# Application for Planning Approval

## *Land Use Planning and Approvals Act 1993*

APPLICATION NO.

**DA2025/044**

LOCATION OF AFFECTED AREA

**113 MCGANN DRIVE, BRIGHTON**

DESCRIPTION OF DEVELOPMENT PROPOSAL

**SINGLE DWELLING**

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT www.brighton.tas.gov.au AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON **04/06/2025**. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT development@brighton.tas.gov.au. REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

**CALLUM PEARCE-RASMUSSEN**
**Acting Chief Executive Officer**

SCAN ME

Brighton
going places

Proposed: Residence

For: J Goldfinch
and S Eyers

At: 113 McGann Drive
Brighton

Designer: Philip Cuthbertson
Building Design Solutions
PO Box 240
Huonville TAS

Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251H

## SITE INFORMATION

PROPERTY DESCRIPTION
PID No 3236692
TITLE No 16589/6
CONTAINING 127.2 Ha
LOCAL AUTHORITY
BRIGHTON COUNCIL
ZONE LANDSCAPE CONSERVATION
TASMANIAN PLANNING SCHEME
PLANNING SCHEME OVERLAYS
PRIORITY VEGETATION AREA
WATERWAY AND COASTAL PROTECTION
BUSHFIRE-PRONE AREA
MEDIUM LANDSCAPE HAZARD BAND
LOW LANDSLIP HAZARD BAND
INNER PROTECTION AREA
ELECTRICITY TRANSMISSION CORRIDOR

BUSHFIRE ATTACK LEVEL DETERMINATION
- FDI: 50
- BAL ADOPTED: 12.5

CLIMATE ZONE: 7
KNOWN SITE HAZARDS: NIL

## COLOR SCHEME

| | |
|---|---|
| WALLS | HANES PAINTS ORGANIC 4 |
| ROOF | COLORBOND WINDSPRAY (LRI27) |
| TRIMS | COLORBOND WINDSPRAY (LRI27) |

## FLOOR AREA

| | |
|---|---|
| HABITABLE AREA | 176 sqm |
| BALCONY | 92 sqm |
| TOTAL | 268 sqm |

## DRAWINGS

| | |
|---|---|
| 1612 SK-A-01 | Site Plan |
| 1612 SK-A-02/A | Site and Soil and Water Management Plan |
| 1612 SK-A-03 | Floor Plan |
| 1612 SK-A-04 | Floor Plan Lower Level |
| 1612 SK-A-05 | Roof Plan |
| 1612 SK-A-06 | Elevations |
| 1612 SK-A-07 | Elevations |
| 1612 SK-A-08 | Section |
| 1612 SK-A-09 | Section |
| 1612 SK-A-10 | Part Site Plan |

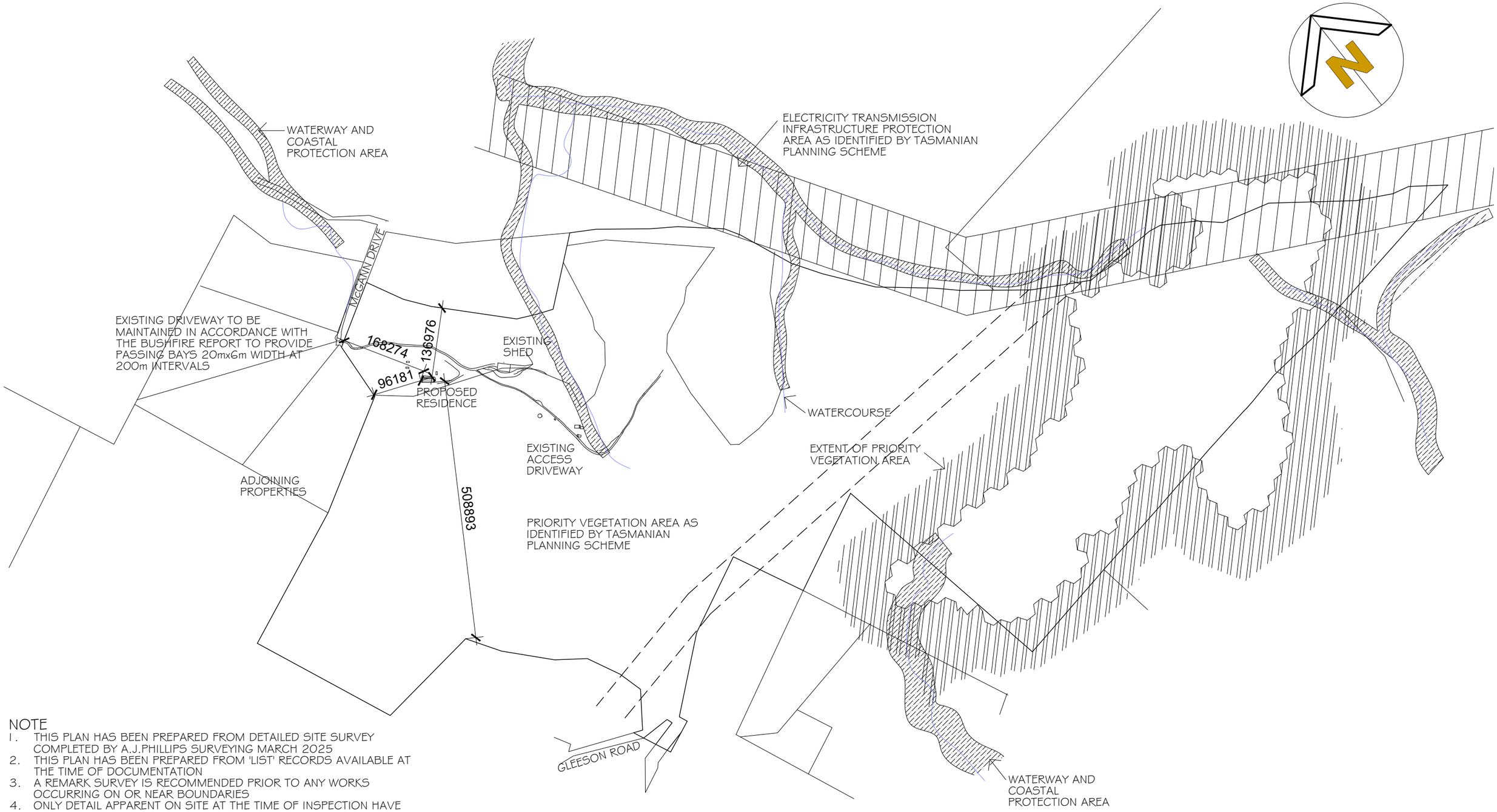
## HYDRAULIC DRAWINGS

| | |
|---|---|
| 1612 SK-H-01 | Sewer House Drainage Plan |
| 1612 SK-H-02 | Stormwater Drainage Plan |

Philip Cuthbertson
BUILDING DESIGN SOLUTIONS

bdaa
BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

Alterations
Extensions
Commercial
Residential
Bushfire Assessments
Draffting
Building Design




NOTE

1. THIS PLAN HAS BEEN PREPARED FROM DETAILED SITE SURVEY COMPLETED BY A.J.PHILLIPS SURVEYING MARCH 2025
2. THIS PLAN HAS BEEN PREPARED FROM 'LIST' RECORDS AVAILABLE AT THE TIME OF DOCUMENTATION
3. A REMARK SURVEY IS RECOMMENDED PRIOR TO ANY WORKS OCCURRING ON OR NEAR BOUNDARIES
4. ONLY DETAIL APPARENT ON SITE AT THE TIME OF INSPECTION HAVE BEEN IDENTIFIED ON THIS PLAN. OTHER FEATURES AND SERVICES MAY EXIST ON, UNDER, OR OVER THE SITE. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO DETERMINE THE LOCATION OF THESE SERVICES PRIOR TO THE COMMENCEMENT OF SITE WORKS
5. SITE SERVICES WITHIN THE CONSTRUCTION SITE SHALL BE DISCONNECTED OR ADEQUATE WARNING SIGNS USED TO IDENTIFY SERVICES PRIOR TO ANY CONSTRUCTION WORKS COMMENCING

PROPERTY DESCRIPTION
PID No 3236692
TITLE No 16589/6
CONTAINING 127.2 Ha

ISSUE:

Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H

SCALE: 1:7500 AT A3
0m 100m 200m 300m



PROPOSED:
RESIDENCE

DRAWING:
SITE PLAN

FOR:
J GOLDFINCH AND S EYERS

AT:
113 McGANN DRIVE BRIGHTON

JOB NO.:
1612
SK-A-01

OF 9 SHEET / S
DATE DRAWN:
MARCH 2025

DURING CONSTRUCTION SERVICE TRENCHES TO BE MANAGED TO PREVENT EROSION AND SITE CONTAMINATION. TRENCH BACKFILL TO BE COMPACTED TO 95% STANDARD COMPACTION AND FINISHED ABOVE SURROUNDING GROUND TO ALLOW FOR SETTLEMENT.

EXISTING SHIPPING CONTAINER STORAGE TO BE REMOVED

EXISTING LEVEL CLEARED AREA - NO FURTHER CLEARING REQUIRED

VEHICLE MANOEUVRING AREA
TERMINATION OF DRIVEWAY MUST BE WITHIN 90m OF FURTHEST POINT OF BUILDING MEASURED AS HOSE A LAY
MAX 3° CROSSFALL

NO CLEARING OR DISTURBANCE OF NATIVE VEGETATION ON SITE IS TO BE CARRIED OUT WITHOUT THE APPROVAL OF COUNCIL

EXISTING SHIPPING CONTAINER STORAGE TO REMAIN

ON COMPLETION OF THE BUILDING WORKS THE AREA NOMINATED AS THE BUSHFIRE HAZARD MANAGEMENT AREA SHOWN HATCHED IS TO BE MAINTAINED IN A LOW FUEL CONDITION IN ACCORDANCE WITH THE BUSHFIRE HAZARD MANAGEMENT PLAN. REMINDER OF CLEARED AREAS TO BE ALLOWED TO REGENERATE NATURALLY

DRIVEWAY TO SATISFY THE REQUIREMENTS OF THE NCC CLAUSE TAS 3.7.4.1 VEHICULAR ACCESS AND THE AUSTRALIAN ROAD RESEARCH BOARD "UNSEALED ROADS MANUAL - GUIDELINES TO GOOD PRACTICE, MARCH 2009" FOR A CLASS 4C ACCESS ROAD. ACCESS ROAD, IF LESS THAN 6m CARRIAGEWAY WIDTH, MUST HAVE 20m LONG PASSING BAYS 6m WIDE NOT MORE THAN 200m APART. CULVERTS, BRIDGES ETC TO BE CONSTRUCTED FOR A MINIMUM VEHICLE LOAD OF 20 TONNES. VEGETATION TO BE CLEARED FOR A HEIGHT OF 4m ABOVE CARRIAGEWAY AND FOR A DISTANCE OF 2m EACH SIDE OF THE CARRIAGEWAY.

INSTALL PERMANENTLY FIXED SIGNAGE TO FIRE-FIGHTING WATER TANK IN ACCORDANCE WITH DIRECTORS DETERMINATION-REQUIREMENTS FOR BUILDING IN BUSHFIRE PRONE AREAS.

WATER FROM THE FIRE TANK IS NOT TO BE USED FOR ANY OTHER PURPOSES INCLUDING FIRE-FIGHTING SPRINKLERS OR SPRAY SYSTEM

16000

EXISTING SHIPPING CONTAINER STORAGE/SITE OFFICE

FIRE TANK

ALL EARTHWORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3798-2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS

EXISTING SANDSTONE RETAINING WALL APPROX 1000 HIGH

AS SOON AS POSSIBLE ON COMPLETION OF WORKS THE SITE IS TO BE RE-VEGETATED TO REDUCE SOIL EROSION. EXPOSED SOIL TO BE STABILISED UNTIL PERMANENT VEGETATION GROWS

169.0

170.0

HMA LOCATED WITHIN EXISTING CLEARED AREA - NO FURTHER CLEARING REQUIRED

171.0

32000

NO WORKS TO BE CARRIED OUT IN THIS AREA

EXISTING FENCE

172.0

PROPOSED RESIDENCE

FFL RL 174.50

32000

HAZARD MANAGEMENT AREA

173.0

174.0

CAR PARKING FOR TWO VEHICLES. GRADIENT OF PARKING AREA NOT TO EXCEED 5%

BATTERED BANK APPROX 500 HIGH

12000

EXISTING VEHICLE ACCESS

175.0

CUT-OFF DRAIN CONSTRUCTED ON HIGH SIDE OF SITE PRIOR TO WORKS COMMENCING AND MAINTAINED FOR DURATION OF WORKS. DRAIN TO BE MAINTAINED FREE FROM PLANTINGS MULCH. PROVIDE LEVEL ROCK SPREADER AT OUTLET TO REDUCE SOIL EROSION

## SITE CONTAMINATION PROTOCOLS

- REFER NRM SOUTH "SOIL AND WATER MANAGEMENT ON CONSTRUCTION SITES" GUIDELINES AND TASMANIAN STANDARD DRAWING TSD-SW28 FOR FURTHER INFORMATION AND GUIDELINES FOR SOIL AND WATER MANAGEMENT
- DISTURBANCE OF THE SITE BEYOND THE CONSTRUCTION AREA IS TO BE KEPT TO A MINIMUM. CONTRACTORS AND VISITORS TO SITE ARE TO AVOID DISTURBING, DRIVING OR WALKING BEYOND THE WORKSITE
- THE PRINCIPAL CONTRACTOR IS TO ESTABLISH "NO GO AREAS" TO RETIAN AS MUCH VEGETATION AS POSSIBLE FROM DAMAGE
- ALL FOOTWEAR, TOOLS, PLANT AND EQUIPMENT IS TO BE CLEANED OF ALL MUD, SOIL AND DEBRIS PRIOR TO DEPARTURE FROM THE SITE
- ADDITIONAL WATER TO BE SUPPLIED ON SITE BY THE PRINCIPAL CONTRACTOR FOR CLEANING PURPOSES
- SEDIMENT AND EROSION CONTROL MEASURES TO BE REGULARLY INSPECTED BY THE PRINCIPAL CONTRACTOR TO ENSURE SYSTEMS ARE IN PLACE AND OPERATIONAL

ISSUE: A 08 MAY 2025 NOTES ADDED REGARDING CLEARING, MANOEUVRING AREA


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:250 AT A3
0m 5m 10m



PROPOSED:
RESIDENCE

DRAWING:
SITE WATER MANAGEMENT PLAN

FOR:
J GOLDFINCH AND S EYERS

AT:
113 McGANN DRIVE BRIGHTON

JOB NO.:
1612
SK-A-02/A

OF 9 SHEET / S
DATE DRAWN:
MARCH 2025

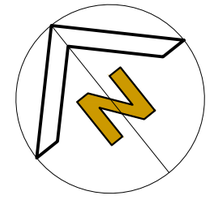
## ENERGY EFFICIENCY

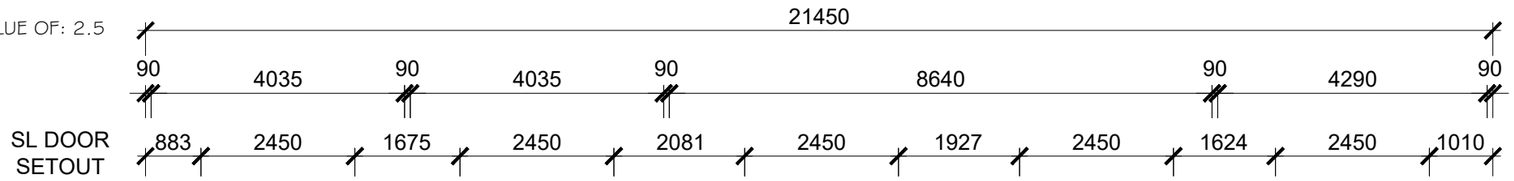
REQUIREMENTS TO SATISFY NCC PART 3.12 ENERGY EFFICIENCY:

ROOF
INSULATION INSTALLED TO HAVE MINIMUM R VALUE OF: 4

EXTERNAL WALLS
INSULATION INSTALLED TO HAVE MIN R VALUE OF: 2.5

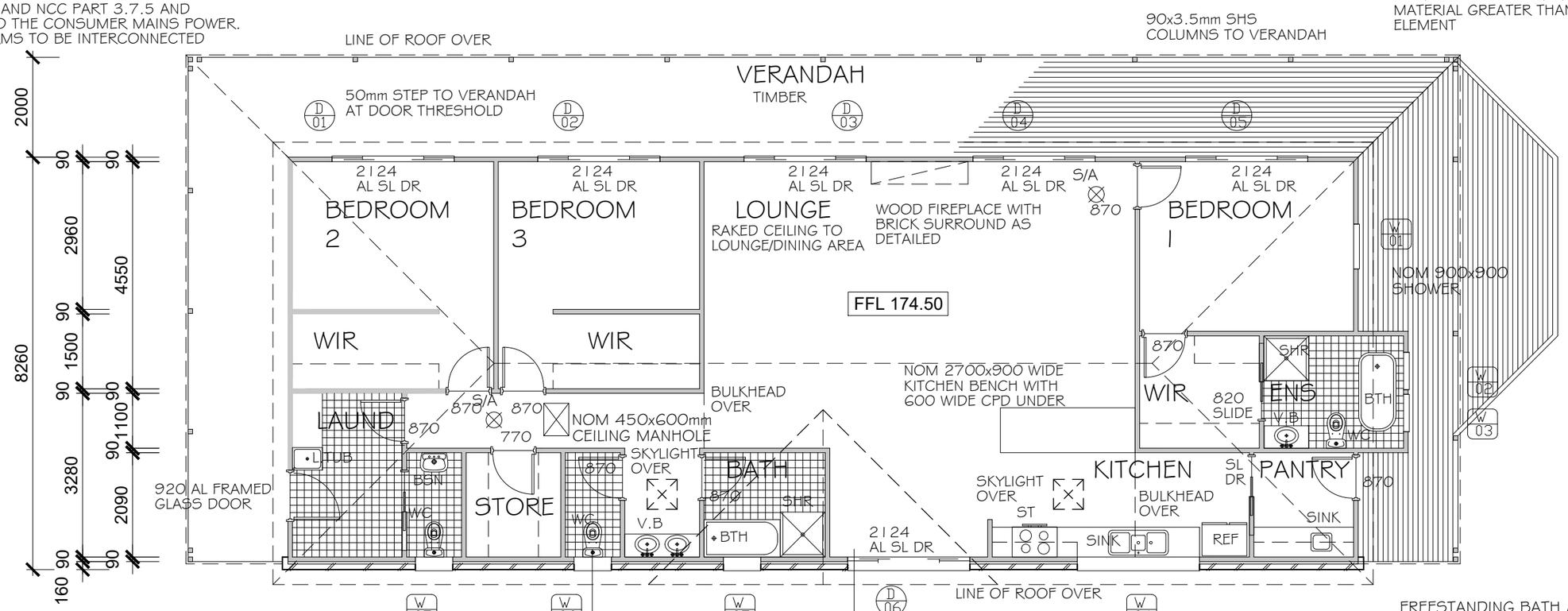
THE BUILDING OWNER IS RESPONSIBLE FOR THE SELECTION OF FLOOR FINISHES IN THE PEDESTRIAN TRAFFICABLE AREAS OF THIS BUILDING. SURFACES SHOULD BE SELECTED IN ACCORDANCE WITH AS HB 197:1999 AND AS/NZS 4586.2004




VERANDAH FLOOR LESS THAN 300mm FROM GLAZED ASSEMBLY ELEMENT (MEASURED HORIZONTALLY AT DECK LEVEL) TO BE SHEETED WITH BUSHFIRE RESISTENT TIMBER FLOORING, TILES OR COMPRESSED FIBRE CEMENT. NO REQUIREMENT FOR DECKING MATERIAL GREATER THAN 300mm FROM GLAZED ELEMENT

S/A ⊗ INDICATES LOCATION OF SMOKE ALARM COMPLYING WITH AS3786 AND NCC PART 3.7.5 AND CONNECTED TO THE CONSUMER MAINS POWER. MULTIPLE ALARMS TO BE INTERCONNECTED




ALL GLAZING TO BE TAGGED OR CERTIFIED FOR COMPLIANCE WITH NCC, AS1288 AND, WHERE APPLICABLE, AS2047

WALL FRAMES AND SHEETING:
1. ALL INTERNAL WALLS ARE 90mm THICK TIMBER FRAMED
2. ALL EXTERNAL WALLS ARE 90mm THICK TIMBER FRAMED
3. DIMENSIONS ARE TO WALL FRAMES (UNLESS NOTED OTHERWISE)
4. PLASTERBOARD WALL AND CEILING SHEETING GENERALLY THROUGHOUT
5. WR PLASTERBOARD TO WET AREAS

CONSTRUCTION TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE BUSHFIRE ASSESSMENT REPORT TO ACHIEVE BAL 12.5 IN ACCORDANCE WITH SECTIONS 3&4 OF AS3959-2018

ROOF LIGHT OR SKYLIGHT IN A HABITABLE ROOM TO BE SEALED OR CAPABLE OF BEING SEALED AND MUST BE CONSTRUCTED WITH AN IMPERFORATE CEILING DIFFUSER OR THE LIKE AT CEILING LEVEL, A WEATHERPROOF SEAL, OR A SHUTTER SYSTEM OPERATED BY THE OCCUPANT

WOOD HEATER AND TILED HEARTH AS SELECTED BY OWNER INSTALLED TO COMPLY WITH AS2918-2001 DOMESTIC FUEL BURNING APPLIANCES - INSTALLATION. CHIMNEY TO BE FITTED WITH A DAMPER OR FLAP THAT CAN BE CLOSED TO SEAL THE CHIMNEY OR FLUE

### FLOOR AREA

| | |
|---|---|
| HABITABLE AREA | 176 sqm |
| VERANDAH | 92 sqm |
| TOTAL | 268 sqm |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SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED: RESIDENCE

DRAWING: FLOOR PLAN

FOR: J GOLDFINCH AND S EYERS

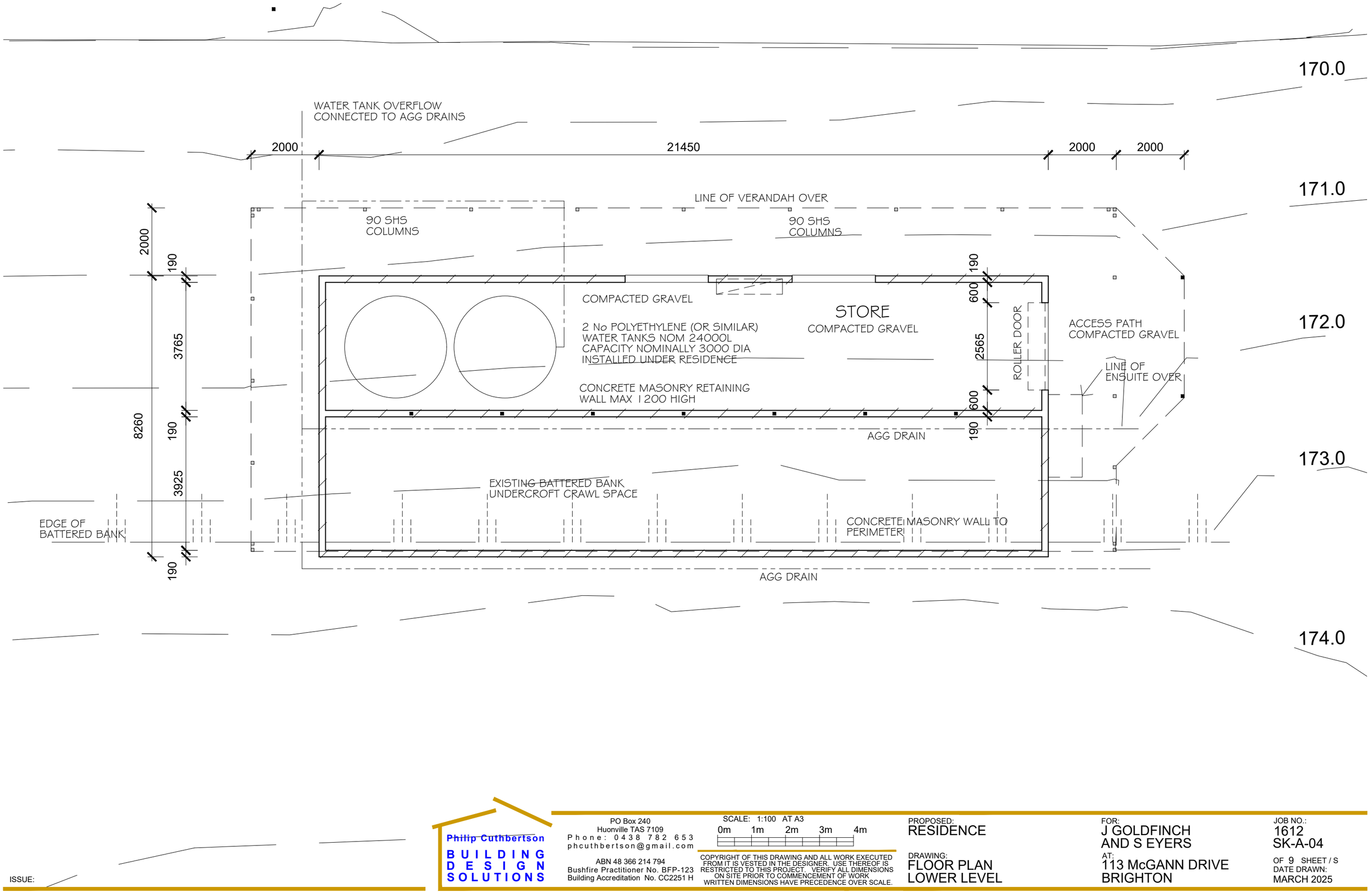
AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612
SK-A-03

OF 9 SHEET / S

DATE DRAWN: MARCH 2025

ISSUE:




ISSUE:

Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
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Huonville TAS 7109
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phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H

SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED:
RESIDENCE

DRAWING:
FLOOR PLAN
LOWER LEVEL

FOR:
J GOLDFINCH
AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-04

OF 9 SHEET / S
DATE DRAWN:
MARCH 2025

## SHEET ROOF INSTALLATION

SHEET ROOFING TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NCC VOL 2 CL 3.5.1. FASTENERS TO BE OF A COMPATIBLE METAL TO THE ROOFING AND SPACED IN ACCORDANCE WITH BCA FIGURE 3.5.1.5.

STOP ENDS TO BE TURNED UP 60 DEGREES AT THE RIDGE LINE OF EACH LENGTH WHEREVER POSSIBLE SHEETS SHALL BE COMPLETE FROM RIDGE TO EAVES

ROOF FLASHINGS SHALL BE PURPOSE MADE, MACHINE FOLDED AND FABRICATED FROM MATERIALS COMPATIBLE WITH THE ROOF SHEETING. JOINTS SHALL BE NOT LESS THAN 40mm

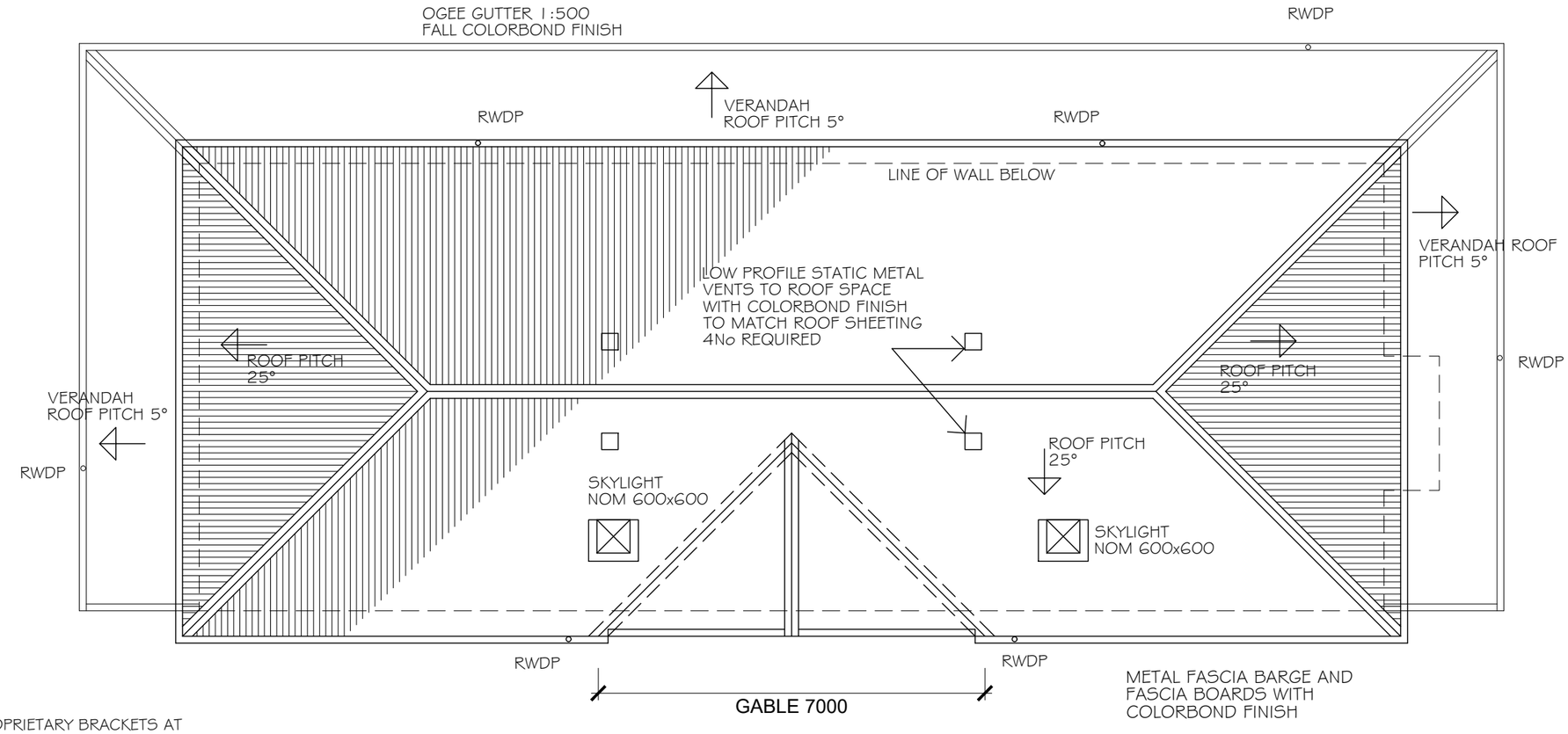
FLASH ALL ROOF JUNCTIONS, UP STANDS AND PROJECTIONS THROUGH ROOF SHEETING. NOTCH AND SCRIBE AS REQUIRED TO FOLLOW THE PROFILE OF ADJACENT SURFACES. MITRE ANGLES AND LAP JOINTS 150mm IN RUNNING LENGTHS. PROVIDE EXPANSION JOINTS AT MAX 6 METRE INTERVALS

SHEETS TO PROJECT 50mm INTO GUTTERS

ROOF/EXTERNAL WALL JUNCTIONS AND ROOF/FLASHINGS JUNCTIONS TO BE SEALED TO PREVENT OPENINGS GREATER THAN 3mm. OPENINGS TO BE FITTED WITH EMBER GUARDS MADE FROM NON-COMBUSTIBLE MATERIAL WITH A MAXIMUM APERTURE OF 2mm

ALL ROOF PENETRATIONS TO BE LOCATED CLEAR OF ALL FRAMING MEMBERS AND FLASHED TO PREVENT INGRESS OF WATER. PROVIDE ADDITIONAL FRAMING AS REQUIRED FOR FIXING OF ROOF SHEETING AND FLASHINGS AROUND PENETRATIONS

TRIMDEK ROOF SHEETING FIXED TO ROOF BATTENS TO MANUFACTURERS REQUIREMENTS




## GUTTER/DOWNPIPES

GUTTERS TO BE SUPPORTED ON PROPRIETARY BRACKETS AT MAXIMUM 900 CENTRES

SET DOWNPIPES 20mm OFF WALLS AND SECURELY FIX WITH 0.6mm METAL STRAPS AT EACH JOINT AND AT MAXIMUM 1200 CENTRES. FINISH STRAPS TO MATCH DOWNPIPES

BAL 12.5 TO BE ADOPTED IN ACCORDANCE WITH THE PROVISIONS OF AS3959

METAL FASCIA BARGE AND FASCIA BOARDS WITH COLORBOND FINISH

STD OGEE GUTTER 1:500 FALL

ISSUE:


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
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SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED: RESIDENCE

DRAWING: ROOF PLAN

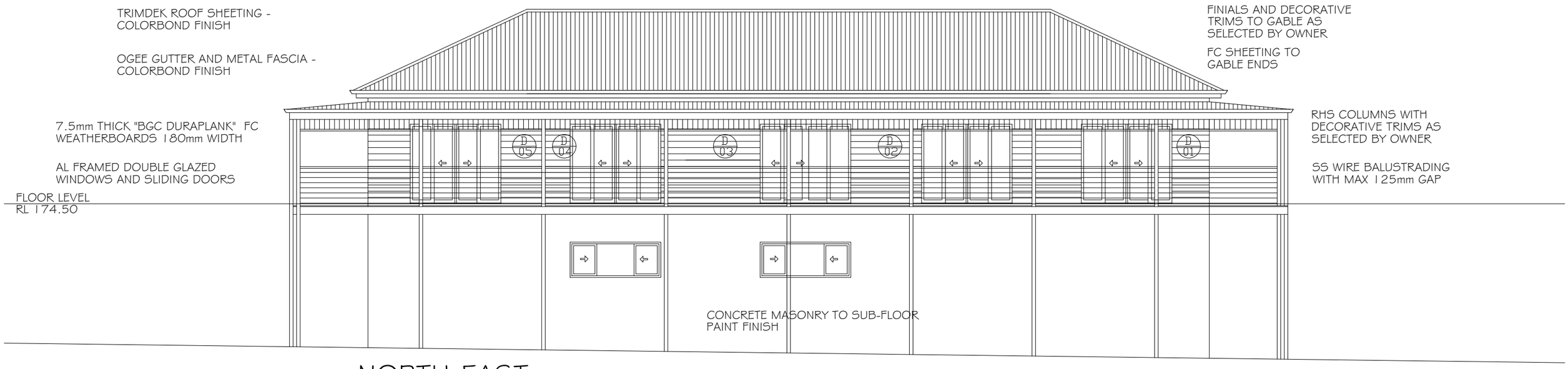
FOR: J GOLDFINCH AND S EYERS

AT: 113 McGANN DRIVE BRIGHTON

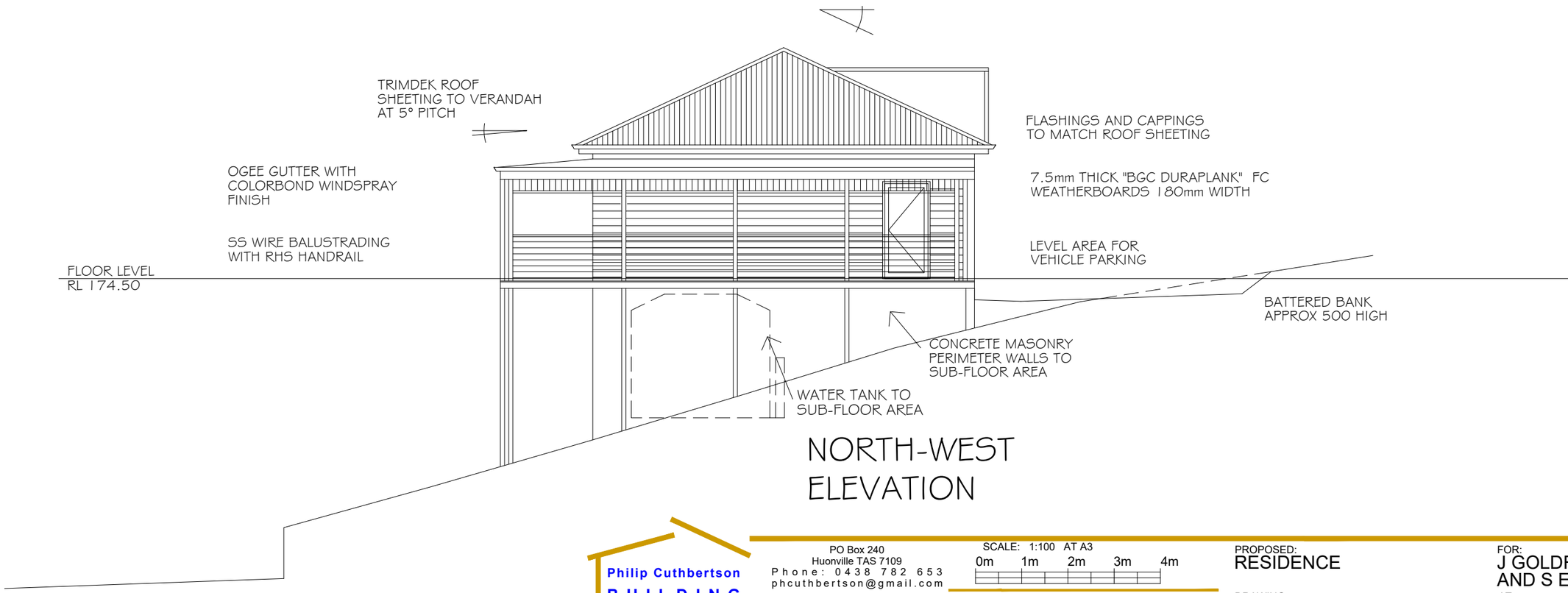
JOB NO.: 1612 SK-A-05

OF 9 SHEET / S

DATE DRAWN: MARCH 2025




# NORTH-EAST ELEVATION




# NORTH-WEST ELEVATION

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BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
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0m 1m 2m 3m 4m



PROPOSED: RESIDENCE

DRAWING: ELEVATIONS

FOR: J GOLDFINCH AND S EYERS

AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612 SK-A-06

OF 9 SHEET / S

DATE DRAWN: MARCH 2025

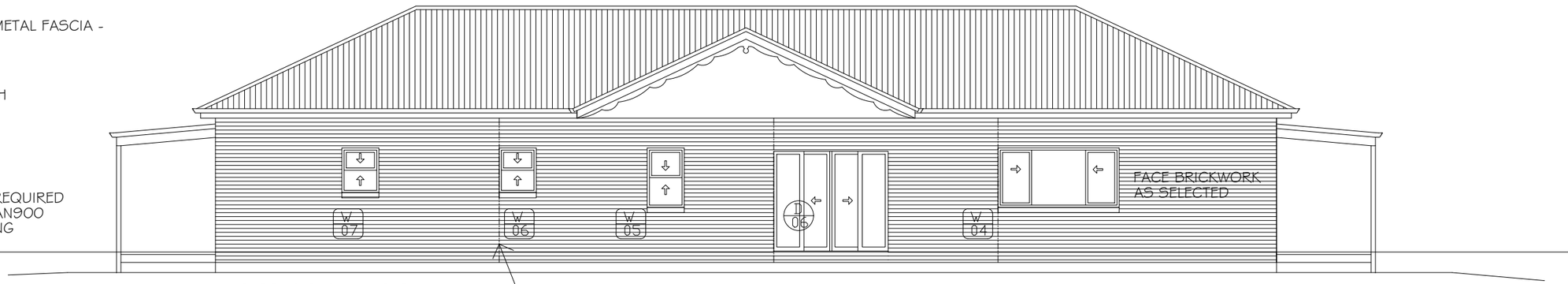
TRIMDEK ROOF SHEETING -
COLORBOND FINISH

OGEE GUTTER AND METAL FASCIA -
COLORBOND FINISH

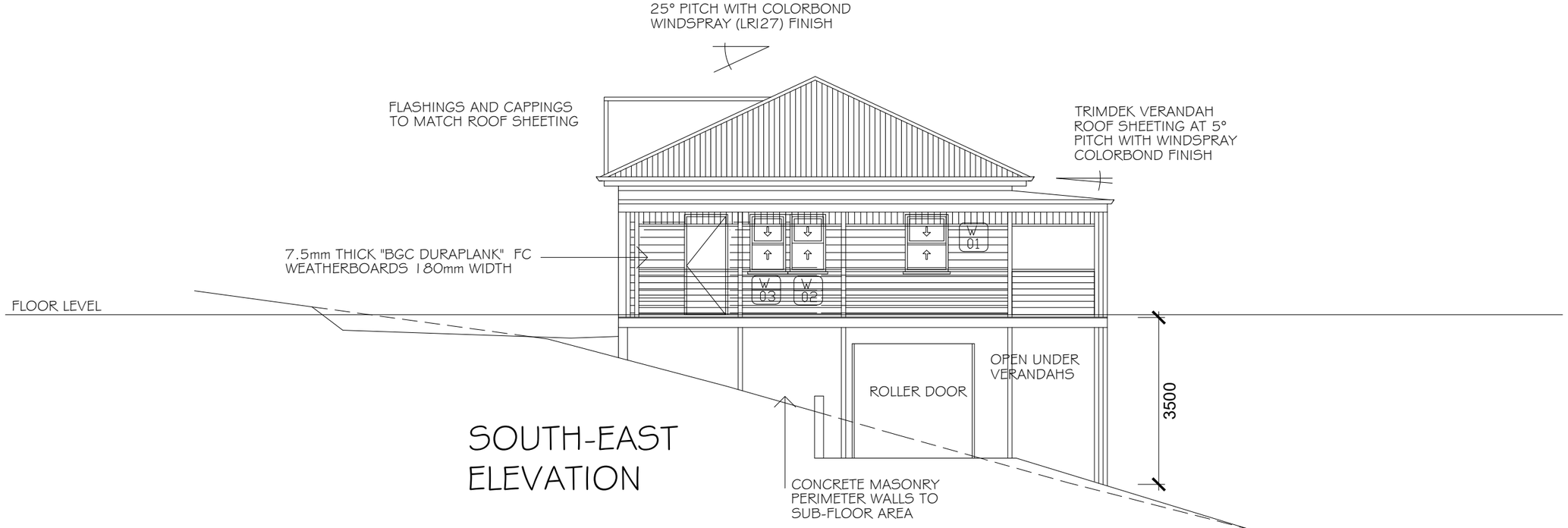
TRIMDEK VERANDAH
ROOFING AT 5° PITCH

90 SHS COLUMNS
TO VERANDAH

NO BALUSTRADING REQUIRED
WHERE FFL LESS THAN900
ABOVE SURROUNDING
GROUND LEVEL




# SOUTH-WEST ELEVATION




# SOUTH-EAST ELEVATION

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BUILDING DESIGN SOLUTIONS

PO Box 240
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SCALE: 1:100 AT A3

0m 1m 2m 3m 4m



PROPOSED:
RESIDENCE

DRAWING:
ELEVATIONS

FOR:
J GOLDFINCH
AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-07

OF 9 SHEET / S

~~DATE DRAWN:~~
MARCH 2025

CEILINGS GENERALLY TO HAVE MINIMUM R4 INSULATION WITH R2 INSULATION (NOMINALLY 70mm THICK) TO 600 WIDE PERIMETER MEASURED FROM EXTERNAL WALL. MIN 150mm CLEARANCE TO BE MAINTAINED BETWEEN TOP OF UNCOMPRESSED BULK CEILING INSULATION AND ROOF SARKING AT LOWEST POINT. PERIMETER INSULATION IS NOT TO BLOCK OFF AIR FLOW FROM EAVES INTO THE ROOF SPACE.

TIMBER ROOF TRUSSES AT 900 CENTRES SUPPLIED AND INSTALLED TO MANUFACTURERS SPECIFICATIONS

INSULATION TO BE CUT TO FIT SNUGLY BETWEEN FRAMING MEMBERS AND TRIMMED AROUND SERVICE PENETRATIONS. ALL SPACES BETWEEN FRAMING MEMBERS TO CONTAIN BULK INSULATION

TRIMDEK ROOF SHEETING FIXED TO TIMBER ROOF BATTENS TO MANUFACTURERS REQUIREMENTS. SEAL UNDER ENDS OF CORRUGATIONS AT CAPPINGS

RIDGE CAPPINGS AND FLASHINGS TO BE ALIGNED TO ALLOW FIXING TO STRUCTURAL SUPPORT MEMBER

OGEE GUTTER WITH COLORBOND FINISH FIXED TO MANUFACTURERS SPECIFICATIONS. IT IS RECOMMENDED THAT A NON-COMBUSTIBLE LEAF GUARD BE INSTALLED TO ALL GUTTERS AND VALLEYS

ALL GAPS AT FASCIA AND RIDGE LINES TO BE SEALED WITH A PERFORATED MESH MADE OF CORROSION-RESISTANT STEEL, BRONZE OR ALUMINUM, MINERAL WOOL, OR OTHER SUITABLE NON-COMBUSTIBLE MATERIAL TO REDUCE ENTRY OF BURNING EMBERS TO AS3959

PERFORATED VAPOUR PERMEABLE ROOF SARKING TO COMPLY WITH AS/NZS 4200 AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS FOR SELECTED ROOF SHEETING

FLASH ABOVE WINDOWS AND TURN UP MIN 150mm BEHIND SHEETING AND FIX TO TIMBER FRAMING

METAL ROOF SHEETING AT 25° PITCH

ROLL TOP ROOF CAPPING COLORBOND FINISH

APPROX 1258

METAL ROOF SHEETING TO VERANDAH AT 5° PITCH WITH BULLNOSE EDGE

CEILING

HEAD

5082

NO SHEETING TO VERANDAH SOFFIT

FC EAVES AND SOFFIT SHEETING. EAVE VENTILATION OPENINGS GREATER THAN 2mm SHALL BE PROTECTED WITH EMBER GUARDS MADE OF NON-COMBUSTIBLE MATERIAL OR A MESH OR PERFORATED SHEET WITH A MAXIMUM APERTURE OF 2mm MADE OF CORROSION RESISTANT STEEL, BRONZE OR ALUMINUM

3000

2700

2100

BRICK ON EDGE SILL TO WINDOWS

PLASTERBOARD CEILING FIXED TO TIMBER BATTENS AT MAX 450 CENTRES

7.5mm THICK "BGC DURAPLANK" FC WEATHERBOARDS 180mm WIDTH

2200

MIN 2100

MIN 5mm GAP TO BE MAINTAINED TO PERIMETER OF WINDOW FRAME AND STRUCTURAL FRAME

FLOOR

EXTERNAL WALLS TO BE LINED WITH VAPOUR PERMEABLE WALL WRAP (BRADFORD ENVIROSEAL RW PROTECTOR WRAP OR SIMILAR) PRIOR TO INSTALLATION OF EXTERNAL WALL CLADDING

FLASHINGS TO BE PROVIDED TO ALL EXTERNAL WALL OPENINGS IN ACCORDANCE WITH PART 8 OF THE NCC

VOID SPACE

SOLID NOGGING TO MID SPAN OF FLOOR JOISTS

OPEN UNDER VERANDAH

3700

FIX NOMINAL 42x20 TG10 TIMBER BATTENS OR SIMILAR VERTICALLY TO EXTERNAL FACE OF TIMBER STUDS OVER WALL PROTECTOR WRAP. PLACE GRADED HORIZONTAL BATTEN AT FLOOR LEVEL TO CHANNEL EXCESS MOISTURE OUT OF WALL CAVITY WITH 10mm GAP TO VERTICAL BATTENS.

TIMBER FRAME CONNECTORS (I.E. JOIST HANGERS OR SIMILAR) TO BE NAILED OR SCREWED (NOT BOTH) WITH 35x3.15mm GALVANISED NAILS, 50x2.8mm SCREW SHANK POWER DRIVEN NAILS, OR 12x35mm TYPE 17 HEX HEAD SCREWS. NUMBER, TYPE AND SPACING OF FIXINGS TO MANUFACTURERS INSTRUCTIONS

REFER FOUNDATION PLAN FOR SLAB AND FOOTING REQUIREMENTS.

REFER ENGINEERS DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMENTS FOR FLOOR SLAB AND FOOTING

UNDERSIDE OF BUILDING (EXCLUDING VERANDAHS TO BE FULLY ENCLOSED WITH A WALL COMPLYING WITH AS3959.

ALL EXTERNAL WALLS TO BE FILLED WITH MINIMUM R2.5 GLASS FIBRE "PINK BATTS" THERMAL INSULATION OR SIMILAR FROM FLOOR TO CEILING

SURROUNDING GROUND LEVEL TO BE SHAPED DIVERT SURFACE WATER AWAY FROM BUILDING WITH A MINIMUM FALL OF 50mm OVER THE FIRST 1m FROM THE BUILDING AND IN ACCORDANCE WITH PART 3.3 OF THE NCC


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS

PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com

ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:50 AT A3
0m 1m 2m



PROPOSED:
RESIDENCE

DRAWING:
SECTION

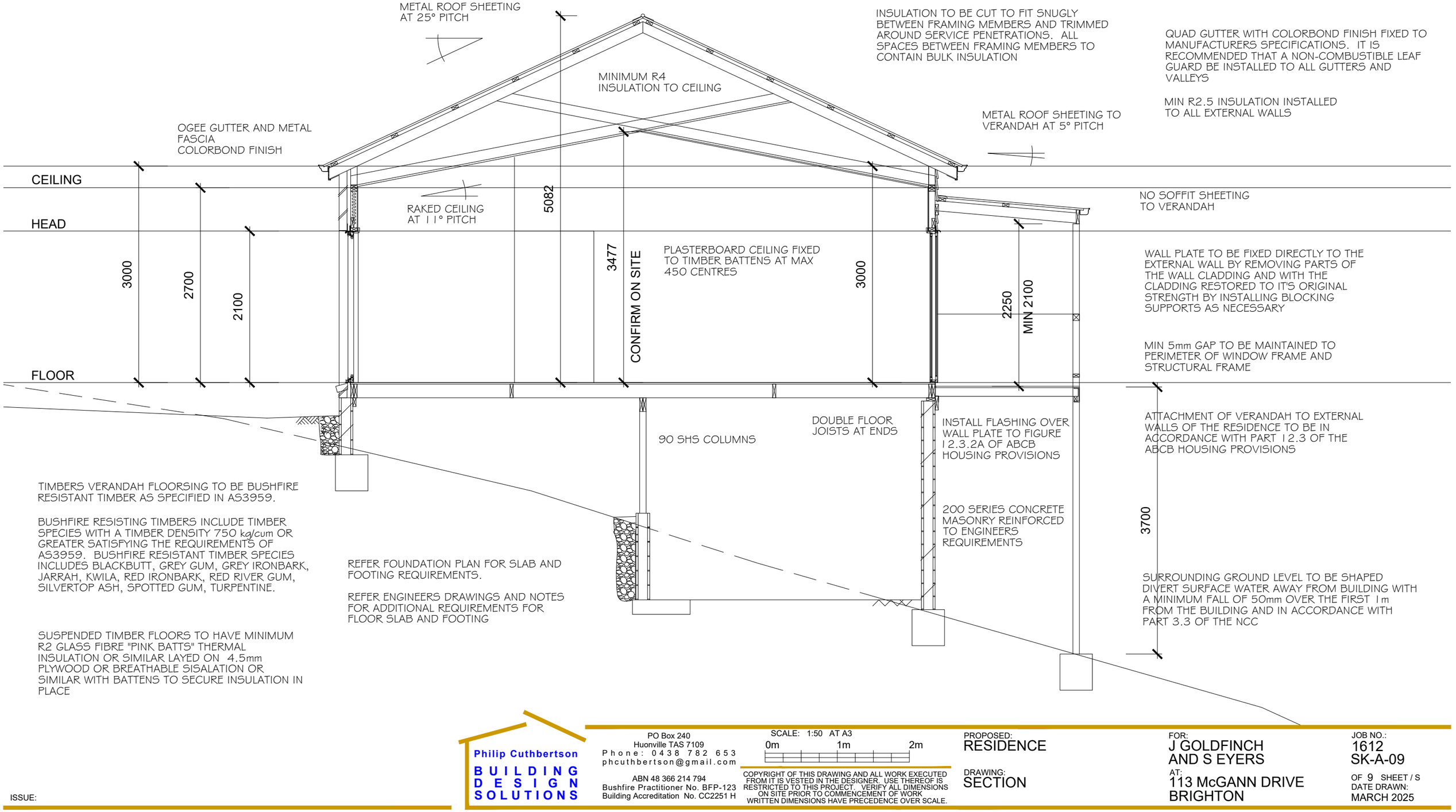
FOR:
J GOLDFINCH
AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-08

OF 9 SHEET / S
DATE DRAWN:
MARCH 2025

ISSUE:




TIMBERS VERANDAH FLOORSING TO BE BUSHFIRE RESISTANT TIMBER AS SPECIFIED IN AS3959.

BUSHFIRE RESISTING TIMBERS INCLUDE TIMBER SPECIES WITH A TIMBER DENSITY 750 kg/cum OR GREATER SATISFYING THE REQUIREMENTS OF AS3959. BUSHFIRE RESISTANT TIMBER SPECIES INCLUDES BLACKBUTT, GREY GUM, GREY IRONBARK, JARRAH, KWILA, RED IRONBARK, RED RIVER GUM, SILVERTOP ASH, SPOTTED GUM, TURPENTINE.

SUSPENDED TIMBER FLOORS TO HAVE MINIMUM R2 GLASS FIBRE "PINK BATTS" THERMAL INSULATION OR SIMILAR LAYED ON 4.5mm PLYWOOD OR BREATHABLE SISALATION OR SIMILAR WITH BATTENS TO SECURE INSULATION IN PLACE

REFER FOUNDATION PLAN FOR SLAB AND FOOTING REQUIREMENTS.

REFER ENGINEERS DRAWINGS AND NOTES FOR ADDITIONAL REQUIREMENTS FOR FLOOR SLAB AND FOOTING

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Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H

SCALE: 1:50 AT A3
0m 1m 2m



PROPOSED:
RESIDENCE

DRAWING:
SECTION

FOR:
J GOLDFINCH AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-09

OF 9 SHEET / S
DATE DRAWN:
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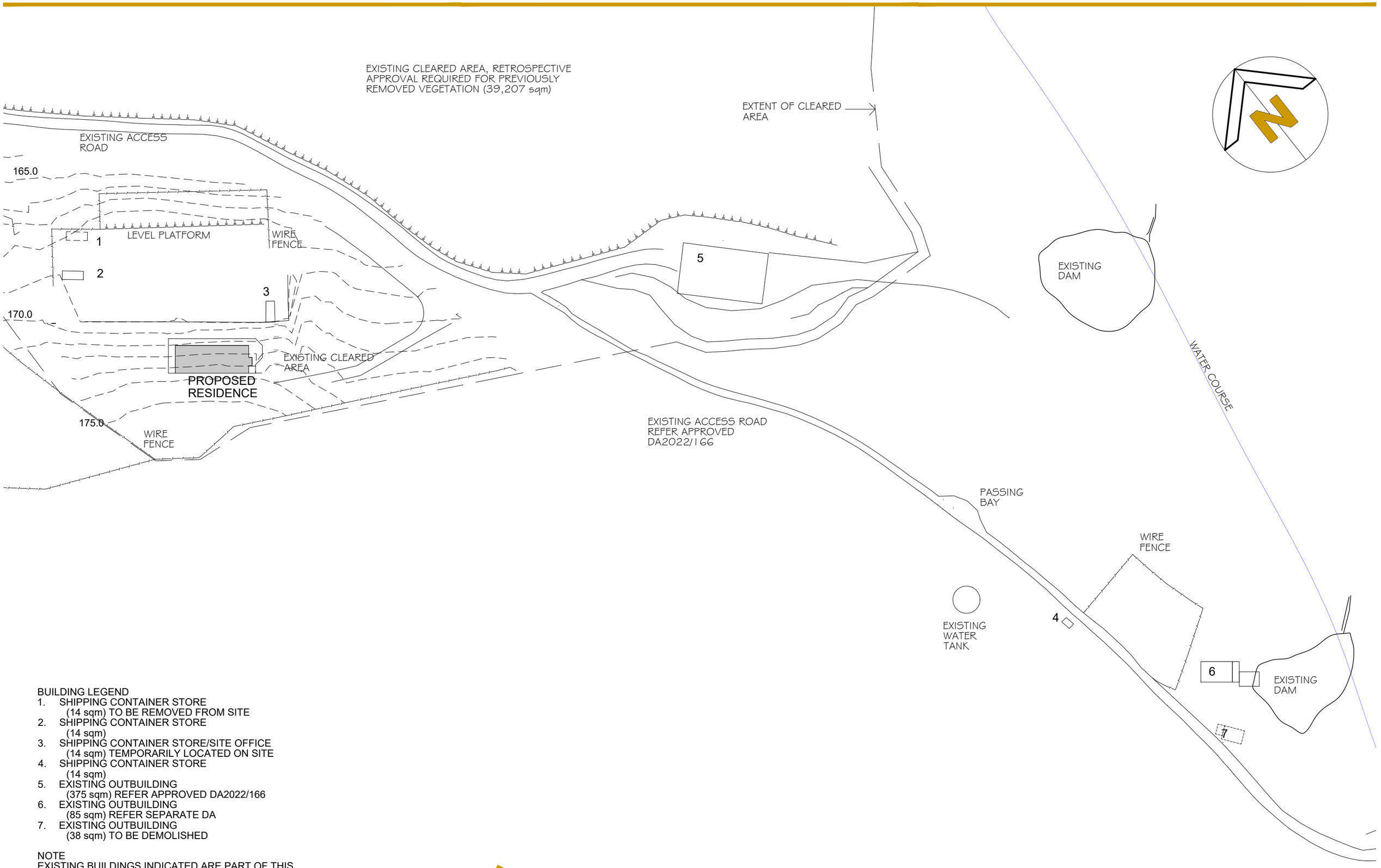



BUILDING LEGEND

1. SHIPPING CONTAINER STORE
   (14 sqm) TO BE REMOVED FROM SITE
2. SHIPPING CONTAINER STORE
   (14 sqm)
3. SHIPPING CONTAINER STORE/SITE OFFICE
   (14 sqm) TEMPORARILY LOCATED ON SITE
4. SHIPPING CONTAINER STORE
   (14 sqm)
5. EXISTING OUTBUILDING
   (375 sqm) REFER APPROVED DA2022/166
6. EXISTING OUTBUILDING
   (85 sqm) REFER SEPARATE DA
7. EXISTING OUTBUILDING
   (38 sqm) TO BE DEMOLISHED

NOTE
EXISTING BUILDINGS INDICATED ARE PART OF THIS DEVELOPMENT APPLICATION BUT APPROVAL TO CONSTRUCT HAS BEEN LODGED UNDER SEPERATE DA

ISSUE: 08 MAY 2025 DRAWING ADDED


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:1000 AT A3
0m 10m 20m 30m 40m



PROPOSED:
RESIDENCE

DRAWING:
PART SITE PLAN

FOR:
J GOLDFINCH AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-10

OF SHEET / S
DATE DRAWN:
MARCH 2025

## WATER SUPPLY

ALL PIPING SHALL BE ADEQUATELY FIXED AT EACH FITTING INCORPORATING PROVISION FOR EXPANSION AND TO PREVENT MOVEMENT OF THE FITTING

ALL ABOVE GROUND WATER SUPPLY PIPES SHALL BE METAL

HOT WATER TO ALL FIXTURES USED FOR PERSONAL ABLUTIONS MUST BE FITTED WITH AN APPROVED TEMPERING VALVE TO LIMIT THE WATER TEMPERATURE TO A MAXIMUM 50° C IN ACCORDANCE WITH AS3500

INSTALL HOT WATER SYSTEM WITH TEMPERATURE VALVE SET TO 65° C. INSULATE HOT WATER PIPEWORK IN ACCORDANCE WITH NCC AND AS3500.4

## DRAINER

SEWER PIPES TO COMPLY WITH AS1260, WORKMANSHIP SHALL COMPLY WITH AS2032

DRAINAGE SYSTEM INSTALLATION, INCLUDING ORG'S, VENTS AND SEWER PIPE SIZES TO BE IN ACCORDANCE WITH AS/NZS3500.2 2021 - PLUMBING AND DRAINAGE

ALL SANITARY WASTES AND FITTINGS SHALL COMPLY WITH AS1415. FINAL LOCATION TO BE DETERMINED ON SITE

ALL PIPING SHALL BE ADEQUATELY FIXED AT EACH FITTING INCORPORATING PROVISION FOR EXPANSION AND TO PREVENT MOVEMENT OF THE FITTING

CONNECT HOUSE DRAINS AND TEST ALL DRAINS, JOINTS CONNECTIONS ETC PRIOR TO COMPLETION. ARRANGE ALL STATUTORY INSPECTIONS AS REQUIRED BY THE COUNCIL

WASTE PIPE TO PASS THROUGH MIDDLE THIRD OF FOOTINGS AND TO BE LAGGED WITH 20mm FOAM LAGGING OR A SUITABLE SLEEVE WHICH PERMITS EQUIVALENT MOVEMENT

VENTS TO TERMINATE ABOVE ROOF WITH APPROVED COWL WITH WATERPROOF FLASHING

UNLESS SHOWN OTHERWISE PIPE GRADES SHALL BE:
Ø50 1:40 (1.25%)
Ø65 1:40 (1.25%)
Ø100 1:60 (1.65%)

LEGEND

| | |
|---|---|
| BTH | BATH |
| B | BASIN |
| LT | LAUNDRY TUB |
| FW | FLOOR WASTE |
| SHR | SHOWER |
| S | SINK |
| WC | WATER CLOSET |
| IO | INSPECTION OPENING |
| VP | VENT PIPE |
| ORG | OVERFLOW RELIEF GULLY |

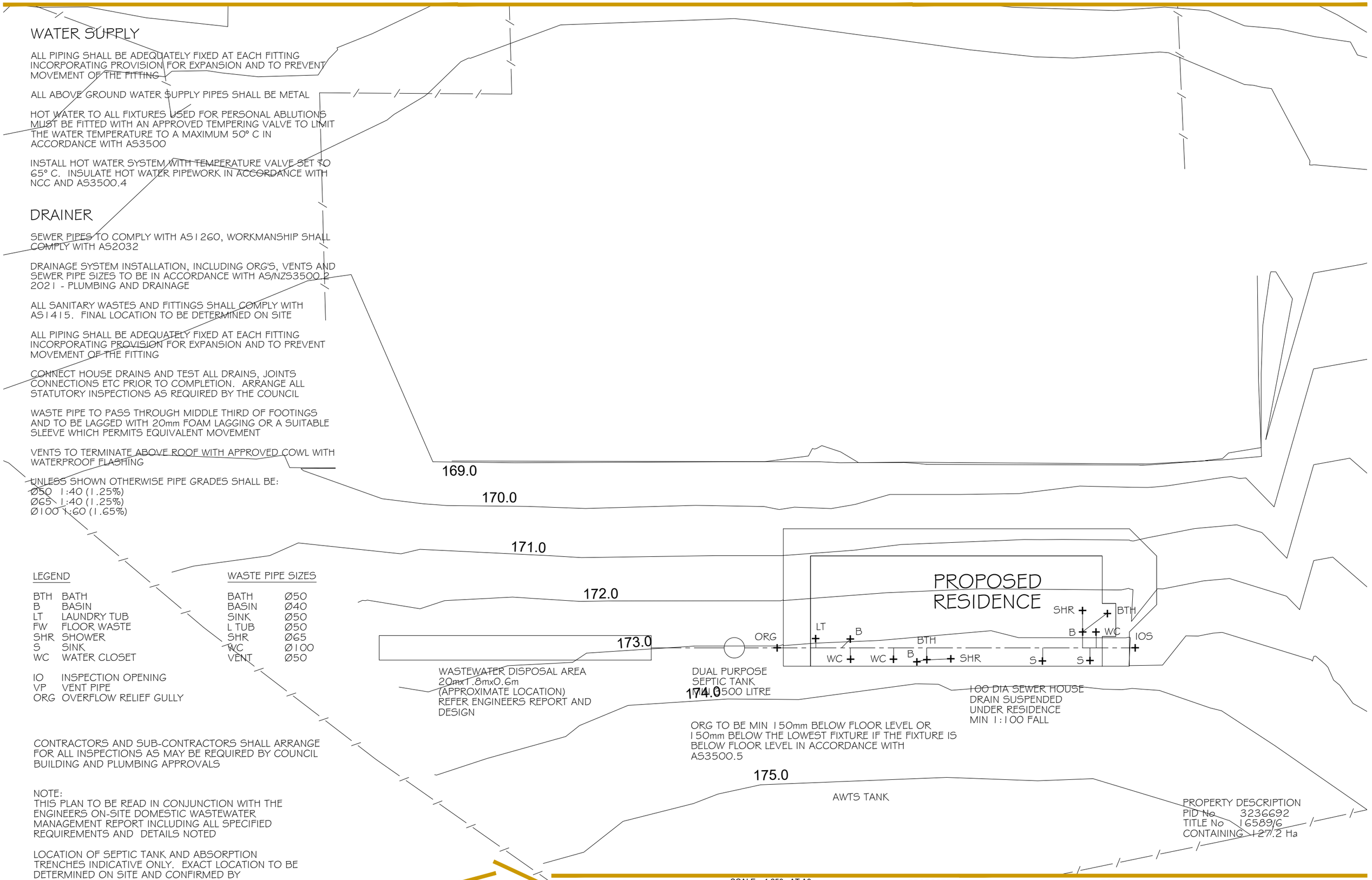
WASTE PIPE SIZES

| | |
|---|---|
| BATH | Ø50 |
| BASIN | Ø40 |
| SINK | Ø50 |
| L TUB | Ø50 |
| SHR | Ø65 |
| WC | Ø100 |
| VENT | Ø50 |

CONTRACTORS AND SUB-CONTRACTORS SHALL ARRANGE FOR ALL INSPECTIONS AS MAY BE REQUIRED BY COUNCIL BUILDING AND PLUMBING APPROVALS

NOTE:
THIS PLAN TO BE READ IN CONJUNCTION WITH THE ENGINEERS ON-SITE DOMESTIC WASTEWATER MANAGEMENT REPORT INCLUDING ALL SPECIFIED REQUIREMENTS AND DETAILS NOTED

LOCATION OF SEPTIC TANK AND ABSORPTION TRENCHES INDICATIVE ONLY. EXACT LOCATION TO BE DETERMINED ON SITE AND CONFIRMED BY CONSULTING ENGINEER

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BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:250 AT A3
0m 5m 10m



PROPOSED: RESIDENCE

DRAWING: SEWER HOUSE DRAINAGE PLAN

FOR: J GOLDFINCH AND S EYERS

AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612 SK-H-01

OF 1 SHEET / S

DATE DRAWN: MARCH 2025

## DOWNPIPES

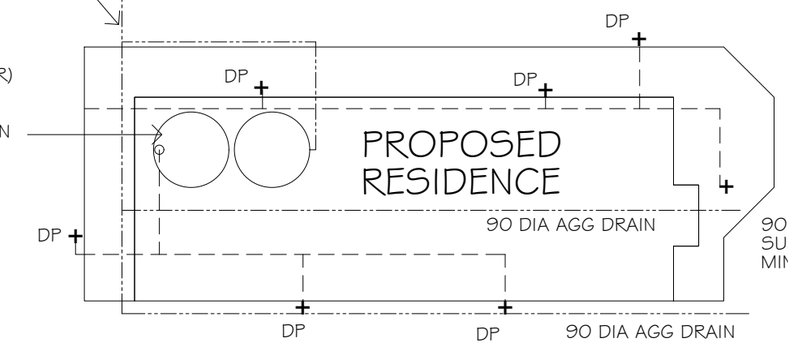
DOWNPIPES TO BE LOCATED AT MAX 12m CENTRES ALONG GUTTERS AND LOCATED NOT MORE THAN 1.2m FROM A VALLEY GUTTER OR AN ADEQUATE MEANS OF OVERFLOW FROM THE GUTTER IS TO BE INSTALLED

MAIN RESIDENCE ROOF AREA: 196 sqm
DESIGN RAINFALL INTENSITY: 116 mm/hr
STD QUAD EAVES GUTTER TO BE INSTALLED
MIN 1:500 FALL
70 sqm ROOF CATCHMENT AREA PER DOWNPIPE
3/100x50mm OR 3/90mm DIA DOWNPIPES SATISFIES THE REQUIREMENTS OF THE NCC

BUILDER TO ENSURE ROOF, GUTTERS AND DOWNPIPES ARE IN PLACE AS SOON AS POSSIBLE DURING CONSTRUCTION. TEMPORARY DOWNPIPES TO BE INSTALLED TO MINIMISE RUNOFF AND EROSION

WATER TANK OVERFLOW
CONNECTED TO AGG DRAINS

2 No POLYETHYLENE (OR SIMILAR)
WATER TANKS NOM 24000L
CAPACITY NOMINALLY 3000 DIA
INSTALLED UNDER RESIDENCE ON
COMPACTED GRAVEL BASE




90 DIA STORMWATER
SUSPENDED UNDER RESIDENCE
MIN 1:100 FALL

PROPERTY DESCRIPTION
PID No 3236692
TITLE No 16589/6
CONTAINING 127.2 Ha

ISSUE: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BUILDING DESIGN SOLUTIONS

PO Box 240
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phcuthbertson@gmail.com

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Building Accreditation No. CC2251 H


SCALE: 1:250 AT A3
0m 5m 10m



PROPOSED:
RESIDENCE

DRAWING:
STORMWATER
DRAINAGE PLAN

FOR:
J GOLDFINCH
AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-H-02

OF 1 SHEET / S
DATE DRAWN:
MARCH 2025

AllUrbanPlanning PTY LTD

7 April 2025

Jo Blackwell
Senior Planner
Brighton Council
1 Tivoli Road
OLD BEACH TAS 7017

Dear Jo,

**Application for a Planning Permit – New Single Dwelling – 113 McGann Drive, Brighton**

Further to our discussions, All Urban Planning Pty Ltd has been engaged to prepare the following planning assessment for a new single dwelling at the above site. A separate application will be made to formalise the existing clearing for pasture areas, outbuildings and earthworks associated with the enlargement of two existing dams on the property.

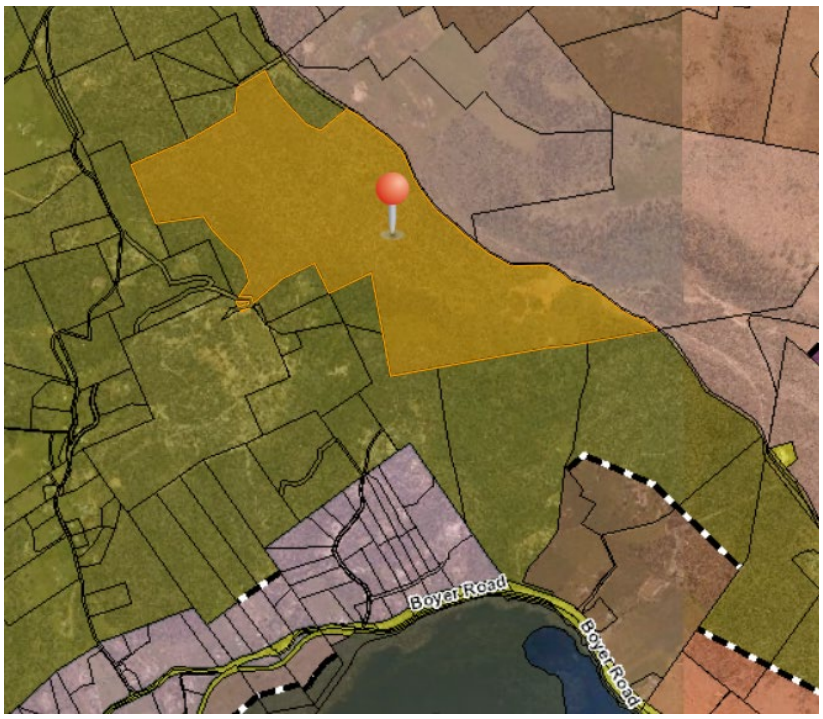


*Figure 1– Site Plan (source annotated from theList)*

## The Proposal

It is proposed to construct a single dwelling on a 127.2Ha bush block at 113 McGann Drive, Brighton. The proposed dwelling is sited a minimum of 96m from the closest boundary.

The proposed dwelling will be finished in Colorbond "Windspray" or other dark natural tone of grey, green or brown with alight reflectance value not more than 40% as approved by Council.

The proposal is accompanied by a Bushfire Hazard Assessment that confirms that the existing cleared area on the site is sufficient to allow construction of the house and its HMA without further vegetation removal.

The site is accessed from McGann Drive. The proposed dwelling is to be accessed via the approved gravel driveway under DA2022/166. Further details of the access are discussed in the accompanying bushfire assessment.

The application is supported by the bushfire assessment, a natural values assessment and an on-site wastewater assessment.

## The Site

The proposal relates to a large bush lot at 113 McGann Drive.

The title is a dominated by a mainly northeast-facing moderately steep to gentle slope with Cobbs Hill and an associated southeast-northwest trending ridgeline with some other aspected slopes to the southwest, south and southeast.

An existing 15m x 25m shed and associated access was approved under DA2022/166. This shed was approved for domestic storage use for a future house and is located in the northern portion of the site on relatively gentle slope.

***Figure 1 – The site and approximate location of proposed single dwelling (Source: TheList, with cadastre and hillshade background)***

## The Planning Scheme

The site is zoned Landscape Conservation under the Brighton Local Provisions Schedule of the Tasmanian Planning Scheme (planning scheme).

The site is also inpacted by the following code overlay areas:

- Low landslip hazard
- Bushfire prone area
- Priority vegetation
- Waterway and coastal protection areas

## Landscape Conservation Zone

The purpose of the Landscape Conservation Zone is:

*22.1.1 To provide for the protection, conservation and management of landscape values.*

*22.1.2 To provide for compatible use or development that does not adversely impact on the protection, conservation and management of the landscape values.*

The proposed single dwelling that is not located within a building area on the sealed plan is a Discretionary Use under the Use Table 22.2.

## Discretionary Use Standard (22.3.3)

*Objective:*

*That the location, scale and extent of a use listed as Discretionary is compatible with landscape values.*

| ***Acceptable Solution*** | ***Performance Criteria*** |
|---|---|
| *A1*<br><br>*No Acceptable Solution.* | *P1*<br><br>*Use listed as Discretionary must be compatible with landscape values, having regard to:*<br><br>*(a) the nature, scale and extent of the use;*<br><br>*(b) the characteristics and type of the use;*<br><br>*(c) the landscape values of the site;*<br><br>*(d) the landscape value of the surrounding area; and*<br><br>*(e) measures to minimise or mitigate impacts.* |
| Assessment:<br><br>The proposed single dwelling use located on the lower parts of the site is of modest scale and will be sited with a cluster of dwellings on other properties fronting the McGann Drive cul-de-sac. The proposal is located well clear of the upper slopes of Cobbs Hill as shown in Figure 1 above and is considered compatible with the landscape values of the site and surrounding area. The accompanying bushfire assessment confirms that the HMA based on the existing cleared area on the site is of adequate size under a performance solution. | |

## Development Standards (22.4)

***Site Coverage (22.4.1)***

*That the site coverage is compatible with the protection, conservation and management of the landscape values of the site and surrounding area.*

| ***Acceptable Solution*** | ***Performance Criteria*** |
|---|---|
| *A1*<br><br>*Site coverage must be not more than 400m².* | *P1*<br><br>*Site coverage must be compatible with the landscape values of the site and surrounding area, having regard to:*<br><br>*(a) the topography of the site;*<br><br>*(b) the capacity of the site to absorb run-off;*<br><br>*(c) the size and shape of the site;*<br><br>*(d) the existing buildings and any constraints imposed by existing development;*<br><br>*(e) the need to remove vegetation;*<br><br>*(f) the location of development in relation to cleared areas; and*<br><br>*(g) the location of development in relation to natural hazards.* |

Assessment:

The site has an existing approved shed of 375m$^2$. The proposal will add an additional roofed area of 268m$^2$. The total roofed area of 643m$^2$ therefore exceeds the 400m$^2$ permitted standard under A1 and is therefore to be assessed under P1.

In this case the proposed site cover is considered compatible with the surrounding landscape values of the site and surrounding area having regard to the considerations in parts a)-g) as follows:

a) The proposed house is located on lower ground between the 169 and 175m contours and is will below the upper slopes and 294m summit of Cobbs Hill.
b) The large site of 127.2 ha has significant capacity to absorb run off
c) The large 127.2 ha site has significant capacity to accommodate the site cover without adverse impact on the landscape.
d) The site currently accommodates an approved 375m$^2$ shed that was approved on the basis that it would be ancillary to a future residence. The prosed single dwelling that is the subject of this application is therefore anticipated.
e) The proposal does not require the removal of further vegetation.
f) The proposal is to be sited within the existing cleared area on the site and approved access

| |
|---|
| g) The proposed dwelling is supported by a bushfire hazard assessment and is sited clear of other hazards on the site. |

***Building height, siting and exterior finishes (22.4.2)***

*That building height, siting and exterior finishes:*

*(a) protects the amenity of adjoining properties;*

*(b) minimises the impact on the landscape values of the area; and*

*(c) minimises the impact on adjoining agricultural uses.*

| ***Acceptable Solution*** | ***Performance Criteria*** |
|---|---|
| *A1*<br>*Building height must be not more than 6m.* | *P1*<br>*Building height must be compatible with the landscape values of the site, having regard to:*<br>*(a) the height, bulk and form of proposed buildings;*<br>*(b) the height, bulk and form of existing buildings;*<br>*(c) the topography of the site;*<br>*(d) the visual impact of the buildings when viewed from roads and public places; and*<br>*(e) the landscape values of the surrounding area.* |
| Assessment:<br>The proposed dwelling will slightly exceed 6m with a proposed height of approximately 6.5m. The proposal is considered compatible with the landscape values of the site and to satisfy P1 after having regard to the following parts a) – e) as follows:<br>a) The height, bulk and form of the proposed dwelling is of a normal domestic scale and will be orientated along the contour of the land<br>b) The proposed dwelling will be smaller than the approved shed which has a height of approximately 6m<br>c) The proposed dwelling will be sited along the contour in the lower parts of the site and well away from the upper slopes and summit of Cobbs Hill.<br>d) The siting of the proposed dwelling, low on the site and well setback from boundaries means that it will not be prominent when viewed from McGann Drive or any other road or public spaces.<br>e) The landscape values of the area within the Landscape Conservation Zone that stem from the vegetated hills will not be significantly impacted by this proposal that is sited on lower ground, away from road frontages and well below skylines and ridgelines. | |
| *A2* | *P2* |

| | |
|---|---|
| *Buildings must have a setback from a frontage not less than 10m.* | *setback from a frontage must be compatible with the landscape values of the surrounding area, having regard to:*<br>*(a) the topography of the site;*<br>*(b) the frontage setbacks of adjacent buildings;*<br>*(c) the height, bulk and form of existing and proposed buildings;*<br>*(d) the appearance when viewed from roads and public places;*<br>*(e) the safety of road users; and*<br>*(f) the retention of vegetation.* |
| Assessment:<br>Complies. | |
| *A3*<br>*Buildings must have a setback from side and rear boundaries not less than 20m.* | *P3*<br>*Buildings must be sited to not cause an unreasonable loss of amenity, or impact on landscape values of the site, having regard to:*<br>*(a) the topography of the site;*<br>*(b) the size, shape and orientation of the site;*<br>*(c) the side and rear setbacks of adjacent buildings;*<br>*(d) the height, bulk and form of existing and proposed buildings;*<br>*(e) the need to remove vegetation as part of the development;*<br>*(f) the appearance when viewed from roads and public places; and*<br>*(g) the landscape values of the surrounding area.* |
| Assessment:<br>Complies. | |
| *A4*<br>*Buildings for a sensitive use must be separated from the boundary of an adjoining Rural Zone or Agriculture Zone a distance of:* | *P4*<br>*Buildings for a sensitive use must be sited to not conflict or interfere with uses in the Rural Zone or Agriculture Zone, having regard to:* |

| | |
|---|---|
| *(a) not less than 200m; or*<br>*(b) if the setback of an existing building for a sensitive use on the site is within 200m of that boundary, not less than the existing building.* | *(a) the size, shape and topography of the site;*<br>*(b) the separation from those zones of any existing buildings for sensitive uses on adjoining properties;*<br>*(c) the existing and potential use of land in the adjoining zones;*<br>*(d) any buffers created by natural or other features; and*<br>*(e) any proposed attenuation measures.* |
| Assessment:<br>Complies | |
| A5<br>Exterior building finishes must have a light reflectance value not more than 40%, in dark natural tones of grey, green or brown. | P5<br>Exterior building finishes must not cause an unreasonable loss of amenity to occupiers of adjoining properties or detract from the landscape values of the site or surrounding area, having regard to:<br>(a) the appearance of the building when viewed from roads or public places in the surrounding area;<br>(b) any screening vegetation; and<br>(c) the nature of the exterior finishes. |
| Assessment:<br>The proposed dwelling will be finished in Colorbond "Windspray" (LRV of 29) or other dark natural tone of grey, green or brown with alight reflectance value not more than 40% as approved by Council. | |

***Access to a road (22.4.3)***

*That new dwellings have appropriate vehicular access to a road maintained by a road authority.*

| ***Acceptable Solution*** | ***Performance Criteria*** |
|---|---|
| *A1*<br>*New dwellings must be located on lots that have frontage with access to a road maintained by a road authority* | *P1*<br>*New dwellings must have legal access, by right of carriageway, to a road maintained by a road authority that is sufficient for the intended use, having regard to:*<br>*(a) the number of users of the access;*<br>*(b) the length of the access;* |

| | |
|---|---|
| | *(c) the suitability of the access for use by the occupants of the dwelling;*<br>*(d) the suitability of the access for emergency services vehicles;*<br>*(e) the topography of the site;*<br>*(f) the construction and maintenance of the access; and*<br>*(g) the construction, maintenance and usage of the road.* |
| Assessment:<br>The proposed dwelling will be accessed from McGann Drive via the approved access and complies with A1. | |

***Landscape Protection (22.4.4)***

Objective:

That the landscape values of the site and surrounding area are protected or managed to minimise adverse impacts.

| ***Acceptable Solution*** | ***Performance Criteria*** |
|---|---|
| A1<br>Building and works must be located within a building area, if shown on a sealed plan. | P1<br>Building and works must be located to minimise native vegetation removal and the impact on landscape values, having regard to:<br>(a) the extent of the area from which vegetation has been removed;<br>(b) the extent of native vegetation to be removed;<br>(c) any remedial or mitigation measures or revegetation requirements;<br>(d) provision for native habitat for native fauna;<br>(e) the management and treatment of the balance of the site or native vegetation areas;<br>(f) the type, size, and design of development; and<br>(g) the landscape values of the site and surrounding area. |
| Assessment: | |

The title does not include a designated building area and the proposal is therefore to be assessed under P1. The proposal is considered to minimise native vegetation removal and impact on landscape values and therefore to satisfy P1 having regard to parts a)-g) and the Natural Values Assessment Addendum 1 as follows:

a) The proposed dwelling is to be sited in an existing cleared area of the site and does not require additional clearing for bushfire HMA or construction of access.
b) The extent of clearing associated with this proposal is considered limited in the context of this 127ha site.
c) No specific remediation or mitigation measures are considered necessary
d) The proposal impacts less than 3% of the site and will maintain large areas of the 127ha site as native fauna habitat.
e) The house site is fenced from the balance of the site. No other management measures are considered necessary
f) The proposed single dwelling development is of comparable impact to other existing residential developments on nearby McGann Drive properties.
g) As discussed above, the proposed siting of the development on the lower slopes of this site and away from the frontage will have limited impact on the landscape values of the site and surrounding area.

| | |
|---|---|
| *A2*<br><br>*Buildings and works must:*<br><br>*(a) be located within a building area, if shown on a sealed plan; or*<br><br>*(b) be an alteration or extension to an existing building providing it is not more than the existing building height; and*<br><br>*(c) not include cut and fill greater than 1m; and*<br><br>*(d) be not less than 10m in elevation below a skyline or ridgeline.* | *P2.1*<br><br>*Buildings and works must be located to minimise impacts on landscape values, having regard to:*<br><br>*(a) the topography of the site;*<br><br>*(b) the size and shape of the site;*<br><br>*(c) the proposed building height, size and bulk;*<br><br>*(d) any constraints imposed by existing development;*<br><br>*(e) visual impact when viewed from roads and public places; and*<br><br>*(f) any screening vegetation.*<br><br>*P2.2*<br><br>*If the building and works are less than 10m in elevation below a skyline or ridgeline, there are no other suitable building areas.* |

Assessment:

The proposal is for a new building and is therefore to be assessed under P2.1 and P2.2.

The proposal is considered to minimise impacts on landscape values and to satisfy P2.1 in that :

a) As discussed above, the proposal is sited on the lower parts of the site and away from the exposed vegetated hillside, skyline and ridgelines

b) The proposal has a relatively small impact on the large 127ha site
c) As discussed above the proposal is of a domestic scale with a height, size and bulk similar to other properties in the surrounding landscape
d) The proposal is sited in an existing cleared area on the site and will be accessed by the approved access
e) The proposal is sited on lower parts of the site and setback from road frontages so that it will not have a significant impact as viewed from any roads or public places
f) The extensive vegetation remaining on the balance of the large site will screen the proposal.

The proposal is sited well below the skyline and ridgeline and complies with P2.2.

## Codes

**Parking and Sustainable Transport Code**

The proposal will comfortably accommodate parking for 2 cars and complies with this Code.

**Natural Assets Code**

The proposal is assessed against the provisions of this Code in Addendum 1 of the accompanying Natural Values Assessment.

**Scenic Protection Code**

Not applicable

**Bushfire Prone Areas Code**

The proposal is accompanied by a Bushfire Hazard Assessment to assist address the requirements of the Zone and Natural Assets Code. This code however does not apply to this proposal that does not involve subdivision or a hazardous or vulnerable use.

**Landslip Hazard Code**

The proposed single dwelling partly within a Low Landslip Hazard Area is exempt from this Code under C15.4.1d)i).

**Conclusion**

The proposed single dwelling sited on the lower ground of this substantial site and close to other existing dwellings clustered around the McGann Drive cul-de-sac is considered to satisfy the relevant provisions of the Landscape Conservation Zone. The proposal is accompanied by a bushfire hazard assessment, wastewater disposal report and a natural values assessment to address the relevant provisions of the planning scheme.

The proposal is recommended for approval as a discretionary application following public advertisement pursuant to Section 57 of the Act.

A separate application is to be made to formalise the existing clearing, outbuildings and dam earthworks.

I would be pleased to discuss as necessary.

Yours sincerely,

Frazer Read
**Principal**
All Urban Planning Pty Ltd

# NATURAL VALUES ASSESSMENT OF 113 MCGANN DRIVE (PID 3236692; C.T. 165891/6; LPI FMB00), BRIGHTON, TASMANIA


## Environmental Consulting Options Tasmania (ECO*tas*) for Sharon Eyers & Jacob Goldfinch

## ORIGINAL: 11 April 2023

## ADDENDUM 1: Development Application for Residential Dwelling (7 April 2025)

***Mark Wapstra*** ***ABN 83 464 107 291***

*28 Suncrest Avenue* *email: mark@ecotas.com.au*

*Lenah Valley, TAS 7008* *web: www.ecotas.com.au* *mobile: 0407 008 685*

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**AUTHORSHIP**

Field assessment: Mark Wapstra

Report production: Mark Wapstra

Habitat and vegetation mapping: Mark Wapstra

Base data for mapping: LISTmap, Prime Design

Digital and aerial photography: Mark Wapstra, GoogleEarth, LISTmap

**ACKNOWLEDGEMENTS**

Sharon Eyers & Jacob Goldfinch (owners) provided background information on the proposed land use. James Wapstra (ECOtas) assisted with the 2025 field assessment and reporting. Philip Cuthbertson (Philip Cuthbertson Building Design Solutions) provided site plans. Roger Fenwick (Bushfire Consultant) provided information on bushfire hazard management requirements. Frazer Read (AllUrbanPlanning) provided background information.

**QUALIFICATIONS**

Except where otherwise stated, the opinions and interpretations of legislation and policy expressed in this report are made by the author and do not necessarily reflect those of the relevant agency. The client should confirm management prescriptions with the relevant agency before acting on the content of this report. This report and associated documents do not constitute legal advice.

Note that any reference to the Department of Primary Industries, Parks, Water & Environment (DPIPWE) now refers to the Department of Natural Resources and Environment Tasmania.

**COVER ILLUSTRATION**

View of main west-facing slope above Gleeson Road showing *Eucalyptus amygdalina* (black peppermint) open forest on sandstone.

Please note: the blank pages in this document are deliberate to facilitate double-sided printing.

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## SUMMARY


### *General*

Sharon Eyers & Jacob Goldfinch (owners) engaged Environmental Consulting Options Tasmania (ECO*tas*) to undertake a natural values assessment of 115 McGann Drive (PID 3236692; C.T. 165891/6; LPI FMB00), Brighton, Tasmania, primarily to ensure that the requirements of the identified natural values are appropriately considered during any further project planning under local, State and Commonwealth government approval protocols.

### *Site assessment*

A natural values assessment of the study area was undertaken by Mark Wapstra (ECO*tas*) on 31 Mar. 2023.

### *Summary of key findings*

Threatened flora

- No plant species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.

Threatened fauna

- No fauna species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.
- The study area does not meet the intent of "significant habitat for a threatened fauna species", at any reasonable scale or interpretation of the concept, pursuant to the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*.

Vegetation types

- The study area supports the following TASVEG mapping unit:
  - *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS).
- Occurrences of DAS do not equate to a threatened ecological community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.
- Occurrences of DAS equate to a native vegetation community (with the same name) listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*.
- Occurrences of DAS usually meet the intent of "priority vegetation" pursuant to the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*.

Weeds

- No plant species classified as declared weeds within the meaning of the Tasmanian *Weed Management Act 1999* (*Biosecurity Act 2019*) were detected from the study area.

Plant disease

- No evidence of *Phytophthora cinnamomi* (PC, rootrot) was observed in susceptible species within the study area.
- No evidence of myrtle wilt was recorded from within the study area.
- No evidence of myrtle rust was recorded from within the study area.

Animal disease (chytrid)

- The study area does not support particular habitats conducive to frog chytrid disease, except in the most general of senses.

***Recommendations***

The recommendations provided below are a summary of those provided in relation to each of the natural values described in the main report. The main text of the report provides the relevant context for the recommendations.

Vegetation types

In general terms, minimising the extent of "clearance and conversion" and/or "disturbance" to native vegetation is recommended. The part of the title proposed for development supports a threatened vegetation type but this community is widespread, homogenous and avoiding it is impractical.

It is acknowledged that the access route will need to meet contemporary bushfire hazard management requirements in terms of grade, width and passing bays but that no particular route is "better or worse" in terms of degree of impact to the threatened vegetation type. Similarly, it is of little measurable consequence whether the proposal is for 1, 2 or 3 cabins, the design of the cabins or the extent of a hazard management area (the latter because the canopy is low and sparse and the understorey very open).

Threatened flora

None identified – no special management required.

Threatened fauna

Apart from the generic recommendation to minimise the extent of "clearance and conversion" and/or "disturbance" to native vegetation, specific management in relation to threatened fauna is not recommended.

Weed and disease management

Owner-occupation is considered the most effective future and longer-term means of achieving weed management (i.e. vigilance and control as needed).

Legislative and policy implications

There are no formal requirements for a permit under Section 51 of the Tasmanian *Threatened Species Protection Act 1995* (TSPA).

A formal referral to the relevant Commonwealth agency under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is not considered required.

Development will require a planning permit pursuant to the provisions of the applicable planning scheme but specific permit conditions in relation to natural values to satisfy P1.1 & P1.2 of C7.6.2 of the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton* are not recommended.

# INTRODUCTION

## *Purpose*

Sharon Eyers & Jacob Goldfinch (owners) engaged Environmental Consulting Options Tasmania (ECO*tas*) to undertake a natural values assessment of 115 McGann Drive (PID 3236692; C.T. 165891/6; LPI FMB00), Brighton, Tasmania, primarily to ensure that the requirements of the identified natural values are appropriately considered during any further project planning under local, State and Commonwealth government approval protocols.

## *Scope*

This report relates to:

- flora and fauna species of conservation significance, including a discussion of listed threatened species (under the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*) potentially present, and other species of conservation significance/interest;
- vegetation types (forest and non-forest, native and exotic) present, including a discussion of the distribution, condition, extent, composition and conservation significance of each community;
- plant and animal disease management issues;
- weed management issues; and
- a discussion of some of the policy and legislative implications of the identified natural values.

This report follows the government-produced *Guidelines for Natural Values Surveys – Terrestrial Development Proposals* (DPIPWE 2015) in anticipation that the report (or extracts of it) may be required as part of various approval processes.

The report format should also be applicable to other assessment protocols as required by the relevant Commonwealth agency (for any referral/approval that may be required under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*), which is unlikely to be required in this case.

More specifically, this assessment and report have been prepared to address specific provisions of the *Tasmanian Planning Scheme – Brighton*, with particular reference to the natural values/biodiversity provisions of the Natural Assets Code.

## *Limitations*

The natural values assessment was undertaken on 31 Mar. 2023. Many plant species have ephemeral or seasonal growth or flowering habits, or patchy distributions (at varying scales), and it is possible that some species were not recorded for this reason. However, every effort was made to sample the range of habitats present in the survey area to maximise the opportunity of recording most species present (particularly those of conservation significance). Late spring and into summer is usually regarded as the most suitable period to undertake most botanical assessments. While some species have more restricted flowering periods, a discussion of the potential for the site to

support these is presented. In this case, I believe that the survey was appropriately timed to detect the species with a highest priority for conservation management in this part of the State.

The survey was also limited to vascular species: species of mosses, lichens and liverworts were not recorded. However, a consideration is made of threatened species (vascular and non-vascular) likely to be present (based on habitat information and database records) and reasons presented for their apparent absence.

Surveys for threatened fauna were largely limited to an examination of "potential habitat" (i.e. comparison of on-site habitat features to habitat descriptions for threatened fauna), and detection of tracks, scats and other signs.

### *Permit*

Any plant material was collected under DNRET permit TFL 22382 (in the name of Mark Wapstra). Relevant data will be entered into DNRET's *Natural Values Atlas* database by the author. Some plant material may be lodged at the Tasmanian Herbarium by the author.

No vertebrate or invertebrate material was collected. A permit is not required to undertake the type of habitat-level assessment described herein.

## LAND USE PROPOSAL

At the time of assessment, a specific land use proposal was not provided. Rather, the project proponents/owners provided a guided walk of the likely access route (from Gleeson Road) and possible sites for 1-3 small cabins (design as yet undecided). It is presumed that some form of hazard management will be required for the cabin sites and that the access will need to comply with contemporary bushfire hazard management requirements in terms of grade, width and passing bays. A possible site for a large water storage tank was also examined. Irrespective of the final design, I am comfortable that I have examined sufficient area around each possible project element (including alternative access starting points and routes and alternative BAL ratings) such that a further site assessment should not become required.

## STUDY AREA

Overview

The study area (Figures 1 & 2) comprises part of the subject title of 113 McGann Drive, Brighton, Tasmania, with the following cadastral details:

- PID 32332366926684;
- C.T. 165891/6;
- LPI FMB00.

The whole title is ca. 1,272,000 $m^2$ (i.e. ca. 127 ha) in extent (measured area as per LISTmap) but the assessment was limited to the area between the main ridgeline and Gleeson Road to the west.

Land tenure and other categorisations relevant to natural values management of the study area are as follows:

- Brighton municipality, zoned as Landscape Conservation pursuant to the *Tasmanian Planning Scheme – Brighton* (Figure 3) and wholly subject to the Priority Vegetation Area overlay (Figure 4); and
- South East bioregion, according to the IBRA 7 bioregions used by most government agencies).

The title is bound on all sides by private titles. There is a private conservation covenant established on a title to the south of the subject title (Figure 5), which is well away from any proposed development.

Other site features

The title is a dominated by a mainly northeast-facing moderately steep to gentle slope with Cobbs Hill and an associated southeast-northwest trending ridgeline with some other aspected slopes to the southwest, south and southeast. The proposed development site is on the ridgeline and west-facing slopes above Gleeson Road. There are no marked or observed drainage features close to the proposed development site, apart from one small dam.

The part of the title examined supports relatively even-aged dry sclerophyll forest with an open understorey (Plates 1-4) except on more sheltered slopes where the understorey becomes shrubbier beneath a marginally taller canopy.


**Plates 1-4.** Examples of relatively even-aged dry sclerophyll forest with an open understorey that dominates the ridgeline and slopes above Gleeson Road

Cadastral and topographic maps show some existing tracks on the title, including one extending along much of the ridgeline. Aerial imagery and site assessment confirmed this track.

The geology (Figure 6) of most of the title is mapped at a 1:250,000 scale as Triassic-age "dominantly quartz sandstone" (geocode: Rq), which was confirmed by reference to outcropping coarse-grained "clean" sandstone and obviously sandy soils derived from this substrate (Plates 5 & 6). The southern area (well away from the proposed development site) is mapped as Permian-age "upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone" (geocode: Pu). The geology is mentioned because it can strongly influence vegetation classification, likelihood of threatened flora (and to a lesser extent threatened fauna).

**Plates 5 & 6.** Examples of outcropping sandstone (see also Plates 1-4)

LISTmap's Fire History layer (Figure 7) indicates two major recent fire events. Most of the title was subject to the "Broadmarsh-Bluff Rd (TFS)" bushfire of 21 Jan. 2003 and the earlier "Dromedary 2 (FT)" bushfire of 15 Feb. 1982. This is reflected in the forest structure (e.g. Plates 1-4) and scorch marks on trees (Plate 7). Older fire events are evidenced by burnt out tree bases (Plate 8).

**Plate 7.** (LHS) Scorch on rough-barked Eucalyptus amygdalina reflecting the more recent fire event

**Plate 8.** (RHS) Burnt out older tree reflecting a much older and more severe fire event

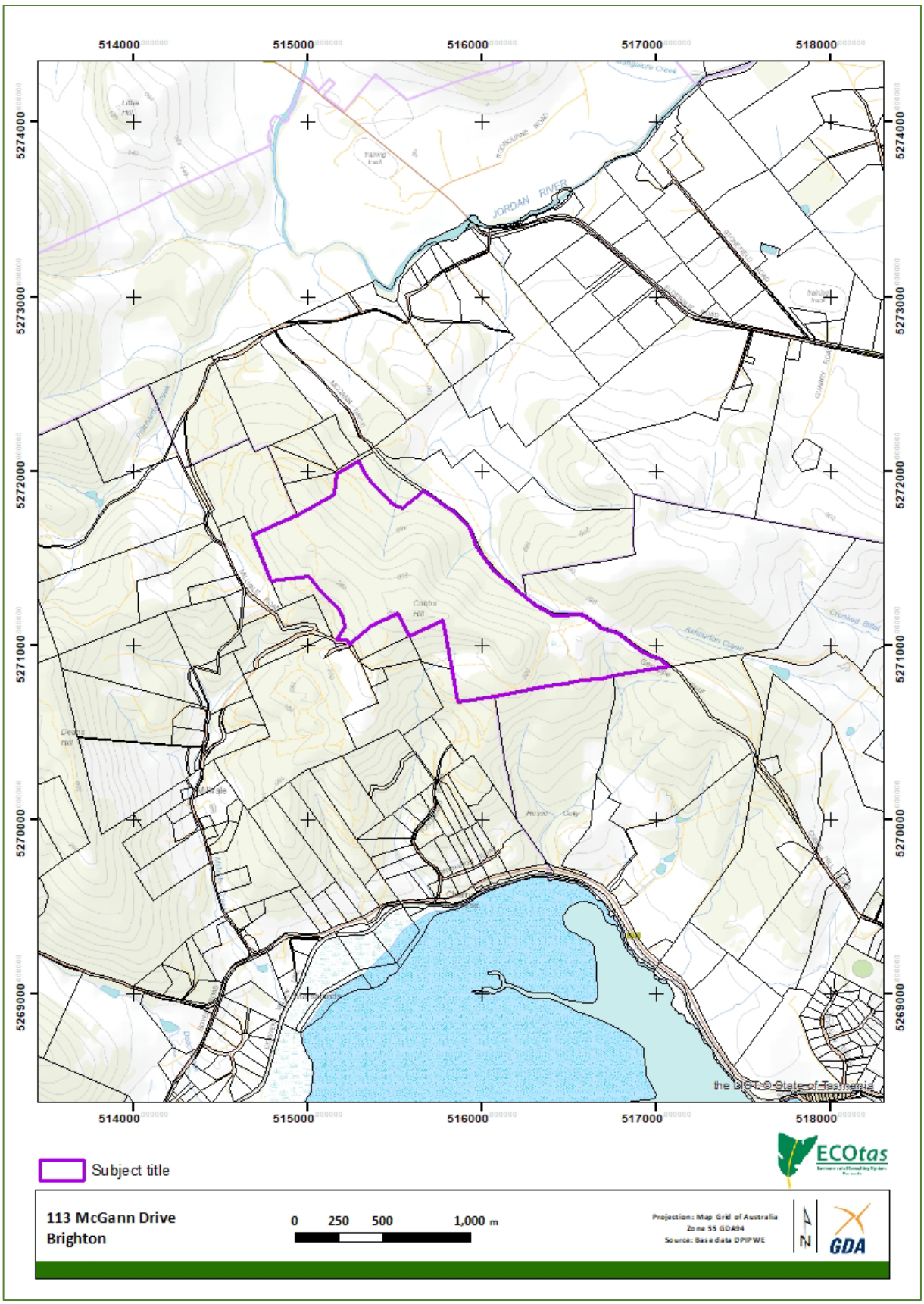


**Figure 1.** General location of subject title

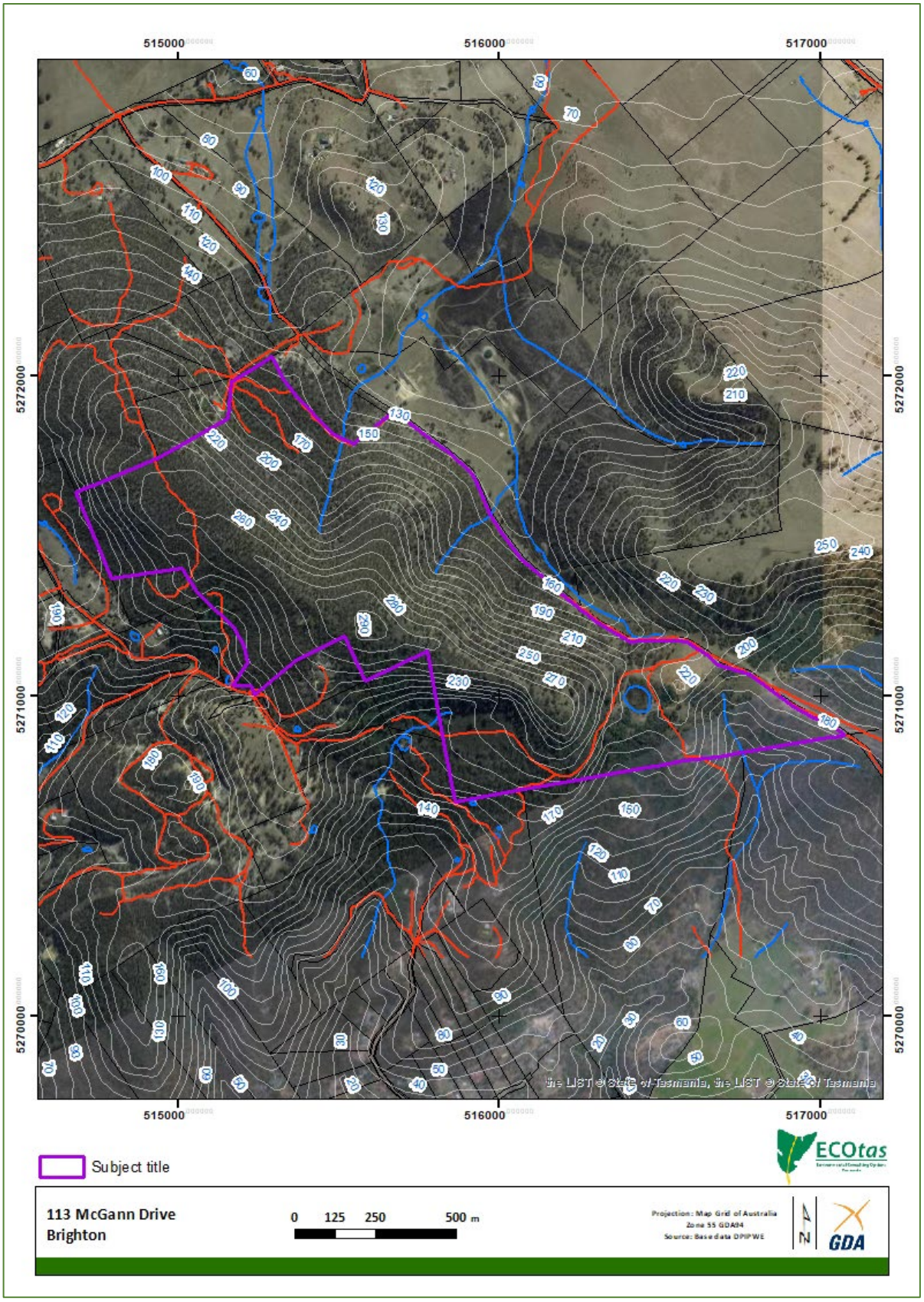


**Figure 2a.** Detailed location of subject title showing elevations, roads/tracks, watercourses and cadastral features

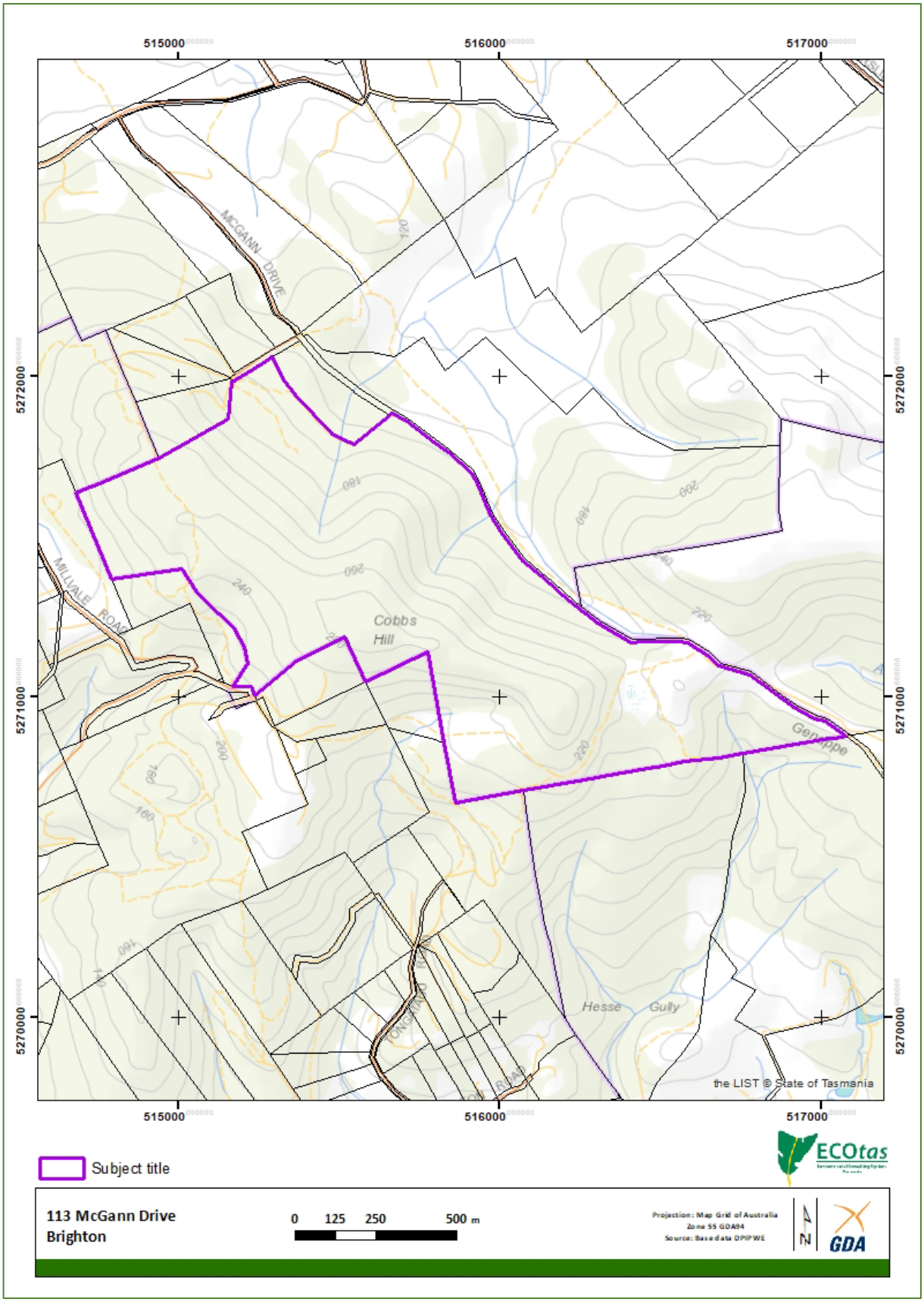


**Figure 2b.** Detailed location of subject title showing general topography and cadastral features


**Figure 2c.** Detailed location of subject title (aerial imagery only)

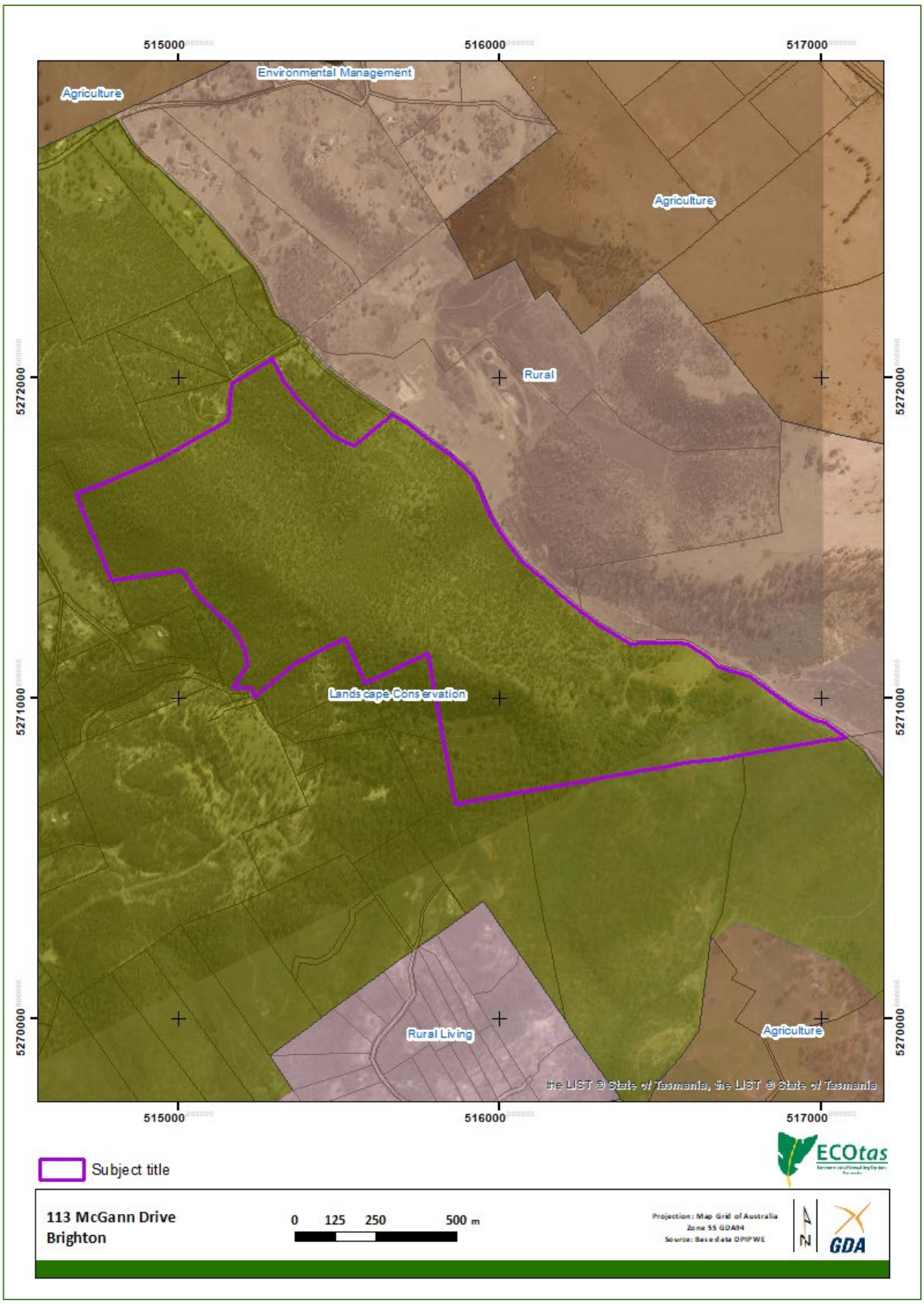


**Figure 3.** Zoning of subject title and surrounds pursuant to the *Tasmanian Planning Scheme – Brighton*

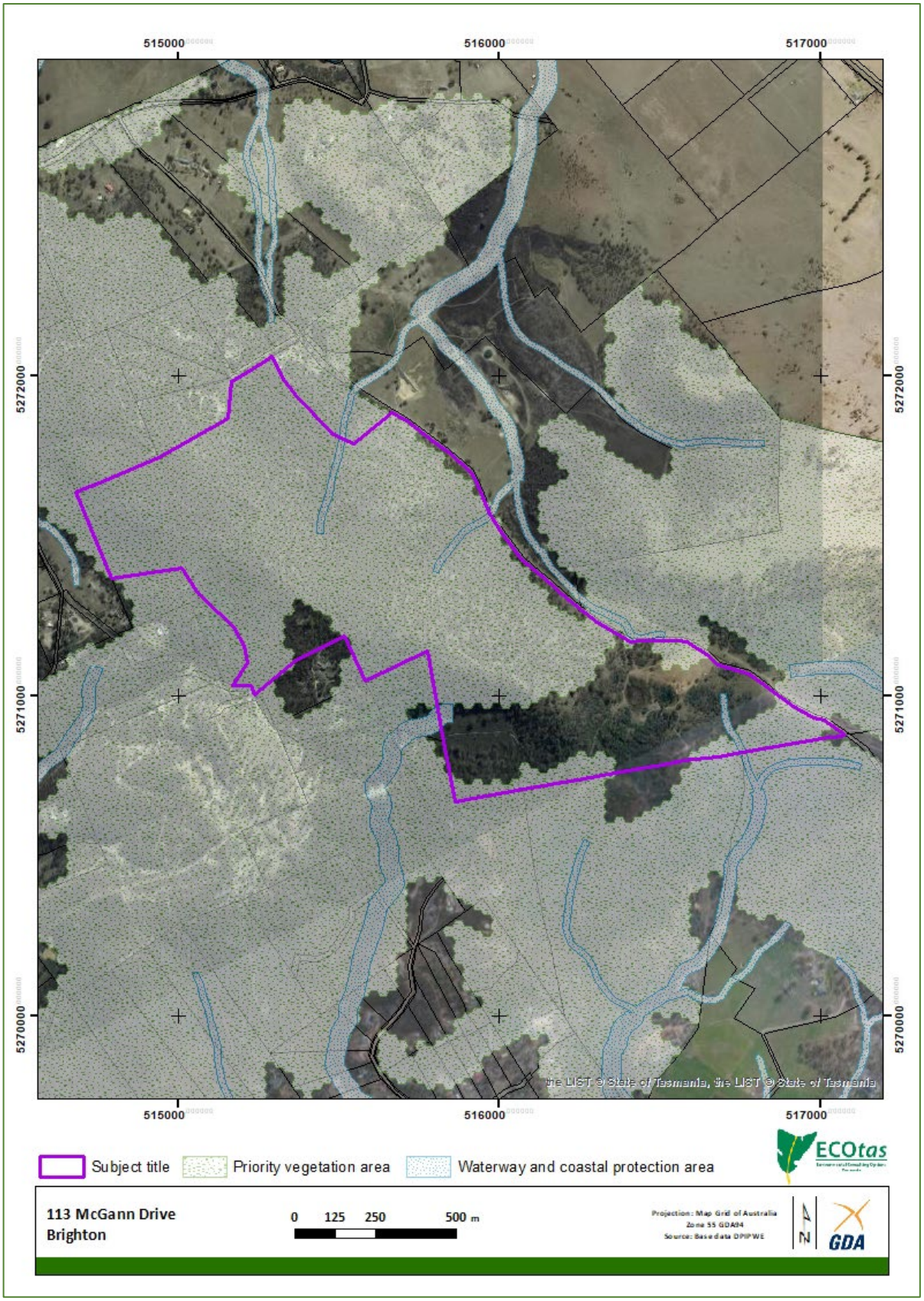


**Figure 4.** Extent of Priority Vegetation Area overlay within and adjacent to subject title pursuant to the *Tasmanian Planning Scheme – Brighton*


**Figure 5.** Location of adjacent private reserve

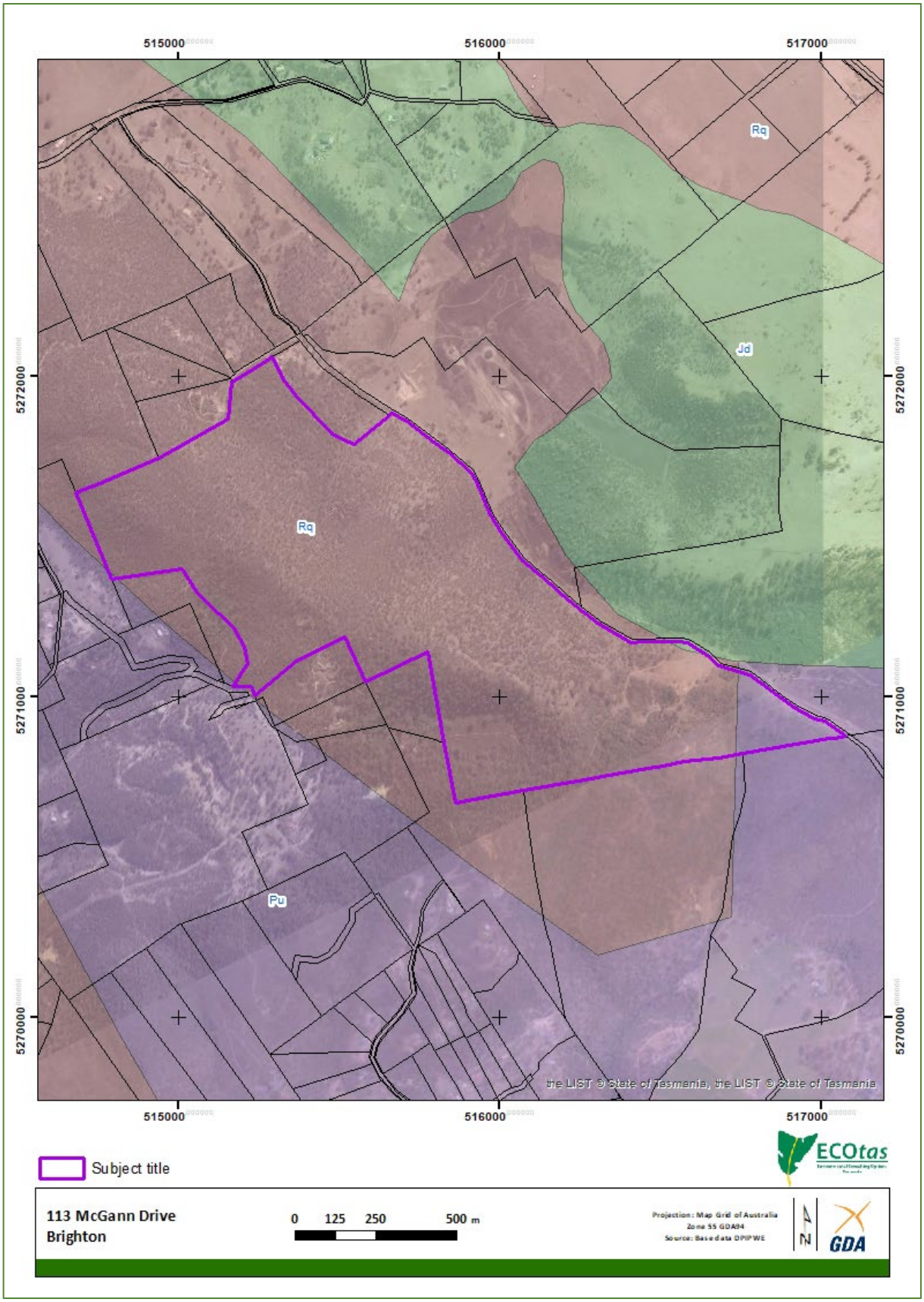


**Figure 6.** Geology of subject title and surrounds (refer to text for codes)

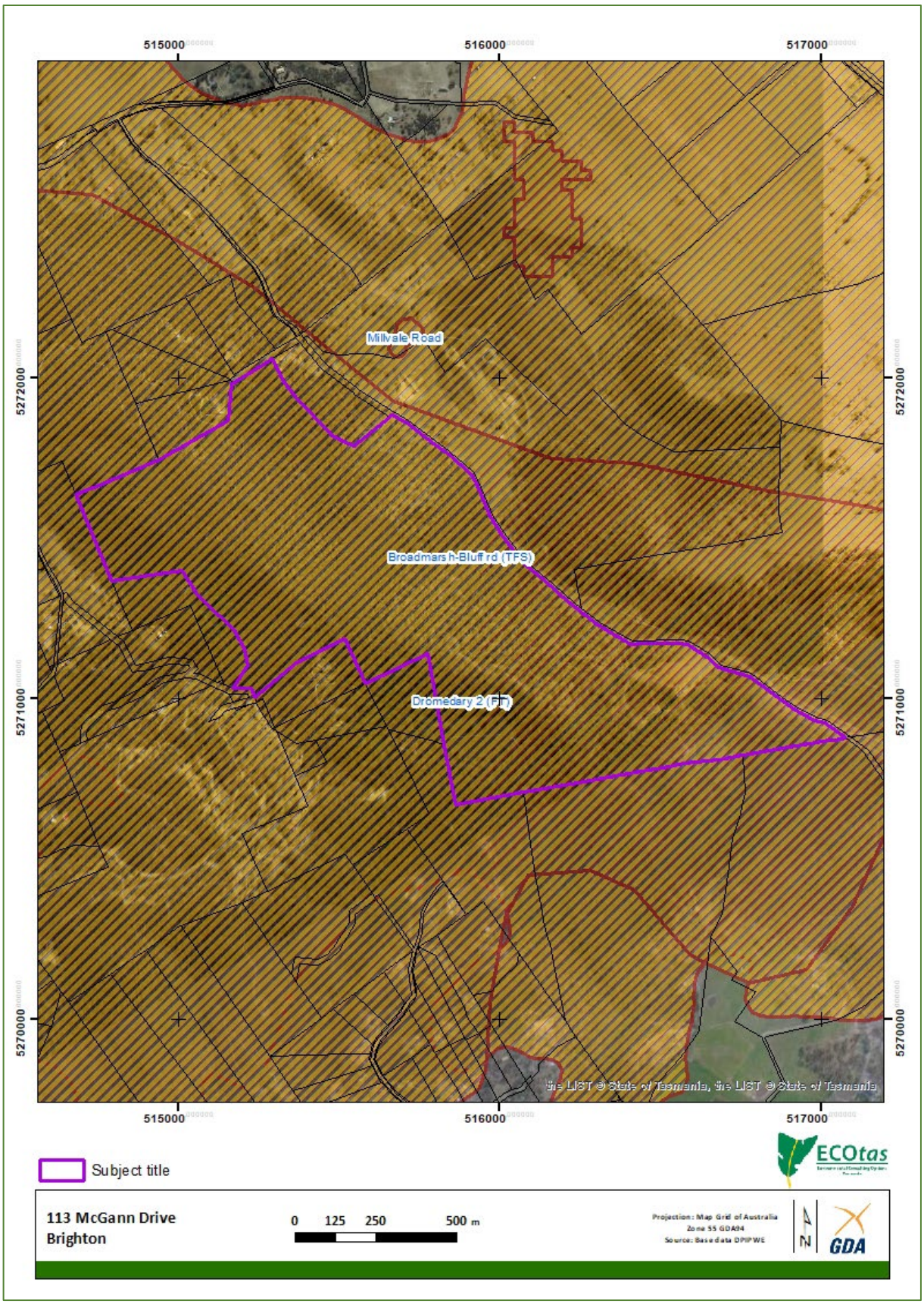


**Figure 7.** Fire history of subject title and surrounds

## METHODS

### *Nomenclature*

All grid references in this report are in GDA94, except where otherwise stated.

Vascular species nomenclature follows de Salas & Baker (2022) for scientific names and Wapstra et al. (2005+) for common names. Fauna species scientific and common names follow the listings in the cited *Natural Values Atlas* report (DNRET 2022).

Vegetation classification follows TASVEG 4.0, as described in *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation (*Kitchener & Harris 2013+).

### *Preliminary investigation*

Available sources of previous reports, threatened flora records, vegetation mapping and other potential environmental values were interrogated. These sources include:

- Tasmanian Department of Natural Resources and Environment Tasmania's *Natural Values Atlas* records for threatened flora and fauna (GIS coverage maintained by the author current as at date of report);
- Tasmanian Department of Natural Resources and Environment Tasmania's *Natural Values Atlas* report ECOtas_113McGannDrive for a polygon defining the subject title (centred on 515748mE 5271308mN), buffered by 5 km, dated 26 Jul. 2022 (DNRET 2022) – Appendix E;
- Forest Practices Authority's *Biodiversity Values Database* report, specifically the species' information for grid reference centroid 515748mE 5271308mN (i.e. a point defining the approximate centre of the assessment area), buffered by 5 km and 2 km for threatened fauna and flora records, respectively, hyperlinked species' profiles and predicted range boundary maps, dated 26 Jul. 2022 (FPA 2022) – Appendix F;
- Commonwealth *Protected Matters Report* for a polygon defining the subject title, buffered by 5 km, dated 26 Jul. 2022 (CofA 2022) – Appendix G;
- TASVEG vegetation coverages (as available through GIS coverage and via LISTmap);
- GoogleEarth, LISTmap and ESRI aerial orthoimagery; and
- other sources listed in tables and text as indicated.

### *Field assessment*

The assessment was undertaken by Mark Wapstra (ECO*tas*) on 31 Mar. 2023. A previous assessment was undertaken (of different but adjacent parts of the title) on 29 Jul. 2022 (hence the older database reports). Cadastral data uploaded to the iGIS application guided the in-field assessment (most boundaries unfenced with limited survey markers). Meandering transects were used to capture the greater range of aspects, slopes and site conditions.

The survey was not limited by access due to the generally open understorey and guided assessment to ensure all possible development site options were examined.

All data was captured using hand-held GPS (Garmin Oregon 600 & Garmin GPSMAP 66sr).

Vegetation classification

Vegetation was classified by waypointing vegetation transitions for later comparison to aerial imagery. The structure and composition of the vegetation type was described using a nominal 30 m radius plot at a representative site within the vegetation type, and compiling a "running" species list for the balance of the vegetation.

Threatened flora

With reference to the threatened flora, the survey included consideration of the most likely habitats for such species. No threatened flora were encountered so further methods are not presented.

Threatened fauna

Surveys for threatened fauna were largely limited to an examination of "potential habitat" (i.e. comparison of on-site habitat features to habitat descriptions for threatened fauna), and detection of tracks, scats and other signs.

Due to the presence of a previously reported eagle nest just off-title and the possible interaction between the proposed development and this nest site, the location of the nest was confirmed by navigating to a pre-uploaded waypoint and examining the nest tree from the edge of the subject title.

Weed and hygiene issues

The study area was assessed with respect to plant species classified as declared weeds under the Tasmanian *Weed Management Act 1999*, Weeds of National Significance (WoNS) or "environmental weeds" (author opinion and as included in *A Guide to Environmental and Agricultural Weeds of Southern Tasmania*, NRM South 2017).

The study area was assessed with respect to potential impacts of plant and animal pathogens, by reference to habitat types and field symptoms.

## FINDINGS

### *Vegetation types*

Comments on TASVEG mapping

This section, which comments on the existing TASVEG mapping for the study area, is included to highlight the differences between existing mapping and the more recent mapping from the present study to ensure that any parties assessing land use proposals (via this report) do not rely on existing mapping. Note that TASVEG mapping, which was mainly a desktop mapping exercise based on aerial photography, is often substantially different to ground-truthed vegetation mapping,

especially at a local scale. An examination of existing vegetation mapping is usually a useful pre-assessment exercise to gain an understanding of the range of habitat types likely to be present and the level of previous botanical surveys.

In this case, it is useful to examine both TASVEG 3.0 & 4.0 mapping because while the latter should be the most up-to-date, unfortunately the former was used to inform the *Tasmanian Planning Scheme* and specifically the Regional Ecosystem Model's mapping of the Priority Vegetation Area overlay. In this case, it appears that the overlay was extended to include both threatened (DTO) and non-threatened (DOB) vegetation types. The *Priority Vegetation Report* (as supplied by Brighton Council) seems to apply the overlay because of potential threatened fauna habitat (eastern barred bandicoot, Tasmanian devil, masked owl), relative reservation (DAM, DAS & DTO) and threatened vegetation (DTO & DAS). This report is very clear in that the reliability of the data source for vegetation mapping (TASVEG 3.0) is "extremely variable – aerial identification and/or on-ground field verification" and that for management "check TasVeg for field verification" and "consider local extent, condition and management option". That is, while local planning authorities have adopted the Priority Vegetation Area overlay, it is clear that the original modelling was intended to inform management and never be absolute, the model's authors very clearly stating assumptions and limitations. The highly variable veracity of TASVEG mapping (any version) is widely recognised and accepted – any planning advice provided that is based on this mapping without ground-truthing must be regarded as unreliable and a mis-use of the dataset.

In this case, TASVEG 3.0, 4.0 & Live (Figure 8) all map the title identically as:

- agricultural land (TASVEG code: FAG)

  FAG is mapped across much of the southern part of the title and a small area along the southern central part of the title. While aerial imagery does indicate some substantially disturbed areas in the south of the title associated with older primary production pursuits, there is clearly a largely native vegetation (or at least modified "native vegetation") cover.

- *Eucalyptus obliqua* dry forest (TASVEG code: DOB)

  DOB is mapped in six polygons extending into the subject title from adjacent areas, these somewhat associated with the more sheltered and steeper slopes. However, aerial imagery clearly indicates at least some of the areas of DOB are mis-mapped.

- *Eucalyptus tenuiramis* forest and woodland on sediments (TASVEG code: DTO)

  DTO is mapped extensively across the central-northern part of the subject title. Even a cursory examination of aerial imagery is strongly indicative that this mapping was likely to be erroneous because DTO in particular has a highly distinctive "signature" of silvery-grey canopy.

- *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS)

  DAS is mapped along the southern boundary (extending from a much larger polygon from the south) and in the northwest corner of the subject title.

<u>Vegetation types recorded as part of the present study</u>

Vegetation types have been classified according to TASVEG 4.0, as described in *From Forest to Fjaeldmark: Descriptions of Tasmania's Vegetation* (Kitchener & Harris 2013+). Table 1 provides information on the mapping unit identified from the part of the title proposed for development (see also Figure 9). Refer to Appendix A for a more detailed description of the native vegetation mapping unit identified from the part of the title proposed for development.

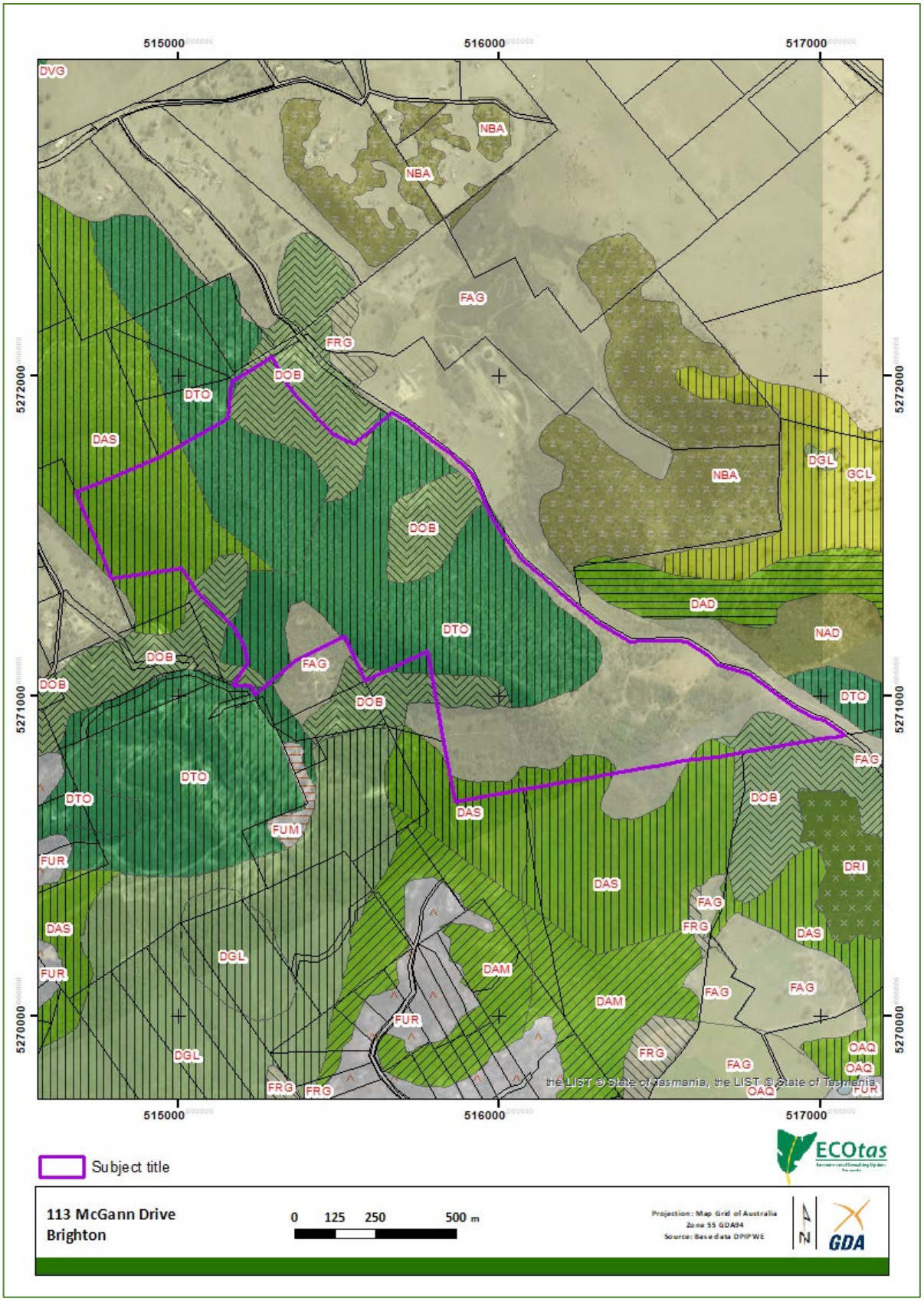


**Figure 8a.** Subject title and surrounds showing existing TASVEG 3.0, 4.0 & Live vegetation mapping: overview of whole title (see text for codes)

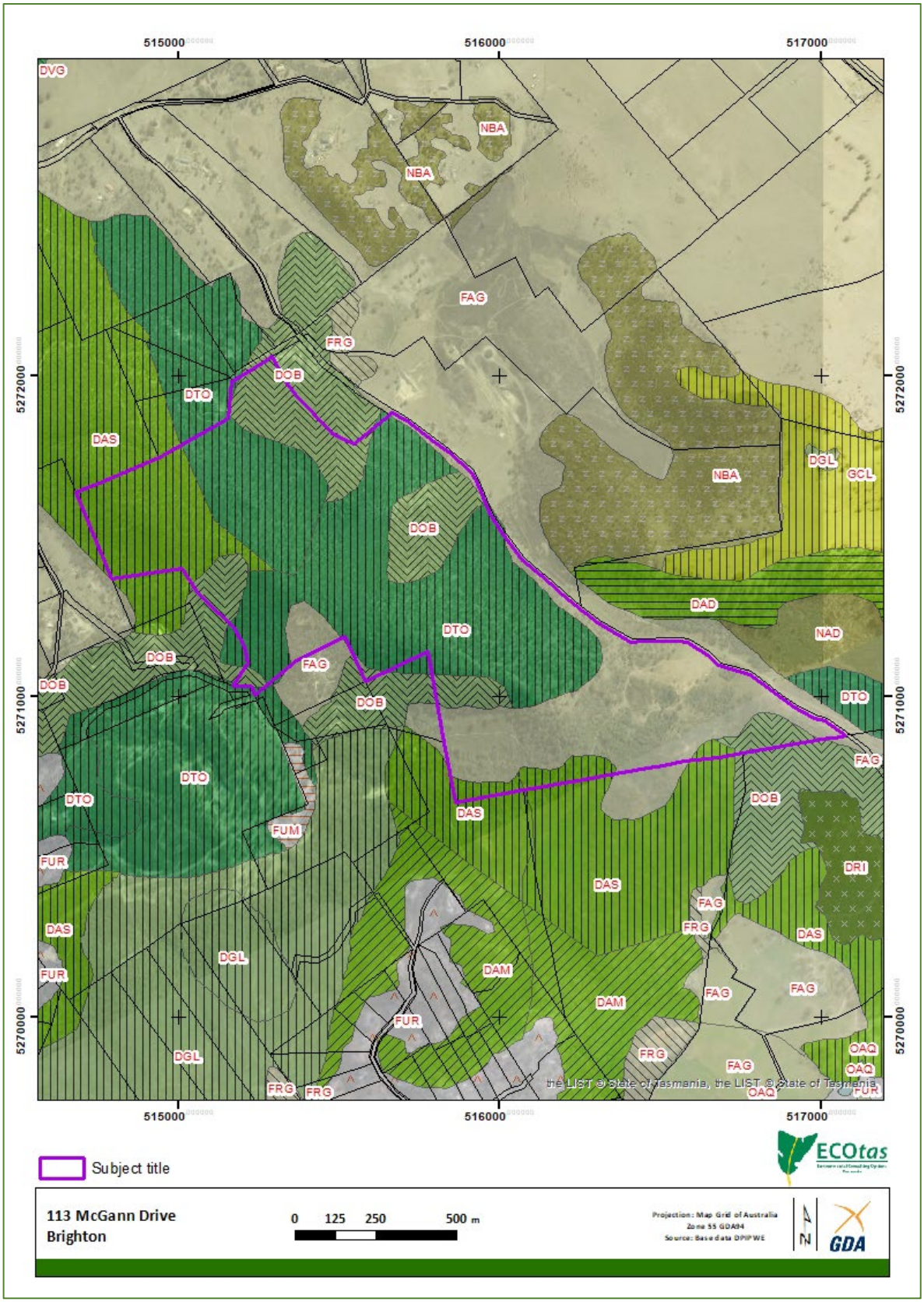


**Figure 8b.** Subject title and surrounds showing existing TASVEG 3.0, 4.0 & Live vegetation mapping: part of title proposed for development (see text for codes)

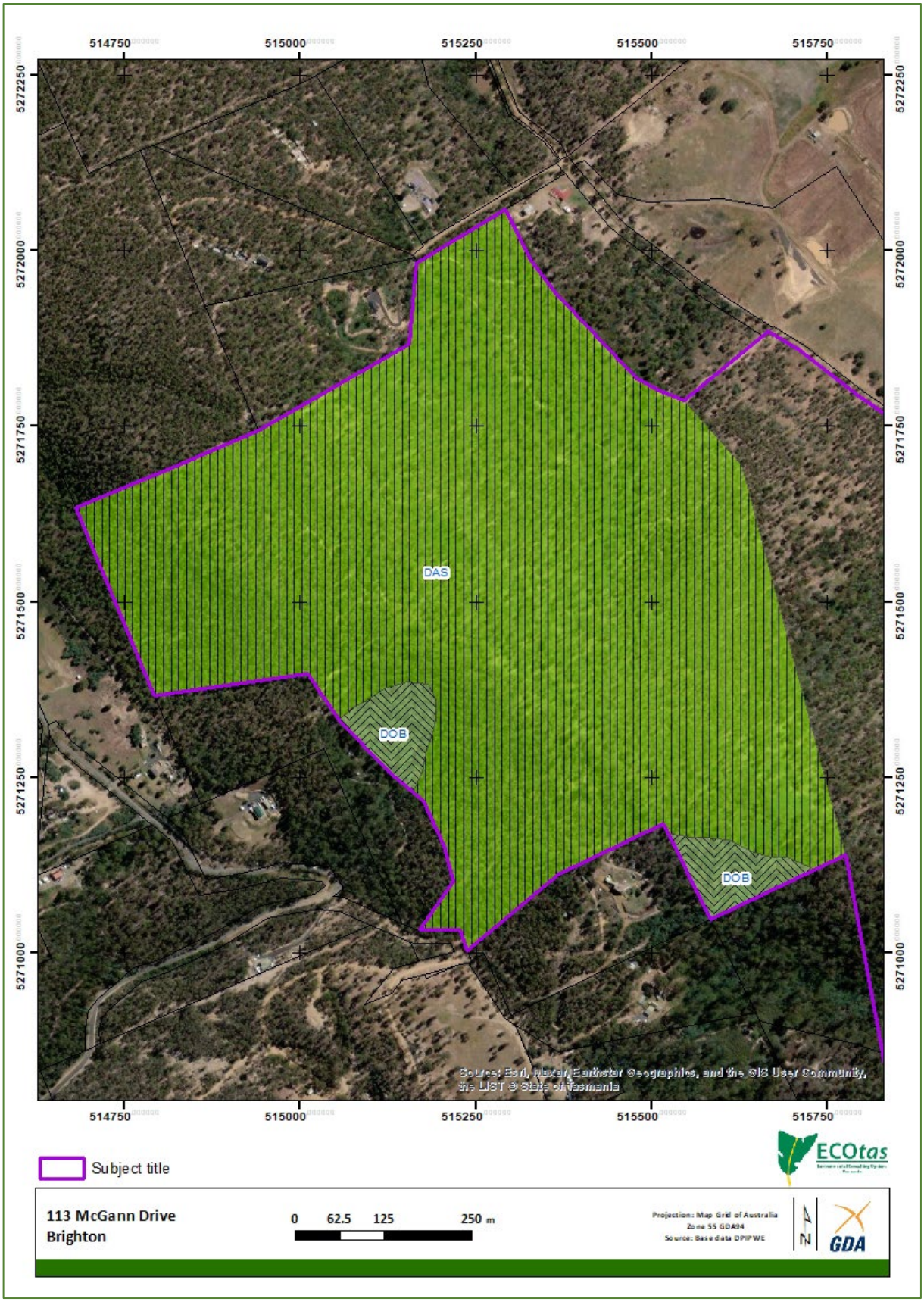


**Figure 9b.** Revised vegetation mapping for part of title proposed for development (see text for codes)

**Table 1.** Vegetation mapping units present in part of the title proposed for development

[conservation status: NCA – as per Schedule 3A of the Tasmanian *Nature Conservation Act 2002*, using units described by Kitchener & Harris (2013+), relating to TASVEG mapping units (DNRET 2023); EPBCA – as per the listing of ecological communities on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, relating to communities as described under that Act, but with equivalencies to TASVEG units]

| **TASVEG mapping unit** (Kitchener & Harris 2013+) | **Conservation priority** NCA *EPBCA* | **Comments** |
|---|---|---|
| ***Dry eucalypt forest and woodland*** | | |
| *Eucalyptus amygdalina* forest and woodland on sandstone (DAS) | threatened *not threatened* | DAS occurs on both the ridgeline and west-facing slopes, with a mainly regrowth structure (post-fire) and very open understorey (reflecting the insolation and bare ground created by thin soils over Triassic sandstone). Occasional sheltered patches have a denser shrubbier and/or bracken-dominated understorey.<br>In places on the upper slopes, DAS grades into *Eucalyptus tenuiramis* forest and woodland on sediments (TASVEG code: DTO) although no patches were large enough to map separately at any practical scale, with the canopy having a shared dominance of *Eucalyptus amygdalina* (black peppermint) and *Eucalyptus tenuiramis* (silver peppermint), the latter only very rarely and locally dominant.<br>On the more most sheltered (and generally steeper) DAS grades into *Eucalyptus obliqua* dry forest (TASVEG code: DOB), which has a similar composition to the more sheltered facies of DAS but the canopy is somewhat taller.<br>DAS is in good ecological condition with no symptoms of plant disease or weeds observed. |

Conservation significance of identified native vegetation type

The identified vegetation type (DAS) does not equate to a threatened ecological community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Occurrences of *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS) equate to a native vegetation community (with the same name) listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*.

Occurrences of DAS usually meet the intent of "priority vegetation" pursuant to the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*, which is defined as follows:

C7.3 Definition of Terms

C7.3.1 In this code, unless the contrary intention appears:

means native vegetation where any of the following apply:

(a) it forms an integral part of a threatened native vegetation community as prescribed under Schedule 3A of the *Nature Conservation Act 2002*;

(b) is a threatened flora species;

(c) it forms a significant habitat for a threatened fauna species; or

(d) it has been identified as native vegetation of local importance.

That is, C7.3.1(a) is applicable, noting that I consider the patch to be "an integral part of a threatened native vegetation community" because the patch continues within the title and into adjacent titles to form a much larger area. Refer to **DISCUSSION *Legislative and policy implications*** for a more detailed analysis of this concept.

### *Plant species*

General information

A total of 77 vascular plant species were recorded from the part of the title proposed for development (Appendix B), comprising 44 dicotyledons (including 2 endemic and 4 naturalised species), 31 monocotyledons (including 1 naturalised species) and 2 pteridophytes (both native). The low diversity of naturalised species is notable, restricted to ubiquitous herbs and grasses recorded from almost all survey sites.

Additional surveys at different times of the year may detect additional short-lived herbs and grasses but a follow-up survey is not considered warranted because of low likelihood of species with a high priority for conservation management being present.

Threatened flora

Database information indicates that the subject title does not support known populations of flora listed as threatened on the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* (Figure 10).

Figure 10 indicates threatened flora species near to the study area and Table C1 (Appendix C) provides a listing of threatened flora from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

### *Threatened fauna*

Database information indicates that the subject title does not support known populations of fauna listed as threatened on either the Tasmanian *Threatened Species Protection Act 1995* and/or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* (Figure 11). Site assessment did not detect any such species from the part of the title proposed for development.

Figure 11 indicates threatened fauna species near to the study area and Table D1 (Appendix D) provides a listing of threatened fauna from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

Site assessment indicated that the part of the title proposed for development supports ubiquitous potential habitat for a suite of threatened fauna species. This includes potential habitat of species such as *Sarcophilus harrisii* (Tasmanian devil), *Dasyurus maculatus* subsp. *maculatus* (spotted-tailed quoll), *Dasyurus viverrinus* (eastern quoll), *Perameles gunnii* subsp. *gunnii* (eastern barred bandicoot), *Tyto novaehollandiae* (masked owl) and *Accipiter novaehollandiae* (grey goshawk). Small-scale development is not anticipated to have a significant deleterious impact on any of these species at any reasonable scale.

There is a previously reported nest of an eagle species located just off-title on Lot 1 Tongatabu Road (Figure 12a). This nest site (RND #2928, "southern slopes of Cobbs Hill, approx 200 m SSE of the peak") has not been allocated to either the wedge-tailed eagle (*Aquila audax* subsp. *fleayi*) or the white-bellied sea-eagle (*Haliaeetus leucogaster*), presumably because at the time of

recording (7 May 2020) there were no birds associated with the structure (prior to start of breeding season). The nest was recorded by ground survey and recorded with a precision of ± 5 m. Based on behaviour of observed wedge-tailed eagles on 29 Jul. 2022 ("pot-hooking" above ridgeline), I am confident that the nest site is best assigned to the wedge-tailed eagle (*Aquila audax* subsp. *fleayi*). As part of the present assessment, the location of the nest was confirmed and is considered precise enough to guide management recommendations. The nest is not in particularly good condition, with signs of collapse and no evidence of long-term use such as algal washes on the trunk below the nest. That said, all nests are usually treated as "viable" and presumed to be potentially "active".

Broadly speaking, there are two main elements to the management of known nest sites of the wedge-tailed eagle: (1) protection of the nest itself and (2) limiting disturbance to the breeding activity at the nest site. Management guidelines have long been developed for the commercial wood production sector through decades of research and implementation and testing of management actions, ultimately leading to a set of agreed management actions delivered through a decision-support system (referred to as the *Threatened Species Adviser*) embedded within the *Forest Practices Code* (and hence the Tasmanian *Forest Practices Act 1985*). The "forestry rules" are also widely cited and used for other land management activities increasingly not related to forestry. In a general sense, this is a sound approach with respect to the general principles. However, in my opinion, management of wedge-tailed eagle nest sites in scenarios other than commercial wood production activities needs to be on a case-by-case basis, taking into account all relevant information since the original research specifically focused on forestry. This includes information on the nest site such as history of discovery and use, its context (e.g. type of topography, vegetation type, etc.), setting (e.g. distance from existing disturbance factors, historical and contemporary land use near nest, etc.) and the specific proposal (e.g. distance, line-of-sight analysis, etc.).

In commercial wood production scenarios, nest sites are protected by an undisturbed reserve of surrounding forest, usually set at a minimum area of 10 ha (which nominally equates to a circle with a radius of ca. 180 m) with area concentrated uphill of the nest to be protect from prevailing wind. In practice, reserves are designed with reference to topographic features, prevailing wind direction, structure and composition of supporting and remaining surrounding forest, and nearby land use activities. However, the 180 m circle provides a good visual guideline to ascertain the degree of risk from a nearby activity. In this particular circumstance, there is no proposal to impact on the forest currently supporting the nest site so this aspect of nest management is not considered further, but it is noted that an area in excess of this notional reserve naturally exists.

In addition to an undisturbed reserve, a 500 m disturbance buffer from the nest is usually applied during the breeding season (for wood production activities). The breeding season is currently described as July to January, inclusive) in most years but sometimes extended to February, inclusive in "late years". Within this period there are some key periods, such as egg laying, incubating and hatching. The 500 m buffer is a guideline and targets disturbance. This 500 m buffer was originally developed to deal with novel, close activities of a nature that are disturbing that are obvious to the eagles attending a nest. This especially applies to activities that are moving toward the nest. A logging operation can be a good example. In this particular circumstance, while the proposed work site is within the notional 500 m of the nest site, the proposed works would be better categorised as incidental and ongoing rather than novel and moving toward the nest site i.e. any attendance of birds at this nest site for breeding purposes would be undertaken with the knowledge of the existing motorcycle club activities. Construction activities effectively within the limits of the existing disturbed area is hardly novel. All that said, the fact that the distance between proposed works and the nest is less than 500 m, it is recommended that works occur between February and June (inclusive).

The term "active nest" is used carefully and in eagle management has a technical meaning; a nest is active if it is being used for breeding, including the period from close nest preparation to laying. For management purposes, it is usually considered that any nest site is "active" unless it is known

as inactive (something that can only be deemed by an experienced observer). In this case, the "activity" of the nest is not considered of great relevance because there is ongoing and continual (legal) levels of "disturbance" (probably better regarded as incidental activity) close to the nest site (from within 19, 23 & 60 Gleeson Road).

Further to the 500 m disturbance buffer, an additional 500 m is applied to forestry activities that are in line-of-sight (LOS) from the nest. LOS is a direct line from the nest to the disturbance not regarding vegetation, i.e. it is not necessarily the same as in sight. This 1,000 m buffer is because of the assumption that all vegetation shelter may be removed so cannot be regarded as a visual barrier (this may be applied to some forms of forestry and land clearing). The 1,000 m LOS buffer is often recommended for non-forestry activities and is arguably often excessive where no vegetation removal is planned and the existing vegetation hides the nest meaning it is (literally) not in line-of-sight. Site assessment clearly indicated that the nest is not within line-of-sight of the proposed development locations because it is effectively screened by the forest to the north of the nest, the nest is set well below the ridgeline on a steep south-facing slope and any proposed project site is below the ridgeline (with each successive element further north further downslope and below the ridgeline). Line-of-sight modelling provided by DNRET (via LISTmap) clearly indicates that no part of the title proposed for development is within line-of-sight (Figure 12b).

That is, the only possible relevant management prescriptions routinely applied to a nest site for a project on the ridgeline to the north of the nest is the 500 m in-season buffer zone (Figure 12b). However, as discussed, this is not considered to be of prime relevance in this case given the topography and proposed land use. That is, a cabin placed in the forest (or a water tank if this is the closest project element) is unlikely to result in manifest and material disturbance to the nest site. This includes activities such as construction during the breeding season, primarily because this sort of activity is ongoing and continual within much closer distance to the nest site than is proposed.

Refer to **DISCUSSION *Legislative and policy implications*** for a more detailed review of why the Tasmanian *Threatened Species Protection Act 1995* or the Commonwealth *Environment Protection and Biodiversity Protection Act 1999* do not have application in this case.

In my opinion, the part of the title proposed for development does not qualify as "priority vegetation" because of the presence of "significant habitat for a threatened fauna species" within the intent of C7.3.1(c) of the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*, where "significant habitat" is defined under the *Scheme* as follows:

> "the habitat within the known or core range of a threatened fauna species, where any of the following applies:
>
> (a) is known to be of high priority for the maintenance of breeding populations throughout the species' range; or
>
> (b) the conversion of it to non-priority vegetation is considered to result in a long-term negative impact on breeding populations of the threatened fauna species".

Problematically, the *Scheme* does not define the terms "known" or "core" range, which means this could rely on those used by other agencies such as the Forest Practices Authority and/or the Department of Natural Resources and Environment Tasmania, which are effectively presented in the relevant database reports (DNRET 2022; FPA 2022). While there is potential habitat of several species (see previous discussion), apart from the wedge-tailed eagle, it is clear that the site is not "known to be of high priority for the maintenance of breeding populations throughout the species' range" or that "conversion of it to non-priority vegetation is considered to result in a long-term negative impact on breeding populations of the threatened fauna species". With respect to the wedge-tailed eagle, while the nest site itself can be argued to be meet these two criteria, in this case, the nest site itself will not be removed, any notionally suggested reserve is easily accommodated (not that this will ever need to be formalised) and works will not reasonably "result in a long-term negative impact" on the species as a whole (or indeed on this breeding pair). That is, C7.3.1(c) is not considered to be applicable.

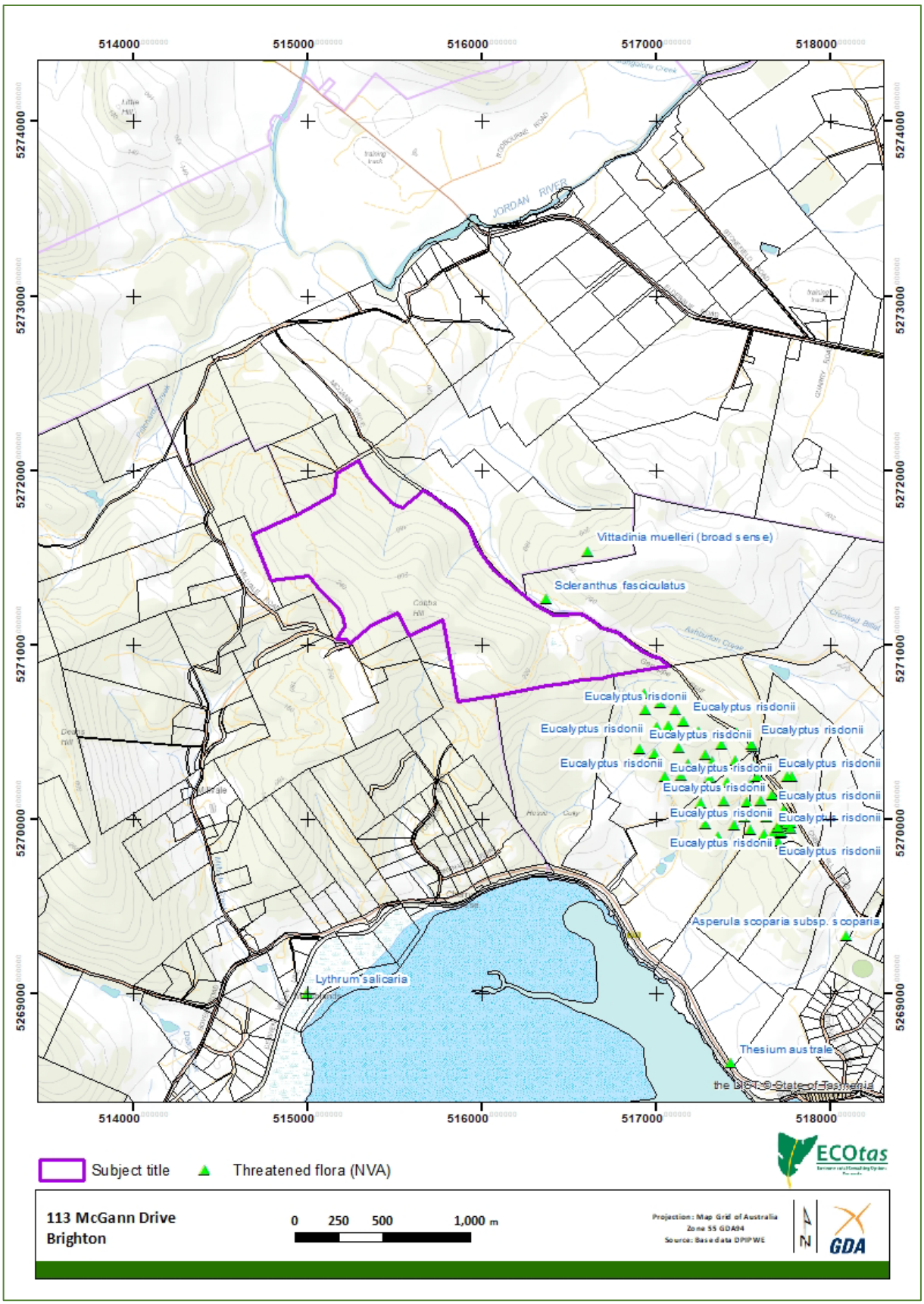


**Figure 10.** Distribution of threatened flora close to the study area (overview)

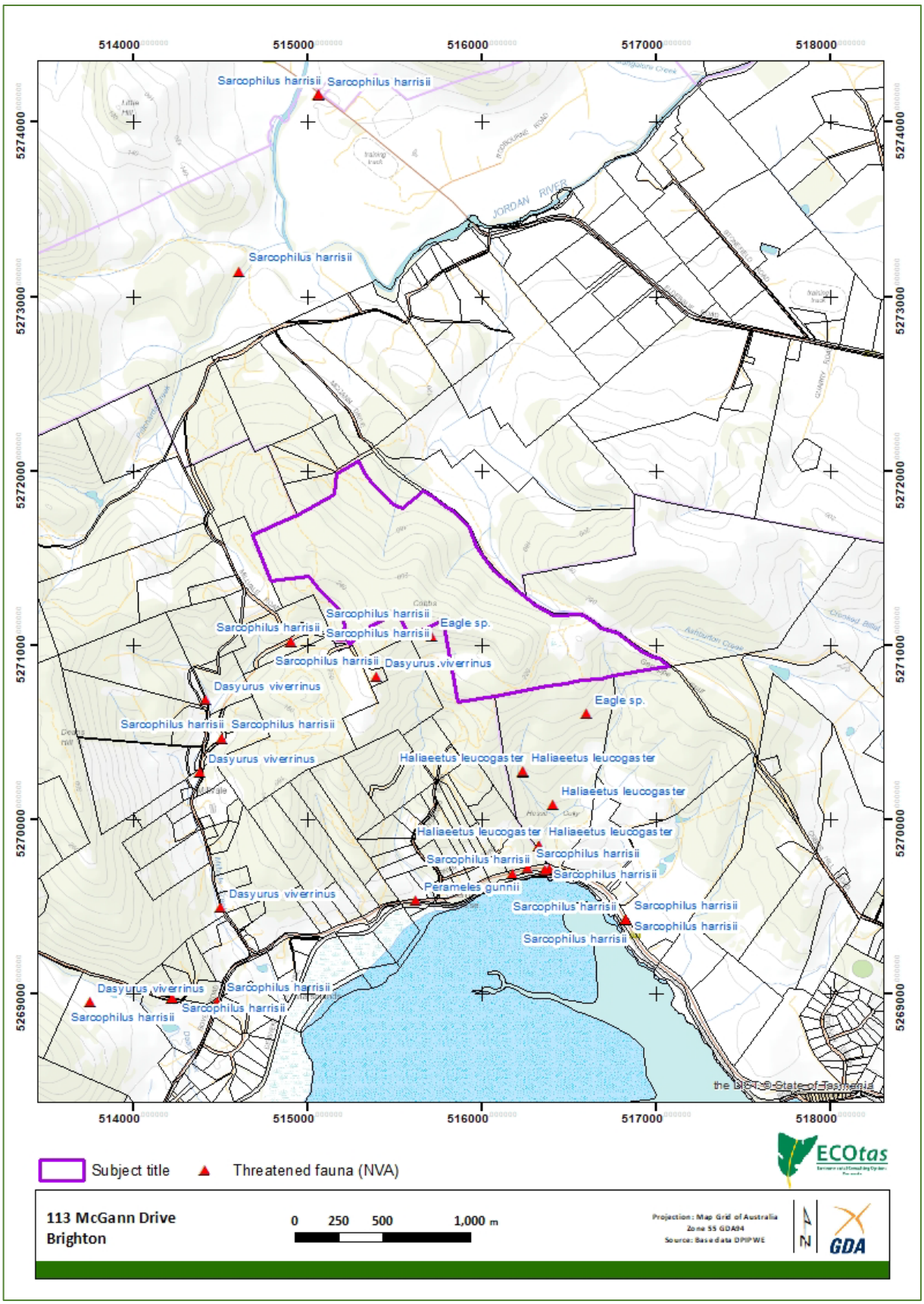


**Figure 11.** Distribution of threatened fauna close to the study area (overview)

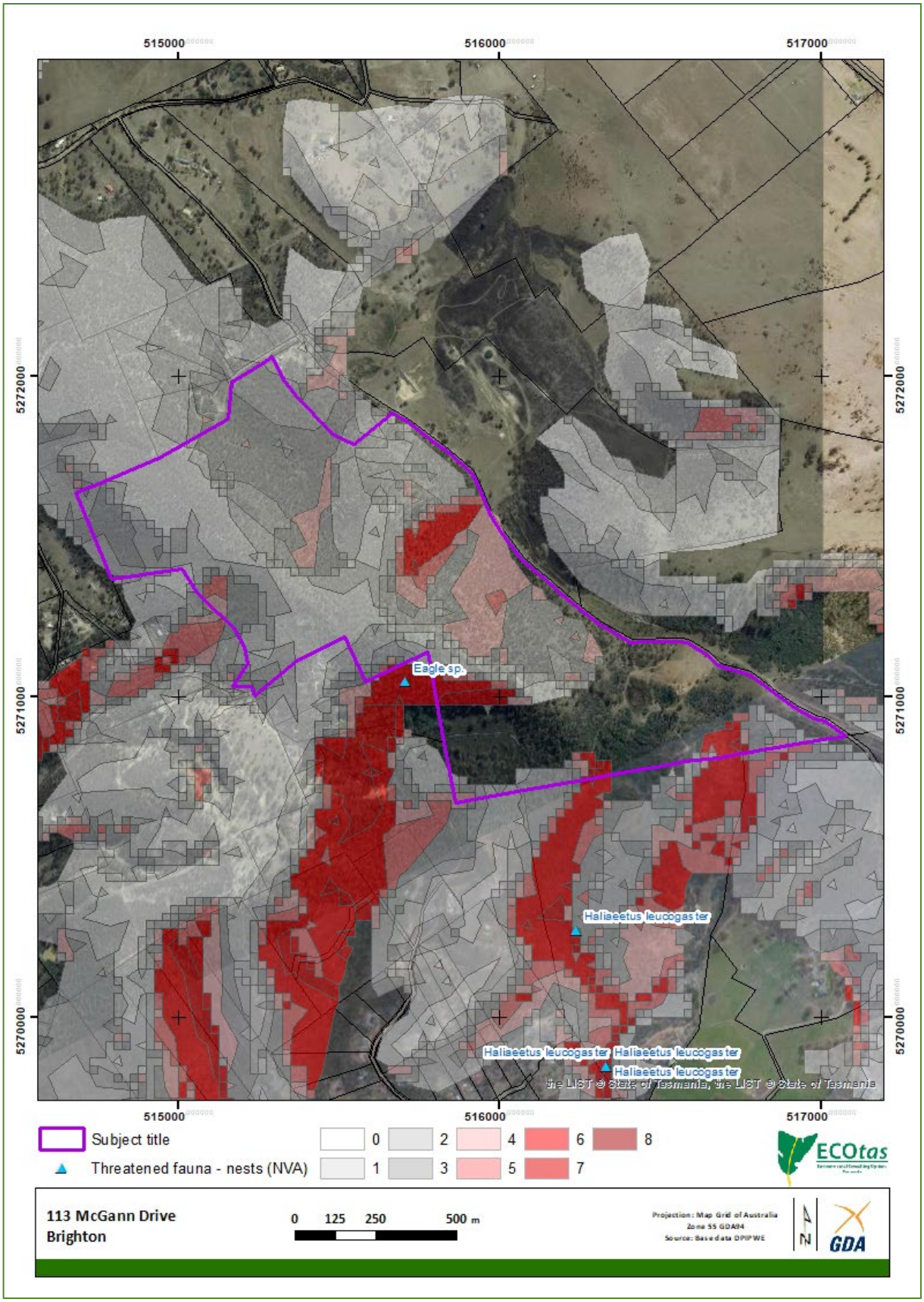


**Figure 12a.** Indicative modelled potential eagle nesting habitat indicating location of nearby nest

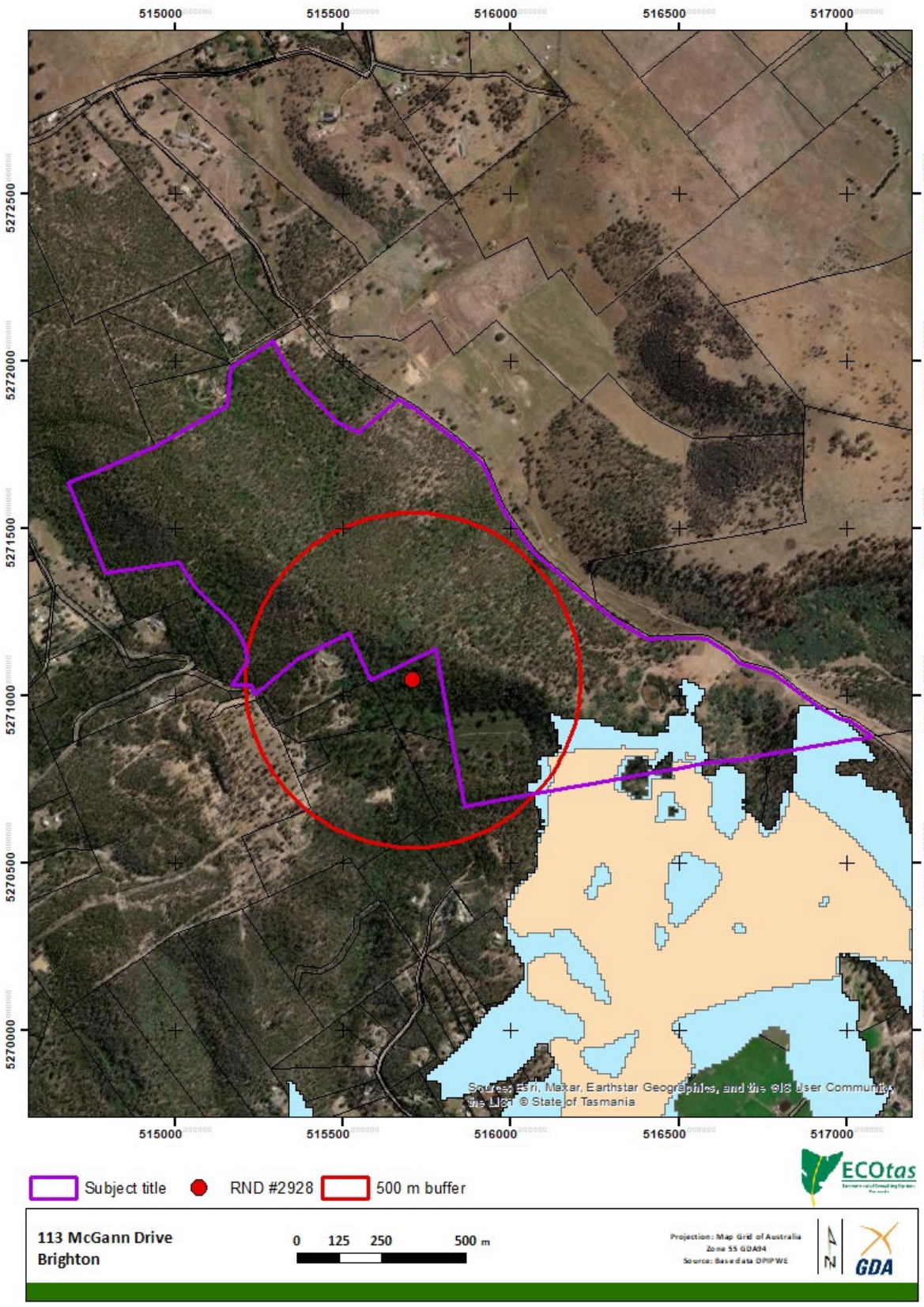


**Figure 12b.** Indicative line-of-sight modelling indicating location of nearby nest with 500 m buffer shown

***Other natural values***

Weed species

No plant species classified as declared weeds within the meaning of the Tasmanian *Weed Management Act 1999* (*Biosecurity Act 2019*) were detected from the part of the title proposed for development.

Given that access to the title will be from fully-formed, sealed and well-maintained public roads, the risk of construction machinery and vehicles introducing weeds to the development site is considered low.

Longer-term special management (e.g. a complex weed management plan) is not considered warranted because owner occupation is considered the most appropriate (and realistic) means of achieving control of any declared species (should they become established), where vigilance and immediate control are practical.

Several planning manuals provide guidance on appropriate management actions, which can be referred to develop site-specific prescriptions for any proposed works in the study area. These manuals include:

- Allan, K. & Gartenstein, S. (2010). *Keeping It Clean: A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens*. NRM South, Hobart;
- Rudman, T. (2005). *Interim* Phytophthora cinnamomi *Management Guidelines*. Nature Conservation Report 05/7, Biodiversity Conservation Branch, Department of Primary Industries, Water & Environment, Hobart;
- Rudman, T., Tucker, D. & French, D. (2004). *Washdown Procedures for Weed and Disease Control*. Edition 1. Department of Primary Industries, Water & Environment, Hobart; and
- DPIPWE (2015). *Weed and Disease Planning and Hygiene Guidelines – Preventing the Spread of Weeds and Diseases in Tasmania*. Department of Primary Industries, Parks, Water & Environment, Hobart.

Rootrot pathogen, *Phytophthora cinnamomi*

*Phytophthora cinnamomi* (PC) is widespread in lowland areas of Tasmania, across all land tenures. However, disease will not develop when soils are too cold or too dry. For these reasons, PC is not a threat to susceptible plant species that grow at altitudes higher than about 700 m or where annual rainfall is less than about 600 mm (e.g. Midlands and Derwent Valley). Furthermore, disease is unlikely to develop beneath a dense canopy of vegetation because shading cools the soils to below the optimum temperature for the pathogen. A continuous canopy of vegetation taller than about 2 m is sufficient to suppress disease. Hence PC is not considered a threat to susceptible plant species growing in wet sclerophyll forests, rainforests (except disturbed rainforests on infertile soils) and scrub e.g. teatree scrub (Rudman 2005; FPA 2009).

The native vegetation type identified from the study area (DAS) is recognised as being susceptible to PC. However, site assessment did not record any field symptoms (dead and/or dying susceptible plant species). No special management should be required in relation to PC.

Myrtle wilt

Myrtle wilt, caused by a wind-borne fungus (*Chalara australis*), occurs naturally in rainforest where myrtle beech (*Nothofagus cunninghamii*) is present. The fungus enters wounds in the tree, usually

caused by damage from wood-boring insects, wind damage and forest clearing. The incidence of myrtle wilt often increases forest clearing events such as windthrow and wildfire.

The study area does not support *Nothofagus cunninghamii*. No special management is required.

Myrtle rust

Myrtle rust is a disease limited to plants in the Myrtaceae family. This plant disease is a member of the guava rust complex caused by *Austropuccinia psidii*, a known significant pathogen of Myrtaceae plants outside Australia. Infestations are currently limited to NSW, Victoria, Queensland and Tasmania (DPIPWE 2015).

No evidence of myrtle rust was noted. The longer-term management issue for the site is to ensure that any ornamental plantings source plants from a reputable nursery free from the pathogen (such businesses are already subject to strict biosecurity conditions).

Chytrid fungus and other freshwater pathogens

Native freshwater species and habitat are under threat from freshwater pests and pathogens including *Batrachochytrium dendrobatidis* (chytrid frog disease), *Mucor amphibiorum* (platypus mucor disease) and the freshwater algal pest *Didymosphenia geminata* (didymo) (Allan & Gartenstein 2010). Freshwater pests and pathogens are spread to new areas when contaminated water, mud, gravel, soil and plant material or infected animals are moved between sites. Contaminated materials and animals are commonly transported on boots, equipment, vehicles tyres and during road construction and maintenance activities. Once a pest pathogen is present in a water system it is usually impossible to eradicate. The manual *Keeping it Clean - A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens* (Allan & Gartenstein 2010) provides information on how to prevent the spread of freshwater pests and pathogens in Tasmanian waterways wetlands, swamps and boggy areas.

The part of the title proposed for development does not support ephemeral or permanent water features, such that no special management is required.

Additional "Matters of National Environmental Significance" – Threatened Ecological Communities

CofA (2022) indicates that the following threatened ecological communities listed on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) are likely to occur within the area:

- Alpine Sphagnum Bogs and Associated Fens [Endangered];
- Lowland Native Grassland of Tasmania [Critically Endangered];
- Tasmanian Forests and Woodlands dominated by Black Gum or Brookers Gum *(Eucalyptus ovata* / E*. brookeriana*) [Critically Endangered];
- Tasmanian White Gum (*Eucalyptus viminalis*) Wet Forest [Critically Endangered].

Existing vegetation mapping (Figure 8) and revised vegetation mapping (Figure 9) indicates that these communities are not present within or adjacent to the subject title i.e. there are no implications under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* in relation to threatened ecological communities.

## DISCUSSION

### *Summary of key findings*

Threatened flora

- No plant species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.

Threatened fauna

- No fauna species listed as threatened on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) and/or the Tasmanian *Threatened Species Protection Act 1995* (TSPA) were detected, or are known from database information, from the study area.
- The study area does not meet the intent of "significant habitat for a threatened fauna species", at any reasonable scale or interpretation of the concept, pursuant to the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*.

Vegetation types

- The study area supports the following TASVEG mapping unit:
  - *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS).
- Occurrences of DAS do not equate to a threatened ecological community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.
- Occurrences of DAS equate to a native vegetation community (with the same name) listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*.
- Occurrences of DAS usually meet the intent of "priority vegetation" pursuant to the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton*.

Weeds

- No plant species classified as declared weeds within the meaning of the Tasmanian *Weed Management Act 1999* (*Biosecurity Act 2019*) were detected from the study area.

Plant disease

- No evidence of *Phytophthora cinnamomi* (PC, rootrot) was observed in susceptible species within the study area.
- No evidence of myrtle wilt was recorded from within the study area.
- No evidence of myrtle rust was recorded from within the study area.

Animal disease (chytrid)

- The study area does not support particular habitats conducive to frog chytrid disease, except in the most general of senses.

### *Legislative and policy implications*

Some commentary is provided below with respect to the key threatened species, vegetation management and other relevant legislation. Note that there may be other relevant policy instruments in addition to those discussed. The following information does not constitute legal

advice and it is recommended that independent advice is sought from the relevant agency/authority.

Tasmanian *Threatened Species Protection Act 1995*

Threatened flora and fauna on this Act are managed under Section 51, as follows:

> 51. Offences relating to listed taxa
>
> (1) Subject to subsections (2) and (3), a person must not knowingly, without a permit –
>
> (a) take, keep, trade in or process any specimen of a listed taxon of flora or fauna; or
>
> (b) disturb any specimen of a listed taxon of flora or fauna found on land subject to an interim protection order; or
>
> (c) disturb any specimen of a listed taxon of flora or fauna contrary to a land management agreement; or
>
> (d) disturb any specimen of a listed taxon of flora or fauna that is subject to a conservation covenant entered into under Part 5 of the *Nature Conservation Act 2002*; or
>
> (e) abandon or release any specimen of a listed taxon of flora or fauna into the wild.
>
> (2) A person may take, keep or process, without a permit, a specimen of a listed taxon of flora in a domestic garden.
>
> (3) A person acting in accordance with a certified forest practices plan or a public authority management agreement may take, without a permit, a specimen of a listed taxon of flora or fauna, unless the Secretary, by notice in writing, requires the person to obtain a permit.
>
> (4) A person undertaking dam works in accordance with a Division 3 permit issued under the *Water Management Act 1999* may take, without a permit, a specimen of a listed taxon of flora or fauna.

The simplest interpretation of this is that any activity that results in a specimen (i.e. individual) of listed flora or fauna being "knowingly taken" would require a permit to be issued through Conservation Assessments, Department of Natural Resources and Environment Tasmania, through a formal application process.

In the absence of an identifiable known location of a specimen of a threatened fauna or flora species from the area proposed for development, the Act has no application. The Act does not make reference to the clearance or disturbance of "potential habitat". The Act does not have application in relation to the management of the wedge-tailed eagle nest.

Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

Under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* an action will require approval from the minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance.

Matters of national environmental significance considered under the EPBCA include:

- listed threatened species and communities
- listed migratory species;
- Ramsar wetlands of international importance;
- Commonwealth marine environment;

- world heritage properties;
- national heritage places;
- the Great Barrier Reef Marine Park;
- nuclear actions; and
- a water resource, in relation to coal seam gas development and large coal mining development.

The relevant Commonwealth agency provides a policy statement titled *Matters of National Environmental Significance: Significant Impact Guidelines 1.1* (CofA 2013, herein the *Guidelines*), which provides overarching guidance on determining whether an action is likely to have a significant impact on a matter protected under the EPBCA.

The *Guidelines* define a **significant impact** as:

> *"…an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts"*

and note that:

> *"…all of these factors [need to be considered] when determining whether an action is likely to have a significant impact on matters of national environmental significance".*

The *Guidelines* provide advice on when a significant impact may be likely:

> *"To be 'likely', it is not necessary for a significant impact to have a greater than 50% chance of happening; it is sufficient if a significant impact on the environment is a real or not remote chance or possibility.*
>
> *If there is scientific uncertainty about the impacts of your action and potential impacts are serious or irreversible, the precautionary principle is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment".*

The *Guidelines* provide a set of Significant Impact Criteria (CofA 2013), which are "intended to assist…in determining whether the impacts of [the] proposed action on any matter of national environmental significance are likely to be significant impacts". It is noted that the criteria are "intended to provide general guidance on the types of actions that will require approval and the types of actions that will not require approval…[and]…not intended to be exhaustive or definitive".

When considering whether or not an action is likely to have a significant impact on a matter of national environmental significance it is relevant to consider all adverse impacts which result from the action, including indirect and offsite impacts. Indirect and offsite impacts include:

a. 'downstream' or 'downwind' impacts, such as impacts on wetlands or ocean reefs from sediment, fertilisers or chemicals which are washed or discharged into river systems;

b. 'upstream impacts' such as impacts associated with the extraction of raw materials and other inputs which are used to undertake the action; and

c. 'facilitated impacts' which result from further actions (including actions by third parties) which are made possible or facilitated by the action.

For example, the construction of a dam for irrigation water facilitates the use of that water by irrigators with associated impacts. Likewise, the construction of basic infrastructure in a previously undeveloped area may, in certain circumstances, facilitate the urban or commercial development of that area.

Consideration should be given to all adverse impacts that could reasonably be predicted to follow from the action, whether these impacts are within the control of the person proposing to take the

action or not. Indirect impacts will be relevant where they are sufficiently close to the proposed action to be said to be a consequence of the action, and they can reasonably be imputed to be within the contemplation of the person proposing to take the action.

*Listed ecological communities*

The subject title does not support any such communities.

*Threatened flora*

The subject title does not support any such species, nor potential habitat of such species (except in a very general sense).

*Threatened fauna*

The study area may support populations of threatened fauna listed on the Act, most notably the Tasmanian devil, spotted-tailed quoll, eastern quoll and eastern barred bandicoot, although no specific evidence such as scats, diggings or dens were noted. Note that the study area is within the range of several other species listed on the Act but it is unlikely that the proposal will result in a significant impact on these species (this includes wide-ranging species such as the masked owl but also those with potential habitat but no recorded occurrences – refer to Appendix D for a more detailed analysis).

The relevant Commonwealth agency provides a *Significant Impact Guidelines* policy statement (CofA 2013) to determine if referral to the department is required. The *Guidelines* consider a "significant impact" to comprise loss that is likely to lead to a long-term decrease in the size of an important population of a species (unlikely to be the case); reduce the area of occupancy of an important population (also unlikely at any reasonable scale); fragment an existing important population into two or more populations (minor habitat loss will occur but not such that fragmentation will result); adversely affect habitat critical to the survival of a species ("critical habitat" has not been defined per se); disrupt the breeding cycle of an important population (unlikely); modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline (this seems unlikely – see previous commentary); result in invasive species that are harmful to a threatened species becoming established in the threatened species' habitat (unlikely); introduce disease that may cause the species to decline (unlikely to introduce and/or exacerbate Devil Facial Tumour Disease); or interfere substantially with the recovery of the species (unlikely at any reasonable scale).

It is highly unusual for a development within a small lot, even within the range of the aforementioned species where potential habitat has been identified, to trigger a formal referral to the relevant Commonwealth agency.

Tasmanian *Forest Practices Act 1985* and associated *Forest Practices Regulations 2017*

The *Regulations* provide the following relevant circumstances in which a Forest Practices Plan is not required.

> 4. Circumstances in which forest practices plan, &c., not required
>
> For the purpose of section 17(6) of the Act, the following circumstances are prescribed:
>
> (a) the harvesting of timber or the clearing of trees, with the consent of the owner of the land, if the land is not vulnerable land and –

(i) the volume of timber harvested or trees cleared is less than 100 tonnes for each area of applicable land per year; or

(ii) the total area of land on which the harvesting or clearing occurs is less than one hectare for each area of applicable land per year –

whichever is the lesser;

(j) the harvesting of timber or the clearing of trees on any land, or the clearance and conversion of a threatened native vegetation community on any land, for the purpose of enabling –

(i) the construction of a building within the meaning of the *Land Use Planning and Approvals Act 1993* or of a group of such buildings; or

(ii) the carrying out of any associated development –

if the construction of the buildings or carrying out of the associated development is authorised by a permit issued under that Act.

On this basis, a proposal subject to a planning permit issued pursuant to the Tasmanian *Land Use Planning and Approvals Act 1993* (i.e. under the *Tasmanian Planning Scheme – Brighton*) should not require a Forest Practices Plan.

Tasmanian *Nature Conservation Act 2002*

Schedule 3A of the Act lists vegetation types classified as threatened within Tasmania. The part of the title proposed for development supports *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS), which is so listed under a community with the same name. While the Tasmanian Department of Natural Resources and Environment Tasmania has administrative responsibility for the Act, actual regulation of impacts on threatened vegetation types is through either the Tasmanian *Forest Practices Regulations 2017* or the Tasmanian *Land Use Planning and Approvals Act 1993* (in this case, the *Tasmanian Planning Scheme – Brighton*). Given the non-applicability of the Tasmanian *Forest Practices Regulations 2017*, reference is made to the review of the provisions of the *Tasmanian Planning Scheme – Brighton*.

Tasmanian *Weed Management Act 1999* (*Biosecurity Act 2019*)

No plant species classified as declared weeds within the meaning of the Act were detected from the part of the title proposed for development, such that the Act has limited direct application.

Tasmanian *Land Use Planning and Approvals Act 1993*

The applicable planning scheme for the study area is the *Tasmanian Planning Scheme – Brighton*. Note that the following is my interpretation of the provisions of the *Scheme* and may not necessarily represent the views of Brighton Council. The following does not constitute legal advice. It is recommended that formal advice be sought from the relevant agency prior to acting on any aspect of this statement.

The subject title is zoned as zoned as Landscape Conservation pursuant to the *Tasmanian Planning Scheme – Brighton* (Figure 4). The part of the title proposed for development is subject to the Priority Vegetation Area overlay (Figure 5).

Below I address the various relevant provisions of the *Scheme* that relate to the management of values considered in the preceding report, with the emphasis on addressing the intent and specifics of the Natural Assets Code.

The purpose of the Natural Assets Code is stated below:

C7.1 The purpose of the Natural Assets Code is:

C7.1.1 To minimise impacts on water quality, natural assets including native riparian vegetation, river condition and the natural ecological function of watercourses, wetlands and lakes.

C7.1.2 To minimise impacts on coastal and foreshore assets, native littoral vegetation, natural coastal processes and the natural ecological function of the coast.

C7.1.3 To protect vulnerable coastal areas to enable natural processes to continue to occur, including the landward transgression of sand dunes, wetlands, saltmarshes and other sensitive coastal habitats due to sea-level rise.

C7.1.4 To minimise impacts on identified priority vegetation.

C7.1.5 To manage impacts on threatened fauna species by minimising clearance of significant habitat.

The above purpose statements are essentially addressed through the relevant development standards. Setting aside C7.1.1, C7.1.2 & C7.1.3 (outside my specific area of expertise but I do not believe them to have relevance to the present project), as a general statement, I do not believe that the small-scale propopsal will compromise the intent of C7.1.4 (but see detailed review of the development standards). I do not believe that C7.1.5 is relevant at any reasonable scale (see later consideration of the concept of "significant habitat").

The application of the Natural Assets Code is stated below:

C7.2 Application of this Code:

C7.2.1 This code applies to development on land within the following areas:

(c) a priority vegetation area only if within the following zone:

(iii) Landscape Conservation Zone

C7.2.2 This code does not apply to use.

The proposed development area is zoned as Landscape Conservation and is subject to the Priority Vegetation Area overlay under the *Scheme* such that C7.2.1(c)(i) has application.

At this point, however, it is worth discussing the classification of the site with respect to the intention of the *Scheme*'s definition of "priority vegetation", which is:

C7.3 Definition of Terms

C7.3.1 In this code, unless the contrary intention appears:

means native vegetation where any of the following apply:

(a) it forms an integral part of a threatened native vegetation community as prescribed under Schedule 3A of the *Nature Conservation Act 2002*;

(b) is a threatened flora species;

(c) it forms a significant habitat for a threatened fauna species; or

(d) it has been identified as native vegetation of local importance.

Under the Code, a "priority vegetation area" is defined to mean:

land shown on an overlay map in the relevant Local Provisions Schedule, as within a priority vegetation area.

That is, C7.3.1(a) is applicable to the area mapped as DAS, noting that I consider the site to be "an integral part of a threatened native vegetation community" because the patch continues within title and into adjacent titles to form a much larger area.

The site does not support threatened flora such that C7.3.1(b) is not applicable.

The site does not support significant habitat for threatened fauna such that C7.3.1(c) is not applicable. "Significant habitat" is defined to mean:

> the habitat within the known or core range of a threatened fauna species, where any of the following applies:
>
> (a) is known to be of high priority for the maintenance of breeding populations throughout the species' range; or
>
> (b) the conversion of it to non-priority vegetation is considered to result in a long-term negative impact on breeding populations of the threatened fauna species.

Problematically, the *Scheme* does not define the terms "known" or "core" range, which means this could rely on those used by other agencies such as the Forest Practices Authority and/or the Department of Natural Resources and Environment Tasmania, which are effectively presented in the relevant database reports (DNRET 2022; FPA 2022). While there is potential habitat of several species (see previous discussion), apart from the wedge-tailed eagle, it is clear that the site is not "known to be of high priority for the maintenance of breeding populations throughout the species' range" or that "conversion of it to non-priority vegetation is considered to result in a long-term negative impact on breeding populations of the threatened fauna species". With respect to the wedge-tailed eagle, while the nest site itself can be argued to be meet these two criteria, in this case, the nest site itself will not be removed, any notionally suggested reserve is easily accommodated (not that this will ever need to be formalised) and works will not reasonably "result in a long-term negative impact" on the species as a whole (or indeed on this breeding pair). That is, C7.3.1(c) is not considered to be applicable.

I am not aware that any part of the site has been "identified as native vegetation of local importance", noting that this cannot simply refer to a site subject to the overlay as that would be circular argument based on false logic (given that the basis for the overlay through the Regional Ecosystem Model acknowledges the need to ground-truth all modelling, such that C7.3.1(d) is not considered to be applicable.

The relevant development standards of the Natural Assets Code are C7.6.2 (Clearance within a priority vegetation area), and have the following objective:

> C7.7 Development Standards for Buildings and Works
>
> C7.6.2 Clearance within a priority vegetation area
>
> Objective:
>
> That clearance of native vegetation within a priority vegetation area:
>
> (a) does not result in unreasonable loss of priority vegetation;
>
> (b) is appropriately managed to adequately protect identified priority vegetation; and
>
> (c) minimises and appropriately manages impacts from construction and development activities.

The above objective statements are essentially addressed through the relevant acceptable solutions or performance criteria. It is noted that terms such as "unreasonable loss…", "appropriately managed to adequately protect…" and "minimises and appropriately manages impacts…" are not defined so it falls to professional opinion and experience to assess a development against these concepts. As a general statement, I do not believe that the small-scale development will compromise the intent of the objective statements.

The acceptable solution for C7.6.2 is stated as:

> A1 Clearance of native vegetation within a priority vegetation area must be within a building area on a sealed plan approved under this planning scheme.

Solution A1 is presumed to not be applicable because the project site is not subject to a "sealed plan approved under this planning scheme".

The performance criteria P1.1 are stated as:

> P1.1
>
> Clearance of native vegetation within a priority vegetation area must be for:
>
> (a) 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 Tasmanian Fire Service or an accredited person;
>
> (b) buildings and works associated with the construction of a single dwelling or an associated outbuilding;
>
> (c) subdivision in the General Residential Zone or Low Density Residential Zone;
>
> (d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design;
>
> (e) clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or
>
> (f) the clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site.

The fact that P1.1 (a) through (f) are linked by "or" means that only one of these provisions needs to be satisfied.

In my opinion, P1.1(f) is of greatest relevance to the present proposal. This clause uses the term "clearance of native vegetation", opening up a new interpretative dilemma. The term "clearing" is not defined in the *Scheme*. With further reference to the concept of "clearance of native vegetation", that the site supports "native vegetation" is not questioned because the *Scheme* defines this to mean:

> plants that are indigenous to Tasmania including trees, shrubs, herbs and grasses that have not been planted for domestic or commercial purposes

"Native vegetation" is clearly present. For the record, this definition, however, is very much all-encompassing and means that sites that are not domestic gardens, commercial wood plantations, crops or very clearly intensively-managed pasture grass are all "native vegetation". Technically, this would include most road verges with scattered trees, shrubs and native grasses, but it could also be extended to "rough pasture" i.e. sites clearly used for primary production such as cropping, grazing, hay-making, etc. but that periodically revert to disused land and some native plant species occurring once again (most notably some native grasses, herbs like buzzies, a scattered teatree or wattle seedling, perhaps a patch of bracken). This definition of "native vegetation" was transferred from the interim planning schemes, where its interpretation has been "tested" in TASCAT (RMPAT) proceedings. In my opinion, significant care needs to be taken in the future utility of this term.

It is also quite clear that the proposal will result in the "clearance of native vegetation", simply by reference to a "dictionary definition" of "clearing" (such as the removal of native vegetation). However, by use of the term "clearance" and the failure to provide a definition of such, reference needs to be made to the provision of a definition of the concept of "clearance and conversion" in the *Scheme* (Table 3.1 of Administration), which is taken to mean:

> as defined in the *Forest Practices Act 1985*

Under that Act, "clearance and conversion" has reference only to "threatened native vegetation communities" (i.e. those listed on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*), which means that the definition of "clearance and conversion" provided in the *Scheme* can have application to the subject site (because works are proposed in an area mapped as threatened vegetation viz. DAS). To satisfy P1.1(f), a development that will result in "clearance of native vegetation" must be "of [a] limited scale relative to the extent of priority vegetation on the site". Again, concepts such as "limited scale relative to…" are not defined in the Scheme. As such, I usually consider this by reference to the potential impact relative to the extent of that vegetation community at a Statewide, bioregional and municipal level, and where possible, to the "site" (referring to the subject title). The proportional impact is estimated by making an assumption about the proposed access (ca. 750 m x 5 m = 3,750 $m^2$) plus say 3 cabins with a hazard management area of ca. 30 m radius (= ca. 8,100 $m^2$), which gives ca. 11,850 $m^2$ (or ca. 1.2 ha) – note that this may be an over-estimate (so a "worst case scenario").

**Table 2.** Spatial extent (and reservation levels) of DAS at different scales
[source: http://nre.tas.gov.au/conservation/development-planning-conservation-assessment/planning-tools/tasmanian-reserve-estate-spatial-layer (June 2020 version)]

| scale | Area (reservation level) | Proportional impact |
|---|---|---|
| Statewide | 40,400 ha (34% reserved) | 0.00297% |
| South East bioregion | 26,300 ha (28% reserved) | 0.00456% |
| Brighton | 600 ha [1] (30% reserved) | 0.2% |
| Title [2] | 56 ha | 2.14% |

[1] Based on the extent of DAS within the subject title (and also other titles I have assessed in the general area), I believe the estimate of 600 ha within the Brighton municipality is under-estimated

[2] The area of DAS within the title is based on my two site assessments (29 Jul. 2022 & 31 Mar. 2023), which clarified its extent within the areas assessed, substantially different to existing TASVEG mapping – the estimate is well below the actual area because I have only re-mapped part of the title (Figure 9), with other areas also appearing to support extensive areas of DAS i.e. the proportional loss is under-estimated, I suspect by at least 25%)

At any scale, the proportional "loss" is very small (Table 2), noting that I would not usually re-map a narrow road through forest and cabins placed in a forest scenario as having been "cleared and converted" per se i.e. it is challenging to argue there will be a measurable loss of DAS. I am comfortable that this meets the intent of "[a] limited scale relative to the extent of priority vegetation on the site", such that P1.1(f) is considered satisfied.

The performance criteria P1.2 are stated as:

> P1.2
>
> Clearance of native vegetation within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:
>
> (a) the design and location of buildings and works and any constraints such as topography or land hazards;
>
> (b) any particular requirements for the buildings and works;

(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings;

(d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;

(e) any on-site biodiversity offsets; and

(f) any existing cleared areas on the site.

In the opening phrase of P1.2, reference is made to the concept of "minimise adverse impacts". First, the use of the term "minimise" contemplates that some level (albeit undefined) of impact is contemplated as being acceptable. Second, the use of the phrase "adverse impact" implies that works must have an "adverse" impact – this being an undefined concept in the *Scheme*, it becomes challenging to suggest that an activity such as placement of a small number of cabins in a an already very open forest will genuinely result in "adverse impact".

With respect to the phrase "…having regard to…", this is considered in the manner referred to in *S and S McElwaine and A Hamilton v West Tamar Council and Growth Developments Pty Ltd [2021] TASCAT 4 (17 November 2021)*, where TASCAT stated: "the requirement to 'have regard to' does not elevate P2.1(a) to (f) to mandatory requirements that the proposal must satisfy. The tribunal need only consider those subparagraphs in ascertaining whether the proposal complies with clause E8.6.1 P2.1".

Below the sub-criteria of P1.2 are addressed in turn.

(a) the design and location of buildings and works and any constraints such as topography or land hazards;

I accept that the proposed sites for the cabins is on a ridgeline/upper slope to avoid the steeper slopes and that access is from Gleeson Road, again to avoid the steeper east-facing slopes.

(b) any particular requirements for the buildings and works;

Uncertain application in relation to the identified natural values and site features, except to acknowledge the engineering and bushfire hazard management requirements for both the access and cabin sites.

(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings;

With respect to subsection P1.2(c), I would usually accept a certified bushfire hazard management plan as meeting the intent of the provision.

(d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;

Uncertain application in relation to the identified natural values, given that the "residual impact" will be the limited clearance/disturbance of DAS vegetation on a site that offers limited practical alternatives, where the balance of the title will remain "as is" subject to the Landscape Conservation and Natural Assets Code provisions.

(e) any on-site biodiversity offsets; and

No such offsets have been identified as necessary – see commentary under P1.2(d).

(f) any existing cleared areas on the site.

I do not believe that "existing cleared areas on the site [title]" are suitable for the proposed development such that P1.2(f) is either satisfied by default or not applicable.

In conclusion, the proposed development should meet the intent of P1.1 & P1.2 of the Natural Assets Code, without specific permit conditions in relation to natural values.

***Recommendations***

The recommendations provided below are a summary of those provided in relation to each of the natural values described in the main report. The main text of the report provides the relevant context for the recommendations.

Vegetation types

In general terms, minimising the extent of "clearance and conversion" and/or "disturbance" to native vegetation is recommended. The part of the title proposed for development supports a threatened vegetation type but this community is widespread, homogenous and avoiding it is impractical.

It is acknowledged that the access route will need to meet contemporary bushfire hazard management requirements in terms of grade, width and passing bays but that no particular route is "better or worse" in terms of degree of impact to the threatened vegetation type. Similarly, it is of little measurable consequence whether the proposal is for 1, 2 or 3 cabins, the design of the cabins or the extent of a hazard management area (the latter because the canopy is low and sparse and the understorey very open).

Threatened flora

None identified – no special management required.

Threatened fauna

Apart from the generic recommendation to minimise the extent of "clearance and conversion" and/or "disturbance" to native vegetation, specific management in relation to threatened fauna is not recommended.

Weed and disease management

Owner-occupation is considered the most effective future and longer-term means of achieving weed management (i.e. vigilance and control as needed).

Legislative and policy implications

There are no formal requirements for a permit under Section 51 of the Tasmanian *Threatened Species Protection Act 1995* (TSPA).

A formal referral to the relevant Commonwealth agency under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) is not considered required.

Development will require a planning permit pursuant to the provisions of the applicable planning scheme but specific permit conditions in relation to natural values to satisfy P1.1 & P1.2 of C7.6.2 of the Natural Assets Code of the *Tasmanian Planning Scheme – Brighton* are not recommended.

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## APPENDIX A. Vegetation community structure and composition

The table below provides information on the structure and composition of the native vegetation mapping unit identified from the part of the title proposed for development.

| ***Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS)** |
|---|
| DAS occurs on both the ridgeline and west-facing slopes, with a mainly regrowth structure (post-fire) and very open understorey (reflecting the insolation and bare ground created by thin soils over Triassic sandstone). Occasional sheltered patches have a denser shrubbier and/or bracken-dominated understorey.<br>In places on the upper slopes, DAS grades into *Eucalyptus tenuiramis* forest and woodland on sediments (TASVEG code: DTO) although no patches were large enough to map separately at any practical scale, with the canopy having a shared dominance of *Eucalyptus amygdalina* (black peppermint) and *Eucalyptus tenuiramis* (silver peppermint), the latter only very rarely and locally dominant.<br>On the more most sheltered (and generally steeper) DAS grades into *Eucalyptus obliqua* dry forest (TASVEG code: DOB), which has a similar composition to the more sheltered facies of DAS but the canopy is somewhat taller.<br>DAS is in good ecological condition with no symptoms of plant disease or weeds observed. |


Typical expression of DAS on ridgeline/upper slope

| **Stratum** | **Height (m)**<br>**Cover (%)** | **Species**<br>(underline = dominant, parentheses = sparse; + = present only) |
|---|---|---|
| Trees | 10-20 m<br>10-30% | *Eucalyptus amygdalina, (Eucalyptus viminalis)* |
| Tall shrubs | 4-7 m<br>5-10% | eucalypt regeneration, *Acacia dealbata, Allocasuarina littoralis, Banksia marginata, Dodonaea viscosa, Bursaria spinosa, Exocarpos cupressiformis* |
| Medium shrubs | 0.5-3 m<br><5% | eucalypt regeneration, *Acacia dealbata, Aotus ericoides, Styphelia ericoides, Bossiaea cinerea* |
| Low shrubs | <0.5 m<br><5% | *Styphelia humifusa, Hibbertia procumbens* |
| Grasses | 5-20% | *Austrostipa stuposa*, *Poa* spp., *Deyeuxia quadriseta*, *Dichelachne rara*, *Microlaena stipoides* |
| Graminoids | <5% | *Gahnia radula, Lomandra longifolia* |
| Herbs | <2% | *Oxalis perennans, Wahlenbergia* spp., *Geranium solanderi* |
| Ferns | local | *Pteridium esculentum* |

## APPENDIX B. Vascular plant species recorded from study area

Botanical nomenclature follows *A Census of the Vascular Plants of Tasmania* (de Salas & Baker 2022), with family placement updated to reflect the nomenclatural changes recognised in the *Flora of Tasmania Online* (de Salas 2023+) and APG (2016); common nomenclature follows *The Little Book of Common Names of Tasmanian Plants* (Wapstra et al. 2005+, updated online at www.nre.tas.gov.au).

e = endemic species; i = naturalised species

**Table B1.** Summary of vascular species recorded from part of subject title proposed for development (and surrounding areas)

| | ORDER | | | |
|---|---|---|---|---|
| **STATUS** | **DICOTYLEDONAE** | **MONOCOTYLEDONAE** | **GYMNOSPERMAE** | **PTERIDOPHYTA** |
| | 380 | 30 | - | 2 |
| e | 2 | - | | |
| i | 4 | 1 | - | - |
| **Sum** | **44** | **31** | **0** | **2** |
| **TOTAL** | **77** | | | |

| | | |
|---|---|---|
| **DICOTYLEDONAE** | | |
| | **ASTERACEAE** | |
| | *Brachyscome aculeata* | hill daisy |
| | *Cassinia aculeata* subsp. *aculeata* | common dollybush |
| i | *Cirsium vulgare* | spear thistle |
| | *Coronidium scorpioides* | curling everlasting |
| | *Euchiton japonicus* | common cottonleaf |
| i | *Hypochaeris glabra* | smooth catsear |
| i | *Hypochaeris radicata* | rough catsear |
| | **CAMPANULACEAE** | |
| | *Wahlenbergia gracilenta* | annual bluebell |
| | *Wahlenbergia gracilis* | sprawling bluebell |
| | *Wahlenbergia multicaulis* | bushy bluebell |
| | **CASUARINACEAE** | |
| | *Allocasuarina littoralis* | black sheoak |
| | **CRASSULACEAE** | |
| | *Crassula sieberiana* | rock stonecrop |
| | **DILLENIACEAE** | |
| | *Hibbertia procumbens* | spreading guineaflower |
| | *Hibbertia riparia* | erect guineaflower |
| | **DROSERACEAE** | |
| | *Drosera auriculata* | tall sundew |
| | **ERICACEAE** | |
| | *Epacris impressa* | common heath |
| | *Styphelia ericoides* | pink beardheath |
| | *Styphelia humifusa* | native cranberry |
| | **EUPHORBIACEAE** | |
| | *Amperea xiphoclada* var. *xiphoclada* | broom spurge |
| | *Poranthera microphylla* | small poranthera |
| | **FABACEAE** | |
| | *Acacia dealbata* subsp. *dealbata* | silver wattle |
| | *Acacia melanoxylon* | blackwood |
| | *Aotus ericoides* | golden pea |
| | *Bossiaea cinerea* | showy bossia |
| | *Bossiaea prostrata* | creeping bossia |
| | *Pultenaea daphnoides* | heartleaf bushpea |
| | **GENTIANACEAE** | |
| i | *Centaurium erythraea* | common centaury |

| | | |
|---|---|---|
| | **GERANIACEAE** | |
| | *Geranium solanderi* | southern cranesbill |
| | **HALORAGACEAE** | |
| | *Gonocarpus tetragynus* | common raspwort |
| | **LAURACEAE** | |
| | *Cassytha pubescens* | downy dodderlaurel |
| | **MYRTACEAE** | |
| | *Calytrix tetragona* | common fringemyrtle |
| e | *Eucalyptus amygdalina* | black peppermint |
| | *Eucalyptus obliqua* | stringybark |
| e | *Eucalyptus tenuiramis* | silver peppermint |
| | *Eucalyptus viminalis* subsp. *viminalis* | white gum |
| | **OXALIDACEAE** | |
| | *Oxalis perennans* | grassland woodsorrel |
| | **PITTOSPORACEAE** | |
| | *Bursaria spinosa* subsp. *spinosa* | prickly box |
| | **POLYGALACEAE** | |
| | *Comesperma volubile* | blue lovecreeper |
| | **PROTEACEAE** | |
| | *Banksia marginata* | silver banksia |
| | **ROSACEAE** | |
| | *Acaena novae-zelandiae* | common buzzy |
| | **SANTALACEAE** | |
| | *Exocarpos cupressiformis* | common native-cherry |
| | *Leptomeria drupacea* | erect currantbush |
| | **SAPINDACEAE** | |
| | *Dodonaea viscosa* subsp. *spatulata* | broadleaf hopbush |
| | **THYMELAEACEAE** | |
| | *Pimelea humilis* | dwarf riceflower |
| | | |
| | **MONOCOTYLEDONAE** | |
| | **AMARYLLIDACEAE** | |
| | *Dianella revoluta* var. *revoluta* | spreading flaxlily |
| | **ASPARAGACEAE** | |
| | *Arthropodium milleflorum* | pale vanilla-lily |
| | *Lomandra longifolia* | sagg |
| | **CYPERACEAE** | |
| | *Carex breviculmis* | shortstem sedge |
| | *Eleocharis sphacelata* | tall spikesedge |
| | *Gahnia radula* | thatch sawsedge |
| | *Isolepis inundata* | swamp clubsedge |
| | *Isolepis marginata* | little clubsedge |
| | *Lepidosperma concavum* | sand swordsedge |
| | *Schoenus apogon* | common bogsedge |
| | **JUNCACEAE** | |
| | *Juncus bufonius* | toad rush |
| | *Juncus holoschoenus* | jointleaf rush |
| | *Juncus planifolius* | broadleaf rush |
| | *Juncus procerus* | tall rush |
| | *Juncus subsecundus* | finger rush |
| | **ORCHIDACEAE** | |
| | *Chiloglottis reflexa* | autumn bird-orchid |
| | **POACEAE** | |
| i | *Aira caryophyllea* subsp. *caryophyllea* | silvery hairgrass |
| | *Anthosachne scabra* | rough wheatgrass |
| | *Austrostipa mollis* | soft speargrass |
| | *Austrostipa stuposa* | corkscrew speargrass |
| | *Deyeuxia quadriseta* | reed bentgrass |
| | *Dichelachne rara* | common plumegrass |
| | *Lachnagrostis aemula* | tumbling blowngrass |
| | *Microlaena stipoides* var. *stipoides* | weeping grass |
| | *Poa labillardierei* var. *labillardierei* | silver tussockgrass |
| | *Poa sieberiana* var. *sieberiana* | grey tussockgrass |
| | *Rytidosperma geniculatum* | kneed wallabygrass |
| | *Rytidosperma penicillatum* | slender wallabygrass |
| | *Rytidosperma setaceum* | bristly wallabygrass |
| | *Tetrarrhena distichophylla* | hairy ricegrass |
| | **RESTIONACEAE** | |
| | *Centrolepis strigosa* subsp. *strigosa* | hairy bristlewort |

| | |
|---|---|
| **PTERIDOPHYTA** | |
| **DENNSTAEDTIACEAE** | |
| *Pteridium esculentum* subsp. *esculentum* | bracken |
| **GLEICHENIACEAE** | |
| *Gleichenia dicarpa* | pouched coralfern |

## APPENDIX C. Analysis of database records of threatened flora

Table C1 provides a listing of threatened flora from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

**Table C1.** Threatened flora records from within 5,000 m of boundary of study area

Species listed below are listed as rare (r), vulnerable (v), endangered (e), or extinct (x) on the Tasmanian *Threatened Species Protection Act 1995* (TSPA); vulnerable (VU), endangered (EN), critically endangered (CR) or extinct (EX) on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). Information below is sourced from DNRET's *Natural Values Atlas* (DNRET 2022) and other sources where indicated. Habitat descriptions are taken from FPA (2016), FPA (2017) and TSS (2003+), except where otherwise indicated. Species marked with # are listed in CofA (2022).

| **Scientific name**<br>**Common name** | **Status**<br>TSPA<br>EPBCA | **Tasmanian habitat description (and distribution)** | **Comments on study area and database records** |
|---|---|---|---|
| *Asperula scoparia* subsp. *scoparia*<br>prickly woodruff | r<br>- | *Asperula scoparia* subsp. *scoparia* is widespread, mainly found in native grasslands and grassy forests, often on fertile substrates such as dolerite-derived soils. Forested sites are usually dominated by *Eucalyptus globulus* and *E. viminalis* (lower elevations) and *E. delegatensis* (higher elevations). | Potential habitat marginally present.<br>This species was not detected (no seasonal constraint on detection and/or identification). |
| *Austrostipa bigeniculata*<br>doublejointed speargrass | r<br>- | *Austrostipa bigeniculata* is found mainly in the southeast and Midlands in open woodlands and grasslands, where it is often associated with *Austrostipa nodosa.* | Potential habitat present.<br>This species was not detected (no seasonal constraint on detection and/or identification). |
| *Austrostipa blackii*<br>crested speargrass | r<br>- | The habitat of *Austrostipa blackii* is poorly understood because of confusion with other species. In its "pure" form (i.e. long coma), *A. blackii* is a species of very near-coastal sites such as the margins of saline lagoons, creek outfalls and vegetated dunes. Further inland, where it seems to grade into other species, it occurs in open grassy woodlands. | As above (but potential habitat more marginal). |
| *Barbarea australis*<br>riverbed wintercress | e<br>EN<br># only | *Barbarea australis* is a riparian species found near river margins, creek beds and along flood channels adjacent to the river. It tends to favour the slower reaches, and has not been found on steeper sections of rivers. It predominantly occurs in flood deposits of silt and gravel deposited as point bars and at the margins of base flows, or more occasionally or between large cobbles on sites frequently disturbed by fluvial processes. Some of the sites are a considerable distance from the river, in flood channels scoured by previous flood action, exposing river pebbles. Most populations are in the Central Highlands, but other populations occur in the northeast and upland areas in the central north. | Potential habitat absent. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| *Bolboschoenus caldwellii*<br>sea clubsedge | r<br>- | *Bolboschoenus caldwellii* is widespread in shallow, standing, sometimes brackish water, rooted in heavy black mud. | Potential habitat absent. |
| *Brachyscome rigidula*<br>cutleaf daisy | v<br>- | *Brachyscome rigidula* is found in the Midlands, East Coast and in parts of the eastern Central Highlands of Tasmania, where it occurs in rough pasture, grassland and grassy woodland on dry rocky hills and flats. | Potential habitat absent (highly atypical of all recorded sites). |
| *Caladenia anthracina*<br>blacktip spider-orchid | e<br>CR<br># | *Caladenia anthracina* has a restricted distribution in the Powranna/Campbelltown/Ross area, occurring in grassy woodland with *Acacia dealbata* (silver wattle) and bracken on well-drained sandy soil. Two historical sites from the Derwent Valley are presumed extinct. | Potential habitat absent. |
| *Caladenia caudata*<br>tailed spider-orchid | v<br>VU<br># only | *Caladenia caudata* has highly variable habitat, which includes the central north: *Eucalyptus obliqua* heathy forest on low undulating hills; the northeast: *E. globulus* grassy/heathy coastal forest, *E. amygdalina* heathy woodland and forest, *Allocasuarina* woodland; and the southeast: *E. amygdalina* forest and woodland on sandstone, coastal *E. viminalis* forest on deep sands. Substrates vary from dolerite to sandstone to granite, with soils ranging from deep windblown sands, sands derived from sandstone and well-developed clay loams developed from dolerite. | Potential habitat present (albeit atypical of most recorded sites).<br>The survey was undertaken outside the peak flowering time (Wapstra 2018). A further timed-targeted survey is not considered warranted because of the statistically very low likelihood of occurrence due to the species' disjunct distribution, usually highly localised and low abundance populations, the highly marginal habitat and the very small footprint of the proposed development. |
| *Calocephalus citreus*<br>lemon beautyheads | r<br>- | *Calocephalus citreus* inhabits disturbed dry grasslands, and is found from a few locations in the southeast of the State. | Potential habitat absent. |
| *Calocephalus lacteus*<br>milky beautyheads | r<br>- | *Calocephalus lacteus* occurs in open, dry sites in lowland areas of eastern and northern Tasmania and on lower altitudes of the Central Plateau. It requires bare ground for recruitment, and may benefit from disturbance. It is often found on roadsides and beside tracks. | Potential habitat absent. |
| *Colobanthus curtisiae*<br>grassland cupflower | r<br>VU<br># | *Colobanthus curtisiae* occurs in lowland grasslands and grassy woodlands but is also prevalent on rocky outcrops and margins of forest on dolerite on the Central Highlands (including disturbed sites such as log landings and snig tracks). | Potential habitat absent. |
| *Dianella amoena*<br>grassland flaxlily | r<br>EN<br># | *Dianella amoena* occurs mainly in the northern and southern Midlands, growing in native grasslands and grassy woodlands. | Potential habitat marginally present (atypical of recorded sites).<br>This species was not detected (no seasonal constraint on detection and/or identification). |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| *Epacris virgata*<br>Kettering<br>pretty heath | v<br>EN<br># only | *Epacris virgata* (Kettering) occurs among foothills in southeastern Tasmania in dry sclerophyll forest on hilly terrain at elevations of 10-300 m a.s.l., mainly on dolerite, though sometimes close to the geological boundary of dolerite and Permian mudstone. It is generally associated with grassy/heathy *Eucalyptus ovata* woodland/forest, but is also occasionally found in grassy/heathy *E. pulchella* woodland/forest. | Potential habitat absent.<br>Note that CofA (2022) refers to this species as "pretty heath" or "Dan Hill heath", either referring to what DNRET refers to as *Epacris virgata* Kettering or *Epacris virgata* Beaconsfield. The former only occurs on dolerite (not present), the latter on ultramafic substrates near Beaconsfield (not present). Note that de Salas & Baker (2022) do not consider there to be infrataxa and that *Epacris virgata* is one entity. |
| *Eucalyptus risdonii*<br>risdon peppermint | r<br>- | *Eucalyptus risdonii* is restricted to the greater Hobart area (particularly the Meehan Range), with an outlying population at Mangalore and on South Arm. It occurs on mudstone, with an altitudinal range from near sea level to 150 m a.s.l. It can occur as a dominant in low open forest with a sparse understorey on dry, insolated ridgelines and slopes (e.g. with a northwest aspect), and individuals can extend into other forest types typically dominated by *E. tenuiramis* or *E. amygdalina* (but occasionally by other species) on less exposed sites. | Potential habitat present.<br>This species was not detected (no seasonal constraint on detection and/or identification). Note that all occurrences of *Eucalyptus tenuiramis* (silver peppermint) were well within the description of this taxon with no hints of clinal and/or hybrid forms with *Eucalyptus risdonii*. |
| *Glycine latrobeana*<br>clover glycine | v<br>VU<br># | *Glycine latrobeana* occurs in a range of habitats, geologies and vegetation types. Soils are usually fertile but can be sandy when adjacent to or overlaying fertile soils. The species mainly occurs on flats and undulating terrain over a wide geographical range, including near-coastal environments, the Midlands, and the Central Plateau. It mainly occurs in grassy/heathy forests and woodlands and native grasslands. | Potential habitat absent. |
| *Gratiola pubescens*<br>hairy brooklime | v<br>- | *Gratiola pubescens* is most commonly located in permanently or seasonally damp or swampy ground, including the margins of farm dams. | Potential habitat absent. |
| *Haloragis aspera*<br>rough raspwort | v<br>- | *Haloragis aspera* is presumed to occur in wet areas in the eastern part of the State. There are taxonomic issues with this species in Tasmania. It is likely to be excluded from the next *Census of Vascular Plants in Tasmania*. | Potential habitat absent. |
| *Haloragis heterophylla*<br>variable raspwort | r<br>- | *Haloragis heterophylla* occurs in poorly-drained sites (sometimes only marginally so), which are often associated with grasslands and grassy woodlands with a high component of *Themeda triandra* (kangaroo grass). It also occurs in grassy/sedgy *Eucalyptus ovata* forest and woodland, shrubby creek lines, and broad sedgy/grassy flats, wet pasture and margins of farm dams. | Potential habitat absent. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| *Hibbertia basaltica*<br>basalt guineaflower | e<br>EN<br># | *Hibbertia basaltica* is restricted to areas of basalt between Pontville and Bridgewater in southern Tasmania where it occurs on slopes along the lower reaches of the Jordan River and one of its tributaries, in native grassland dominated by *Themeda triandra* (kangaroo grass) and *Austrostipa* (spear grass) species with the occasional *Bursaria spinosa* (prickly box). Rock cover is high, while soils are shallow clay loams. Slopes vary from 0-15 degrees, and altitude 15-45 m a.s.l. Note that a very similar taxon, possibly undescribed or within a broader concept of *H. basaltica*, occurs in similar habitat but on Jurassic dolerite in the same part of the State; currently all such sites are shown on databases as *H.* sp. Richmond dolerite. | Potential habitat absent. |
| *Isoetopsis graminifolia*<br>grass cushion | v<br>- | *Isoetopsis graminifolia* grows in native grasslands, usually dominated by *Themeda triandra* (kangaroo grass), or on rockplates, the underlying substrate being mostly basalt or dolerite. The elevation range of recorded sites is 20-360 m a.s.l. in areas of low rainfall. | Potential habitat absent. |
| *Lepidium hyssopifolium*<br>soft peppercress | e<br>EN<br># only | The native habitat of *Lepidium hyssopifolium* is the growth suppression zone beneath large trees in grassy woodlands and grasslands (e.g. over-mature black wattles and isolated eucalypts in rough pasture). *Lepidium hyssopifolium* is now found primarily under large exotic trees on roadsides and home yards on farms. It occurs in the eastern part of Tasmania between sea-level to 500 metres a.s.l. in dry, warm and fertile areas on flat ground on weakly acid to alkaline soils derived from a range of rock types. It can also occur on frequently slashed grassy/weedy roadside verges where shade trees are absent. | Potential habitat absent, except in the most general of senses.<br>This species was not detected (no seasonal constraint on detection and/or identification). |
| *Lepilaena patentifolia*<br>spreading watermat | r<br>- | *Lepilaena patentifolia* occurs in coastal lagoons, creeks, inlets and estuaries and brackish inland lagoons. | Potential habitat absent. |
| *Leucochrysum albicans*<br>subsp. *tricolor*<br>grassland paperdaisy | e<br>EN<br># only | *Leucochrysum albicans* subsp. *tricolor* occurs in the west and on the Central Plateau and the Midlands, mostly on basalt soils in open grassland. This species would have originally occupied *Eucalyptus pauciflora* woodland and tussock grassland, though most of this habitat is now converted to improved pasture or cropland. | Potential habitat absent. |
| *Lythrum salicaria*<br>purple loosestrife | v<br>- | *Lythrum salicaria* inhabits swamps, stream banks and rivers mainly in the north and northeast of the State. It can also occur between gaps in *Melaleuca ericifolia* forest. This species can act as | Potential habitat absent. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| | | a weed, proliferating along roadsides and other disturbed areas, and, as horticultural strains are in cultivation and birds can disperse seed, some occurrences may not be native. | |
| *Pellaea calidirupium*<br>hotrock fern | r<br>- | *Pellaea calidirupium* is found in inland, rocky habitats in areas of low to moderate rainfall predominantly in the eastern half of Tasmania. It grows in crevices and on ledges on exposed or semi-exposed rock outcrops. | Potential habitat absent (rock outcrops too small). |
| *Pentachondra ericifolia*<br>fine frillyheath | r<br>- | *Pentachondra ericifolia* occurs in rocky sites in open alpine/dry sclerophyll woodland and heathland. | Potential habitat absent. |
| *Prasophyllum apoxychilum*<br>tapered leek-orchid | v<br>EN<br># only | *Prasophyllum apoxychilum* occurs in coastal heathland or grassy and scrubby open eucalypt forest on sandy and clay loams, often among rocks. It occurs at a range of elevations and seems to be strongly associated with dolerite in the east and southeast of its range. | Potential habitat absent. |
| *Pterostylis commutata*<br>midlands greenhood | e<br>CR<br># only | *Pterostylis commutata* is restricted to Tasmania's Midlands, where it occurs in native grassland and *Eucalyptus pauciflora* grassy woodland on well-drained sandy soils and basalt loams. | Potential habitat absent. |
| *Pterostylis ziegeleri*<br>grassland greenhood | v<br>VU<br># | *Pterostylis ziegeleri* occurs in the State's south, east and north, with an outlying occurrence in the northwest. In coastal areas, the species occurs on the slopes of low stabilised sand dunes and in grassy dune swales, while in the Midlands it grows in native grassland or grassy woodland on well-drained clay loams derived from basalt. | Potential habitat absent. |
| *Pultenaea prostrata*<br>silky bushpea | v<br>- | *Pultenaea prostrata* occurs in grassy woodlands or grasslands, mostly on Tertiary basalt or Quaternary alluvium. | Potential habitat absent. |
| *Ranunculus pumilio* var. *pumilio*<br>ferny buttercup | r<br>- | *Ranunculus pumilio* var. *pumilio* occurs mostly in wet places (e.g. broad floodplains of permanent creeks, "wet pastures") from sea level to 800-900 m. | Potential habitat absent. |
| *Ruppia megacarpa*<br>largefruit seatassel | r<br>- | *Ruppia megacarpa* occurs in estuaries and lagoons along the east and southeast coasts, and brackish lagoons in the Midlands; there is also an historic record from the Tamar estuary in the States' north. | Potential habitat absent. |
| *Schoenoplectus tabernaemontani*<br>river clubsedge | r<br>- | *Schoenoplectus tabernaemontani* inhabits the margins of lagoons on King Island, Flinders Island and on some riverbanks in the Midlands. | Potential habitat absent. |
| *Scleranthus fasciculatus*<br>spreading knawel | v<br>- | *Scleranthus fasciculatus* is recorded from a few locations in the Midlands and southeast. The vegetation at most of the sites is *Poa* grassland/grassy woodland. *Scleranthus fasciculatus* appears to need gaps between the | Potential habitat present.<br>This species was not detected (no seasonal constraint on detection and/or identification). |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| | | tussock spaces for its survival and both fire and stock grazing maintain the openness it requires. Often found in areas protected from grazing such as fallen trees and branches. | |
| *Senecio squarrosus*<br>leafy fireweed | r<br>- | *Senecio squarrosus* occurs in a wide variety of habitats. One form occurs predominantly in lowland damp tussock grasslands. The more widespread and common form occurs mainly in dry forests (often grassy) but extends to wet forests and other vegetation types. | As above. |
| *Stackhousia subterranea*<br>grassland candles | e<br>- | *Stackhousia subterranea* occurs in native grasslands and grassy woodlands/forests, often associated with fertile soils derived from basalt. *Themeda triandra* (kangaroo grass) is often one of the more prominent grasses. | Potential habitat absent. |
| *Stuckenia pectinata*<br>fennel pondweed | r<br>- | *Stuckenia pectinata* is found in fresh to brackish/saline waters in rivers, estuaries and inland lakes. It forms dense stands or mats, particularly in slow-flowing or static water. The species grows in water of various depth. | Potential habitat absent. |
| *Thesium australe*<br>southern toadflax | x<br>VU | In Tasmania, *Thesium australe* is known only from an 1804 collection from the Derwent River Valley. Suitable habitat for this species includes grassland and grassy woodland. *Thesium australe* is presumed extinct in Tasmania. | Species presumed extinct. |
| *Triptilodiscus pygmaeus*<br>dwarf sunray | v<br>- | *Triptilodiscus pygmaeus* grows within grasslands, grassy woodlands or rockplates, with the underlying substrate being mostly Tertiary basalt or Jurassic dolerite. The elevation range of recorded sites in Tasmania is 30-470 m a.s.l., with an annual rainfall of about 450-600 mm. The species occurs within native grassland dominated by *Themeda triandra* (kangaroo grass). | Potential habitat absent. |
| *Vallisneria australis*<br>river ribbons | r<br>- | *Vallisneria australis* grows rooted and submerged in flowing freshwater habitats such as major rivers of the Midlands. | Potential habitat absent. |
| *Velleia paradoxa*<br>spur velleia | v<br>- | *Velleia paradoxa* is known from the Hobart and Launceston areas, and the Midlands and the Derwent Valley, where it occurs in grassy woodlands or grasslands on dry sites. It has been recorded up to 550 m a.s.l. at sites with an annual rainfall range of 450-750 mm. | Potential habitat marginally present.<br>This species was not detected (no seasonal constraint on detection and/or identification). |
| *Vittadinia burbidgeae*<br>smooth new-holland-daisy | r<br>- | *Vittadinia burbidgeae* occurs in native grassland and grassy woodland. | As above. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on study area and database records |
|---|---|---|---|
| *Vittadinia cuneata* var. *cuneata*<br>fuzzy new-holland-daisy | r<br>- | *Vittadinia cuneata* var. *cuneata* occurs in native grassland and grassy woodland. | As above. |
| *Vittadinia gracilis*<br>woolly new-holland-daisy | r<br>- | *Vittadinia gracilis* occurs in native grassland and grassy woodland. | As above. |
| *Vittadinia muelleri*<br>narrowleaf new-holland-daisy | r<br>- | *Vittadinia muelleri* occurs in native grassland and grassy woodland. | As above. |
| *Xanthoparmelia amphixantha*<br>lichen | e<br>- | *Xanthoparmelia amphixantha* occurs in the Southern Midlands on stony shallow soils in native grassland. | Potential habitat absent. |
| *Xanthoparmelia vicariella*<br>lichen | r<br>- | *Xanthoparmelia vicariella* is known only from the Southern Midlands where it occurs on dolerite and basalt boulders in dry sclerophyll woodland and native grassland. | Potential habitat absent. |
| *Xerochrysum palustre*<br>swamp everlasting | v<br>VU<br># only | *Xerochrysum palustre* has a scattered distribution with populations in the northeast, east coast, Central Highlands and Midlands, all below about 700 m elevation. It occurs in wetlands, grassy to sedgy wet heathlands and extends to associated heathy *Eucalyptus ovata* woodlands. Sites are usually inundated for part of the year. | Potential habitat absent. |

## APPENDIX D. Analysis of database records of threatened fauna

Table D1 provides a listing of threatened fauna from within 5,000 m of the study area (nominal buffer width usually used to discuss the potential of a particular study area to support various species listed in databases), with comments on whether potential habitat is present for the species, and possible reasons why a species was not recorded.

**Table D1.** Threatened fauna records from 5,000 m of boundary of study area

Species listed below are listed as rare (r), vulnerable (v), endangered (e), or extinct (x) on the Tasmanian *Threatened Species Protection Act 1995* (TSPA); vulnerable (VU), endangered (EN), critically endangered (CR) or extinct (EX) on the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA). Information below is sourced from the DNRET's *Natural Values Atlas* (DNRET 2022), Bryant & Jackson (1999), FPA (2022) & McNab (2022); marine, wholly pelagic and littoral species such as marine mammals, fish and offshore seabirds are excluded. Species marked with # are listed in CofA (2022).

| **Scientific name**<br>**Common name** | **Status**<br>TSPA<br>EPBCA | **Tasmanian habitat description (and distribution)** | **Comments on project area and database records** |
|---|---|---|---|
| *Accipiter novaehollandiae*<br>grey goshawk | e<br>- | Potential habitat is native forest with mature elements below 600 m, particularly along watercourses. Significant habitat may be summarised as areas of wet forest, rainforest and damp forest patches in dry forest, with a relatively closed mature canopy, low stem density, and open understorey in close proximity to foraging habitat and a freshwater body. | Potential habitat absent, except in a very general sense.<br>The species may very occasionally utilise the greater title area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species. |
| *Amminoropa vigens*<br>[syn. *Discocharopa vigens*]<br>ammonite pinwheel snail | e<br>CR<br># only | Potential habitat is dry and wet eucalypt forests on dolerite in the Hobart lowlands (all below 400 m a.s.l). | Potential habitat absent (site is on sandstone, not dolerite). |
| *Antipodia chaostola* tax. *leucophaea*<br>chaostola skipper | e<br>EN<br># | Potential habitat is dry forest and woodland supporting *Gahnia radula* (usually on sandstone and other sedimentary rock types) or *Gahnia microstachya* (usually on granite-based substrates). | Potential habitat marginally present with *Gahnia radula* highly localised. Searches for larval shelters failed to detect any evidence. *Gahnia radula* absent from the proposed development site. |
| *Apus pacificus*<br>fork-tailed swift | -<br>-<br># only | Seasonal migrant (December through March) with habitat open skies over any habitat, more commonly associated with forested hills and mountains (McNab 2022). | Potential habitat widespread but this is a species that flies at high altitude, very fast and highly mobile, feeding on the wing and virtually never perches (McNab 2022).<br>This species should not require further consideration. |
| *Aquila audax* subsp. *fleayi*<br>wedge-tailed eagle | e<br>EN<br># | Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest. Nest trees are usually amongst the largest in a locality. They are generally in sheltered positions on leeward slopes, between the lower and mid sections of a slope and with the top of the tree usually lower than the ground level of the top of the ridge, although in some parts of the State topographic shelter is not always a significant factor (e.g. parts of the northwest and Central Highlands). | Refer to **FINDINGS *Threatened fauna*** for more details. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on project area and database records |
|---|---|---|---|
| *Botaurus poiciloptilus*<br>Australasian bittern | -<br>EN<br># | Potential habitat is comprised of wetlands with tall dense vegetation, where it forages in still, shallow water up to 0.3 m deep, often at the edges of pools or waterways, or from platforms or mats of vegetation over deep water. It favours permanent and seasonal freshwater habitats, particularly those dominated by sedges, rushes and reeds or cutting grass growing over a muddy or peaty substrate (TSSC 2011). | Potential habitat absent. |
| *Bubulcus coromandus*<br>[syn. *B. ibis*, *Ardea ibis*]<br>cattle egret | -<br>-<br># only | Seasonal migrant (April through October) with habitat agricultural lands, crops, dams, pastures, particularly those with cattle, mudflats and wetlands (McNab 2022). | Potential habitat absent, except in the most general of sense.<br>This species should not require further consideration. |
| *Ceyx azureus* subsp. *diemenensis* [syn. *Alcedo azurea* subsp. *diemenensis*]<br>Tasmanian azure kingfisher | e<br>EN<br># | Potential foraging habitat is primarily freshwater (occasionally estuarine) waterbodies such as large rivers and streams with well-developed overhanging vegetation suitable for perching and water deep enough for dive-feeding. Potential breeding habitat is usually steep banks of large rivers (a breeding site is a hole (burrow) drilled in the bank). | Potential habitat absent. No ephemeral or permanent flowing waterbodies present within or adjacent to part of title proposed for development. |
| *Dasyurus maculatus* subsp. *maculatus*<br>spotted-tailed quoll | r<br>VU<br># | Potential habitat is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex and steep rocky areas are present, and includes remnant patches in cleared agricultural land. | Potential habitat marginally present. No evidence (e.g. scats) of the species was observed. The site is unlikely to support dens of the species because of the understorey lacking substantial large coarse woody debris, rock piles, and wombat burrows.<br>The species may utilise the greater title area as part of a home range and for foraging but development at the scale proposed and within the context of surrounding land uses should not have a significant impact on potential habitat of the species. |
| *Dasyurus viverrinus*<br>eastern quoll | -<br>EN<br># | Potential habitat includes rainforest, heathland, alpine areas and scrub. However, it seems to prefer dry forest/native grassland mosaics which are bounded by agricultural land. | Potential habitat present.<br>See under spotted-tailed quoll. |
| *Gallinago hardwickii*<br>Lathams snipe | -<br>-<br># only | Seasonal migrant that prefers brackish, fresh and saline habitats including lagoons, lakes, marshes, swamps, wet grasslands and paddocks and wetlands with tussockgrasses (McNab 2022). | Potential habitat absent, except in the most general of sense.<br>This species should not require further consideration. |
| *Haliaeetus leucogaster*<br>white-bellied sea-eagle | v<br>- | Potential habitat comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is any large waterbody (including sea coasts, estuaries, wide rivers, lakes, impoundments and even large farm dams) supporting prey items (fish). Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest | Refer to wedge-tailed eagle. |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on project area and database records |
|---|---|---|---|
| | | within 5 km of the coast (nearest coast including shores, bays, inlets and peninsulas), large rivers (class 1), lakes or complexes of large farm dams. | |
| *Hirundapus caudacutus*<br>white-throated needletail | -<br>VU<br># | Seasonal migrant (December through March) with habitat open skies over any habitat, more commonly associated with forested hills and mountains (McNab 2022). | Potential habitat widespread but this is a species that flies at high altitude, very fast and highly mobile, feeding on the wing and virtually never perches (McNab 2022).<br>This species should not require further consideration. |
| *Lathamus discolor*<br>swift parrot | e<br>CR<br># | Potential foraging habitat comprises *E. globulus* or *E. ovata* trees that are old enough to flower. Potential nesting habitat is considered to comprise eucalypt forests that contain hollow-bearing trees. | *Eucalyptus ovata* is absent so this aspect of potential foraging habitat is not present. *Eucalyptus globulus* is absent so this aspect of potential foraging habitat is not present.<br>The part of the title proposed for development supports limited hollow-bearing trees so potential breeding habitat is not present (and is highly atypical of known breeding locations that are mainly in hollow-rich forests on ridges and upper slopes). |
| *Litoria raniformis*<br>green and golden frog | v<br>VU<br># | Potential habitat is permanent and temporary waterbodies, usually with vegetation in or around them, including features such as natural lagoons, permanently or seasonally inundated swamps and wetlands, farm dams, irrigation channels, artificial water-holding sites such as old quarries, slow-flowing stretches of streams and rivers and drainage features. | Potential habitat absent. No ephemeral or permanent flowing waterbodies present within or adjacent to part of title proposed for development. |
| *Myiagra cyanoleuca*<br>satin flycatcher | -<br>-<br># only | Seasonal migrant (November through march) with habitat scrub, wet and dry sclerophyll forests, woodlands and creeklines (McNab 2022). | Potential habitat present.<br>This is a spring-summer migrant that may occasionally utilise the greater study area for foraging and possibly nesting. It is unlikely that the proposal will have a significant impact on this species at any reasonable level. |
| *Neophema chrysostoma*<br>blue-winged parrot | -<br>-<br># only | Seasonal migrant (October through April) with habitat agricultural lands, crops, dams, paddocks, coastal scrub, open grassy woodlands, heathland and saltmarshes (McNab 2022). | See under satin flycatcher. |
| *Pardalotus quadragintus*<br>forty-spotted pardalote | e<br>EN<br># | Potential habitat is any forest and woodland supporting *E. viminalis* where the canopy cover of *E. viminalis* is greater than or equal to 10% or where *E. viminalis* occurs as a localised canopy dominant or co-dominant in patches exceeding 0.25 ha. | Potential habitat absent. *Eucalyptus viminalis* is a very minor component of the canopy only. |
| *Perameles gunnii* subsp. *gunnii*<br>eastern barred bandicoot | -<br>VU<br># | Potential habitat is open vegetation types including woodlands and open forests with a grassy understorey, native and exotic grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland. Significant habitat is dense tussock grass-sagg-sedge swards, piles | Potential habitat present.<br>The species may utilise the greater area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species. Development may manifestly benefit |

| Scientific name<br>Common name | Status<br>TSPA<br>EPBCA | Tasmanian habitat description (and distribution) | Comments on project area and database records |
|---|---|---|---|
| | | of coarse woody debris and denser patches of low shrubs (especially those that are densely branched close to the ground providing shelter) within the core range of the species. | the species by creating open areas suitable for foraging. |
| *Prototroctes maraena*<br>Australian grayling | v<br>VU<br># | Potential habitat is all streams and rivers in their lower to middle reaches. Areas above permanent barriers (e.g. Prosser River dam, weirs) that prevent fish migration, are not potential habitat. | Potential habitat absent. No ephemeral or permanent flowing waterbodies present within or adjacent to part of title proposed for development. |
| *Pseudemoia pagenstecheri*<br>tussock skink | v<br>- | Potential habitat comprises native grasslands dominated by tussock-forming grasses. | Potential habitat absent. Native grassland is absent. |
| *Sarcophilus harrisii*<br>Tasmanian devil | e<br>EN<br># | Potential habitat is all terrestrial native habitats, forestry plantations and pasture. Devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat (open understorey mixed with patches of dense vegetation) within their home range (4-27 $km^2$). Potential denning habitat is areas of burrowable, well-drained soil, log piles or sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, free from risk of inundation and with at least one entrance through which a devil could pass. | Potential habitat present.<br>See under spotted-tailed quoll. |
| *Tyto novaehollandiae*<br>subsp. *castanops*<br>masked owl | e<br>VU<br># | Potential habitat is all areas with trees with large hollows (≥15 cm entrance diameter). Remnants and paddock trees (in any dry or wet forest type) in agricultural areas may constitute potential habitat. Significant habitat is any areas within the core range of native dry forest with trees over 100 cm dbh with large hollows (≥15 cm entrance diameter). | Potential nesting habitat absent. Large trees with large hollows are absent from the part of the title proposed for development.<br>The species may utilise the greater title area as part of a home range and for foraging but small-scale development should not have a significant impact on this aspect of the life history of the species. |

**APPENDIX E. DNRET's *Natural Values Atlas* report for study area**

Appended as pdf file.

**APPENDIX F. Forest Practices Authority's *Biodiversity Values Atlas* report for study area**

Appended as pdf file.

**APPENDIX G. CofA's *Protected Matters* report for study area**

Appended as pdf file.

**ATTACHMENT**

- .shp/.dwg file of revised vegetation

## ADDENDUM 1. Updated natural values assessment for residential dwelling

### *Preamble*

This addendum statement should be read in conjunction with:

> ECO*tas* (2023). *Natural Values Assessment of 115 McGann Drive (PID 3236692; C.T. 165891/6; LPI FMB00), Brighton, Tasmania.* Report by Environmental Consulting Options Tasmania (ECO*tas*) for Sharon Eyers & Jacob Goldfinch, 11 April 2023.

It is understood that Brighton Council is in receipt of that report as part of the planning application related to the now-approved shed.

The purpose of this addendum is to provide information on natural values of the part of the title proposed for a residential dwelling including access and bushfire hazard management such that the relevant provisions of the Landscape Conservation Zone and Natural Assets Code can be considered.

### *Assessment*

The original natural values assessment was undertaken on 29 Jul. 2022 by Mark Wapstra (ECO*tas*) with a more detailed assessment on 31 Mar. 2023. These formed the basis of ECO*tas* (2023).

A further natural values assessment was undertaken by Mark Wapstra & James Wapstra (ECO*tas*) on 3 Mar. 2025, specifically to address matters related to a proposed residential dwelling and other developments on the site to be subject to separate planning applications.

While the database reports cited in ECO*tas* (2023) were not updated viz. CofA (2022), DNRET (2022a) & FPA (2022), the author maintains a GIS project up-to-date with all relevant vegetation mapping (viz. TasVeg 3.0, 4.0 & Live versions), and records of threatened flora and fauna, which were also cross-checked against LISTmap layers for currency.

### *Findings*

<u>Vegetation types</u>

The part of the title proposed for the residential dwelling is now wholly cleared land (Plates 1-4) with an existing access (Plates 5 & 6). It is understood that the hazard management area will be wholly contained within the now fenced part of the title with no requirement for further clearing or modification of native vegetation. It is further understood that no further works are required to make the existing access compliant with bushfire hazard management requirements i.e. no further clearing or modification of native vegetation is required.

In terms of the most appropriate classification of the proposed development site under the TASVEG system of classification, a "modified land" mapping unit is most appropriate. While parts of the site support some native plant species, it is no longer appropriate to classify it as "native vegetation", even recognising the almost all-encompassing definition of this under the *Statewide Planning Provisions*. In my opinion, the now developed area is best classified as extra-urban miscellaneous (TASVEG code: FUM), which would be re-coded to urban areas (TASVEG code: FUR) once fully developed.

**Plates 1-4.** Proposed location of residential dwelling: [clockwise from top left] looking north, east, south and west

**Plates 5 & 6.** Views of existing formed access from end of McGann Drive

Prior to the most recent modification, this part of the title was mapped on all versions of TASVEG (refer Figure 8) as *Eucalyptus obliqua* dry forest (TASVEG code: DOB). Site assessment confirmed that this was wholly erroneous, as was the vegetation mapping across most of the title, which was updated in ECO*tas* (2023). That update (refer Figure 9) resulted in most of the title being mapped as *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS) with only small areas of *Eucalyptus obliqua* dry forest (TASVEG code: DOB), the latter well outside any part of the title ever likely to be developed.

That is, the part of the title proposed for development supported *Eucalyptus amygdalina* forest and woodland on sandstone (TASVEG code: DAS). This equates to a native vegetation community (with the same name) listed as threatened on Schedule 3A of the Tasmanian *Nature Conservation Act 2002*. Occurrences of DAS usually meet the intent of "priority vegetation" pursuant to the *Statewide Planning Provisions*, which is defined as follows:

> C7.3 Definition of Terms
>
> C7.3.1 In this code, unless the contrary intention appears:
>
> means native vegetation where any of the following apply:
>
> (a) it forms an integral part of a threatened native vegetation community as prescribed under Schedule 3A of the *Nature Conservation Act 2002*;
>
> (b) is a threatened flora species;
>
> (c) it forms a significant habitat for a threatened fauna species; or
>
> (d) it has been identified as native vegetation of local importance.

That is, C7.3.1(a) was applicable, noting that I considered the patch to be "an integral part of a threatened native vegetation community" because the patch continues within the title and into adjacent titles to form a much larger area. This part of the title was (and is) subject to the Priority Vegetation Area overlay.

Threatened flora

Refer to ECO*tas* (2023). This part of the title did not (and still does not) support populations of threatened flora. The absence of threatened flora from this part of the title (in fact, the whole title) means that no part of the site is "a threatened flora species" [sic] such that it cannot be interpreted as "priority vegetation" (in relation to this value) pursuant to C7.3.1(b) of the *State Planning Provisions* (see previous citation of definition of "priority vegetation" at ***Findings*** Vegetation types).

Threatened fauna

Refer to ECO*tas* (2023). This part of the title did not (and still does not) support populations of threatened fauna nor what could be construed as "significant habitat" of such species. This means that this part of the site cannot form "a significant habitat for a threatened fauna species" such that cannot be interpreted as "priority vegetation" (in relation to this value) pursuant to C7.3.1(c) of the *State Planning Provisions* (see previous citation of definition of "priority vegetation" at ***Findings*** Vegetation types).

***Consideration of Scheme provisions***

Landscape Conservation Zone

The title is zoned as Landscape Conservation (Figure 3).

In this case, residential is a discretionary use (Table 22.2). With respect to natural values (and noting that the zone provisions make little direct reference to such, mainly referring to the concept of "landscape values", which are no where defined per se), the most relevant provisions are discussed below.

22.4 Development Standards for Buildings and Works

22.4.3 Landscape protection

Objective: That the landscape values of the site and surrounding area are protected or managed to minimise adverse impacts.

Notwithstanding that the objective statement refers to "landscape values", a small-scale project should not have "adverse impacts" on "natural values".

A1 Building and works must be located within a building area, if shown on a sealed plan.

Solution A1 is presumed to not be applicable because the project site is not subject to a "sealed plan approved under this planning scheme".

P1

Building and works must be located to minimise native vegetation removal and the impact on landscape values, having regard to:

(a) the extent of the area from which vegetation has been removed;

(b) the extent of native vegetation to be removed;

(c) any remedial or mitigation measures or revegetation requirements;

(d) provision for native habitat for native fauna;

(e) the management and treatment of the balance of the site or native vegetation areas;

(f) the type, size, and design of development; and

(g) the landscape values of the site and surrounding area.

P1 makes reference to "minimise native vegetation removal". Prior to the now-present cleared and modified areas, this would have been achieved by utilising any existing access and constraining development as far as practical to that required for bushfire hazard management. In theory, there would no "better or worse" parts of the title per se, noting the high level of homogeneity of the mapped vegetation on the lower slopes of the title (i.e. within the part of the title most practical for development). Now that the site has been modified, satisfying P1 is by reference to placement of the proposed dwelling and any associated elements within the now fenced part of the title i.e. within an area not requiring the further clearing or modification of native vegetation.

With "regard to" the sub-clauses, site assessment did not indicate any specific natural values matters requiring specific attention under these clauses (noting that they do not mention threatened vegetation types, threatened flora or fauna per se – refer to Natural Assets Code for more details on this). Development as proposed should not materially impact on concepts such as the "provision for native habitat for native fauna" given that the whole site (title) is ca. 127 ha, most of which is the same vegetation type (i.e. "native habitat for native fauna" is extensive and will remain so).

Natural Assets Code

The part of the title proposed for development site is subject to the Priority Vegetation Area overlay (Figure 4).

The purpose of the Natural Assets Code is stated below:

C7.1 The purpose of the Natural Assets Code is:

C7.1.1 To minimise impacts on water quality, natural assets including native riparian vegetation, river condition and the natural ecological function of watercourses, wetlands and lakes.

C7.1.2 To minimise impacts on coastal and foreshore assets, native littoral vegetation, natural coastal processes and the natural ecological function of the coast.

C7.1.3 To protect vulnerable coastal areas to enable natural processes to continue to occur, including the landward transgression of sand dunes, wetlands, saltmarshes and other sensitive coastal habitats due to sea-level rise.

C7.1.4 To minimise impacts on identified priority vegetation.

C7.1.5 To manage impacts on threatened fauna species by minimising clearance of significant habitat.

The above purpose statements are essentially addressed through the relevant development standards. However, as a general statement, a single residential dwelling and associated hazard management area and access should not compromise the intent of the purpose statements. As the part of the title covered by overlays related to "watercourse" and related values will not be developed under the planning application for a residential dwelling, C7.1.1, C7.1.2 & C7.1.4 are not considered to have direct or indirect application to the proposed development. C7.1.4 is considered to have had direct application to the proposed development because of the presence of "priority vegetation" in the form of a threatened native vegetation community (prior to clearing and modification), although in the absence of such now, C7.1.4 may have limited application. The site has not been found to support "significant habitat of threatened fauna", such that C7.1.5 is not considered to have direct or indirect application to the proposed development.

The application of the Natural Assets Code is stated below:

C7.2 Application of this Code:

C7.2.1 This code applies to development on land within the following areas:

(c) a priority vegetation area only if within the following zone:

(iii) Landscape Conservation Zone

C7.2.2 This code does not apply to use.

The proposed development area is zoned as Landscape Conservation and is subject to the Priority Vegetation Area overlay under the *Scheme* such that C7.2.1(c)(iii) has application.

At this point, however, it is worth discussing the classification of the site with respect to the intention of the *Scheme*'s definition of "priority vegetation", which is:

C7.3 Definition of Terms

C7.3.1 In this code, unless the contrary intention appears:

means native vegetation where any of the following apply:

(a) it forms an integral part of a threatened native vegetation community as prescribed under Schedule 3A of the *Nature Conservation Act 2002*;

(b) is a threatened flora species;

(c) it forms a significant habitat for a threatened fauna species; or

(d) it has been identified as native vegetation of local importance.

Under the Code, a "priority vegetation area" is defined to mean:

land shown on an overlay map in the relevant Local Provisions Schedule, as within a priority vegetation area.

Site assessment indicated that the part of the title proposed for development supported (but no longer does so) a native vegetation community listed as threatened under Schedule 3A of the Tasmanian *Nature Conservation Act 2002*, such that C7.3.1(a) was (is?) applicable.

Site assessment indicated that the part of the title proposed for development did not (and still does not) support threatened flora, such that C7.3.1(b) was (is) not applicable.

Site assessment indicates that the part of the title proposed for development did not (and still does not) support "significant habitat for threatened fauna", such that C7.3.1(c) is not considered applicable.

I am not aware that any part of the title has been otherwise "identified as native vegetation of local importance", such that C7.3.1(d) was (is) not considered applicable.

The relevant development standards of the Natural Assets Code are C7.6.2 (Clearance within a priority vegetation area), and have the following objective:

C7.6 Development Standards for Buildings and Works

C7.6.2 Clearance within a priority vegetation area

Objective:

That clearance of native vegetation within a priority vegetation area:

(a) does not result in unreasonable loss of priority vegetation;

(b) is appropriately managed to adequately protect identified priority vegetation; and

(c) minimises and appropriately manages impacts from construction and development activities.

The above objective statements are essentially addressed through the relevant acceptable solutions or performance criteria. However, as a general statement, small-scale development should not compromise the intent of the objective statements.

The acceptable solution for C7.6.2 is stated as:

A1 Clearance of native vegetation within a priority vegetation area must be within a building area on a sealed plan approved under this planning scheme.

Solution A1 is presumed to not be applicable because the project site will not be subject to a "sealed plan approved under this planning scheme".

The performance criteria P1.1 are stated as:

P1.1

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

(a) 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 Tasmanian Fire Service or an accredited person;

(b) buildings and works associated with the construction of a single dwelling or an associated outbuilding;

(c) subdivision in the General Residential Zone or Low Density Residential Zone;

(d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design;

(e) clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or

(f) the clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site.

The fact that P1.1 (a) through (f) are linked by the disjunctive "or" means that only one of these provisions needs to be satisfied. Therefore, a project for a single residential dwelling would mean that P1.1(b) is satisfied, irrespective of the identified natural values.

The performance criteria P1.2 are stated as:

P1.2

Clearance of native vegetation within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:

(a) the design and location of buildings and works and any constraints such as topography or land hazards;

(b) any particular requirements for the buildings and works;

(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings;

(d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;

(e) any on-site biodiversity offsets; and

(f) any existing cleared areas on the site.

Reference is made in the opening phrase of P1.2 to the concept of "minimise adverse impacts". The use of the term "minimise" contemplates that some level (albeit undefined) of impact is contemplated as being acceptable.

With respect to the phrase "…having regard to…", this is considered in the manner referred to in *S and S McElwaine and A Hamilton v West Tamar Council and Growth Developments Pty Ltd [2021] TASCAT 4 (17 November 2021)*, where TASCAT stated: "the requirement to 'have regard to' does not elevate P2.1(a) to (f) to mandatory requirements that the proposal must satisfy. The tribunal need only consider those subparagraphs in ascertaining whether the proposal complies with clause E8.6.1 P2.1".

Below the sub-criteria of P1.2 are addressed in turn.

(a) the design and location of buildings and works and any constraints such as topography or land hazards;

With respect to the title, I accept that a logical location for a residential dwelling is at the end of the existing access (a previous existing track that has been upgraded) in what is now a cleared area but was previously a homogenous regrowth-dominated area of native vegetation on the lower slopes of the title. Other parts of the title are steeper or topographically more obvious and may

have other constraints. That is, the selected location is considered an acceptable balance between the identified natural values and constraints imposed by a project in this setting.

(b) any particular requirements for the buildings and works;

Uncertain application in relation to the identified natural values and the previous (and current) status of the site.

(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings;

With respect to subsection P1.2(c), a certified bushfire hazard management plan is usually considered to meet the intent of the provision. In this case, it is understood that the hazard management area can be wholly contained within the now fenced area requiring no further clearing or modification of native vegetation.

(d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;

No "mitigation measures" have been recommended based on the relatively small "residual impact on priority vegetation" – most of the ca. 127 ha title is the same threatened vegetation type and this will remain subject to the provisions of both the Landscape Conservation Zone and Natural Assets Code.

(e) any on-site biodiversity offsets; and

No such offsets have been identified as necessary (see response above).

(f) any existing cleared areas on the site.

Prior to the clearing and modification, there were no specific parts of the title that would reasonably have met the intent of an "existing cleared area". The proposal now takes full advantage of an "existing cleared area".

On the basis of the above review, the relevant performance criteria of C7.6.2 are considered satisfied.

# *ONSITE-WASTEWATER ASSESSMENT*

***113 McGann Drive***

***Brighton***

***February 2025***

GES

GEO-ENVIRONMENTAL

SOLUTIONS

## Investigation Details

| | |
|---|---|
| **Client:** | Jacob & Sharon Goldfinch |
| **Site Address:** | 113 McGann Dr, Brighton |
| **Date of Inspection:** | 09/12/2024 |
| **Proposed Works:** | New house |
| **Investigation Method:** | AMS Power Probe - Direct Push |
| **Inspected by:** | C. Cooper |

## Site Details

| | |
|---|---|
| **Certificate of Title (CT):** | 165891/6 |
| **Title Area:** | Approx. 127.2 ha |
| **Applicable Planning Overlays:** | Bushfire-prone areas, Landslip Hazard, Priority Vegetation |
| **Slope & Aspect:** | 8° NE facing slope |
| **Vegetation:** | Bush |
| **Ground Surface:** | Disturbed |

## Background Information

| | |
|---|---|
| **Geology Map:** | MRT 1:250000 |
| **Geological Unit:** | Triassic Sandstone |
| **Climate:** | Annual rainfall 500mm |
| **Water Connection:** | Tank |
| **Sewer Connection:** | Unserviced-On-site required |
| **Testing and Classification:** | *AS2870:2011, AS1726:2017 & AS1547:2012* |

## Investigation

A number of bore holes were completed to identify the distribution and variation of the soil materials at the site, bore hole locations are indicated on the site plan. See soil profile conditions presented below. Tests were conducted across the site to obtain bearing capacities of the material at the time of this investigation.

***Soil Profile Summary***

| BH 1 Depth (m) | BH 2 Depth (m) | USCS) | Description |
|---|---|---|---|
| 0.00-0.40 | 0.00-0.20 | **SW** | **Silty SAND**: Brown-grey, slightly moist, dense. |
| 0.40-0.80 | 0.20-0.40 | **SW** | **Silty SAND**: Dark brown/Dark grey, slightly moist, dense. |
| 0.80-1.60 | 0.40-0.70 | **SW** | **Silty SAND**: Pale brown/grey, slightly moist, very dense (BH1 hand auger refusal on rock). |
| | 0.70-1.00 | **SW** | **Silty SAND**: Light brown-orange, slightly moist, very dense. |
| | 1.00-1.20 | **SW** | **Silty SAND with gravels**: Brown, slightly moist, very dense, refusal on rock. |

## Site Notes

Soils on site are developing from Triassic Sandstone. The soils consist of deep windblown sands.

## Wastewater Classification & Recommendations

According to AS1547-2012 (on-site waste-water management) the natural soil is classified as **Sandy Loam (category 2).** It is proposed to install a dual-purpose septic tank with on-site absorption. A Design Loading Rate (DLR) of 20L/$m^2$/day has been assigned for primary treated effluent.

The proposed house has a calculated maximum wastewater output of 720L/day. This is based on a tank water supply and a maximum occupancy of 6 people (120L/day/person). Currently the house has three planned bedrooms however the wastewater system will be sized for four to accommodate a future renovation.

Using the DLR of 20L/$m^2$/day, an absorption area of at least 36$m^2$ will be required to accommodate the expected flows. This can be accommodated by one 20m x 1.8m x 0.6m terraced absorption trench connected to a dual-purpose septic tank (min 3500L).

For all calculations please refer to the Trench summary reports. Due to the highly permeable topsoils a cut off drain will not be required.

A 100% reserve area should be set aside for future wastewater requirements. There is sufficient space available on site to accommodate the reserve due to the large property size (>2ha). Therefore, a formal reserve area has not been assigned.

The following setback distances are required to comply with the Building Act 2016:

| | |
|---|---|
| Upslope or level buildings: | 3m |
| Downslope buildings: | 12m |
| Upslope or level boundaries: | 1.5m |
| Downslope boundaries: | 16m |
| Downslope surface water: | 100m |

Compliance with Building Act 2016 Guidelines for On-site Wastewater Management Systems is outlined in the attached table.

During construction GES will need to be notified of any variation to the soil conditions or wastewater loading as outlined in this report.

Dr John Paul Cumming B.Agr.Sc (hons) PhD CPSS GAICD

*Director*

**GES P/L**

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

# Assessment Report

## Site assessment for on-site waste water disposal

| | | | |
|---|---|---|---|
| Assessment for | Jacob & Sharon Goldfinsh | Assess. Date | 3-Feb-25 |
| | | Ref. No. | |
| Assessed site(s) | 113 McGann Drive Brighton | Site(s) inspected | 9-Dec-24 |
| Local authority | Brighton | Assessed by | John Paul Cumming |

This report summarises wastewater volumes, climatic inputs for the site, soil characteristics and sustem sizing and design issues. Site Capability and Environmental sensitivity issues are reported separately, where 'Alert' columns flag factors with high (A) or very high (AA) limitations which probably require special consideration for system design(s). Blank spaces on this page indicate data have not been entered into TRENCH.

**Wastewater Characteristics**

Wastewater volume (L/day) used for this assessment = 720 (using the 'No. of bedrooms in a dwelling' method)
Septic tank wastewater volume (L/day) = 240
Sullage volume (L/day) = 480
Total nitrogen (kg/year) generated by wastewater = 2.2
Total phosphorus (kg/year) generated by wastewater = 1.3

**Climatic assumptions for site** (Evapotranspiration calculated using the crop factor method)

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean rainfall (mm) | 37 | 31 | 34 | 27 | 40 | 40 | 35 | 51 | 44 | 52 | 51 | 48 |
| Adopted rainfall (R, mm) | 37 | 31 | 34 | 27 | 40 | 40 | 35 | 51 | 44 | 52 | 51 | 48 |
| Retained rain (Rr, mm) | 31 | 27 | 29 | 23 | 34 | 34 | 30 | 43 | 37 | 44 | 43 | 40 |
| Max. daily temp. (deg. C) | | | | | | | | | | | | |
| Evapotrans (ET, mm) | 130 | 110 | 91 | 63 | 42 | 29 | 32 | 42 | 63 | 84 | 105 | 126 |
| Evapotr. less rain (mm) | **99** | **83** | **62** | **40** | **8** | **-5** | **2** | **-1** | **26** | **40** | **62** | **86** |

Annual evapotranspiration less retained rain (mm) = 501

**Soil characterisitics**

Texture = Sandy Loam  Category = 2  Thick. (m) = 2
Adopted permeability (m/day) = 3  Adopted LTAR (L/sq m/day) = 20  Min depth (m) to water = 3

**Proposed disposal and treatment methods**

| | |
|---|---|
| Proportion of wastewater to be retained on site: | All wastewater will be disposed of on the site |
| The preferred method of on-site primary treatment: | In dual purpose septic tank(s) |
| The preferred method of on-site secondary treatment: | In-ground |
| The preferred type of in-ground secondary treatment: | Trench(es) |
| The preferred type of above-ground secondary treatment: | None |
| Site modifications or specific designs: | Not needed |

**Suggested dimensions for on-site secondary treatment system**

| | |
|---|---|
| Total length (m) = | 20 |
| Width (m) = | 1.8 |
| Depth (m) = | 0.6 |
| Total disposal area (sq m) required = | 36 |
| comprising a Primary Area (sq m) of: | 36 |
| and a Secondary (backup) Area (sq m) of: | |

Sufficient area is available on site

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

The assigned DLR for the application area is 20L/m$^2$/day requiring a minimum absorption area of 36 sqm. Therefore the system will have the capacity to cope with predicted climatic and loading events.

**GES P/L**

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

# Site Capability Report

## Site assessment for on-site waste water disposal

| | | | |
|---|---|---|---|
| Assessment for | Jacob & Sharon Goldfinsh | Assess. Date | 3-Feb-25 |
| | | Ref. No. | |
| Assessed site(s) | 113 McGann Drive Brighton | Site(s) inspected | 9-Dec-24 |
| Local authority | Brighton | Assessed by | John Paul Cumming |

This report summarises data relating to the physical capability of the assessed site(s) to accept wastewater. Environmental sensitivity and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) site limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

| Alert | Factor | Units | Value | Confid level | Limitation Trench | Limitation Amended | Remarks |
|---|---|---|---|---|---|---|---|
| | Expected design area | sq m | 10,000 | V. high | Very low | | |
| | Density of disposal systems | /sq km | 10 | Mod. | Very low | | |
| | Slope angle | degrees | 8 | High | Low | | |
| | Slope form | Straight simple | | High | Low | | |
| | Surface drainage | Imperfect | | High | Moderate | | |
| | Flood potential | Site floods <1:100 yrs | | High | Very low | | |
| | Heavy rain events | Infrequent | | High | Moderate | | |
| | Aspect (Southern hemi.) | Faces NE or NW | | V. high | Low | Moderate | |
| | Frequency of strong winds | Common | | High | Low | | |
| | Wastewater volume | L/day | 720 | High | Moderate | No change | |
| | SAR of septic tank effluent | | 1.2 | High | Low | | |
| | SAR of sullage | | 2.1 | High | Moderate | | |
| | Soil thickness | m | 2.0 | V. high | Very low | | |
| | Depth to bedrock | m | 2.0 | Mod. | Low | | |
| | Surface rock outcrop | % | 0 | V. high | Very low | | |
| | Cobbles in soil | % | 0 | V. high | Very low | | |
| | Soil pH | | 7.0 | High | Very low | | |
| | Soil bulk density | gm/cub. cm | 1.5 | High | Low | | |
| | Soil dispersion | Emerson No. | 8 | V. high | Very low | | |
| AA | Adopted permeability | m/day | 3 | Mod. | Very high | | |
| | Long Term Accept. Rate | L/day/sq m | 20 | High | Low | | |

To enter comments, click on the line below 'Comments' . (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

This site has the capability to accept primary treated wastewater.

**GES P/L**

Land suitability and system sizing for on-site wastewater management

Trench 3.0 (Australian Institute of Environmental Health)

# Environmental Sensitivity Report

## Site assessment for on-site waste water disposal

| | | | |
|---|---|---|---|
| Assessment for | Jacob & Sharon Goldfinsh | Assess. Date | 3-Feb-25 |
| | | Ref. No. | |
| Assessed site(s) | 113 McGann Drive Brighton | Site(s) inspected | 9-Dec-24 |
| Local authority | Brighton | Assessed by | John Paul Cumming |

This report summarises data relating to the environmental sensitivity of the assessed site(s) in relation to applied wastewater. Physical capability and system design issues are reported separately. The 'Alert' column flags factors with high (A) or very high (AA) limitations which probably require special consideration in site acceptability or for system design(s). Blank spaces indicate data have not been entered into TRENCH.

| Alert | Factor | Units | Value | Confid level | Limitation Trench | Limitation Amended | Remarks |
|---|---|---|---|---|---|---|---|
| AA | Cation exchange capacity | mmol/100g | 25 | High | Very high | | |
| | Phos. adsorp. capacity | kg/cub m | 0.6 | High | Moderate | | |
| | Annual rainfall excess | mm | -501 | High | Very low | | |
| | Min. depth to water table | m | 3 | High | Very low | | |
| | Annual nutrient load | kg | 3.5 | High | Very low | | |
| | G'water environ. value | Agric non-sensit | | V. high | Low | | |
| | Min. separation dist. required | m | 3 | High | Very low | | |
| | Risk to adjacent bores | Very low | | V. high | Very low | | |
| | Surf. water env. value | Agric non-sensit | | V. high | Low | | |
| | Dist. to nearest surface water | m | 240 | V. high | Moderate | | |
| | Dist. to nearest other feature | m | 141 | V. high | Very low | Moderate | |
| | Risk of slope instability | Very low | | V. high | Very low | | |
| | Distance to landslip | m | 115 | V. high | Low | | |

To enter comments, click on the line below 'Comments'. (This yellow-shaded box and the buttons on this page will not be printed.)

Comments

There is low risk of environmental harm associated with onsite wastewater disposal at this site.

Demonstration of wastewater system compliance to *Building Act 2016 Guidelines for On-site Wastewater*

| **Acceptable Solutions** | **Performance Criteria** | **Compliance** |
|---|---|---|
| A1<br><br>Horizontal separation distance from a building to a land application area must comply with one of the following:<br><br>a) be no less than 6m; or<br><br>b) be no less than:<br><br>(i) 3m from an upslope building or level building;<br>(ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building;<br>(iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building. | P1<br><br>a) The land application area is located so that<br><br>(i) the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low.; and<br>(ii) is setback a sufficient distance from a downslope excavation around or under a building to prevent inadequately treated wastewater seeping out of that excavation | Complies with A1 (b) (i)<br>Land application area will be located with a minimum separation distance of 3m from an upslope or level building.<br><br>Complies with A1 (b) (ii)<br>Land application area will be located with a minimum separation distance of 12m from a downslope building. |
| A2<br><br>Horizontal separation distance from downslope surface water to a land application area must comply with (a) or (b)<br><br>(a) be no less than 100m; or<br><br>(b) be no less than the following:<br><br>(i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or<br><br>(ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to down slope surface water. | P2<br><br>Horizontal separation distance from downslope surface water to a land application area must comply with all of the following:<br><br>a) Setbacks must be consistent with AS/NZS 1547 Appendix R;<br><br>b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. | Complies with A2 (a)<br>Land application area located > 100m from downslope surface water |

| | | |
|---|---|---|
| A3<br><br>Horizontal separation distance from a property boundary to a land application area must comply with either of the following:<br><br>(a) be no less than 40m from a property boundary; or<br><br>(b) be no less than:<br><br>(i) 1.5m from an upslope or level property boundary; and<br><br>(ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or<br><br>(iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary. | P3<br><br>Horizontal separation distance from a property boundary to a land application area must comply with all of the following:<br><br>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and<br><br>(b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. | Complies with A3 (b) (i)<br>Land application area will be located with a minimum separation distance of 1.5m from an upslope or level property boundary<br><br>Complies with A3 (b) (ii)<br>Land application area will be located with a minimum separation distance of 16m from a downslope property boundary. |
| A4<br><br>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient. | P4<br><br>Horizontal separation distance from a downslope bore, well or similar water supply to a land application area must comply with all of the following:<br><br>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and<br><br>(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable | Complies with A4<br>No bore or well identified within 50m |

| | | |
|---|---|---|
| A5<br>Vertical separation distance between groundwater and a land application area must be no less than:<br>(a) 1.5m if primary treated effluent; or<br>(b) 0.6m if secondary treated effluent | P5<br>Vertical separation distance between groundwater and a land application area must comply with the following:<br>(a) Setback must be consistent with AS/NZS 1547 Appendix R; and<br>(b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable | Complies with A5 (a)<br>No groundwater encountered |
| A6<br>Vertical separation distance between a limiting layer and a land application area must be no less than:<br>(a) 1.5m if primary treated effluent; or<br>(b) 0.5m if secondary treated effluent | P6<br>Vertical setback must be consistent with AS/NZS1547 Appendix R. | Complies with A6 (a) |
| A7<br>nil | P7<br>A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties | Complies |

# AS1547:2012 – Loading Certificate – Septic System Design

This loading certificate sets out the design criteria and the limitations associated with use of the system.

**Site Address:** 113 McGann Drive Brighton

**System Capacity:** 6 people @ 120L/person/day

**Summary of Design Criteria**

**DLR:** 20L/$m^2$/day.

**Absorption area:** 36$m^2$

**Reserve area location /use:** Not Assigned - more than 100% available

**Water saving features fitted:** Standard fixtures

**Allowable variation from design flows:** 1 event @ 200% daily loading per quarter

**Typical loading change consequences:** Expected to be minimal due to capacity of system and site area (provided loading changes within 25% of design)

**Overloading consequences:** Continued overloading may cause hydraulic failure of the absorption area and require upgrading/extension of the area. Risk considered acceptable due to visible signs of overloading and owner monitoring.

**Underloading consequences:** Lower than expected flows will have minimal consequences on system operation unless the house has long periods of non occupation. Under such circumstances additional maintenance of the system may be required. Risk considered acceptable.

**Lack of maintenance / monitoring consequences:** Issues of underloading/overloading and condition of the absorption area require monitoring and maintenance, if not completed system failure may result in unacceptable health and environmental risks. Septic tank de-sludging must also be monitored to prevent excessive sludge and scum accumulation. Monitoring and regulation by the property owner required to ensure compliance.

**Other operational considerations:** Owners/occupiers must be aware of the operational requirements and limitations of the system, including the following; the absorption area must not be subject to traffic by vehicles or heavy stock and should be fenced if required. The absorption area must be kept with adequate grass cover to assist in evapotranspiration of treated effluent in the absorption trenches. The septic tank must be desludged at least every 3 years, and any other infrastructure such as septic tank outlet filters must also be cleaned regularly (approx. every 6 months depending upon usage). Foreign materials such as rubbish and solid waste must be kept out of the system.

# CERTIFICATE OF THE RESPONSIBLE DESIGNER

**Section 94**
**Section 106**
**Section 129**
**Section 155**

Form **35**

To: Jacob & Sharon Goldfinch *Owner name*
22 Ardea Drive *Address*
Swan Bay 7252 *Suburb/postcode*

## Designer details:

Name: John-Paul Cumming
Category: Bld. Srvcs. Dsgnr. - Hydraulic
Business name: Geo-Environmental Solutions
Phone No: 03 6223 1839
Business address: 29 Kirksway Place
Battery Point 7004
Fax No: N/A
Licence No: CC774A
Email address: office@geosolutions.net.au

## Details of the proposed work:

**Owner/Applicant** Jacob & Sharon Goldfinch
Designer's project reference No. J7283
**Address:** 113 McGann Dr
Lot No: 165891/6
Brighton 7030

**Type of work:** Building work ☐ Plumbing work ☒ *(X all applicable)*

**Description of work:**
On-site wastewater management system - design

*(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)*

**Description of the Design Work (Scope, limitations or exclusions):** *(X all applicable certificates)*

| Certificate Type: | Certificate | Responsible Practitioner |
|---|---|---|
| | ☐ Building design | Architect or Building Designer |
| | ☐ Structural design | Engineer or Civil Designer |
| | ☐ Fire Safety design | Fire Engineer |
| | ☐ Civil design | Civil Engineer or Civil Designer |
| | ☒ Hydraulic design | Building Services Designer |
| | ☐ Fire service design | Building Services Designer |
| | ☐ Electrical design | Building Services Designer |
| | ☐ Mechanical design | Building Service Designer |
| | ☐ Plumbing design | Plumber-Certifier; Architect, Building Designer or Engineer |
| | ☐ Other (specify) | |

Deemed-to-Satisfy: ☒ Performance Solution: ☐ *(X the appropriate box)*

Other details:

Septic tank with absorption trench

## Design documents provided:

The following documents are provided with this Certificate –

*Document description:*

| | | |
|---|---|---|
| Drawing numbers: | Prepared by: Geo-Environmental Solutions | Date: Feb-25 |
| Schedules: | Prepared by: | Date: |
| Specifications: | Prepared by: Geo-Environmental Solutions | Date: Feb-25 |
| Computations: | Prepared by: | Date: |
| Performance solution proposals: | Prepared by: | Date: |
| Test reports: | Prepared by: Geo-Environmental Solutions | Date: Feb-25 |

**Standards, codes or guidelines relied on in design process:**

AS1547:2012 On-site domestic wastewater management.

AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

**Any other relevant documentation:**

Onsite Wastewater Assessment - 113 McGann Drive Brighton - Feb-25

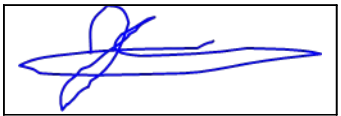
Onsite Wastewater Assessment - 113 McGann Drive Brighton - Feb-25

**Attribution as designer:**

I John-Paul Cumming, am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

| | *Name: (print)* | *Signed* | *Date* |
|---|---|---|---|
| Designer: | John-Paul Cumming |  | 03/02/2025 |
| Licence No: | CC774A | | |

## Assessment of Certifiable Works: (TasWater)

**Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.**

**If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.**

**TasWater must then be contacted to determine if the proposed works are Certifiable Works.**

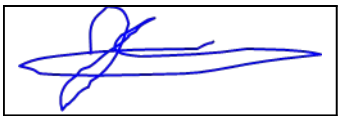
**I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:**

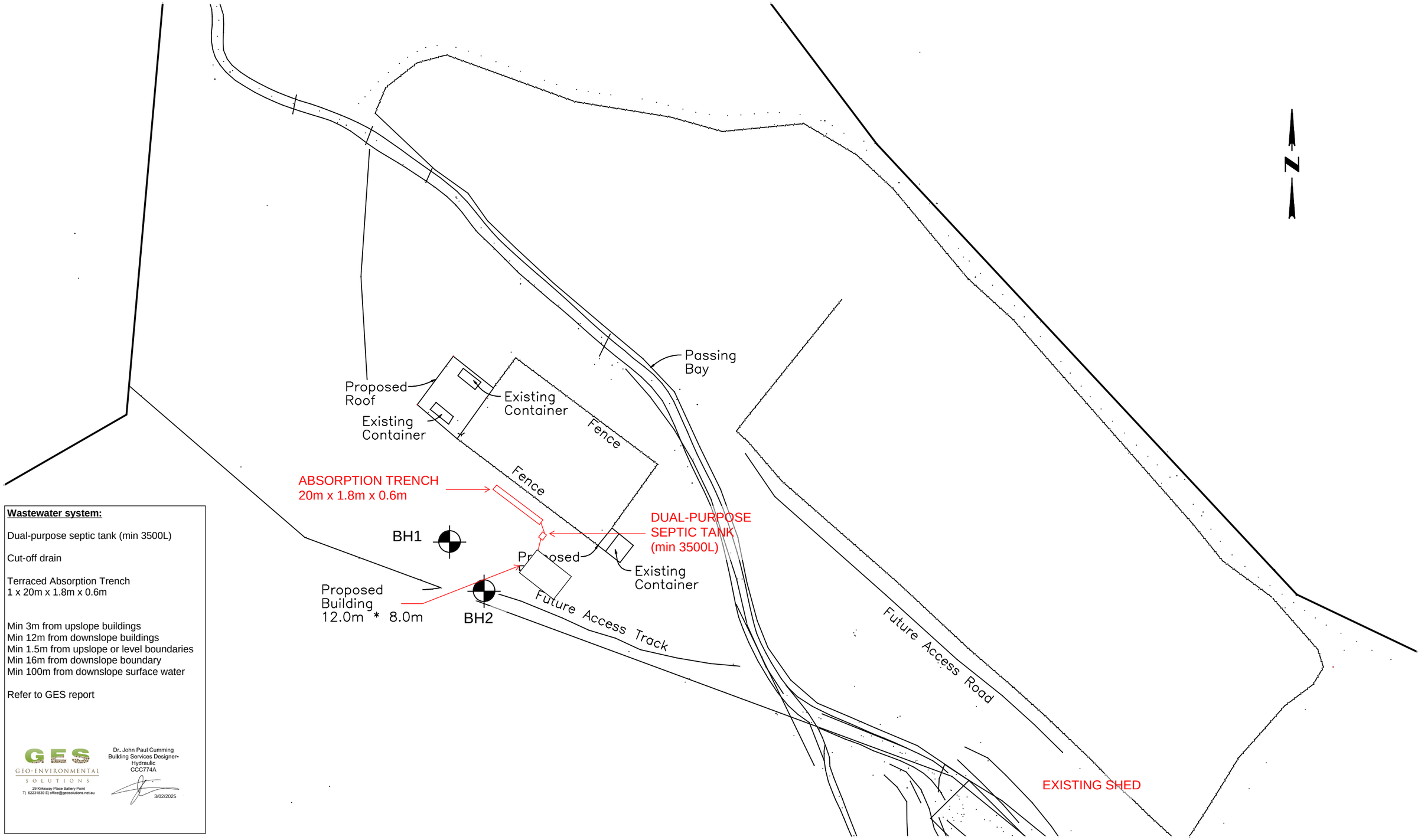
- [x] The works will not increase the demand for water supplied by TasWater
- [x] The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- [x] The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- [x] The works will not damage or interfere with TasWater's works
- [x] The works will not adversely affect TasWater's operations
- [x] The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- [x] I have checked the LISTMap to confirm the location of TasWater infrastructure
- [x] If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

## Certification:

I ..... John-Paul Cumming..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008,* that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

| | *Name: (print)* | *Signed* | *Date* |
|---|---|---|---|
| Designer: | John-Paul Cumming |  | 03/02/2025 |




**Wastewater system:**

Dual-purpose septic tank (min 3500L)

Cut-off drain

Terraced Absorption Trench
1 x 20m x 1.8m x 0.6m

Min 3m from upslope buildings
Min 12m from downslope buildings
Min 1.5m from upslope or level boundaries
Min 16m from downslope boundary
Min 100m from downslope surface water

Refer to GES report

GES
GEO-ENVIRONMENTAL SOLUTIONS
29 Kirksway Place Battery Point
T| 62231839 E| office@geosolutions.net.au

Dr. John Paul Cumming
Building Services Designer-Hydraulic
CCC774A
3/02/2025

Property Address

113 MCGANN DR BRIGHTON TAS 7030
Property ID 3236692
Title Reference 165891/6

JACOB RIORDAN GOLDFINCH & SHARON ANNE EYERS

SHEET 2 OF 3

| DATE | SCALE |
|---|---|
| 10 April 24 | 1 : 1000 |
| DRAWN | FILE |
| AJP | 6199 33 |
| SURVEYED | |
| AJP | |

A.J PHILLIPS SURVEYING
6 Bindaree Road
Legana
Tasmania
7277

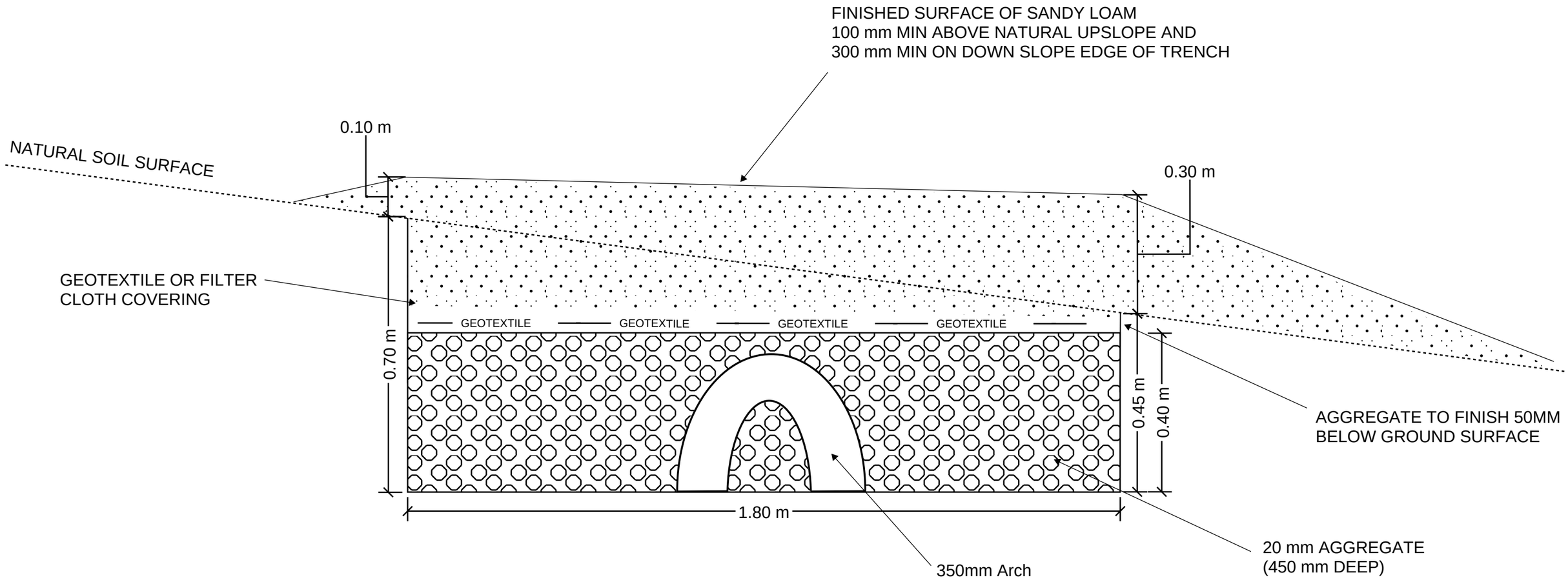
email: ajpsurv@bigpond.net.au
Mobile 0412 315 880

# DETAIL PLAN
# PROPOSED STRUCTURES

**Design notes:**

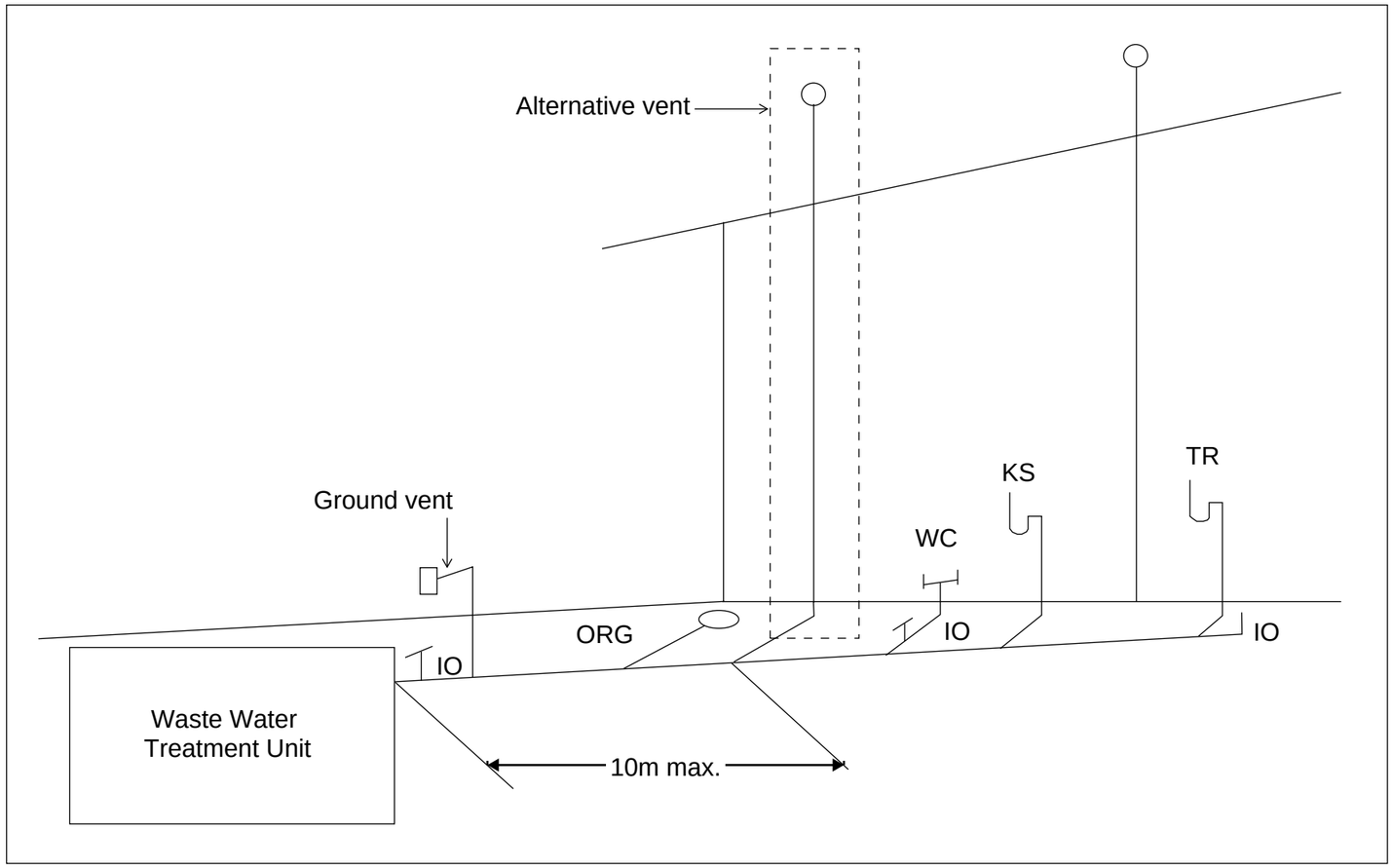
1. Absorption trench dimensions of up to 20m long by 0.45m deep by 1.8m wide – total storage volume calculated at average 35% porosity.
2. Base of trenches to be excavated level and smearing and compaction avoided.
3. 350mm Arch should be placed in the centre of trench
4. Geotextile or filter cloth to be placed over the distribution arch to prevent clogging
5. Construction on slopes up to 20% to allow trench depth range 700mm upslope edge to 450mm on down slope edge
6. Dispersive soils gypsum to be incorporated into the base of the trench at a rate of 1kg/m$^2$
7. All works on site to comply with AS3500 and Tasmanian Plumbing code.

GES
GEO-ENVIRONMENTAL
SOLUTIONS
29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au




| | | | | | |
|---|---|---|---|---|---|
| Do not scale from these drawings. Dimensions to take precedence over scale. | Geo-Environmental Solutions | | | Terraced Absorption Trench Detail | Sheet 1 of 1 |

GES
GEO-ENVIRONMENTAL
SOLUTIONS
29 Kirksway Place, Battery Point
T| 62231839 E| office@geosolutions.net.au




**Tas Figure H101.2 Alternative Venting Arrangements**

Vents must terminate in accordance with AS/NZS 3500.2

Alternative venting to be used by extending a vent to terminate as if an upstream vent, with the vent connection between the last sanitary fixture or sanitary appliance and the on-site wastewater management system. Use of a ground vent in not recommended

Inspection openings must be located at the inlet to an on-site wastewater management system treatment unit and the point of connection to the land application system and must terminate as close as practicable to the underside of an approved inspection opening cover installed at the finished surface level

Access openings providing access for desludging or maintenance of on-site wastewater management system treatment unites must terminate at or above finished surface level

Alternative vent is the preferred arrangement where possible.

| | | | | | | |
|---|---|---|---|---|---|---|
| Do not scale from these drawings. Dimensions to take precedence over scale. | | | | Tas Figure H101.2<br>Alternative Venting Arrangements | | Sheet 1 of 1 |

# Bushfire Hazard Report

# 113 McGann Drive
# Brighton

## Performance Solution

## Tasmanian Planning Scheme

Property ID 3236692 Title Reference 165891/6

New construction

**S Eyers & J Goldfinch**

March 2025

Roger Fenwick Bush Fire Consultant
PO Box 86B Kettering Tasmania 7155
roger@bushfire-consultant.com.au
0411 609 906
Accreditation No. BFP - 162

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## Executive summary

I am an Accredited person permitted to assess bushfire hazards and to define Hazard Management Areas and to prepare appropriate plans for their ongoing management. A summary of my *curriculum vitae* is Annexure A.

This report concerns proposed construction of a single family dwelling in a bushfire-prone area within a Tasmanian Planning Scheme area, assessed under the provisions of the *Director's Determination Bushfire Hazard Areas v 1.2 (*DDBHA).

Vegetation in close proximity to the proposed building site necessitated preparation of a Performance Solution.

Roger Fenwick BFP 162 Scope 1, 2, 3A, 3B

View to North from proposed house site.

## Purpose

I have been engaged to undertake a Bushfire Hazard Report for proposed construction of a single-family dwelling on a hobby farm located at 113 McGann Drive, Brighton known as Property ID 3236692, Title Reference 165891/6.

This report provides an assessment of the bushfire risk as required by the provisions of the *Director's Determination Bushfire Hazard Areas v 1.2 (*DDBHA). The proximity of the proposed building area to unmanaged vegetation on adjacent land necessitated a Performance Solution.

## Methodology

The assessment protocol relies on definitions and specifications in the Australian Standard *Construction of buildings in bushfire-prone area 2018* (AS 3959) or *Nash Standard – Steel Framed Construction in Bushfire Areas*, vegetation classification by Specht 1970, and State variations defined in the DDBHA. Those variations specify additional requirements for access, water supply, and a Hazard Management Area (HMA) plan.

For defined vegetation classes, litter and other flammable vegetation component standard values have been determined. These, slope values and standard weather conditions are used to calculate bushfire behaviour, including rate of forward spread, radiant heat output and flame height. When considered in conjunction with the distance between the edge of the fire and the point of measurement (eg the wall of a house), they show the intensity of the fire exposure.

Those combined values are expressed as a Bushfire Attack Level (BAL) plus a number which expresses the radiant heat output in kilowatts per square metre ($kWm^{-2}$). The BAL rating determines the required construction standard. As the setback distance increases, the BAL rating decreases.

Proximity to vegetation growing on adjoining land places the intended building site less than the acceptable BAL-12.5 setback in the Deemed to Satisfy (DtS) table in AS 3959. This requires a Performance Solution assessment as outlined in the Standard. That in turn required a Performance-Based Design Brief, defining how compliance with specified fire safety outcomes will be achieved.

## Proposal

This proposal is to build a BAL-12.5 specification house on already cleared land. The available space is such that, under Deemed to Satisfy rules, a house and its Hazard Management Area will not fit without additional tree removal within the originally designated Protected Vegetation Area, now the Priority Vegetation Area, in the fenced-off portion beside the initially cleared area.

A site-specific Method 2 calculation, applied as a Performance Solution only to that upslope exposure, shows that the already cleared space is sufficient to allow construction of the desired house and its HMA without further vegetation removal. All other exposures were evaluated by (Deemed to Satisfy) reference to table 2.6 of AS 3959.

Plans showing the site and proposed development are attached at Annexure E.

## General site description

This irregularly shaped 127ha lot occupies all of the northern side and most of the southern side of Cobbs Hill, on the southern side of the Jordan River floodplain.

### Vegetation

Incorrectly identified on TasVeg as *E tenuiramis* (Silver peppermint) and *E obliqua* (Messmate stringybark), the area is in fact dominated by *E amygdalina* (Black peppermint).

View from house site to NW

and to South - SE

### Topography

The bulk of the lot has slopes in the 15-20° range, and the lower and cleared areas are around 0-5°.

## Fire history

The LIST records that fires in 1981/82 and in 2002/03 burned on the site.

## Bushfire Context

A bushfire prone area is defined as land so mapped, or land within 100m of bushfire prone vegetation equal to or exceeding 1 hectare in area. Bushfire prone vegetation includes areas of grasses and shrubs other than defined exceptions such as maintained lawns, gardens, some horticultural land and the like.

The slope used in Deemed to Satisfy bushfire assessments based on the Tables in AS 3959 is the gradient beneath unmanaged adjoining vegetation able to support fire movement towards structures. It varies from Upslope and Level (both defined as 0°) to groups of Downslope in 5° increments, maxing out at 20°. Downslope means that fire is travelling uphill when moving towards the structure. Specific slope values can be applied, by Method 2 as specified in AS 3959.

Setbacks are defined as the plan view (horizontal) distance between the edge of unmanaged vegetation and the nearest part of a structure subject to the assessment. This means to the nearest wall, or if there is no wall, to the nearest supporting post or column of a carport, deck, veranda, landing, stairs or ramps. Eaves and overhangs, tanks, chimneys, unroofed pergolas and sun blinds are excluded.

For planning purposes, it is assumed that the McArthur Forest Fire Danger Index (FDI) is 50. This defined FDI may not cover the worst case exposure at a site, and even strict adherence

to the mandatory and other recommended specifications will not guarantee that structures will not be ignited by bushfire.

### Site slopes

With respect to fire behaviour, the area immediately adjacent to the proposed house site at the base of the hill is a downslope of 2° to the NE, level to NW, upslope 2° to the SE, and upslope 14° to the SW.

### Site vegetation

As determined by Mark Wapstra of ECOTAS, the vegetation type present on the hill behind the fence and to both ends of the proposed house is *E amygdalina* dominated Tasmanian Dry Eucalypt Forest & Woodland[1]. The understorey is unremarkable low shrubs and bracken. Grassland will be developed over the area below the house, to the general NE.

## Performance-Based Analysis

### Objective

The intention is to ensure that adequate setback distances from fire in nearby unmanaged vegetation are provided so as to reduce the likelihood of ignition to an acceptable level, and ensure a tolerable risk to occupants and firefighters.

Table 2.6 in AS 3959 provides specifications for recognised vegetation types and slope classes, showing the combinations of setback distance and construction level generally regarded as providing acceptable levels of fire resistance. The Standard also specifies the methodology (Method 2) by which site-specific calculations can be made, mirroring that used to generate the Tables shown in the DtS section of the Standard. I have written an Excel spreadsheet that performs the calculations specified in AS 3959.

The approved PBD protocol requires that the relevant stakeholders agree on the required outcome and the means by which proposed solutions will be assessed.

### Relevant stakeholders

The relevant stakeholders in this case include the property owner, the building designer (Phil Cuthbertson), the planner (Frazer Read), the building surveyor (Gabriel Barnes), the Natural Values assessor (Mark Wapstra), the Tasmania Fire Service and the bushfire practitioner.

### Agreed input data

The slopes to be used are as measured by me on site, and include a 14° upslope.

The nearby tree-based vegetation is *E amygdalina* -dominated Tasmanian Dry Eucalypt Forest & Woodland on the 14° upslope to the general SW. According to Marsden-Smedley *et al (ibid)* the surface and near-surface fuel level associated with that species is 11tha$^{-1}$, to which must be added 1tha$^{-1}$ for bark and 10tha$^{-1}$ for canopy. This gives values of w = 12 & W = 22 for use in Method 2 calculations, for the Dry Forest fuels. Standard Forest and Grassland values are used for the DtS Table 2.6-derived setbacks.

### DtS departures and relevant Performance Requirements

The applicable requirements are provided in the DDBHA.

| DtS provision | DtS compliance | Relevant performance requirement |
|---|---|---|
| 2.2(3) Design & Construction | Will comply with DtS | NCC H7P5 Design and construction to reduce risk of ignition from design bushfire |

[1] Marsden-Smedley, Anderson & Pyrke, Fuels in dry Tasmanian forests, Fire 2022, 5, 103 MDPI Table 4

| | | |
|---|---|---|
| 2.2(4)(a) Propery Access | Will comply with DtS | - |
| 2.2(4)(b) Water supply | Will comply with DtS | - |
| 2.2(4)(c) Hazard Management Area | Will not comply with DtS in AS 3959 Table 2.6 | The setbacks required to correspond to an appropriate Design and Construction specification in AS 3959 & DD Table 4 |

### Assessment Methods

In accordance with A2G2(1)(a) the Performance Solution demonstrates compliance with the Performance Requirements.

The relevant NCC Assessment Method under A2G2(2)(b)(ii) involves:

- Other Verification Method, being Method 2 in the Standard.

### Acceptance Criteria

The proposed Acceptance Criteria are that

- Construction standards, and
- Siting (the extent of the Hazard Management Area)

provide an acceptable standard of safety for occupants and firefighters. Acceptable standard will be satisfied by meeting BAL-12.5 specifications for both the construction standard and siting (the size of the HMA).

Under A2G2(2) the only applicable Assessment Method is Other Verification Method.

### Documentation and evidence to be provided

The following documentation will be provided to the building surveyor:

- Bushfire hazard management plan;
- Bushfire hazard report that includes:
  - DtS assessment;
  - Method 2 assessment.
- Design documentation demonstrating compliance with the design BAL (to be provided by designer).

## BAL ratings

The combined assessment defines the extent of the HMA necessary to permit, and require, construction to BAL-12.5.

### Access

Direct property access is from McGann Drive, a locally 6m wide unsealed road. On-site access will be via a gravel driveway with a carriageway not less than 4m in width with 0.5m clear on each side, slightly under 200m in length. All slope and turn radius restrictions are satisfied, and no passing bays will be required. There will be ample space in which to turn a tanker on site, and provide hardstand to a water point within 3m, and via a hose lay less than 90m in length to all parts of the house. This will meet Table 2 B.

### Water

No reticulated water supply exists, and DDBHA Table 3B applies. A minimum 10kl capacity metal water tank and specified fittings will be provided within 3m of hardstanding and between 6m & 90m of the dwelling, located on the large clear area below the house. A path will facilitate access from the hardstand area to the house.

### Environmental & other constraints

Waterway & coastal protection, Landslip, Priority vegetation and Electricity corridor overlays cover parts of the site. No additional bushfire protection works should affect any of the protection overlay areas.

## Assessment

### Hazard Management Area

The HMA to the specifications in DDBHA Table 4 is shown on the plan at Annexure B. Within the area outlined only paved areas, managed lawn or garden, occasional garden shrubs and scattered trees to the management regime shown at Annexure C are permitted.

The vegetation/slope/distance combinations and resultant setback requirements relative to the building site are as shown in the table below, with the limiting values highlighted.

| Direction & slope | Vegetation | Actual distance | DtS 12.5 | M2 12.5 |
|---|---|---|---|---|
| NE -2° | Grass | 32m | 16m | |
| NW Level | Forest | 45m | 32m | |
| SW +14° | Dry Forest | 14m | 32m | 12m |
| SE +2° | Forest | 40m | 32m | |

### Construction specification

All works need to be built to BAL-12.5 specifications, as indicated on the plans. In addition to the specifications within AS 3959, I recommend that non-combustible leaf guard be fitted to every roof gutter capable of collecting leaves.

### Property access

DDBHA Table 2 B. The firefighting water outlet will be located at the hardstanding below the house site, approximately 200m from the front entry gate. The distance by hoselay from the hardstanding beside the water outlet to the furthest part of the building will be less than 90m. The access route meets all unsealed gradient and other carriageway width and weight limits.

### Water supply

10kl of water reserved for fire fighting will be provided in an above-ground metal tank fitted with a ball or gate valve and a 65mm Storz coupling plus captive cap, within 3m of a hardstanding area beside the access, not within 6m of the dwelling, and readily accessible to a tanker. Standard signage (Annexure C) will be fitted in a location clearly visible to approaching vehicles. Water supply will meet the requirements of DDBHA Table 3 B.

## Conclusion

The significantly reduced setback determined via Method 2 relative to the DtS requirement is entirely reasonable, given that fire rate of spread is reduced by a factor of 2 down a 1° slope and by a factor of 4 down a 20° slope. A three-fold reduction in the rate of spread should generate approximately one third of the fire Intensity, and approximately one third of the radiant heat flux. The actually required setback is 37.5% of the DtS result which assumes level ground and a fuel load over double what is present on site. Apart from being an apparently reasonable outcome, it has been derived by application of exactly the same mathematical calculations as used to produce the DtS tables.

The hazard separation distances to be achieved **and maintained** in accordance with the plan for the Hazard Management Area, combined with construction to the recommended specifications, will result in what I regard as an acceptably protected structure against the

anticipated exposure to bushfire attack. Under bushfire weather conditions that exceed the design criteria, the probable survival of structures is less likely.

This report complies with the provisions of NCC Clause A2G2(4)(d) and BHAN 07.

## Summary of requirements

### Initial checklist

1. Install and fill the fire-fighting water tank, outlet and signage (as prescribed in Annexure C) next to the hardstanding beside the access driveway.
2. Complete all construction to BAL-12.5 specifications in s3 & s5 of AS 3959-2018.
3. Create the Hazard Management Area as prescribed in Annexure C, to the dimensions shown in Annexure B.

### Annual checklist

4. Maintain the Hazard Management Area as prescribed in Annexure C, to the dimensions shown in Annexure B.
1. Check that the fire fighting water tank is full and all fittings are in proper working order prior to each fire season. Be aware that ‘fire fighting’ includes use for domestic (structural) fires as well as bushfires, both on and off the property.

# Annexure A Curriculum vitae

**Qualifications**

Graduate Certificate in Bushfire Protection, UWS, 2013

Bachelor of Science (Forestry), ANU, 1969

**Work Experience**

**Self-employed consultant** – 1988 to present

**ACT Bush Fire Council**

Chief Fire Control Officer – 1986 to 1987

Secretary – 1985

Chief Fire Control Officer -1976 to 1978

Deputy Chief Fire Control Officer – 1972 to 1975

Assistant to Chief Fire Control Officer - 1970 to 1971

**CSIRO**

Experimental Officer, Project Aquarius 1982 to 1984

**Chemonics Industries** USA 1979 to 1981

Field Service Representative, chemical fire retardants

**Project Experience**

- Responsible for all aspects of staff administration, finance, bush fire safety planning, fire management, training, and fire control operations in the ACT.
- Attended approximately 2000 wildfires, experimental fires and controlled burns.
- Attended to an additional approximately 1000 wildfires.
- Personally prepared approximately 2800 compliance reports to accompany Development Applications for subdivisions, Special Purpose structures, houses, industrial buildings and Defence complexes.
- Prepared assessments for 31 schools in the Nation-Building Program for the Dept of Education, Employment & Workplace Relations.
- Gave evidence in the Land & Environment Court on contested DA matters.
- Prepared Vegetation Management Plans for large (primarily Defence) estates throughout Australia.
- Prepared training plans and the Bushfire Response Action Plan for Puckapunyal Base, Dept of Defence.
- Provided studies of bush fire behaviour to assist planning and risk management by plantation insurance companies, Councils and other land management agencies.
- As an Expert Witness, investigated, reported on and gave evidence in 47 matters involving fire causation and fire management activities, mainly in connection with civil litigation.
- As Senior Research Officer, assisted in the experiment design and data analysis and responsible for all field operations for Project Aquarius, the major study of large aircraft assisted bush fire control by CSIRO Division of Forestry Research.
- As a field representative for Chemonics Industries in the USA, maintained and oversaw the operation of all of the US Forest Service air tanker bases in Washington & Oregon, and introduced the use of fire retardants by ground application for fire management in the western states.
- Lectured in bush fire behaviour and control principles at the ANU and the Canberra College of Advanced Education (now University of Canberra).
- Wrote the bush fire training module for the ACT Fire Brigade.
- Prepared the first urban-rural interface bush fire protection planning guidelines in the ACT for the National Capital Development Commission.

# Annexure B  Bushfire Hazard Management Plan

# BUSHFIRE HAZARD MANAGEMENT PLAN

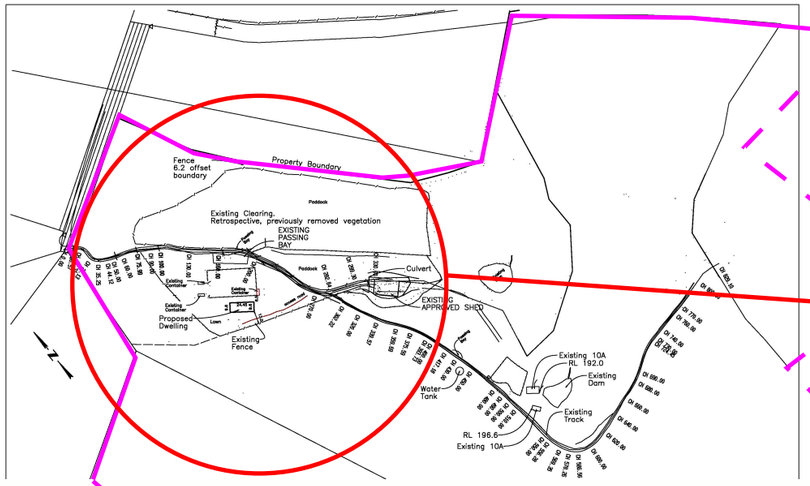
**113 McGann Drive, Brighton**
**Property ID 3236692  Title 155891/6**

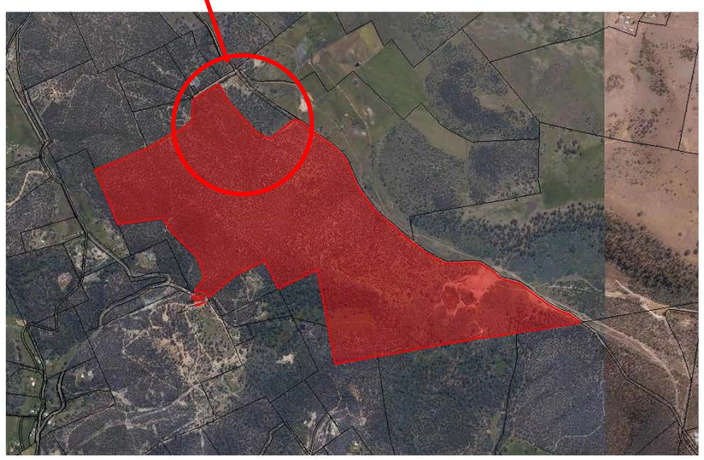
**Report 2501SHA.BRI.MCG1.0**
**Roger Fenwick  BFP 162  Scope 1, 2, 3A, 3B**

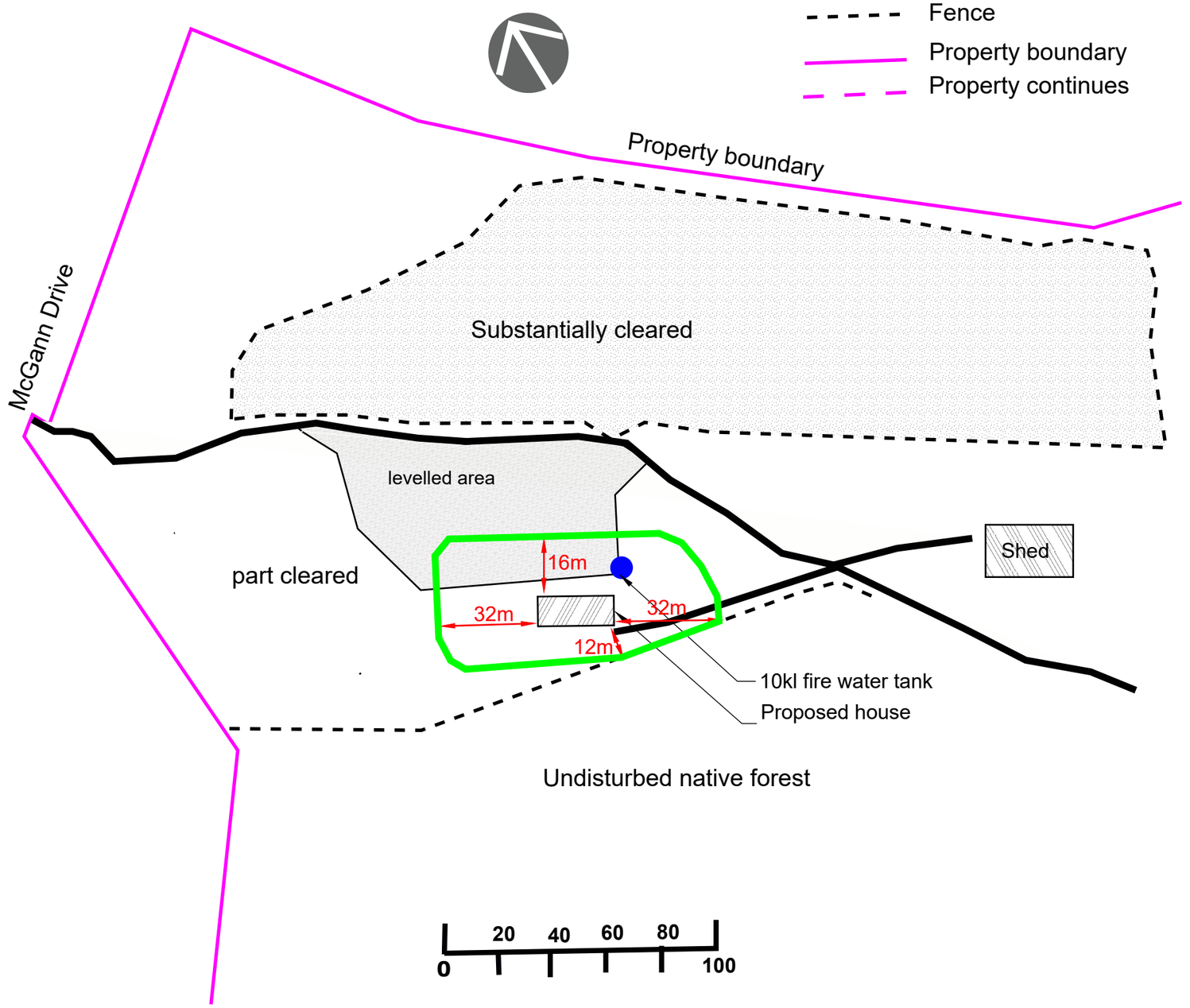
**21 March 2025**

**The Hazard Management Area covers the area outlined in green.**

Within the HMA maintain lawn to 25mm or other low ground cover, kept green if possible, or garden with only isolated shrubs and trees at least 2m from walls & 5m from windows.  Do not store exposed combustible rubbish or firewood within 6m of buildings.  Construction is to be to **BAL-12.5**.
10kl capacity metal construction water tank with signage and fittings per Annexure C, reserved for fire fighting use only, sited with outlet within 3m of hardstanding.
**Refer to the Report for detailed specifications**.





# Annexure C  Management specifications

Hazard Management Areas

The intent is to maintain the Hazard Management Area in a condition that will not allow the development or passage of fire able to ignite structures through radiant heat or flame contact.  In addition, providing protection against ember attack is highly desirable.  Much of the aim is to limit the intensity of the approaching fire to a level which can be absorbed without damage by the passive protection measures included in the house construction.  The materials used have been chosen to (probably) not be ignited (eg walls) or be sufficiently heat-affected to break (eg windows) during the passage of the fire. It is assumed that nobody will necessarily be present during the passage of the fire, so that the structure will hopefully survive by itself.  Heat from the head of the approaching fire will probably be at its peak for around 5 minutes, but embers, smoke and uncomfortably high heat will continue for around an hour or so.  Attendance by suitably clothed, trained, fit and able-bodied people with appropriate equipment immediately after passage of the fire increases the likelihood of the structure surviving, particularly if small local patches have ignited.

Fire must be kept far enough away to limit the radiant heat which will threaten both structures and anyone (homeowners, fire-fighters) in the path of the fire.  Basically, fire spreads rapidly in surface litter and low grassy growth, and develops tall flames in the shrub layer.  That makes things difficult for fire-fighters trying to work the fire edge.  With enough heat generated by vigorous fire in the shrubs and sapling (understorey) layers, the fire flame height will increase, and involve the crowns of the overstorey trees.  Flames also run up the bark of many fibrous-barked eucalypt species, adding to the overall heat output but primarily creating showers of embers

Limiting fire behaviour is achieved by separating the various vegetation components both vertically and horizontally.  Less surface litter will result in a slightly slower-moving fire, putting out less heat and therefore slower to ignite the shrub layer.  Partial removal of the shrub layer significantly reduces the low-level flame height, making it easier for fire-fighters to work near the fire edge, and becoming less likely to ignite the sapling layer.  Keeping the shrub and sapling layer fire intensity low means that fire is unlikely to move into the canopy of the overstorey.  That is a crown fire, and is completely uncontrollable by any means.

Limiting ember production is best achieved by not having rough-barked species nearby, or by removing the loose outer bark layer before fire gets near.  That can be done by intentionally (with appropriate permissions, after taking proper precautions, and under experienced supervision, and **not** during the fire season!) setting fire to the bark and having it run up the stem.  That will leave a blackened stem for maybe 4 -5 years, but should dramatically reduce ember production for 15-20 years, depending on the species.

Protecting against ember attack relies largely on proper construction material selection and design that will not trap embers or the litter on which they may land and ignite.  Properly screened openings are essential, but good plant selection and layout can create an ember shield, to deflect or trap embers approaching the house.  Remember that embers will also accumulate in the sheltered side, in the eddy zone behind the house.  Anywhere leaves accumulate, so will embers.

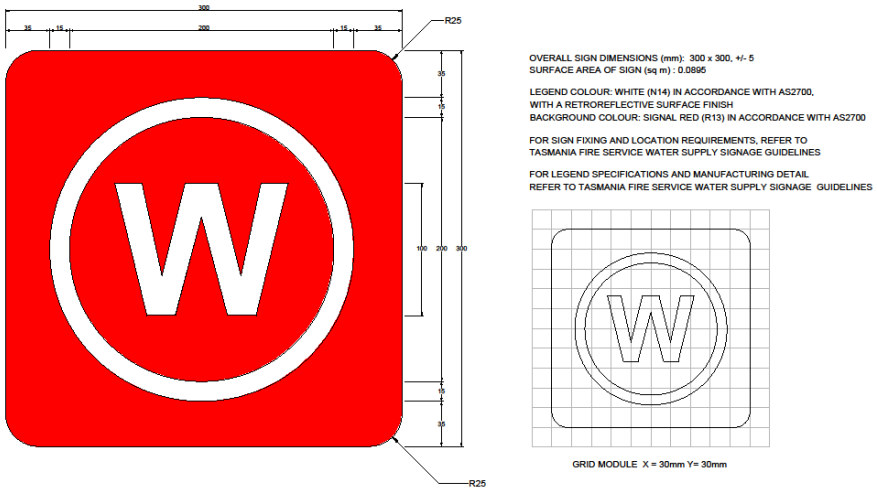
It is essential to keep even low creeping flames from contacting walls of the house.  Maintain a path at least 30cm wide completely clear of all flammable material immediately between the garden/ lawn area – a concrete or gravel path, bare soil, whatever – and the house.

The HMA is to be kept in a substantially cleared condition, with a minimum of flammable material and plants.

Within the HMA, mown lawn and only occasional scattered low-flammability ornamental shrubs, garden plants and the like, plus the mature trees indicated for retention should be allowed.

- Immediately beside the house there must be a strip not less than 30cm wide which is kept bare of any combustible material.
- Grass must be kept mown to not more than 25mm in height, and should be kept watered and green within 5m of a wall.
- Shrubs should not be located within 2m of a wall, or within 5m of a window.
- Avoid using combustible mulch within 2m of a window and within 1m of a wall – use pebbles instead in these settings.
- Trees are to be kept well-spaced, with one crown diameter between canopy crowns, and one shrub (or shrub cluster to 5m diameter) between shrubs or shrub clusters. (If trees have a 10m diameter canopy, there should be 10m between their canopies, ie 20m between trunks. Similarly, a 2m diameter cluster of shrubs should not be within 2m of other shrubs.
- Favour smooth-barked over rough-barked trees, and low-flammability species.
- Prune all tree branches to a height of 2m.
- Shrubs should not be located directly under trees.
- Don't have open woodpiles or locate rubbish heaps within the HMA.

**Water tank signage** meeting the requirements of AS 2304-2011 or as per the design below, is required. The sign must be within 1m of the location of the outlet, at least 400mm above ground level, located to be visible from an approaching vehicle, and not obstruct access to the outlet.




All above-ground components must be metal, or lagged with non-combustible material. Buried components must be not less than 300mm deep.

The (not less than 50mm bore) outlet and ball or gate valve must be

- on the water storage tank, or
- beside an approved remote takeoff point located in a protected position, 450-600mm above ground and supplied by a pipe not less than 50mm internal diameter,

so that all parts of the building are within 90m of the outlet.

Water takeoff points must be fitted with a Storz 65mm coupling and suction washer, plus a blank cap on a chain at least 220mm long. They must not be within a parking area, and must be accessible from a hardstanding area located within 3m of the take-off point and not closer than 6m to the building.

The hardstanding area must be at least 3m in width, and connected to the general access driveway, and be constructed so that when occupied by a tanker, the tanker will not obstruct the passage of other vehicles. A tanker must have direct access from the hardstanding to a turning area with arms at least 4m in width and 8m in length.

## Annexure D Form 55 Certificate

# CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

**Section 321**

To: S Eyers & J Goldfinch *Owner /Agent*
PO Box 243 *Address*
Brighton Tas 7030 *Suburb/postcode*

Form **55**

## Qualified person details:

Qualified person: Roger Fenwick
Address: PO Box 86B
Kettering 7155
Phone No: 0411 609 906
Fax No:
Licence No: BFP-162
Email address: roger@bushfire-consultant.com.au

Qualifications and Insurance details: Accredited No 162 under the Fire Service Act 1979
Professional Indemnity & Public Liability insurance by Lloyd's

*(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items*

Speciality area of expertise: Analysis of hazards in bushfire-prone areas

*(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)*

## Details of work:

Address: 113 McGann Drive
Brighton Tas 7030
Lot No: 6
Certificate of title No: 165891

The assessable item related to this certificate: Assessment of bushfire attack level for new construction - Class 1a

Note that new works involving a Performance Solution must be approved by TFS via a Form 47.

*(description of the assessable item being certified)*
*Assessable item includes –*
- *a material;*
- *a design*
- *a form of construction*
- *a document*
- *testing of a component, building system or plumbing system*
- *an inspection, or assessment, performed*

## Certificate details:

Certificate type: Bushfire hazard assessment

*(description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)*

This certificate is in relation to the above assessable items, at any stage, as part of – *(tick one)*

☒ building work, plumbing work or plumbing installation or demolition work

OR

☐ a building, temporary structure or plumbing installation

In issuing this certificate the following matters are relevant –

| | |
|---|---|
| Documents: | Bushfire Hazard Assessment Report dated March 2025 including Bushfire Hazard Management Plan dated March 2025<br>AS 3959-2018 *Construction of buildings in bushfire-prone areas*<br>Plans by Phil Cuthbertson |
| Relevant calculations: | Method 2 calculations appended to Report |
| References: | N/A |

*Substance of Certificate:* *(what it is that is being certified)*

A bushfire assessment and management plan for proposed new construction, in accordance with BAL-12.5 construction standard of AS 3959-2018.

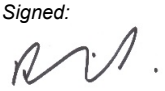
Approval of Performance Solution components requires a Form 47 from the TFS.

*Scope and/or Limitations*

A Bushfire Hazard Assessment was commissioned by the owners to identify the potential bushfire risk and BAL rating, and to recommend appropriate compliance and protection measures.

Limitations: The proposed measures comply with the guidelines. Full compliance with the requirements in this report and/or AS 3959-2018 does not guarantee survival of structures or persons.

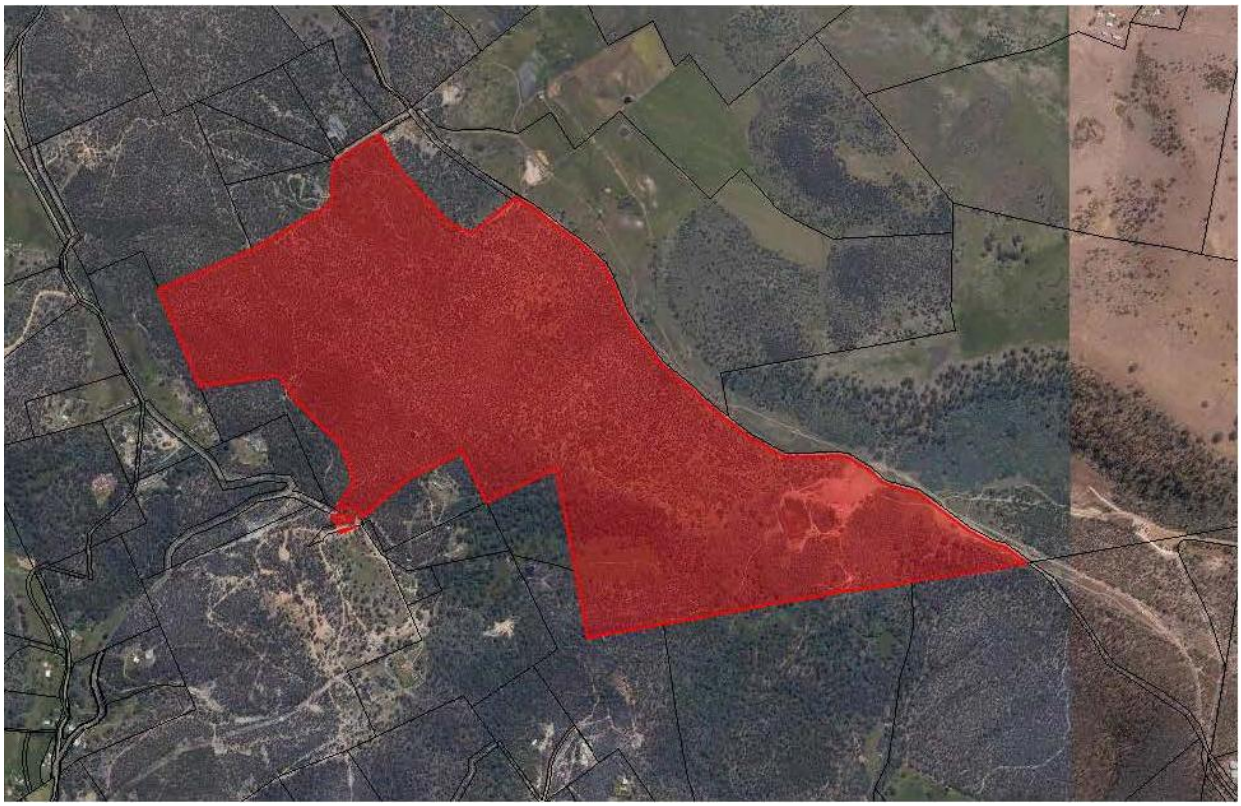
**I certify the matters described in this certificate.**

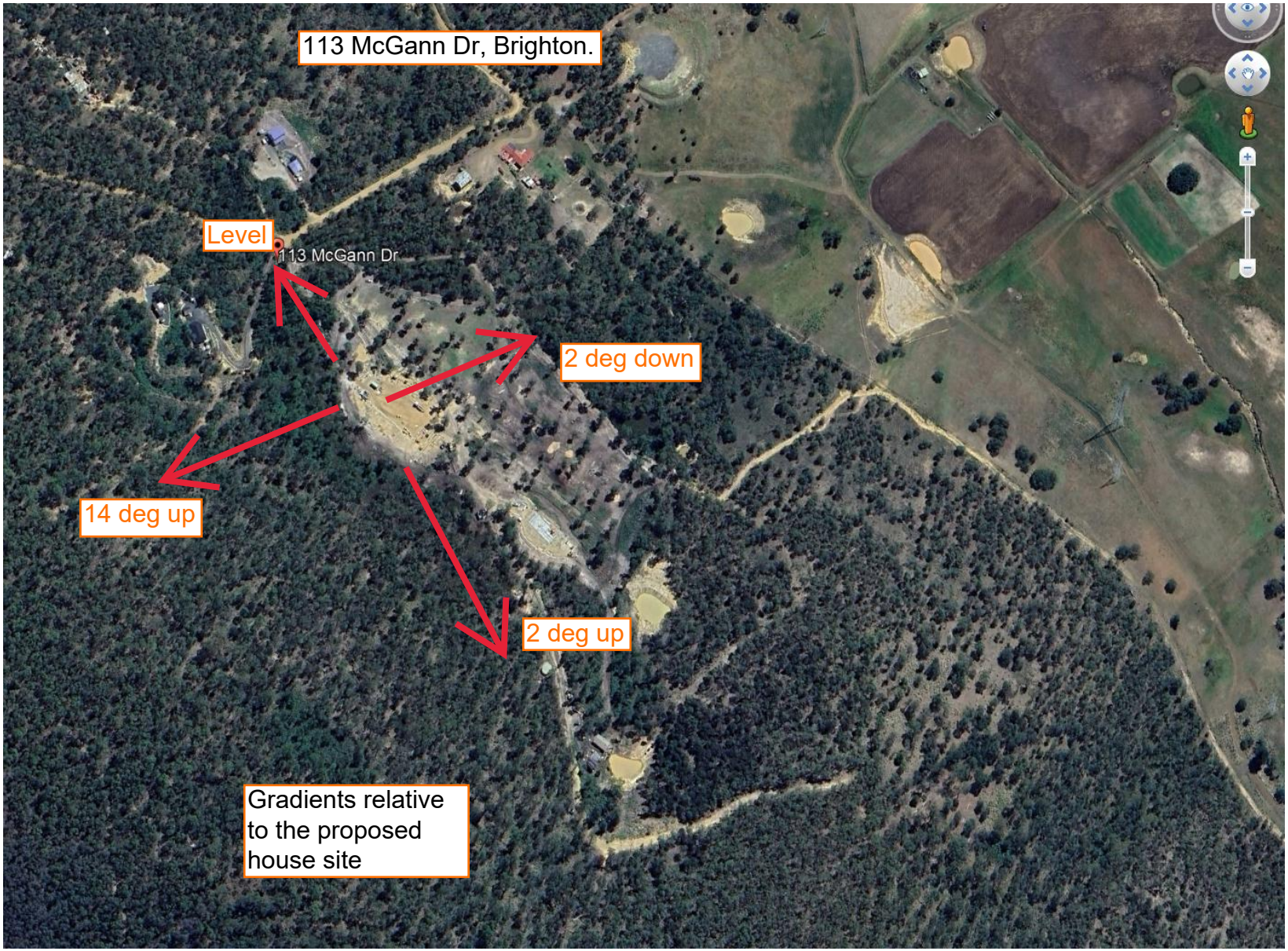
| *Signed:* | *Certificate No:* | *Date:* |
|---|---|---|
|  | 2501SHA.BRI.MCG1.0 | 21 March 2025 |

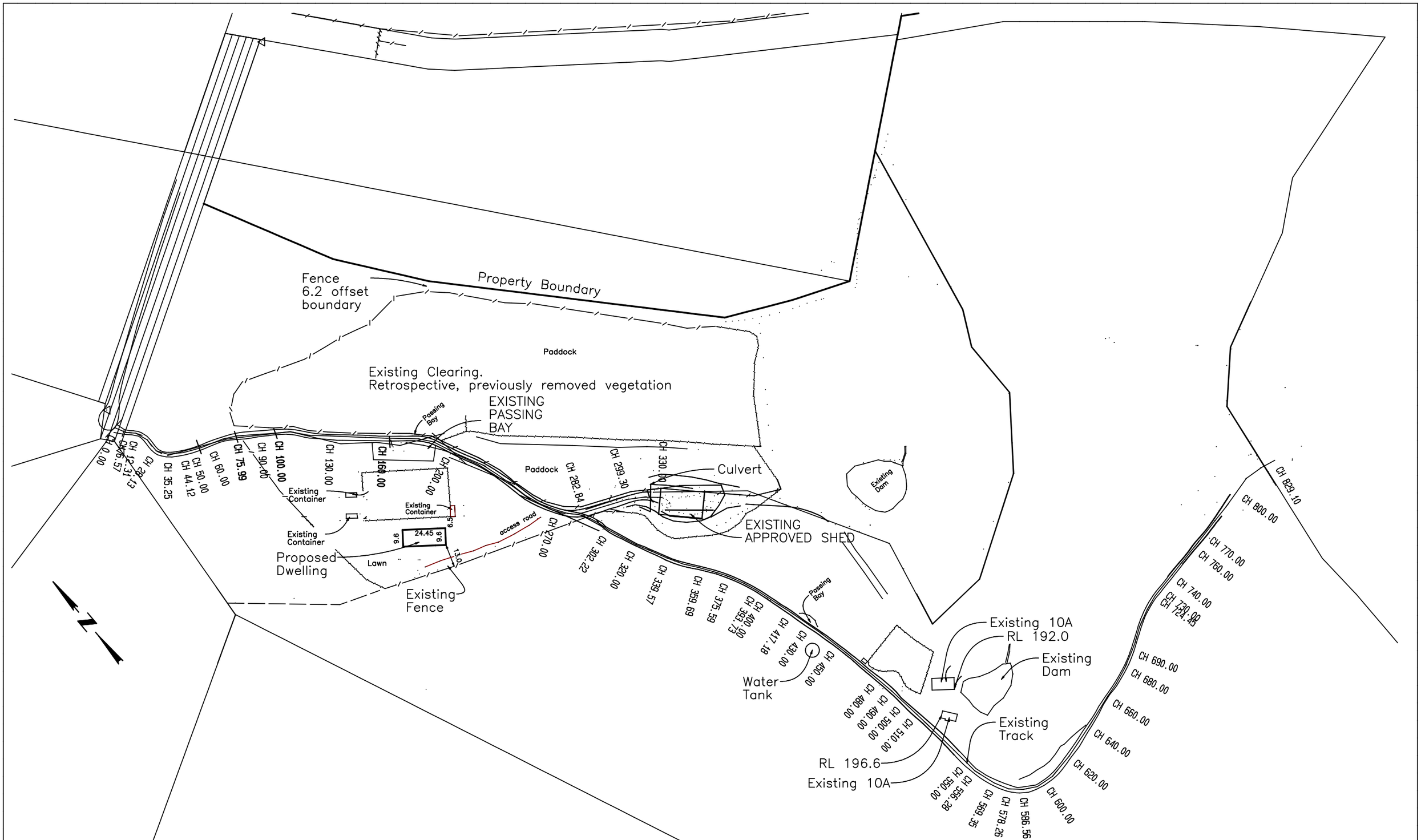
Qualified person:

# Annexure E  Site plans


Black Brush
C186
ELDERSLIE ROAD
RIVER
Winton Hill
Shene Hill
Merriworth Hill
ROAD
Rekuna
Strathallan
Pontville
TEA TREE
Coal Brains Hill
McShane Hills
C185
C195
C321
Tea Tree
MIDDLE TEA TREE
BRIGHTON
Jews Hill
Cobbs Hill
C325
C323
C322
Hammonds Gunns SL
MT DROMEDARY
Millvale
Upper Dromedary
Pig Hill
MEEHAN RANGE
C326
Dromedary
DERWENT ESTUARY HIGHWAY
BRIDGEWATER
GAGEBROOK
Mt Terra
ROAD
A10
Granton
C326
C327
Quoin Rl
Duckhole
B10
LYELL HIGHWAY
Snake Mt
B32
EAST DERWENT
Gunners Quoin
HILL
Boyer
BOYER ROAD
OLD BEACH
GRASSTREE HILL
C324
Sorell Creek
C615
Malbina
MT FAULKNER
Grasstree Hill
Sorell
CLAREMONT
MT DIRECTION
GRASS TREE
Basin Hills
Glen Dhu
Molesworth
BERRIEDALE
RIVER
Otago
HWY
RISDON VALE
C615
B35
Risdon
Sugarloaf Hill
Big Rocky
Glenlusk
GLENORCHY




113 McGann Dr, Brighton.
Level
113 McGann Dr
2 deg down
14 deg up
2 deg up
Gradients relative to the proposed house site




Property Address

113 MCGANN DR BRIGHTON TAS 7030
Property ID 3236692
Title Reference 165891/6

JACOB RIORDAN GOLDFINCH & SHARON ANNE EYERS

SHEET 3 OF 3

| DATE | SCALE |
|---|---|
| 26 Feb 2025 | 1 : 2000 |
| DRAWN | FILE |
| AJP | 6199 10 |
| SURVEYED | |
| AJP | |


A.J PHILLIPS SURVEYING
6 Bindaree Road
Legana
Tasmania
7277

email: ajpsurv@bigpond.net.au
Mobile 0412 315 880


# DETAIL/ CONTOUR PLAN
# FUTURE CULVERTS
# PASSING BAYS
# CHAINAGE OF EXISTING TRACK

DURING CONSTRUCTION SERVICE TRENCHES TO BE MANAGED TO PREVENT EROSION AND SITE CONTAMINATION. TRENCH BACKFILL TO BE COMPACTED TO 95% STANDARD COMPACTION AND FINISHED ABOVE SURROUNDING GROUND TO ALLOW FOR SETTLEMENT.

NO CLEARING OR DISTURBANCE OF NATIVE VEGETATION ON SITE IS TO BE CARRIED OUT WITHOUT THE APPROVAL OF COUNCIL

EXISTING SHIPPING CONTAINER STORAGE TO REMAIN

EXISTING SHIPPING CONTAINER STORAGE TO REMAIN

EXISTING CLEARED/LEVEL AREA

ON COMPLETION OF THE BUILDING WORKS THE AREA NOMINATED AS THE BUSHFIRE HAZARD MANAGEMENT AREA SHOWN HATCHED IS TO BE MAINTAINED IN A LOW FUEL CONDITION IN ACCORDANCE WITH THE BUSHFIRE HAZARD MANAGEMENT PLAN. REMINDER OF CLEARED AREAS TO BE ALLOWED TO REGENERATE NATURALLY

DRIVEWAY TO SATISFY THE REQUIREMENTS OF THE NCC CLAUSE TAS 3.7.4.1 VEHICULAR ACCESS AND THE AUSTRALIAN ROAD RESEARCH BOARD "UNSEALED ROADS MANUAL - GUIDELINES TO GOOD PRACTICE, MARCH 2009" FOR A CLASS 4C ACCESS ROAD. ACCESS ROAD, IF LESS THAN 6m CARRIAGEWAY WIDTH, MUST HAVE 20m LONG PASSING BAYS 6m WIDE NOT MORE THAN 200m APART. CULVERTS, BRIDGES ETC TO BE CONSTRUCTED FOR A MINIMUM VEHICLE LOAD OF 20 TONNES. VEGETATION TO BE CLEARED FOR A HEIGHT OF 4m ABOVE CARRIAGEWAY AND FOR A DISTANCE OF 2m EACH SIDE OF THE CARRIAGEWAY.

ALL EARTHWORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS 3798-2007 GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS

AS SOON AS POSSIBLE ON COMPLETION OF WORKS THE SITE IS TO BE RE-VEGETATED TO REDUCE SOIL EROSION. EXPOSED SOIL TO BE STABILISED UNTIL PERMANENT VEGETATION GROWS

INSTALL PERMANENTLY FIXED SIGNAGE TO FIRE-FIGHTING WATER TANK IN ACCORDANCE WITH DIRECTORS DETERMINATION-REQUIREMENTS FOR BUILDING IN BUSHFIRE PRONE AREAS.

WATER FROM THE FIRE TANK IS NOT TO BE USED FOR ANY OTHER PURPOSES INCLUDING FIRE-FIGHTING SPRINKLERS OR SPRAY SYSTEM

FIRE TANK

EXISTING SHIPPING CONTAINER STORAGE TO REMAIN

EXISTING SANDSTONE RETAINING WALL APPROX 750 HIGH

16000

169.0

170.0

171.0

32000

172.0

173.0

174.0

175.0

PROPOSED RESIDENCE

FFL RL 174.50

32000

HAZARD MANAGEMENT AREA

CAR PARKING FOR TWO VEHICLES. GRADIENT OF PARKING AREA NOT TO EXCEED 5%

BATTERED BANK APPROX 500 HIGH

12000

EXISTING VEHICLE ACCESS

CUT-OFF DRAIN CONSTRUCTED ON HIGH SIDE OF SITE PRIOR TO WORKS COMMENCING AND MAINTAINED FOR DURATION OF WORKS. DRAIN TO BE MAINTAINED FREE FROM PLANTINGS MULCH. PROVIDE LEVEL ROCK SPREADER AT OUTLET TO REDUCE SOIL EROSION

EXISTING FENCE

## SITE CONTAMINATION PROTOCOLS

- REFER NRM SOUTH "SOIL AND WATER MANAGEMENT ON CONSTRUCTION SITES" GUIDELINES AND TASMANIAN STANDARD DRAWING TSD-SW28 FOR FURTHER INFORMATION AND GUIDELINES FOR SOIL AND WATER MANAGEMENT
- DISTURBANCE OF THE SITE BEYOND THE CONSTRUCTION AREA IS TO BE KEPT TO A MINIMUM. CONTRACTORS AND VISITORS TO SITE ARE TO AVOID DISTURBING, DRIVING OR WALKING BEYOND THE WORKSITE
- THE PRINCIPAL CONTRACTOR IS TO ESTABLISH "NO GO AREAS" TO RETIAN AS MUCH VEGETATION AS POSSIBLE FROM DAMAGE
- ALL FOOTWEAR, TOOLS, PLANT AND EQUIPMENT IS TO BE CLEANED OF ALL MUD, SOIL AND DEBRIS PRIOR TO DEPARTURE FROM THE SITE
- ADDITIONAL WATER TO BE SUPPLIED ON SITE BY THE PRINCIPAL CONTRACTOR FOR CLEANING PURPOSES
- SEDIMENT AND EROSION CONTROL MEASURES TO BE REGULARLY INSPECTED BY THE PRINCIPAL CONTRACTOR TO ENSURE SYSTEMS ARE IN PLACE AND OPERATIONAL

- DRAFT -
NOT FOR CONSTRUCTION

ISSUE:

Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H

SCALE: 1:250 AT A3
0m 5m 10m



PROPOSED: RESIDENCE

DRAWING: SITE WATER MANAGEMENT PLAN

FOR: J GOLDFINCH AND S EYERS

AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612 SK-A-02

OF 1 SHEET / S

DATE DRAWN: MARCH 2025

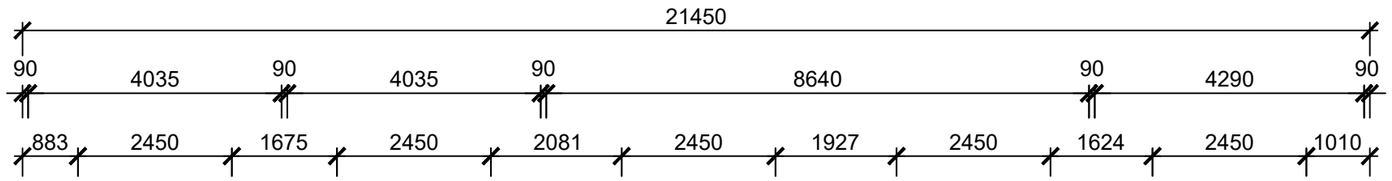
## ENERGY EFFICIENCY

REQUIREMENTS TO SATISFY NCC PART 3.12 ENERGY EFFICIENCY:

ROOF
INSULATION INSTALLED TO HAVE MINIMUM R VALUE OF: 4

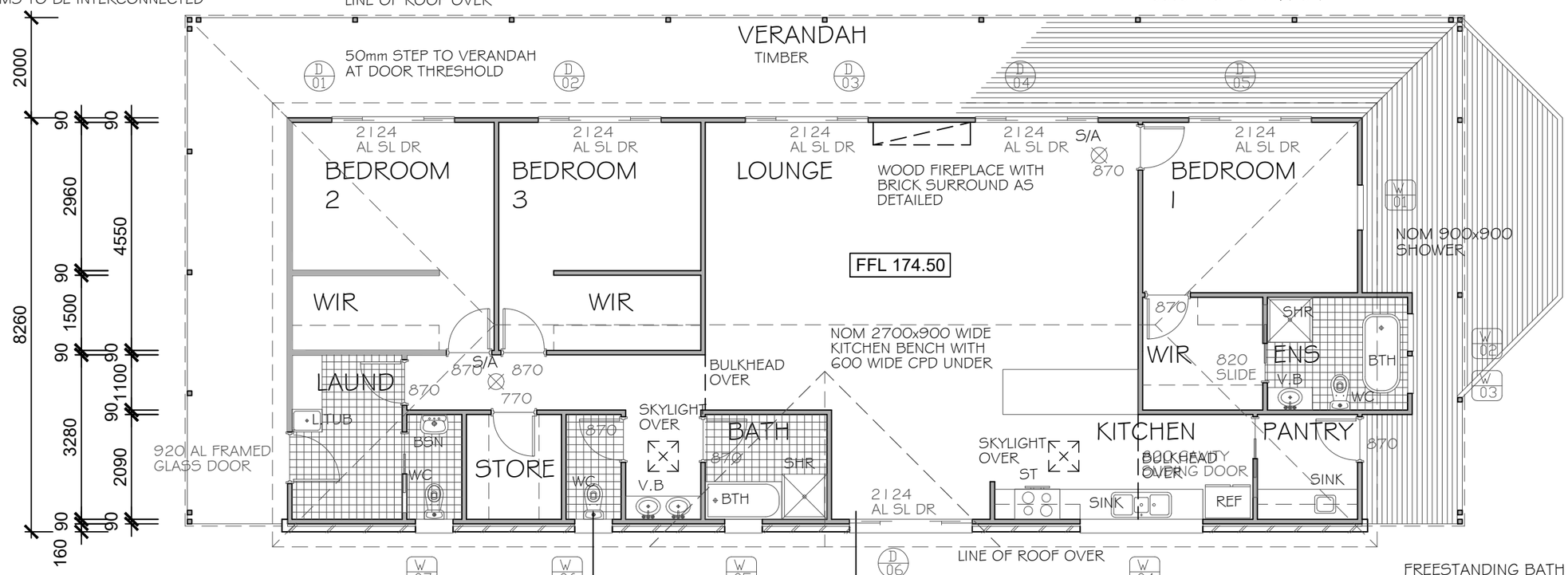
EXTERNAL WALLS
INSULATION INSTALLED TO HAVE MIN R VALUE OF: 2.5

THE BUILDING OWNER IS RESPONSIBLE FOR THE SELECTION OF FLOOR FINISHES IN THE PEDESTRIAN TRAFFICABLE AREAS OF THIS BUILDING. SURFACES SHOULD BE SELECTED IN ACCORDANCE WITH AS HB 197:1999 AND AS/NZS 4586.2004




S/A ⊗ INDICATES LOCATION OF SMOKE ALARM COMPLYING WITH AS3786 AND NCC PART 3.7.5 AND CONNECTED TO THE CONSUMER MAINS POWER. MULTIPLE ALARMS TO BE INTERCONNECTED

VERANDAH FLOOR LESS THAN 300mm FROM GLAZED ASSEMBLY ELEMENT (MEASURED HORIZONTALLY AT DECK LEVEL) TO BE SHEETED WITH BUSHFIRE RESISTENT TIMBER FLOORING, TILES OR COMPRESSED FIBRE CEMENT. NO REQUIREMENT FOR DECKING MATERIAL GREATER THAN 300mm FROM GLAZED ELEMENT




ALL GLAZING TO BE TAGGED OR CERTIFIED FOR COMPLIANCE WITH NCC, AS1288 AND, WHERE APPLICABLE, AS2047

WALL FRAMES AND SHEETING:
1. ALL INTERNAL WALLS ARE 90mm THICK TIMBER FRAMED
2. ALL EXTERNAL WALLS ARE 90mm THICK TIMBER FRAMED
3. DIMENSIONS ARE TO WALL FRAMES (UNLESS NOTED OTHERWISE)
4. PLASTERBOARD WALL AND CEILING SHEETING GENERALLY THROUGHOUT
5. WR PLASTERBOARD TO WET AREAS

CONSTRUCTION TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE BUSHFIRE ASSESSMENT REPORT TO ACHIEVE BAL 12.5 IN ACCORDANCE WITH SECTIONS 3&4 OF AS3959-2018

ROOF LIGHT OR SKYLIGHT IN A HABITABLE ROOM TO BE SEALED OR CAPABLE OF BEING SEALED AND MUST BE CONSTRUCTED WITH AN IMPERFORATE CEILING DIFFUSER OR THE LIKE AT CEILING LEVEL, A WEATHERPROOF SEAL, OR A SHUTTER SYSTEM OPERATED BY THE OCCUPANT

WOOD HEATER AND TILED HEARTH AS SELECTED BY OWNER INSTALLED TO COMPLY WITH AS2918-2001 DOMESTIC FUEL BURNING APPLIANCES - INSTALLATION. CHIMNEY TO BE FITTED WITH A DAMPER OR FLAP THAT CAN BE CLOSED TO SEAL THE CHIMNEY OR FLUE

### FLOOR AREA

| | |
|---|---|
| HABITABLE AREA | 176 sqm |
| VERANDAH | 92 sqm |
| TOTAL | 268 sqm |

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Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED: RESIDENCE

DRAWING: FLOOR PLAN

FOR: J GOLDFINCH AND S EYERS

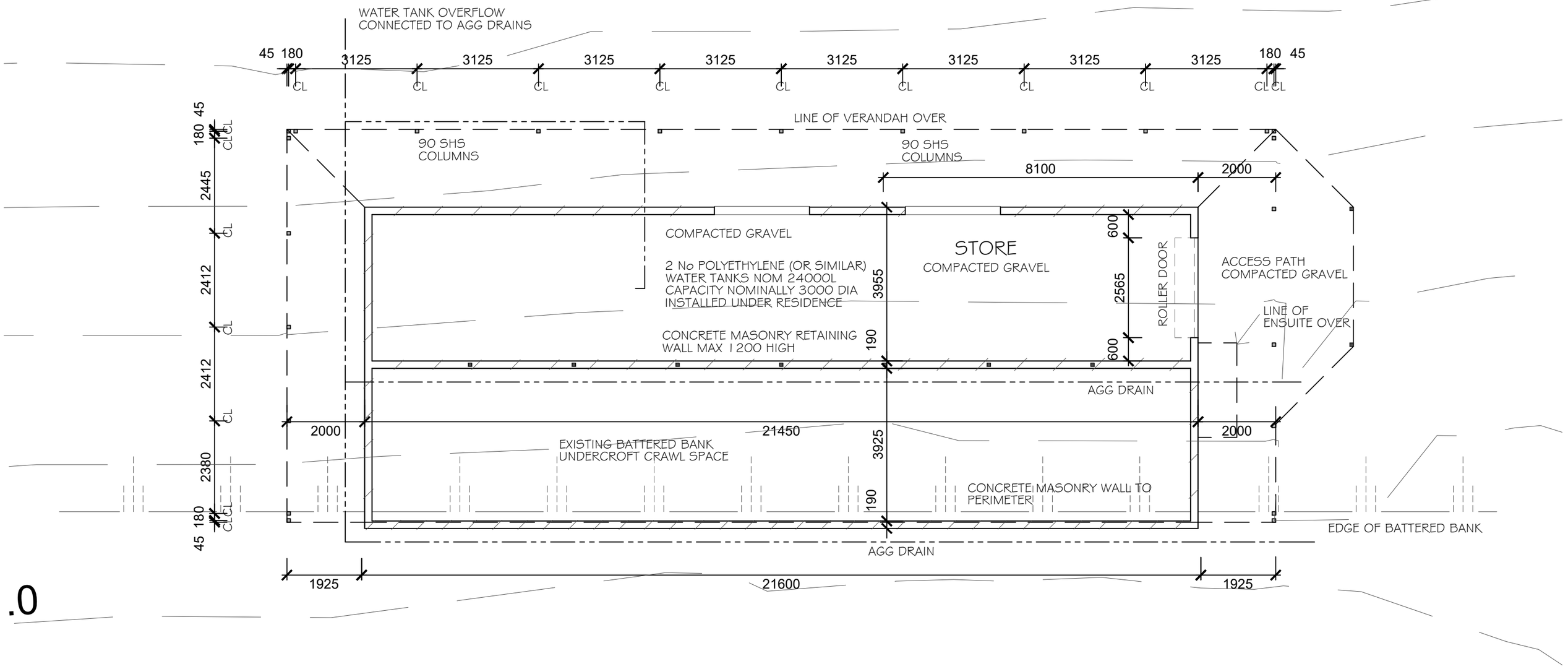
AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612

SK-A-03

OF 1 SHEET / S

DATE DRAWN: MARCH 2025




.0

- DRAFT
NOT FOR
CONSTRUCTION

175.0

ISSUE:


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS

PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com

ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H


SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED:
RESIDENCE

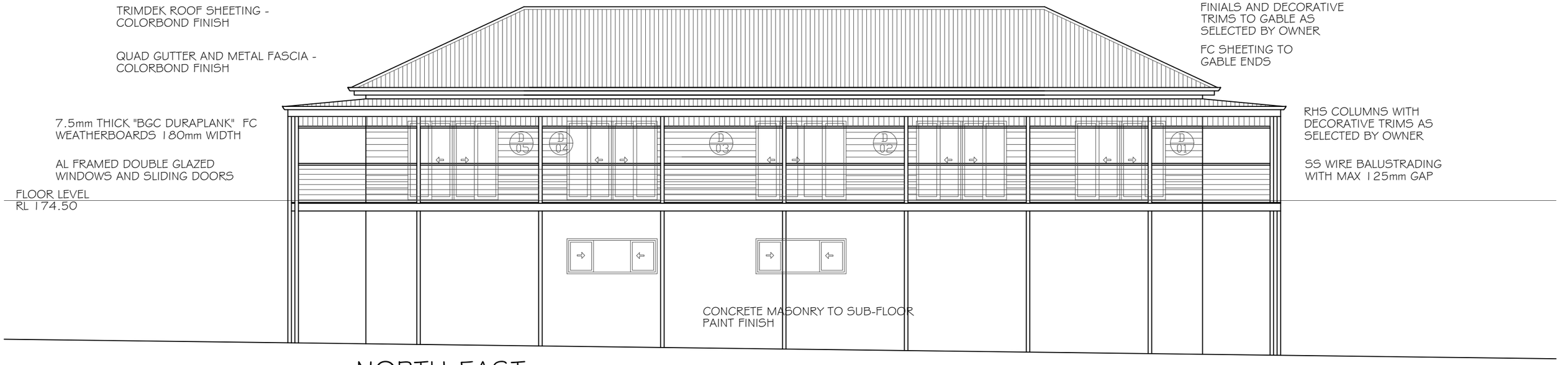
DRAWING:
FLOOR PLAN
LOWER LEVEL

FOR:
J GOLDFINCH
AND S EYERS

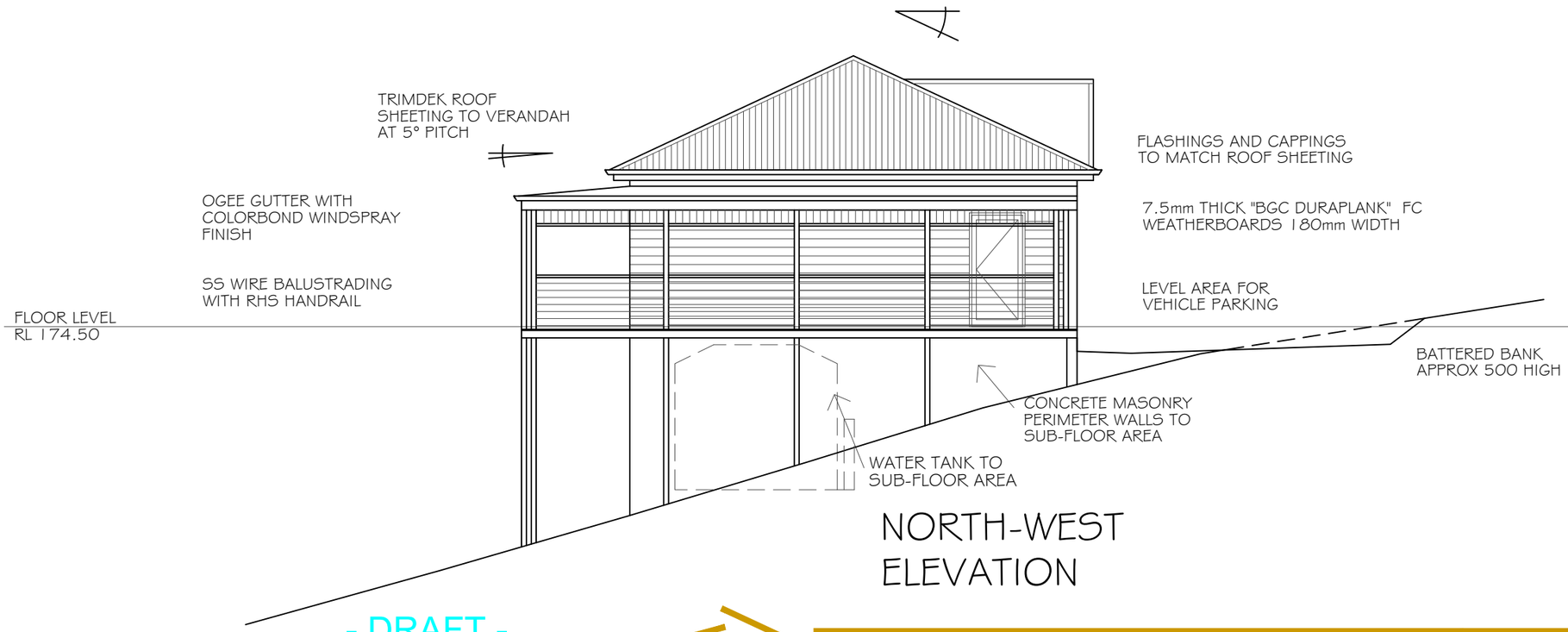
AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-04

OF 1 SHEET / S
DATE DRAWN:
MARCH 2025




# NORTH-EAST ELEVATION




# NORTH-WEST ELEVATION

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ISSUE:

Philip Cuthbertson
BUILDING DESIGN SOLUTIONS
PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com
ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
Building Accreditation No. CC2251 H

SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED: RESIDENCE

DRAWING: ELEVATIONS

FOR: J GOLDFINCH AND S EYERS

AT: 113 McGANN DRIVE BRIGHTON

JOB NO.: 1612 SK-A-06

OF 1 SHEET / S

DATE DRAWN: MARCH 2025

TRIMDEK ROOF SHEETING -
COLORBOND FINISH

QUAD GUTTER AND METAL FASCIA -
COLORBOND FINISH

TRIMDEK VERANDAH
ROOFING AT 5° PITCH

90 SHS COLUMNS
TO VERANDAH

NO BALUSTRADING REQUIRED
WHERE FFL LESS THAN900
ABOVE SURROUNDING
GROUND LEVEL

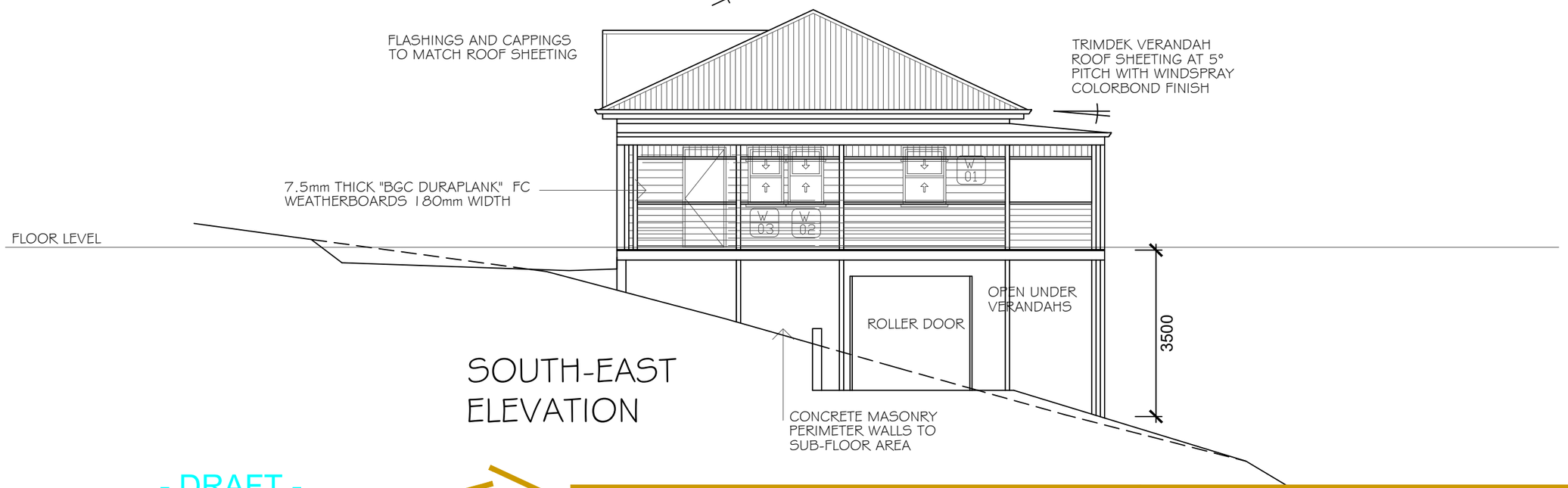

# SOUTH-WEST ELEVATION

TRIMDEK ROOF SHEETING AT
25° PITCH WITH COLORBOND
WINDSPRAY (LRI27) FINISH

FLASHINGS AND CAPPINGS
TO MATCH ROOF SHEETING

TRIMDEK VERANDAH
ROOF SHEETING AT 5°
PITCH WITH WINDSPRAY
COLORBOND FINISH

7.5mm THICK "BGC DURAPLANK" FC
WEATHERBOARDS 180mm WIDTH




# SOUTH-EAST ELEVATION

- DRAFT -
NOT FOR
CONSTRUCTION

ISSUE:


Philip Cuthbertson
BUILDING DESIGN SOLUTIONS

PO Box 240
Huonville TAS 7109
Phone: 0438 782 653
phcuthbertson@gmail.com

ABN 48 366 214 794
Bushfire Practitioner No. BFP-123
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SCALE: 1:100 AT A3
0m 1m 2m 3m 4m



PROPOSED:
RESIDENCE

DRAWING:
ELEVATIONS

FOR:
J GOLDFINCH
AND S EYERS

AT:
113 McGANN DRIVE
BRIGHTON

JOB NO.:
1612
SK-A-07

OF 1 SHEET / S
DATE DRAWN:
MARCH 2025

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS 3959 Method 2 calculations** | | | | | | | | |
| **Address** | **113 McGann Drive, Brighton** | | | | | | | |
| **PID** | **3236692** | | **Title ref** | **165891/6** | | | | |
| | | | | | | | | |
| | Inputs | derived figures | outputs | | | | | |
| FDI | 50 | w | ros | | | | | |
| Vegetation | D | 12 | 0.7 | | | | | |
| Veg Slope | | derived figures | | degrees | -14 | Forest | F | |
| HMA slope | -0.087266463 | 22 | F length | degrees | -5 | Dry Tasmanian Forest | D | |
| HMA width | 12 | R slope | 4.4 | | | Rainforest | R | |
| | | 0.3 | 4.4 | Elevation receiver | 2 | Woodland | W | |
| Flame width | 100 | W | 4.4 | | | Low heath | L | Shrubland |
| | | 22 | 4.4 | | | Heath | H | Scrub |
| | | | 4.4 | | | Grass | G | |
| | | | 4.4 | | | forest wetland | fw | |
| | | | 4.4 | | | | | |
| | | | 4.4 | | | | | |
| | | | | | | | | |
| | | R (slope) | F length | Intensity | | Radiation | 11.95 | $kWm^{-2}$ |
| Forest & Woodland | | 0.27 | 4.42 | 3115 | | | | |
| Shrub, Heath, Scrub | | 0.27 | 4.9 | 8184 | | temp (1090, 1200) | 1090 | |
| Grass | | 0.27 | 2.1 | 3115 | | | | |
| | | | | | | | | |
| flame angle | 80 | | | | | | | |
| | | | | | | | | |
| The variable inputs to this spreadsheet appear in the yellow-highlighted boxes. | | | | | | | | |
| The derived values w and W are as they appear in AS 3959, apart from individually allocated figures for D vegetation types, | | | | | | | | |
| taken from Marsden-Smedley *et al*, Fuel in Tasmanian Dry Eucalypt Forests, Fire 2022, 5, 103. Table 4 | | | | | | | | |
| The usual output is Radiation in $kWm^{-2}$ but the program can be forced to find input values matching a desired outcome. | | | | | | | | |
| **Simulations of the shielding effect of fences are made by manually adjusting the F length value** | | | | | | | | |
| **If that is done, the first column of F length values will show mis-matching numbers** | | | | | | | | |
| | | | | | | Upslope exposure | | |