT EASEMENT (PRIVATE) means

(a) the right for the proprietor of the dominant tenement to enter upon the land marked EMBANKMENT EASEMENT (PRIVATE) within Lot 6 on the plan at any time to construct and maintain a bank to support the adjoining driveway immediately above the servient tenement; and

(b) reserving the right for the proprietor of the servient tenement to plant and maintain vegetation on the said land and to use the land in any manner not affecting the support which it gives the adjoining driveway; and

(c) to ensure that the rights granted are exercised in a proper manner so as to cause as little inconvenience as possible and to do as little damage as practicable to the said land.

BUSHFIRE HAZARD MANAGEMENT EASEMENT means

(a) The right for the person having the benefit in accordance with the requirements of any Bushfire Hazard Management Plan approved by the Brighton Council associated with the development to enter the land, manage the land including the hazard management areas, and to maintain the bushfire-prone vegetation in a reduced fuel condition.

(b) The person having the benefit of the Bushfire Hazard Management Easement and may do anything reasonably necessary for that purpose, including entering the land, taking anything onto the land and carrying out works.

To be continued in the following page.

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

Search Time: 12:42 PM

Department of Natural Resources and Environment Tasmania

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ANNEXURE TO SCHEDULE OF EASEMENTS			~		,	~	
PAGE 6 OF 6 PAGES	SF)1	8	4	4	6	8
SUBDIVIDER: - CERTANE CT PTY LTD (MORTGAGEE IN POSSESSIO	ON)						
(continued) BUSHFIRE HAZARD MANAGEMENT EASEMENT means (c) In exercising those powers, the person having the benefit of the Bushfire Hazard I	Manageme	nt Ease	ement	mus	:t:		
i) ensure all works are done properly;							
ii) cause as little inconvenience as practical to the owner and occupier of the lot burc	dened;						
iii) cause as little damage as practical to the lot burdened and any improvement on it accordance with the Bushfire Management Plan; and	t except for	the wo	orks ur	ndert	aken:	ı in	
iv) restore the lot burdened as neatly as practical to its former condition except for th Pipeline and Services Easement and works undertaken in accordance with the Bush	e addition (fire Manage	of infra: ement	structi Plan, i	ure p and	ursu	iant te	>
v) make good any collateral damages.							
DRAINAGE RIGHT means Right of drainage which has the same meaning under Schedule 8 of <i>Conveyancing ar</i>	nd Law of P.	roperty	Act 1	384 (Tas).		
The owner of each lot of lots 1, 2, 3, 4 & 5 on the Plan acknowledges that Lots 1-5 are envelope. The owner of each lot of lots 1, 2, 3, 4 & 5 on the Plan covenants with the Ve Services Pty Ltd ACN 643 981 275, and the owners for the time being of every other lot the burden of this covenant may run with and bind the covenantor's lot and every par annexed to and devolve with each other and every part of every other lot shown on th stipulations, namely that no building will be constructed to the east of the line marked Plan.	subject to a endor, Austr ot shown or t thereof ar he plan to ol I A, B, C, D,	restric ration M the Pl d that bserve E and f	tive b Aortga an to the be the fo F show	uildi age F the in anefit Ilowi wn o	ng finan ntent t shal ng n the	ice t that II be e	
SIGNED BY MORTGAGEE IN POSSESSION CERTANE CT PTY LTD ACN 106 424 (AS SARGON CT PTY LTD AND PREVIOUSLY KNOWN AS AET CORPORATE TRUE COMPRISED IN CERTIFICATE OF TITLE VOLUME 140781 Folio 2 PURSUANT TO F WITH DEALING NUMBER E125132 by its Sole Director and Secretary of Summer Lawyers Pty. Ltd. pursuant to Power of Attorney with NSW Registered BK 4741 NO 841 and who declares that he has received no notice of alteration or renovation of the said Power of Attorney in the presence of: Witness (Signature): Xmm (W. (Print Full Name): Xiaodan Cui (Full Postał Address): Level 10, 131 York Street, Sydney NSW 2000	088 (PREVI ST PIY LTI REGISTERE ese ad Secretar Ltd.	<u>OUSLY</u>)) OF T D MOF	<u>KNC</u> HEL RTGA	<u>WN</u> <u>AND</u> <u>GE</u> Law			*
NOTE: - Every annexed sheet must be signed by the parties to the deal body be signed by the persons who have attested the affixing of the seal of	ling or wh	iere th	ie par deal	ty is		orpo	rate





SEARCH OF TORRENS TITLE

VOLUME	FOLIO
143522	7
EDITION	DATE OF ISSUE
4	18-Jul-2016

SEARCH DATE : 22-Aug-2023 SEARCH TIME : 07.58 AM

DESCRIPTION OF LAND

Parish of FORBES Land District of MONMOUTH Lot 7 on Sealed Plan 143522 Derivation : Part of 847 Acres Granted to C S Henry & R Dry Prior CT 140781/1

SCHEDULE 1

M559587 TRANSFER to MICHEAL WAYNE SMITH and DIANNE JOY O'REILLY Registered 18-Jul-2016 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any SP143522 EASEMENTS in Schedule of Easements SP143522 FENCING COVENANT in Schedule of Easements SP101150 & SP140781 COVENANTS in Schedule of Easements SP140781 FENCING COVENANT in Schedule of Easements SP101150 FENCING PROVISION in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

NOTICE: This folio is affected as to amended covenants pursuant to Request to Amend No. D17133 made under Section 103 of the Local Government (Building and Miscellaneous Provisions) Act 1993. Search Sealed Plan No. 140781 Lodged by BRIGHTON COUNCIL on 13-Jul-2011 BP: D17133



FOLIO PLAN

RECORDER OF TITLES

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RECORDER OF TITLES

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SCHEDULE OF EASEMENTS

NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.

Registered Number

P143522

PAGE 1 OF 2 PAGE/S

EASEMENTS AND PROFITS

Each lot on the plan is together with:-

such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain (1)the stormwater and other surplus water from such lot; and

any easements or profits a prendre described hereunder.

(2)

Each lot on the plan is subject to:such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and

any easements or profits a prendre described hereunder.

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

Lots 5, 6, 7, 8, 9, 10, 11, 12, and 13 on the plan are each subject to a right of drainage for Brighton Council over the **Drainage Easement 3.00** wide shown on the plan passing through such lots.

FENCING COVENANT

The owner of each lot on the plan covenants with the Vendor Elite Enterprises Australia Pty Ltd that the Vendor shall not be required to fence.

COVENANTS

EACH LOT ON THE PLAN IS AFFECTED BY THE RESTRECTEVE COVENANTS CREATED BY AND MORE FULLY SET FORTH IN SEALED PLANS NO. 101150 AND NO. 140781 RESPECTIVELY

-COVENANTS

The owner of lots 8, 9, 10, 11, 12, & 13 on the plan covenants with the Vendor Elite Enterprises Australia Pty Ltd and The Brighton Council and the owners for the time being of every other Lot shown on the plan to the intent that the burden of this covenant may run with and bind the Covenantor's Lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every part of every other lot shown on the planto observe the following stipulations:

Not to permit direct access to Baskerville road from the subject lots. 1.

The owner of lots 8, 9, 10, 11, 12 & 13 on the plan covenants with the Vendor Elite Enterprises Australia Pty Ltd and the owners for the time being of every other Lot shown on the plan to the intent that the burden of this covenant may run with and bind the Covenantor's Lot and every part thereof and that the benefit thereof shall be annexed to and devolve with each and every part of every other lot shown on the plan to observe the following stipulations:

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Elite Enterprises Australia Pty Ltd	PLAN SEALED BY: BRIGHTON COUNCIL	
FOLIO REF: 140781/1	DATE: 24.3 05	
SOLICITOR Goodman Solicitors	SUB 04/16	
& REFERENCE: Matt Goodman	REF NO. Council Delegate	
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.		

Search Time: 07:58 AM

Department of Natural Resources and Environment Tasmania

Volume Number: 143522

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ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 2 PAGES



SUBDIVIDER: Elite Enterprises Australia Pty Ltd FOLIO REFERENCE: 140781/1

Not to erect on such lot any building which is more than a single storey in height.

As it relates to covenant No. 2 defailed above The Vendor reserves the right for themselves or their assigns to sell lease or otherwise deal with any Lot on the plan either subject to the above conditions and/or restrictive covenants or any one of them or not subject to such modifications thereof as they in their sole discretion deem fit. The exercise of the said right in relation to any Lot shall not release the Owners of any other Lot from any of the conditions or covenants affecting or imposed upon such other Lots or give the Owners of any Lot any right of action against the Vendors or any other person.

SIGNED by the said Elite Enterprises Australia Sole louf. Sole lam Pty Ltd the Registered Proprietors of the land comprised in Certificate Certificate of Title Volume 140781 Folio 1 0000000 in the presence of: Dames John Jones Sisi ric Manager Beechaut St . Iton NKW 2303. SIGNED AT HAMILTON FRISH OF March 2025 FOR NATIONAL AUSTRALIA BANK LIMITED ACNAUT 041 937 BY MICHAEL FRIEDMAN ITS OULY APPOINTED ATTORNEY CNDFR POWER OF ATTORNEY No. 549 BOOK, 3834 MANAGER

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

Search Time: 07:58 AM

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RECORDER OF TITLES

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ANNEXURE TO SCHEDULE OF EASEMENTS

PAGE 2 OF 3 PAGES

Registered Number

SP 143522

SUBDIVIDER: Elite Enterprises Australia Pty Ltd FOLIO REFERENCE: 140781/1

Executed by NATIONAL AUSTRALIA BANK LIMITED by its Attorney Andrew Michael Downie under Power of Attorney No. 67/0241 and amended by 71/5033 (who states that he holds the office in the NATIONAL AUSTRALIA BANK LIMITED indicated under his signature and who declares he has received no notice of revocation of the said Power) in the presence of:

) Mobile Mortgage Manager

)

Jenny Doran, Bank Officer 76 Liverpool Street, Hobart

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

Search Date: 22 Aug 2023

Search Time: 07:58 AM

Department of Natural Resources and Environment Tasmania

Volume Number: 143522

Revision Number: 01

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SEARCH OF TORRENS TITLE

VOLUME	FOLIO	
49158	1	
EDITION	DATE OF ISSUE	
11	02-Jun-2022	

SEARCH DATE : 13-Jun-2024 SEARCH TIME : 08.06 AM

DESCRIPTION OF LAND

Parish of FORBES, Land District of MONMOUTH Lot 1 on Sealed Plan 49158 Derivation : Part of 847 Acres Gtd. to C.S. Henty and R. Dry Prior CT 4770/62

SCHEDULE 1

D86234 TRANSFER to BASKERVILLE QUARRIES PTY LTD Registered 23-Dec-2013 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any		
SP 49158 FENCING PROVISION in Schedule of Easements		
SP 49158 COUNCIL NOTIFICATION under Section 468(12) of the		
Local Government Act 1962		
B632376 BURDENING EASEMENT: Pipeline Right for The Hobart		
Regional Water Board over Pipeline Easement 10.06		
wide shown passing through the said land within		
described Registered 03-Nov-1993 at noon		
(MF:2146/618)		
M900416 MORTGAGE to Geoffrey Alan Christie and Sharon Ann		

Christie Registered 02-Jun-2022 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980





INDEX PLAN



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SCHEDULE OF EASEMENTS

RECORDER OF TITLES

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SCHEDULE OF EASEMENTS

PLAN NO.

58

Note:-The Town Clerk or Council Clerk must sign the certificate on the back page for the purpose identification.

The Schedule must be signed by the owners and mortgagees of the land affected. Signatures should be attested.

EASEMENTS AND PROFITS

Each lot on the plan is together with:----

- (1) such rights of drainage over the drainage easements shewn on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
- (2) any easements or profits à prendre described hereunder.

Each lot on the plan is subject to:----

- (1) such rights of drainage over the drainage easements shewn on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other sutplus water from any other lot on the plan; and
- (2) any easements or profits à prendre described hereunder.

The direction of the flow of water through the drainage easements shewn on the plan is indicated by arrows.

Fencing Provision:

In respect of the Lots upon the Plan the Vendor Mattodd Estate Pty Ltd and John Edward Watson and Lesley Anne Watson shall not be required to fence.

Volume Number: 49158

RECORDER OF TITLES Issued Pursuant to the Land Titles Act 1980



The Common Seal of MATTODD ESTATE PTY LTD as registered proprietors of the land in Certificate of Title Volume 4671 Folio 71 was hereunto affixed in the presence of :-

COM MOA	
PTY. LTD.	:
2223 Timpa	
2 Builden and	•
2 control concepting	- 1

SIGNED by

JOHN EDWARD WATSON

as registered proprietor of the

land in Certificate of Title Volume

4671 Folio 71 in the presence of:-

W. Wowarder Land Could . Judgebent

SIGNED by

LESLEY ANNE WATSON

as registered proprietor of the

land in Certificate of Title Volume

4671 Folio 71 in the presence of:-

SIGNED by

Sourcison

PETER ETHRINGTON EVANS

and GARY RONALD GRANT as Mortgagees pursuant to Memorandum of Mortgage No. B361046A in the presence of:-

La Dabon

This is the schedule of casements attached to the plan ofMATTODD ESTATE PTY LTDAND (Insert Subdivider's Full Name) JOHN EDWARD WATSON AND LESLEY ANNE WATSON CERTIFICATE OF TITLE VOLUME 4671 FOLIO 71 (Insert Title Reference) **GROUN** 19.99 Solicitor's Refetence BUTLER MCINTYRE & BUTLER Council Clerk/T (PJJ/90/2810) 05-8 3134

Rugass

Tasmanian Planning Scheme - Brighton

Amendment RZ 2024/02

Instrument of Certification

The Brighton Council Planning Authority resolved at its meeting held on 1 October 2024 that Amendment RZ2024/02 of the *Tasmanian Planning Scheme - Brighton* meets the requirements specified in Section 34 of the *Land Use Planning and Approvals Act 1993*.

The common seal of the Brighton Council is affixed below, pursuant to the Council resolution of 16 May 2006 in the presence of:

General Manager

Date:

AMENDMENT TO THE PLANNING SCHEME ORDINANCE

Amend clause BRI-S11.7.1 Building and Works of the BRI-S11.0 South Brighton Specific Area Plan as follows:

BRI-S11.7.1 Building and Works

This clause is in addition to General Residential Zone – clause 8.4 Development Standards for Dwellings.

Objective:			
That buildings and works do not prejudice the efficient future utilisation of land for urban development.			
Acceptable Solutions	Performance Criteria		
 A1 Buildings and works must: (a) be for an addition to an existing dwelling; (b) be of a temporary nature able to be removed prior to the development of the land; or (c) be on a lot, excluding a balance lot, that has been created after the date this Specific Area Plan first came into effect. 	 P1 Buildings and works must not preclude or hinder the effective and efficient implementation of the Development Framework in Figure BRI-S11.2, having regard to: (a) the topography of the site; (b) any existing access arrangements; (c) location of any services; (d) the purpose, location and extent of any building and works; and (e) any alternative subdivision layout that achieves the Specific Area Plan Purpose. 		



James Dryburgh General Manger Brighton Council 1 Tivoli Road, OLD BEACH TAS 7017 Email: admin@brighton.tas.gov.au

Dear James,

Proposed Draft Amendment to Brighton Local Provisions Schedule, South Brighton Specific Area Plan

I write providing support and land owner consent for a proposed draft amendment to the Brighton Local Provisions Schedule (LPS) by Brighton Council which impacts Homes Tasmania land at 33 Elderslie Road, Brighton.

The South Brighton Specific Area Plan (SAP) was inserted into the LPS by amendment RZ 2022-05 with the effective date of 24 May 2024 and contains clause BRI-S11.7.1 A1 which reads:

A1 Buildings and works must:

(a) be for an addition to an existing dwelling;

(b) be of a temporary nature able to be removed prior to the development of the land; or (c) be on a lot, excluding a balance lot, that has been created by an approved subdivision under this Specific Area Plan.

BRI-S11.7.1 A1(c) is considered problematic for Homes Tasmania in relation to the subdivision of the land at 33 Elderslie Road. The application for the 109-lot subdivision was lodged on the 28 June 2023 (prior to the SAP) and the subdivision permit was approved by Council on 17 September 2024, after the SAP had been inserted into the LPS.

This timing creates a situation where all development on lots created by the subdivision at 33 Elderslie Road will not comply with BRI-S11.7.1 A1(c), therefore all future works will be deemed discretionary and have to be assessed in accordance with *s*.57 of the Land Use Planning and Approvals Act 1993 (LUPAA).

Copy: David.Allingham@brighton.tas.gov.au

We understand Council propose to remedy this situation by replacing the existing BRI-S11.7.1 A1(c) with:

A1 (c) "be on a lot, excluding a balance lot, that has been created after the effective date* of this Specific Area Plan." *effective date 24 May 2024.

Pursuant to Section 52(1) of the *Land Use Planning and Approvals Act 1993* and as a person authorised under Section 12(1) of the *Homes Tasmania Act 2022*, on behalf of Homes Tasmania, I Richard Gilmour, hereby give the applicant permission to the making of the following involving land in the ownership Homes Tasmania at the nominated address. Please note, as of 1st December 2022 the Director of Housing ceased to exist. Under Schedule 2(5) of the *Homes Tasmania Act 2022* all reference to the Director of Housing is to be taken to be a reference to Homes Tasmania.

I thank Council for their attention to this matter and I hope this letter of support encourages the Tasmanian Planning Commission to dispense with public exhibition requirements under 40I of LUPAA.

Yours sincerely

Richard Gilmour Director Community Infrastructure Homes Tasmania

25 September 2024

David Allingham

From: Sent: To: Subject: Tony Dourias Jnr <douriasgroupholdings@gmail.com> Wednesday, 25 September 2024 3:11 PM David Allingham Re: South Brighton SAP amendment

Caution: This is an external email and may be **malicious**. Please take care when clicking links or opening attachments.

Hi.

Yes I consent to the ammendment.

Kind Regards,

Tony Dourias Jnr

Joint Managing Director



Dourias Group Holdings

Tony Dourias Jnr

P: 0413 590 488 F: 03 86861483

E: dourias@bigpond.com

You can upload large files to me at: https://www.hightail.com/u/tony-dourias-jnr

Dourias Group Holdings

PO Box 3193 West Hobart,

Tasmania, AUS, 7000

Tony & John Dourias - Joint Managing Directors

Tony Dourias Jnr - 0413 590 488 - John Dourias - 0413 590 489
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On Wed, 25 Sept 2024, 2:06 pm David Allingham, <<u>David.Allingham@brighton.tas.gov.au</u>> wrote:

Thanks Tony.

Do you have a signature block or something you can add to your consent email to make it look a bit more official?

Cheers

From: Tony Dourias Jnr <<u>douriasgroupholdings@gmail.com</u>>
Sent: Wednesday, 25 September 2024 1:54 PM
To: David Allingham <<u>David.Allingham@brighton.tas.gov.au</u>>
Subject: Re: South Brighton SAP amendment

Caution: This is an external email and may be **malicious**. Please take care when clicking links or opening attachments.

Hi.

Yes, I consent to the amendment.

On Wed, 25 Sept 2024, 9:50 am David Allingham, <<u>David.Allingham@brighton.tas.gov.au</u>> wrote:

Hi Tony

I am not sure whether you are aware, but there is an error in the wording of the South Brighton SAP that will impact future development on lots created under subdivision approval SA2015/00011 on your land at <u>1 Dylan St, Brighton</u>. I am currently preparing a draft planning scheme amendment to fix the error.

The error relates to the wording in clause BRI-S11.7.1 Building and Works A1(c):

Building and works must:

•••••

(c) be on a lot, excluding a balance lot, that has been created by an approved subdivision under this Specific Area Plan.

The current wording will unintentionally result in all future development applications involving buildings and works being discretionary on lots created by subdivision permit SA2015/00011 as it was not "an approved subdivision under this Specific Area Plan."

A modification to the wording is proposed as follows:

Building and works must:

••••

(c) be on a lot, excluding a balance lot, that has been created after the date this Specific Area Plan first came into effect."

The modification refers only to lots "created" and removes the reference to a subdivision approval. A lot is created when a title is registered. As no new titles have been registered from permit SA2015/00011 (noting that it has substantially commenced and is a valid permit) prior to the

effective date of the South Brighton SAP, future development applications on new lots can satisfy the Acceptable Solution, as intended.

Given the simplicity of the request, I am requesting that the Tasmanian Planning Commission dispense with public exhibition requirements in accordance with s.40I of the *Land Use Planning and Approvals Act 1993*. I am hoping that you can provide written consent to the draft planning scheme amendment and dispensing the public exhibition requirements.

I am hoping to put the draft planning scheme amendment up to the Planning Authority meeting on 1 October and the Agenda closes tomorrow. If you could provide consent by tomorrow It would be greatly appreciated. Apologies for the short timeframe.

Feel free to contact me to discuss further.

Kind regards

DAVID ALLINGHAM

DIRECTOR DEVELOPMENT SERVICES

Working Hours: Mon – Thurs



1 Tivoli Road, Old Beach TAS 7017

Tel: (03) 6268 7021

Mob: 0404 996 614

www.brighton.tas.gov.au

We acknowledge the traditional owners who once walked this country, the Mumirimina people, the original custodians of the skies, land and water of kutalayna (Jordan River). We forward our respect to the palawa/pakana (Tasmanian Aboriginal) community as the traditional and original owners of lutruwita (Tasmania).

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