

Basin plan 1:1 250 Location plan and detail NTS



LEGEND

Pacific Pine Estate Balance boundary

SOURCES

Contours and proposed layout supplied by Kennedy Surveying and SMEC Urban

Sandy Ioam Particle size 0.45 - 0.5mm Hydraulic condictivity 50 - 200mm/hr Organic content 5 - 10% Coarse sand transition Particle size typically 1.0mm 150mm Gravel drainage layer (Screenings) Particle size typically 5 - 10mm 150mm Provide impermeable layer under Notes 100mm dia perforated Filter conductivity to be measured in PVC Pipe to be graded accordance with AS4419:2003. to fall to a free draining Filter organic content to be measured outlet. in accordance with AS1289 4.1.1. TYPICAL BIORETENTION BASIN FILTER ZONE DETAIL Bioretention Basin 4 Details Bioretention Basin 3 Details Filter/Surface Area = 90m<sup>2</sup>/90m<sup>2</sup> Extended Detention Depth = 0.3m Filter/Surface Area = 200m<sup>2</sup>/270m<sup>2</sup> Filter Depth = 0.6m Extended Detention Depth = 0.3m Filter Depth = 0.6m Basin 4 Basin 3 29 50 25 23 35 FOX VALLEY ROAD 16 15 13



PACIFIC PINES ESTATE LENNOX HEAD, NSW

CLIENT LEND LEASE

BIORETENTION BASIN DETAILS

 DATE 24/09/2012
 DRAWN BWS

 SCALE 1:1 250 & NTS
 CHECKED CMA

 PROJECT NO 10734
 DRAWING NO 1.6
 REVISION B

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50 100 150 200 250 metres

SCALE
1:5 000



ORIENTATION

LEGEND

LEGEND

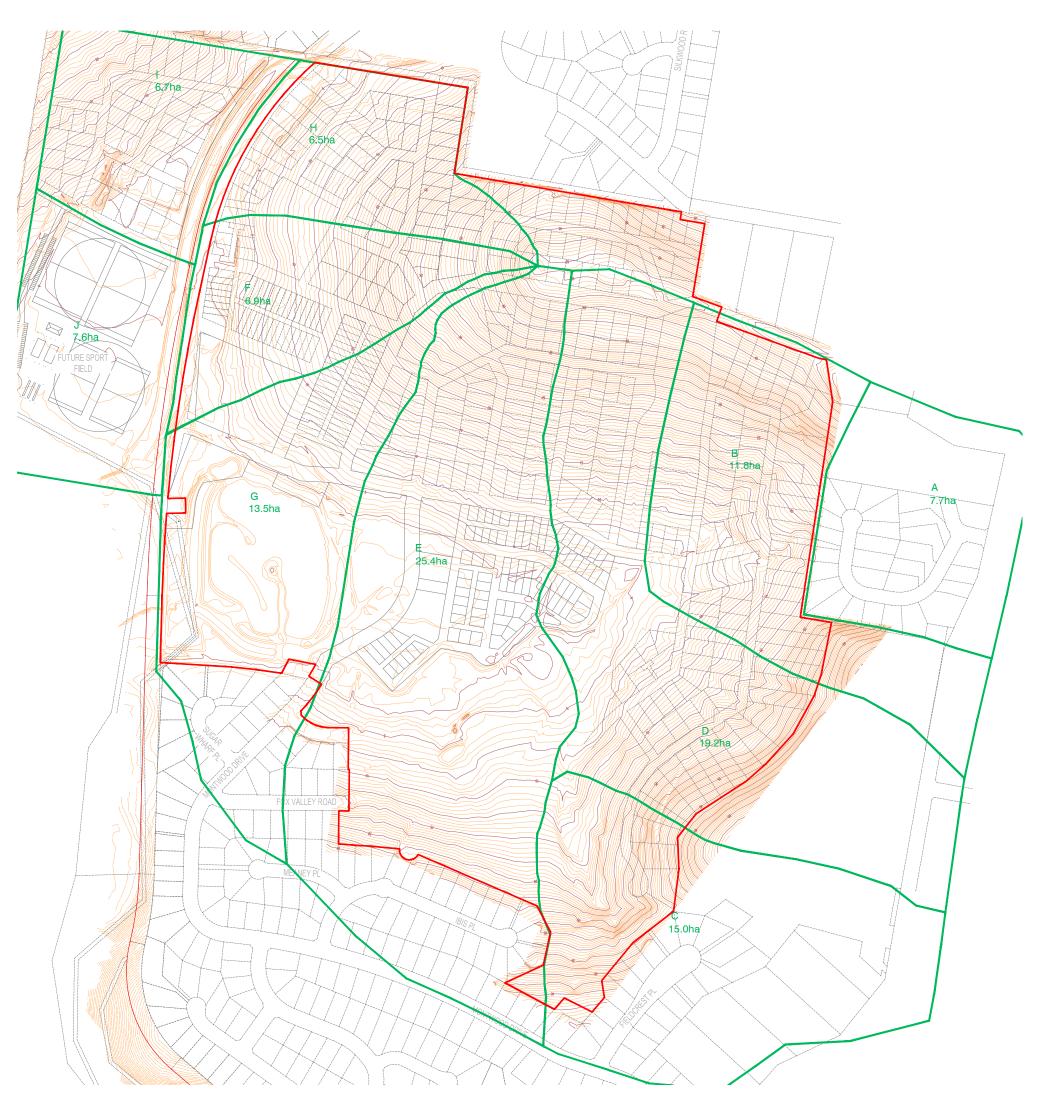
Pacific Pines Estate balance boundary

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WBNM base case catchment boundary

## SOURCES

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PACIFIC PINES ESTATE LENNOX HEAD, NSW

CLIENT LEND LEASE

WBNM BASE CASE CATCHMENT PLAN

 DATE 24/09/2012
 DRAWN BWS

 SCALE 1:5 000
 CHECKED CMA

 PROJECT NO 10734
 DRAWING NO 1.7
 REVISION B

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SCALE 1:5 000



ORIENTATION

## LEGEND

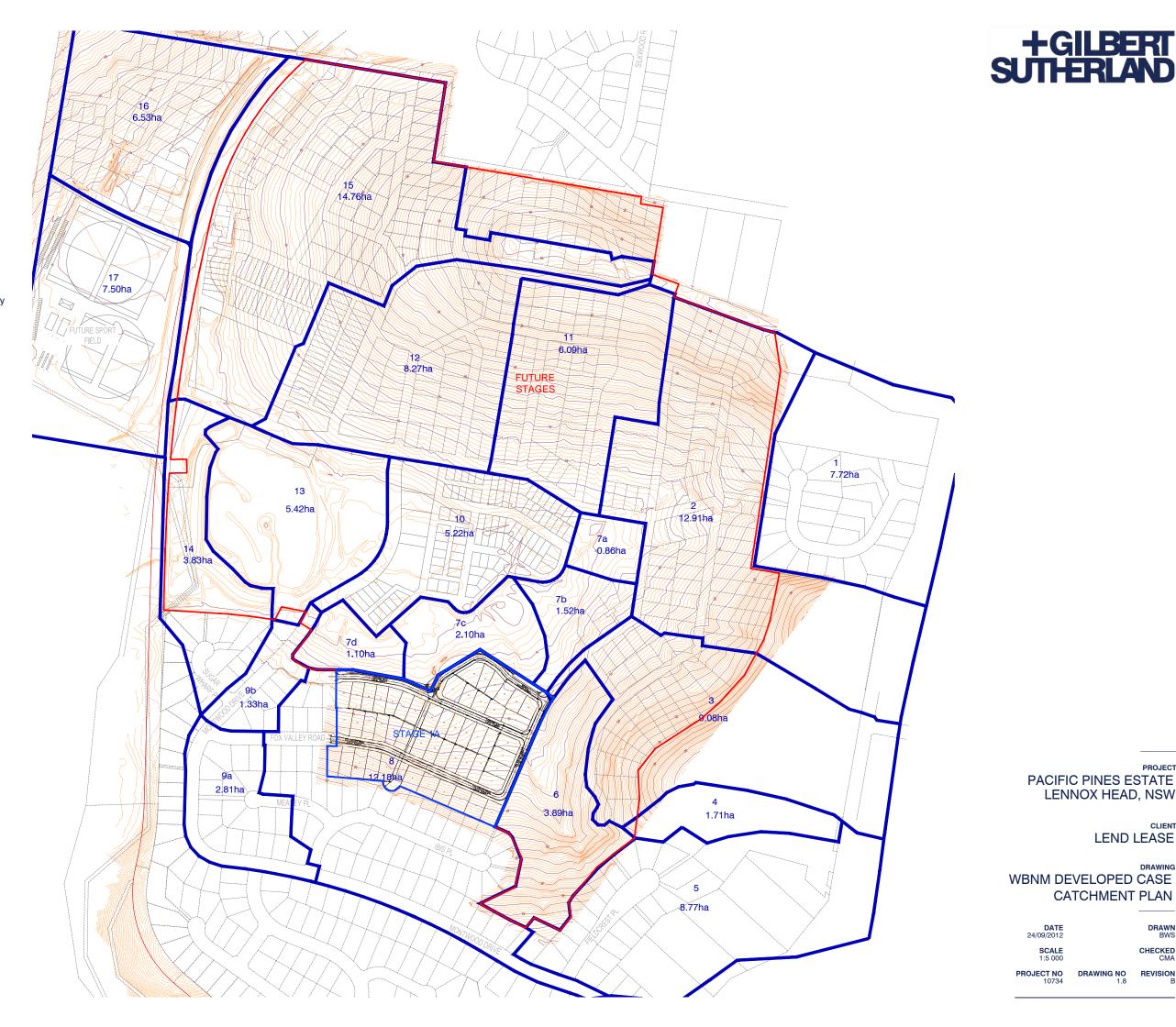
Pacific Pines Estate balance boundary

Stage 1A boundary

WBNM developed case catchment boundary

#### **SOURCES**

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AGRICULTURE WATER ENVIRONMENT

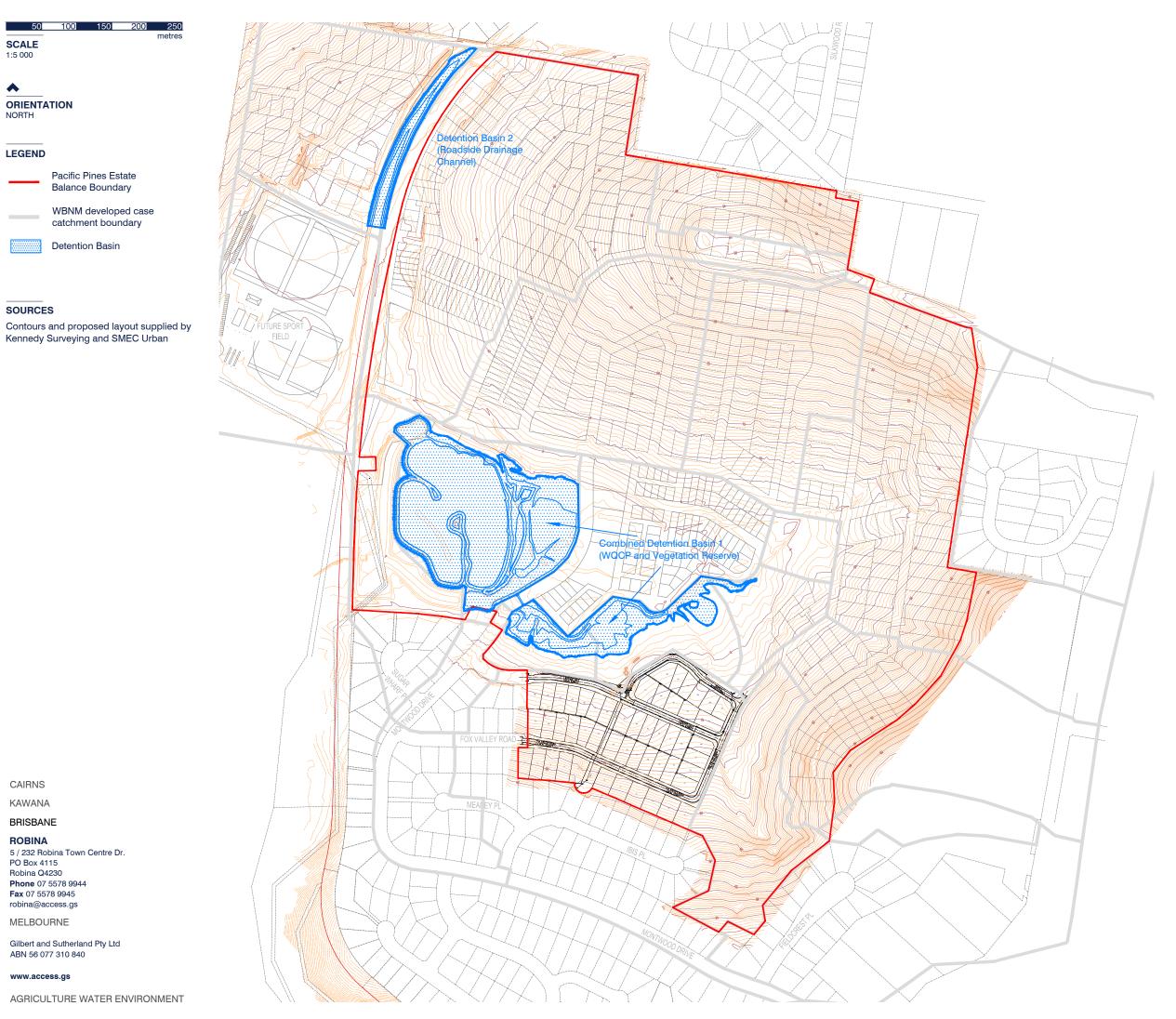
PROJECT

PACIFIC PINES ESTATE LENNOX HEAD, NSW

> CLIENT LEND LEASE

DRAWING WBNM DEVELOPED CASE **CATCHMENT PLAN** 

**DATE** 24/09/2012 DRAWN BWS CHECKED CMA PROJECT NO 10734 DRAWING NO 1.8 REVISION B





PROJECT PACIFIC PINES ESTATE LENNOX HEAD, NSW

> CLIENT LEND LEASE

> > DRAWN BWS

DRAWING **DETENTION BASIN LAYOUT** 

**DATE** 24/09/2012

SCALE 1:5 000 CHECKED CMA

PROJECT NO 10734

DRAWING NO REVISION B

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SCALE 1:5 000

ORIENTATION

Pacific Pines Estate Balance Boundary

**Detention Basin** 

Kennedy Surveying and SMEC Urban

WBNM developed case catchment boundary

**LEGEND** 

SOURCES

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Basin plan 1:1 250 Location plan and detail NTS



ORIENTATION

NORTH

LEGEND

Pacific Pine Estate Balance boundary

#### **SOURCES**

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⊢NSL Topsoil (variable) Gravel drainage layer 300mm 150mm perforated UPVC pipe @ 1.25% (min.) grade 600mm Provide flushout points with caps at end of line INFILTRATION TRENCH TYPICAL DETAIL Trench 3 Infiltration drain nfiltration drain (refer to typical detail) to typical detail) 47 Trench 4 29 50 25 23 35 18 15 13



PACIFIC PINES ESTATE LENNOX HEAD, NSW

CLIENT LEND LEASE

INFILTRATION TRENCH DETAILS

DATE 24/09/2012 DRAWN BWS

SCALE 1:1 250 & NTS CMA

PROJECT NO DRAWING NO REVISION

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