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 AERIAL SURVEY: TERRAMAP
 FILE REF: 2959005 NAMBOUR 071215 REV 0.DWG
 DATED: 07 DEC. 2015
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HORIZONTAL DATUM: GDA-56
 HEIGHT DATUM: AHD

LEGEND

- SIDEWALL LEACHATE RISER
- PROPOSED LEACHATE WELL LOCATION
- CREEK LINE
- FAUNA AND LITTER EXCLUSION FENCE

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NOTE:
 FOR TYPICAL SIDE WALL LINER
 DETAIL REFER DWG 102

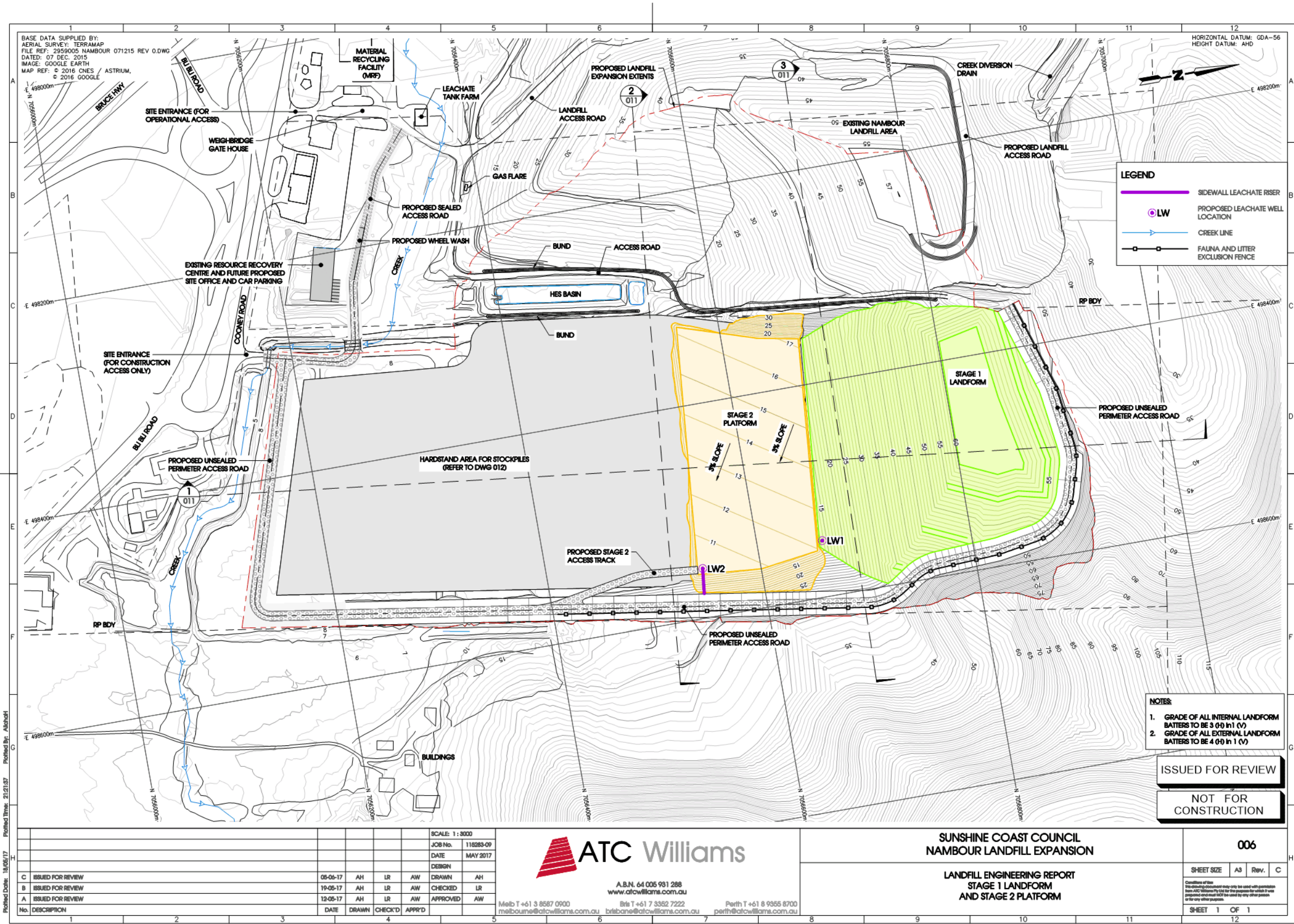
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B	ISSUED FOR REVIEW	19-05-17	AH	LR	AW
A	ISSUED FOR REVIEW	12-05-17	AH	LR	AW

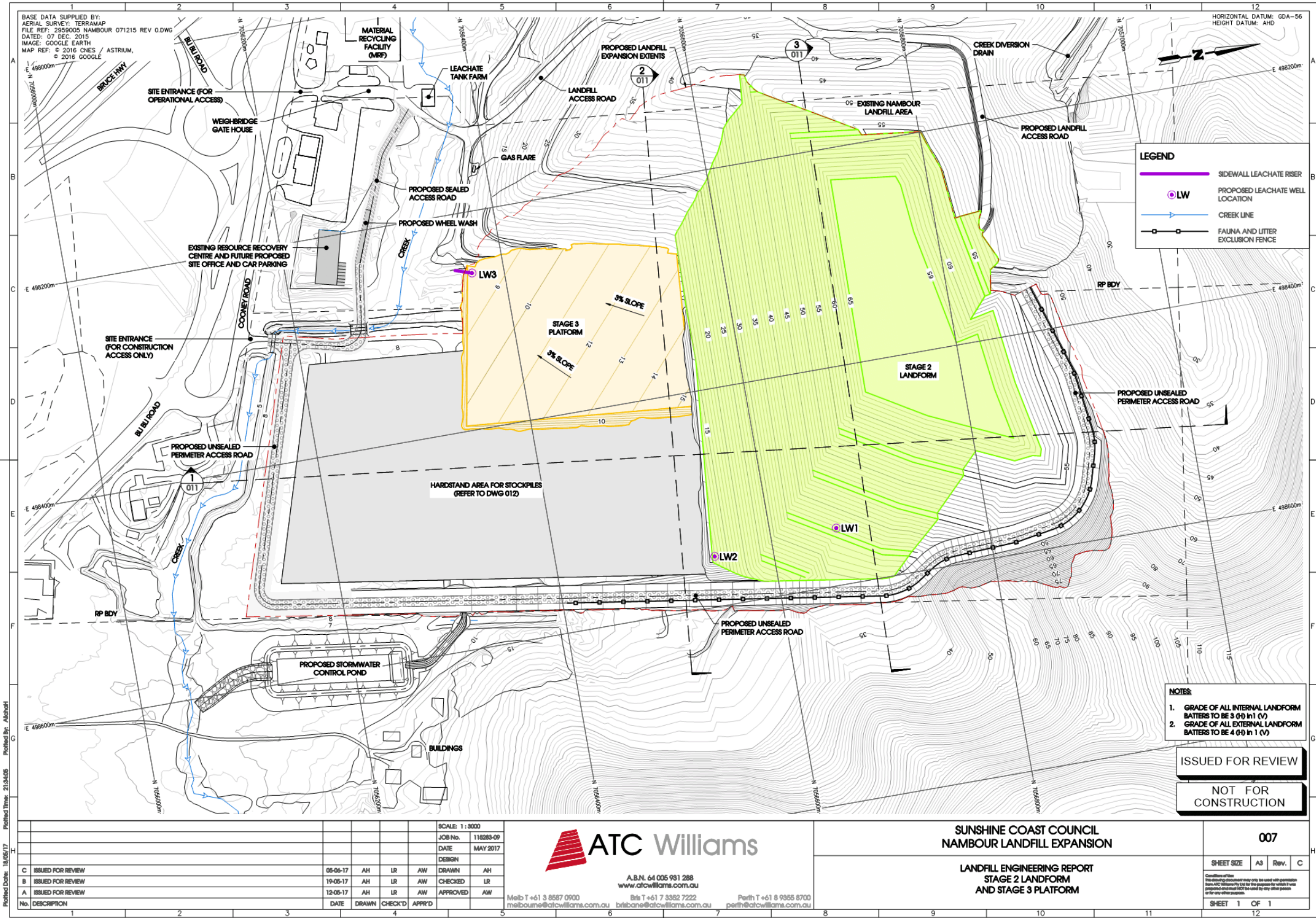
ATC Williams
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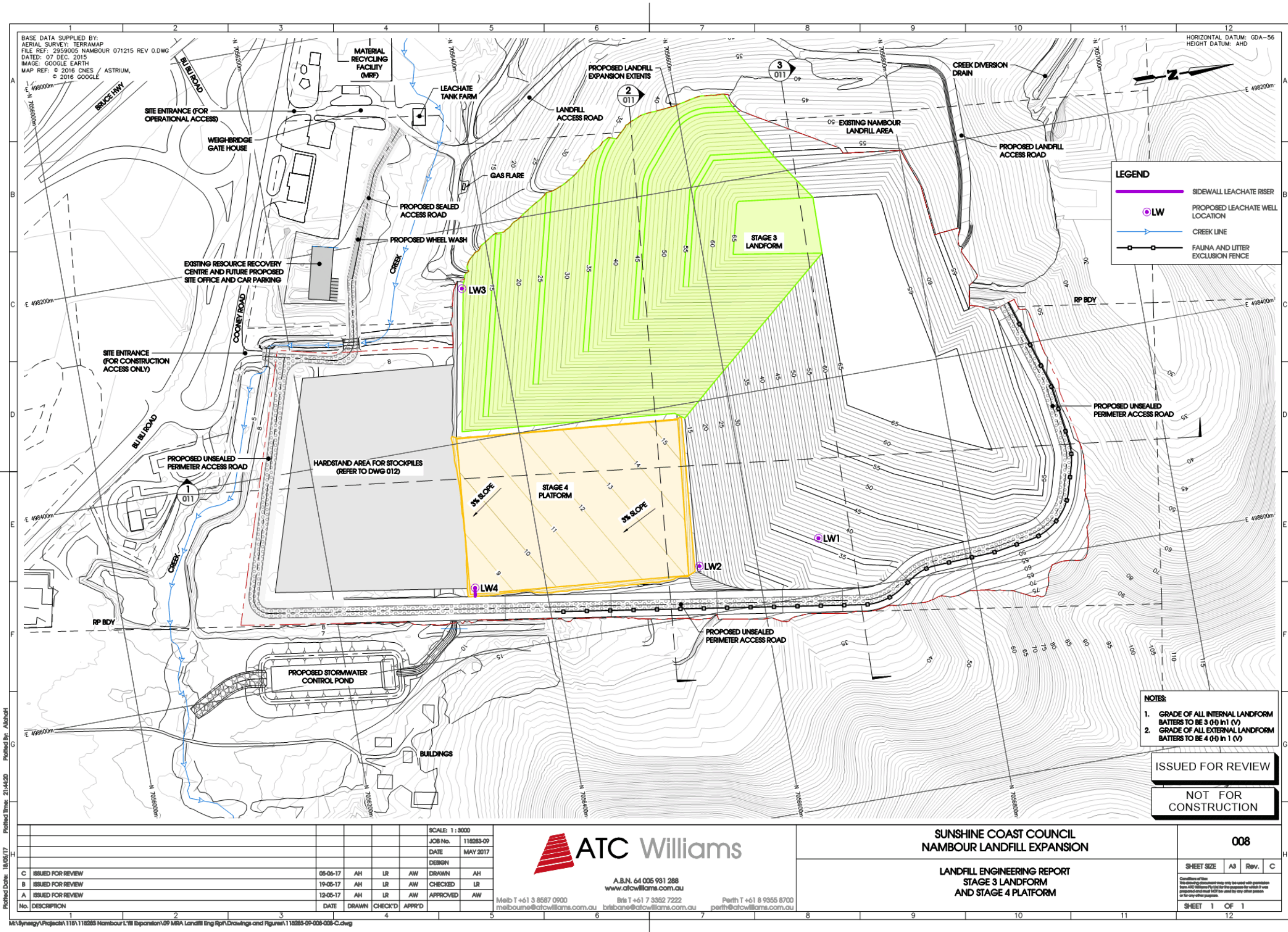
SUNSHINE COAST COUNCIL
NAMBOUR LANDFILL EXPANSION
LANDFILL ENGINEERING REPORT
STAGE 1 PLATFORM

005

SHEET SIZE	A3	Rev.	C
SHEET 1 OF 1			







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- NOTES:**
1. GRADE OF ALL INTERNAL LANDFORM BATTERS TO BE 3 (4) IN 1 (V)
 2. GRADE OF ALL EXTERNAL LANDFORM BATTERS TO BE 4 (6) IN 1 (V)

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SCALE: 1:3000

JOB No. 118283-09
 DATE MAY 2017

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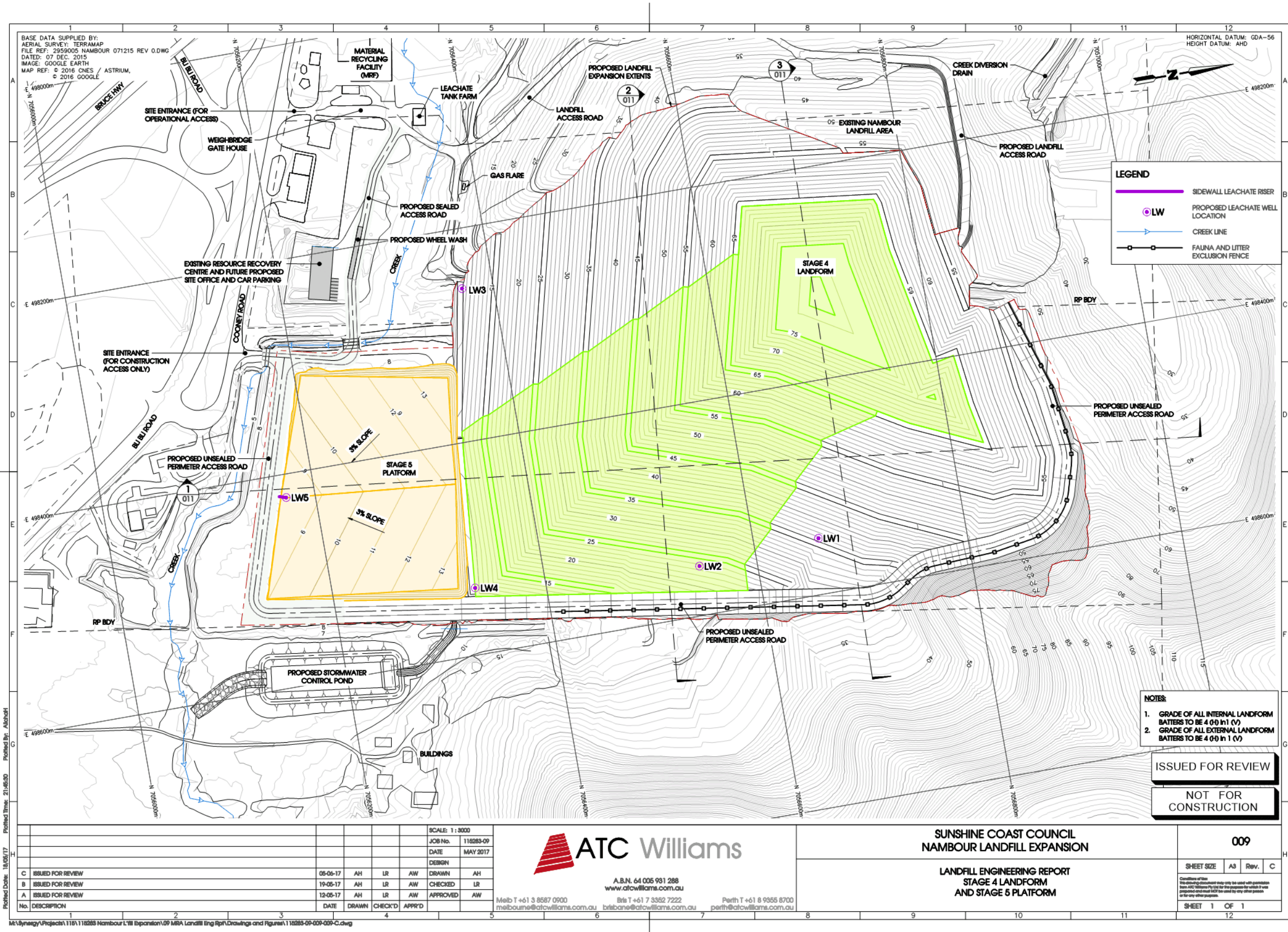
SUNSHINE COAST COUNCIL
 NAMBOUR LANDFILL EXPANSION

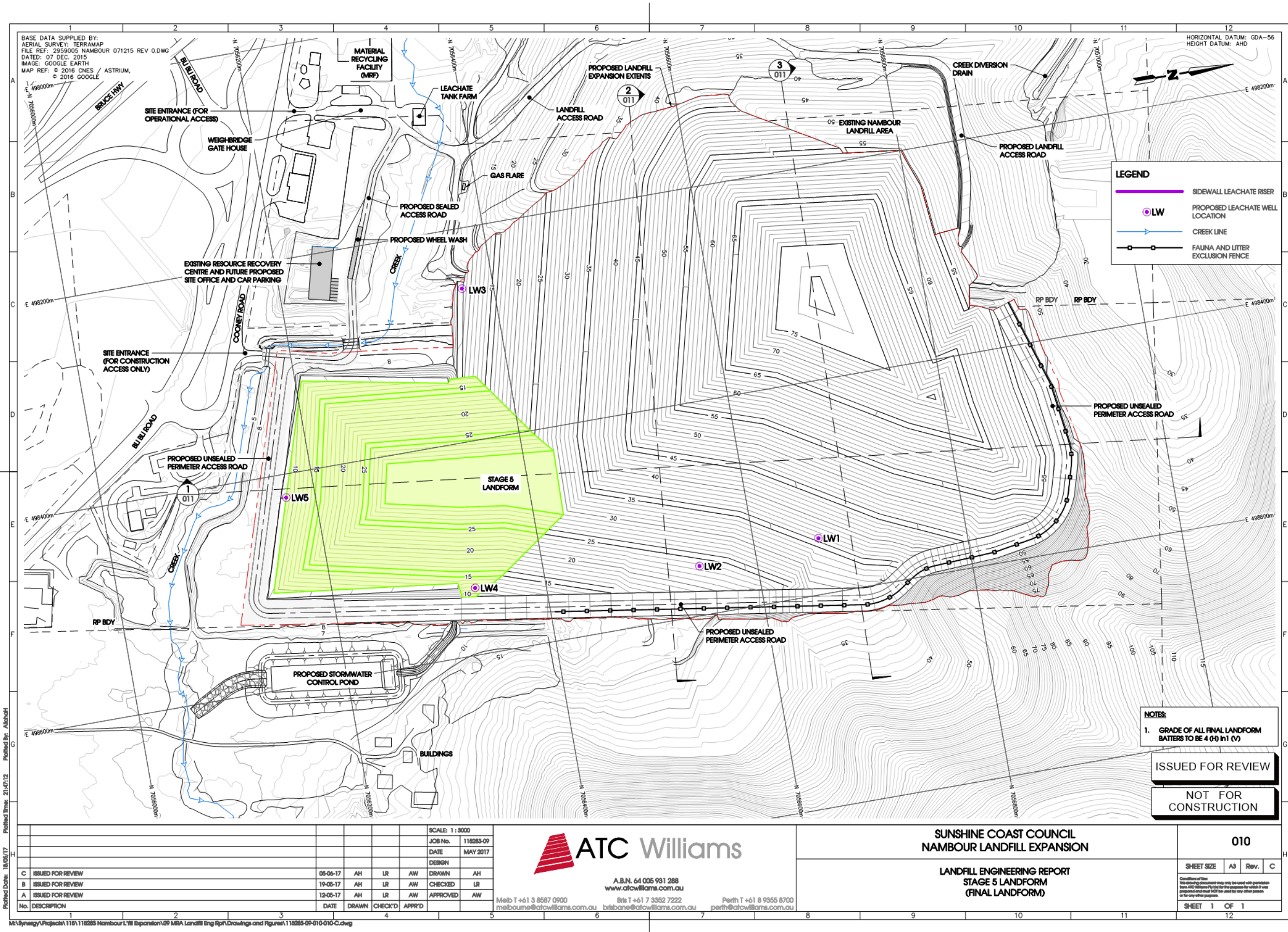
LANDFILL ENGINEERING REPORT
 STAGE 3 LANDFORM
 AND STAGE 4 PLATFORM

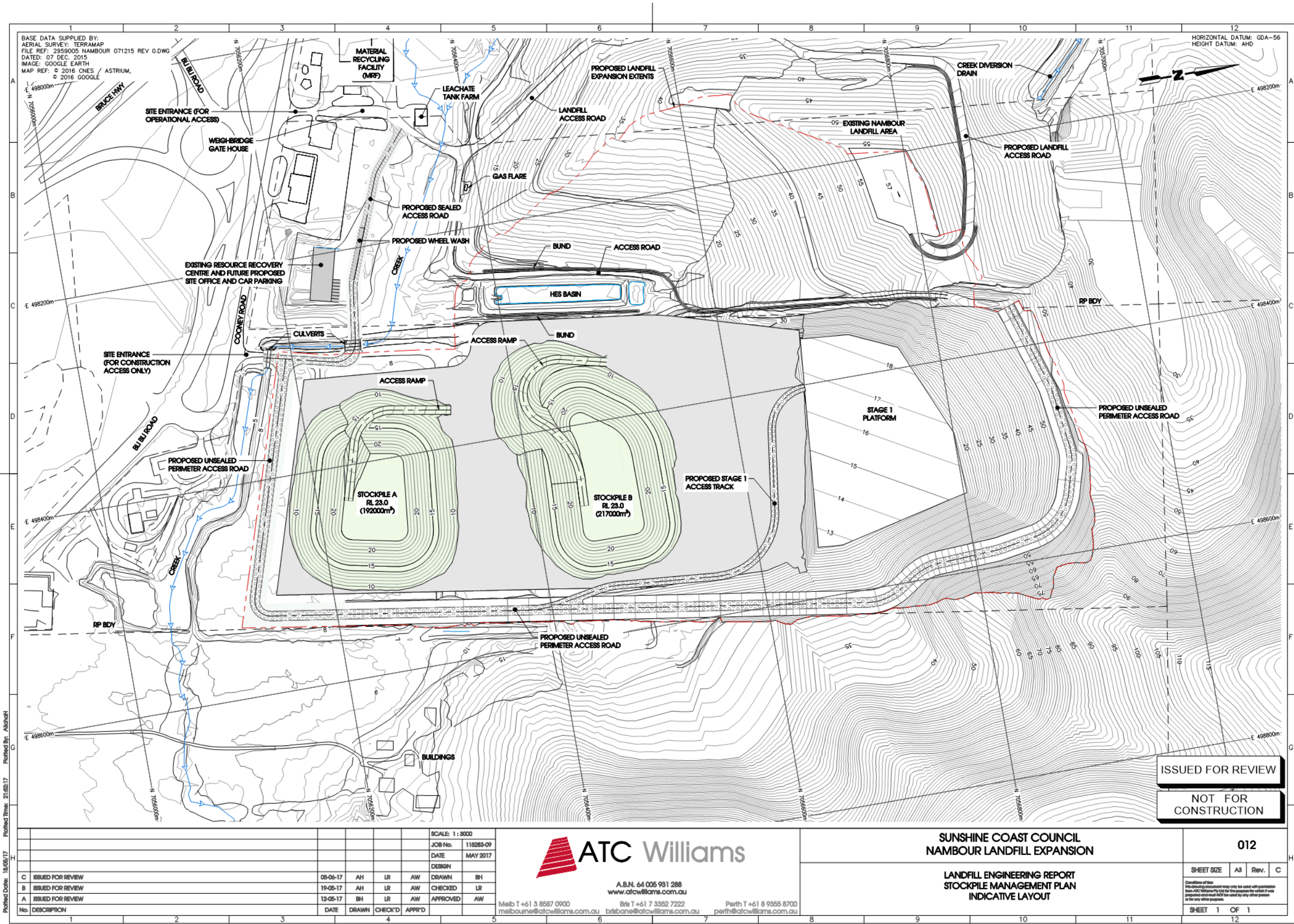
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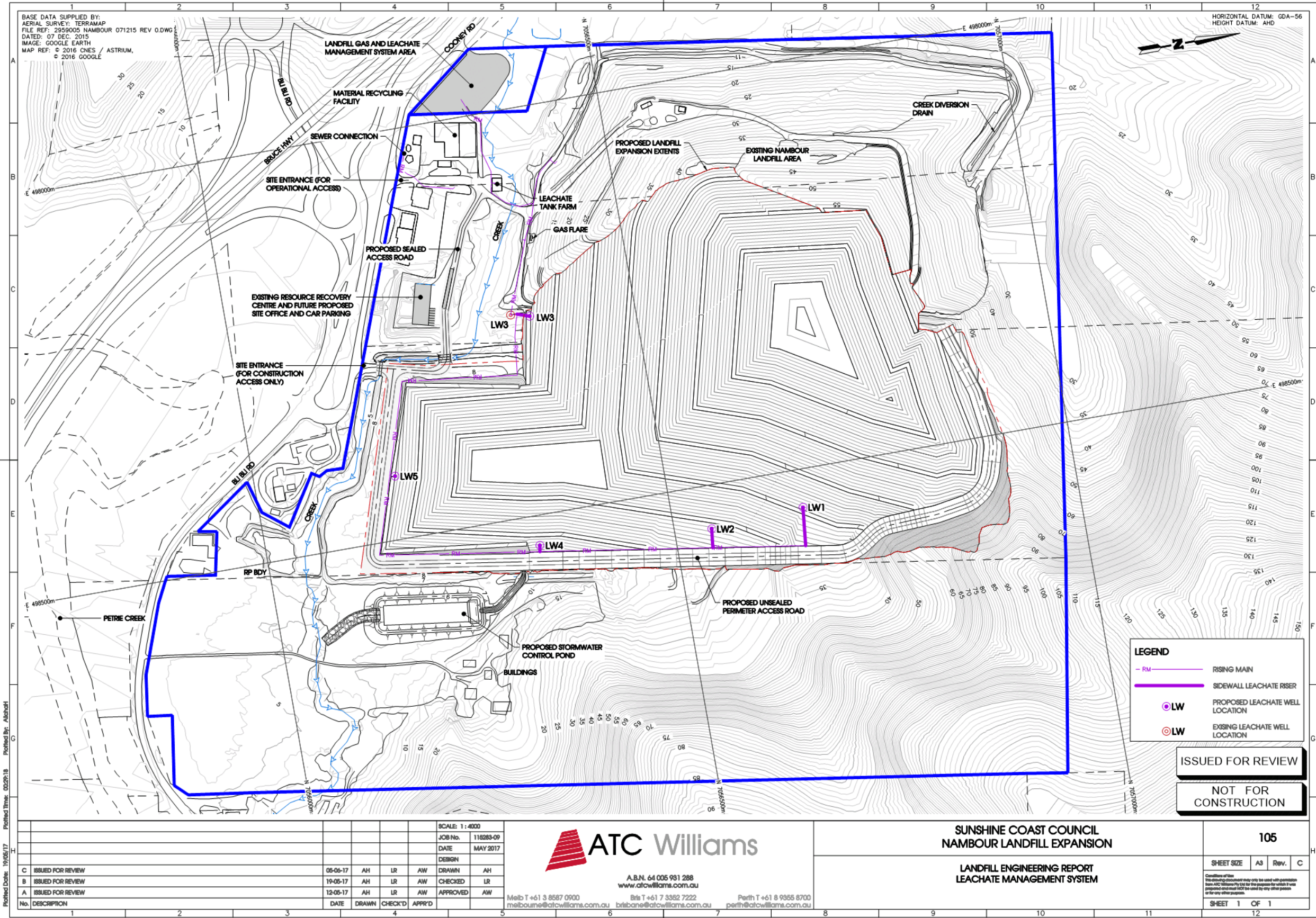
SHEET SIZE A3 Rev. C

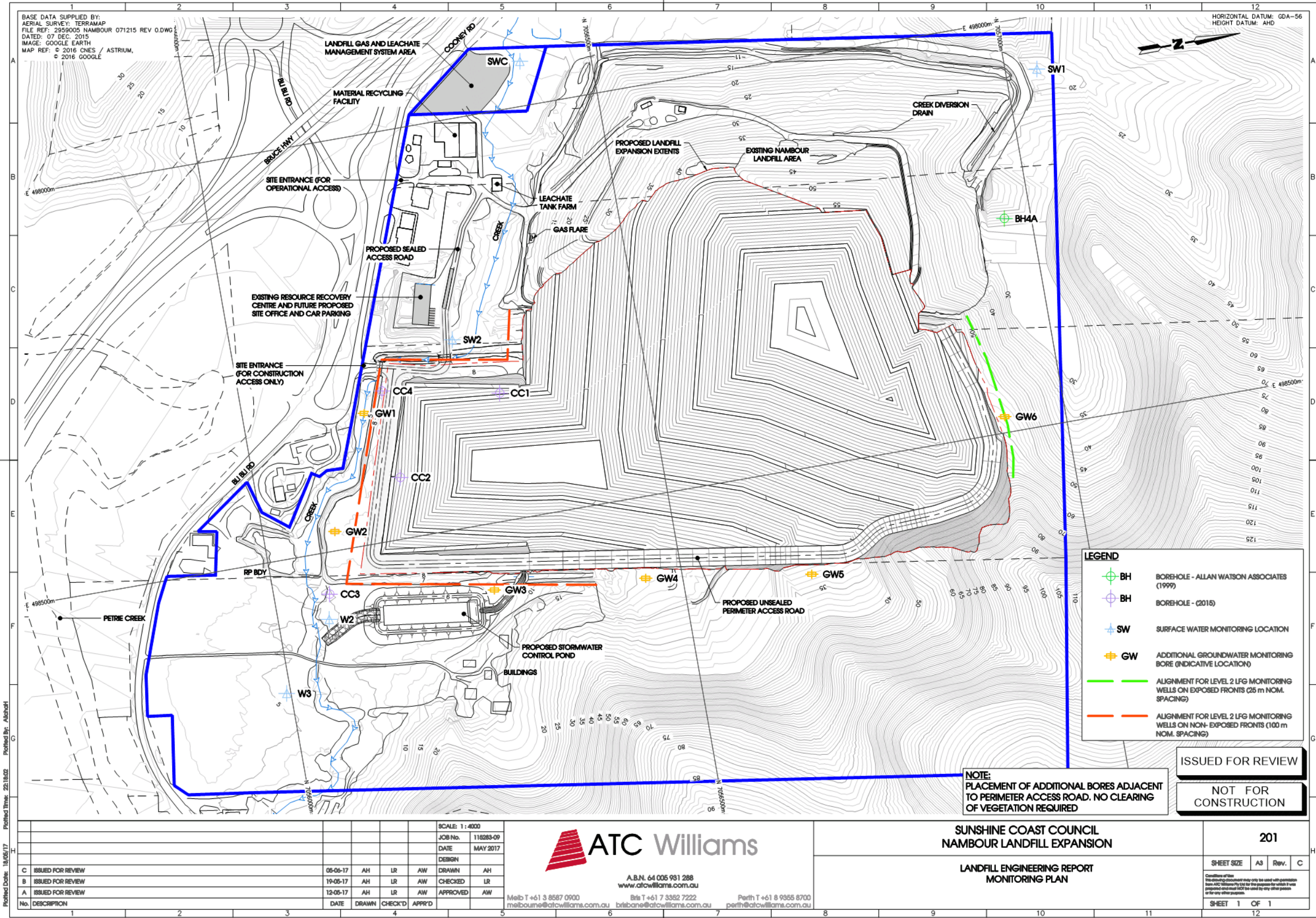
SHEET 1 OF 1

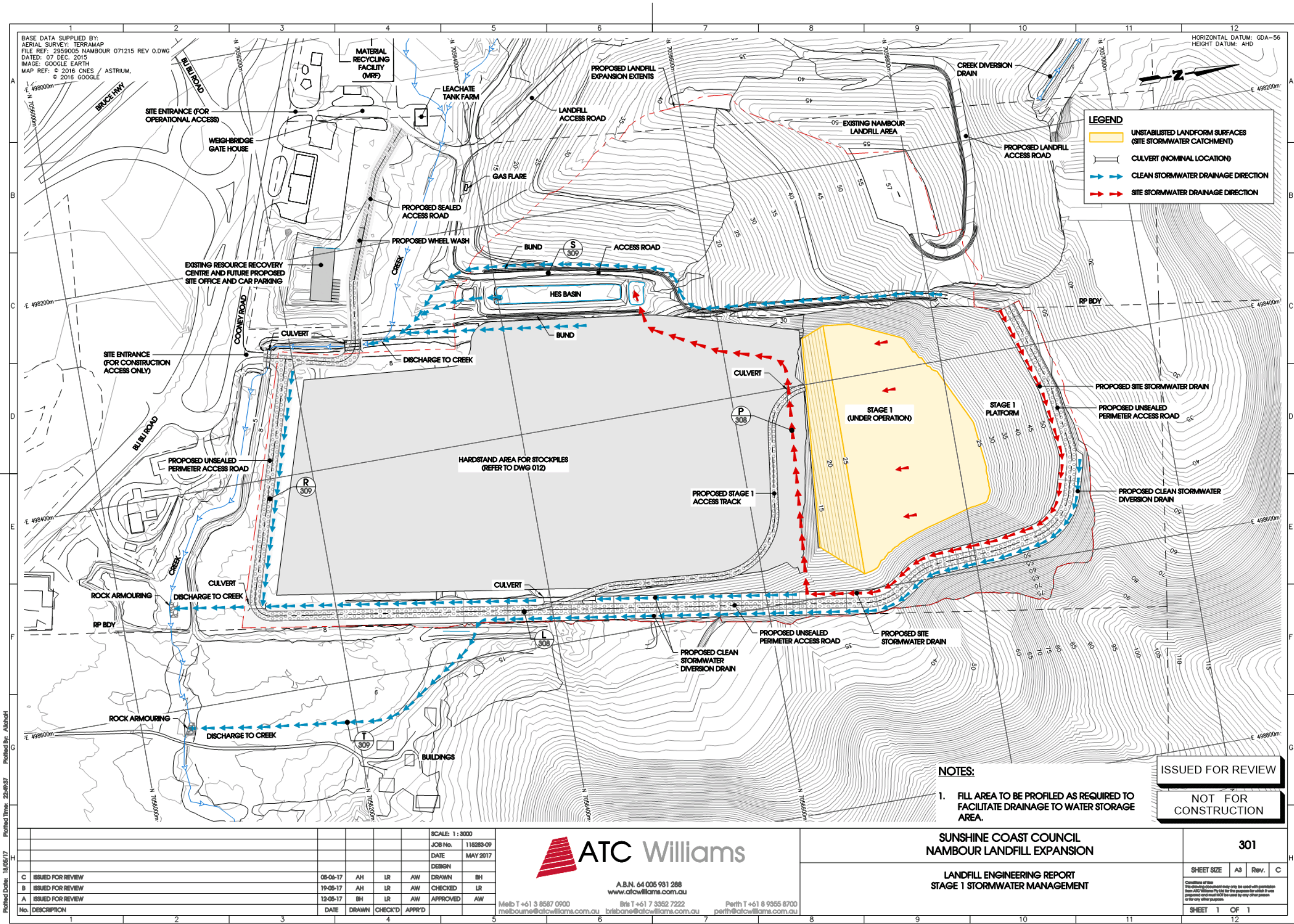


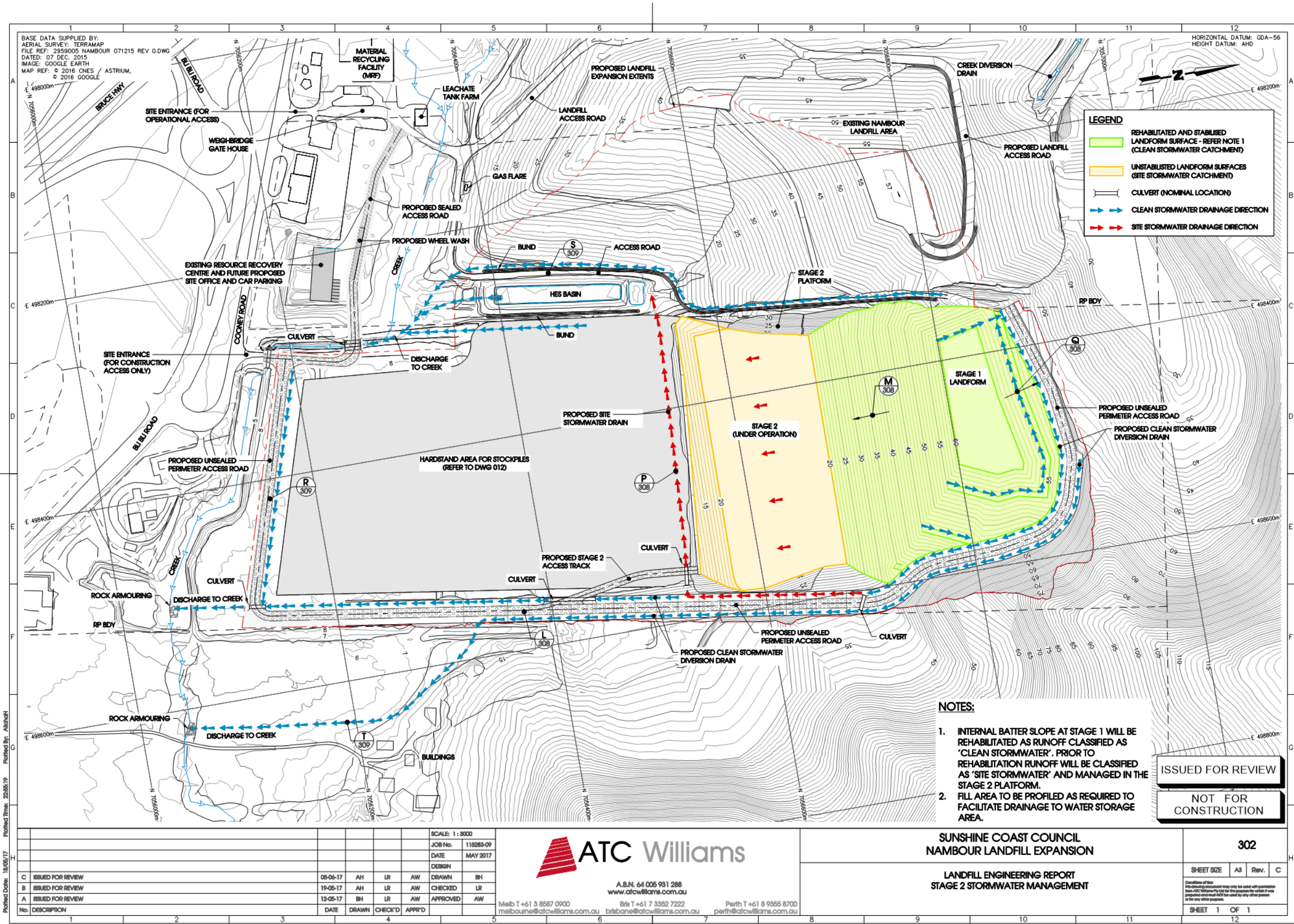


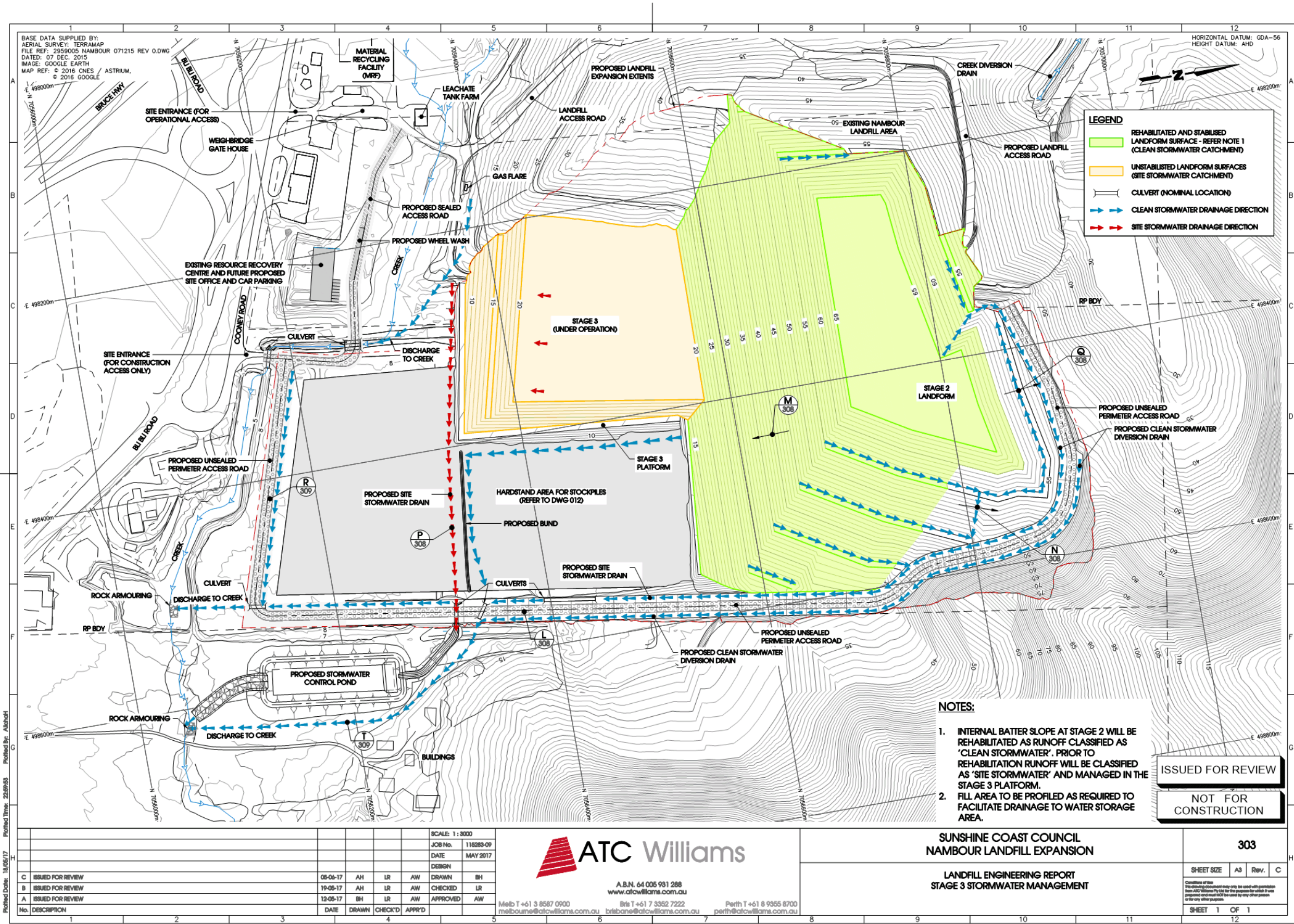


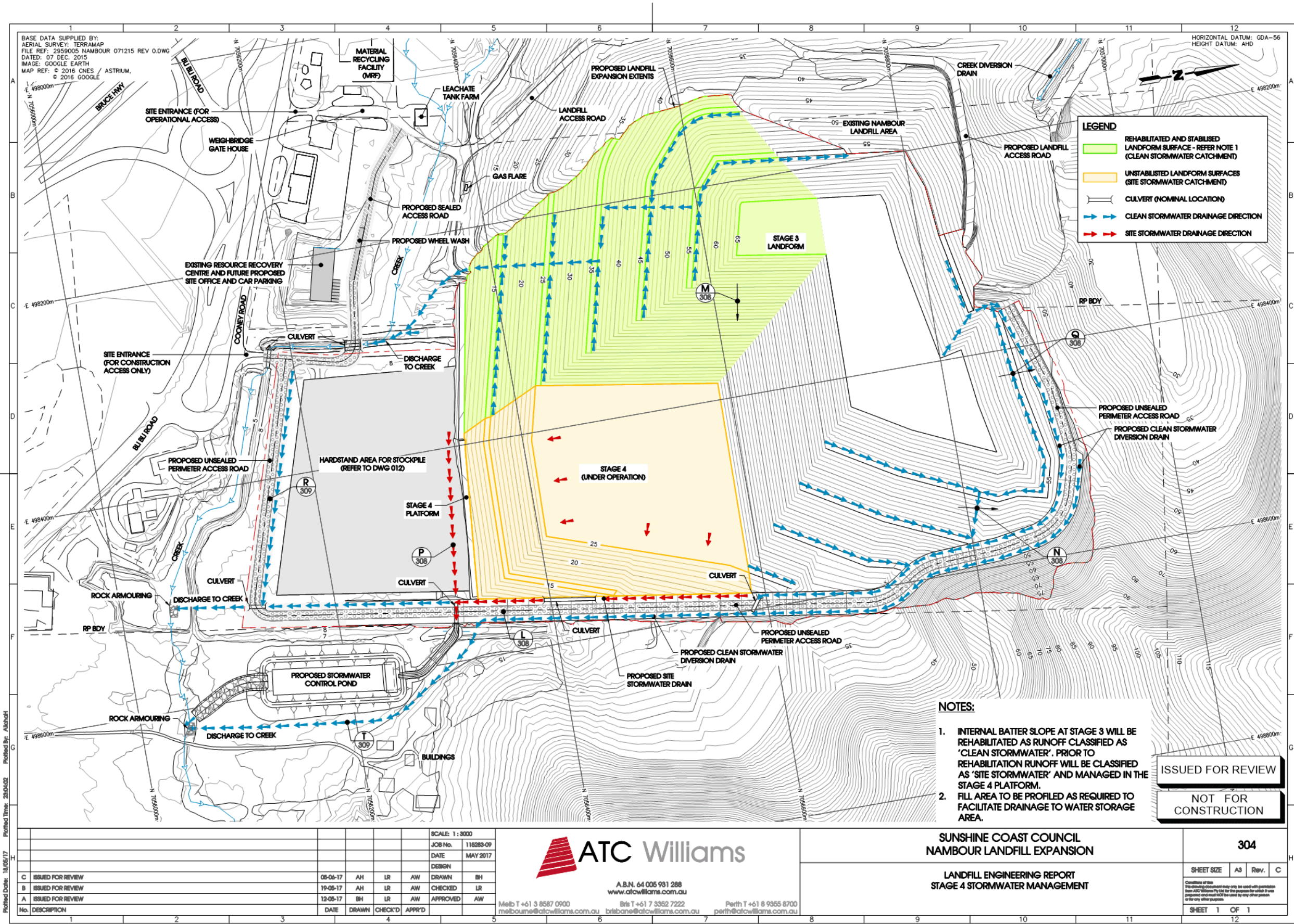


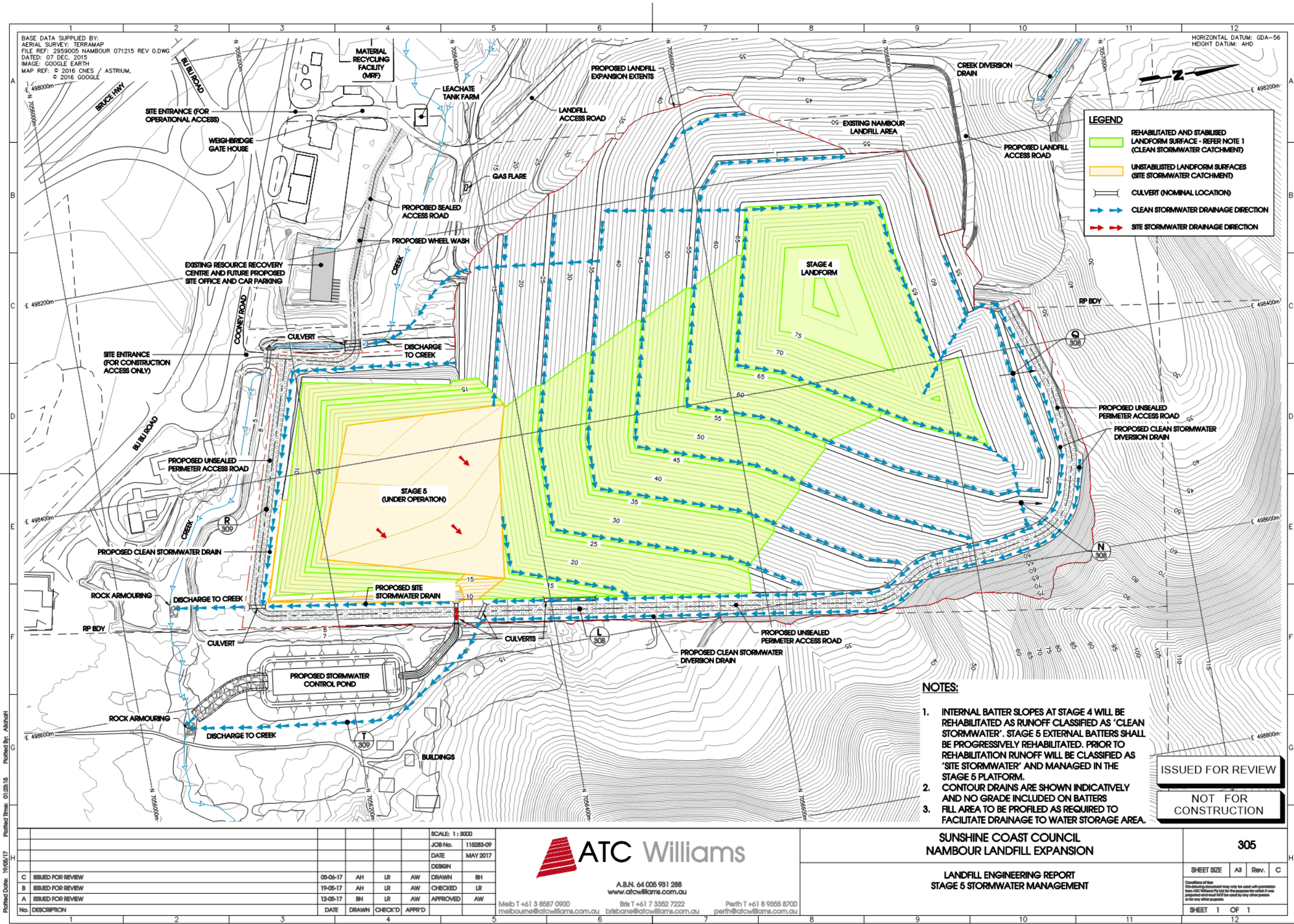


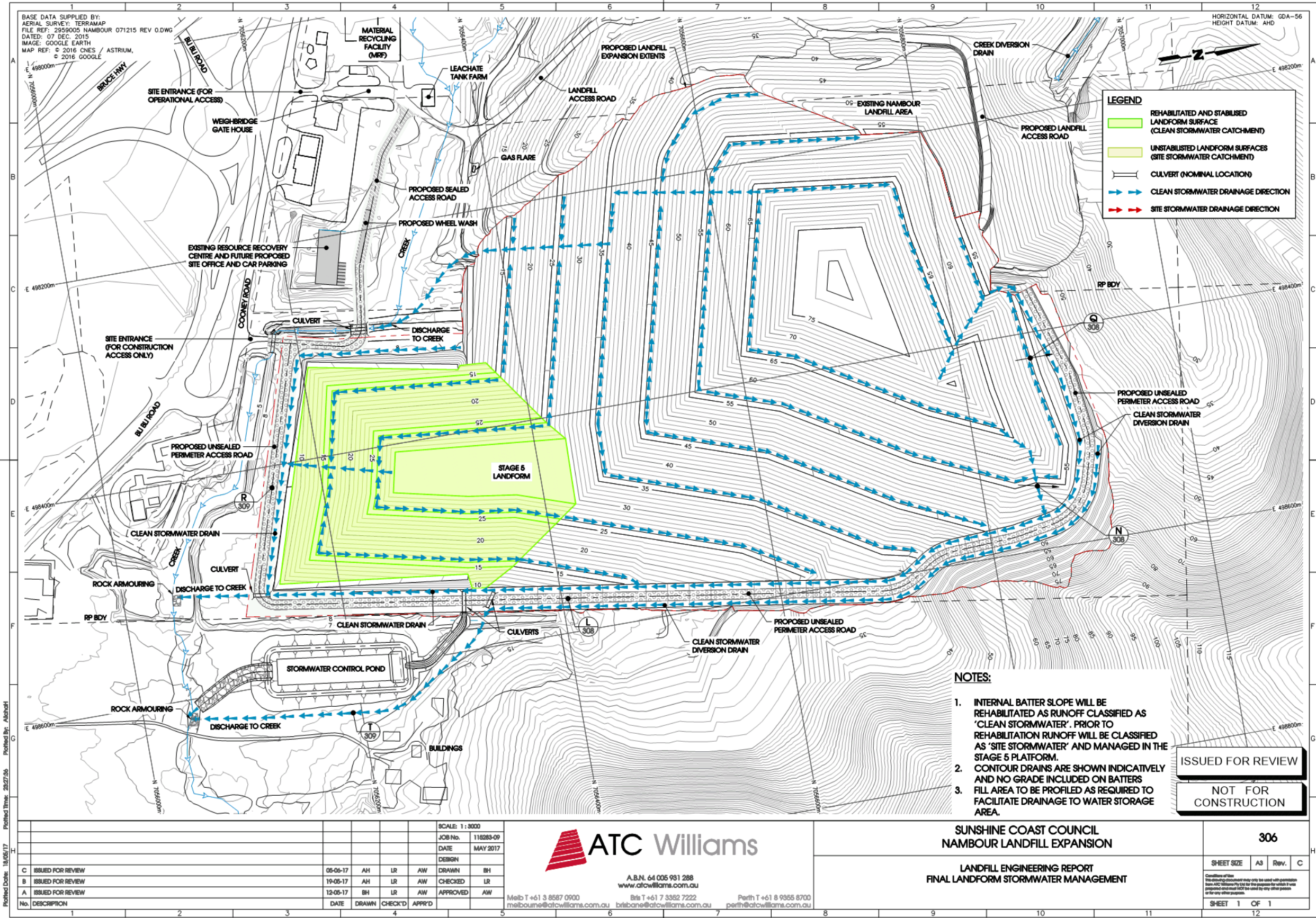


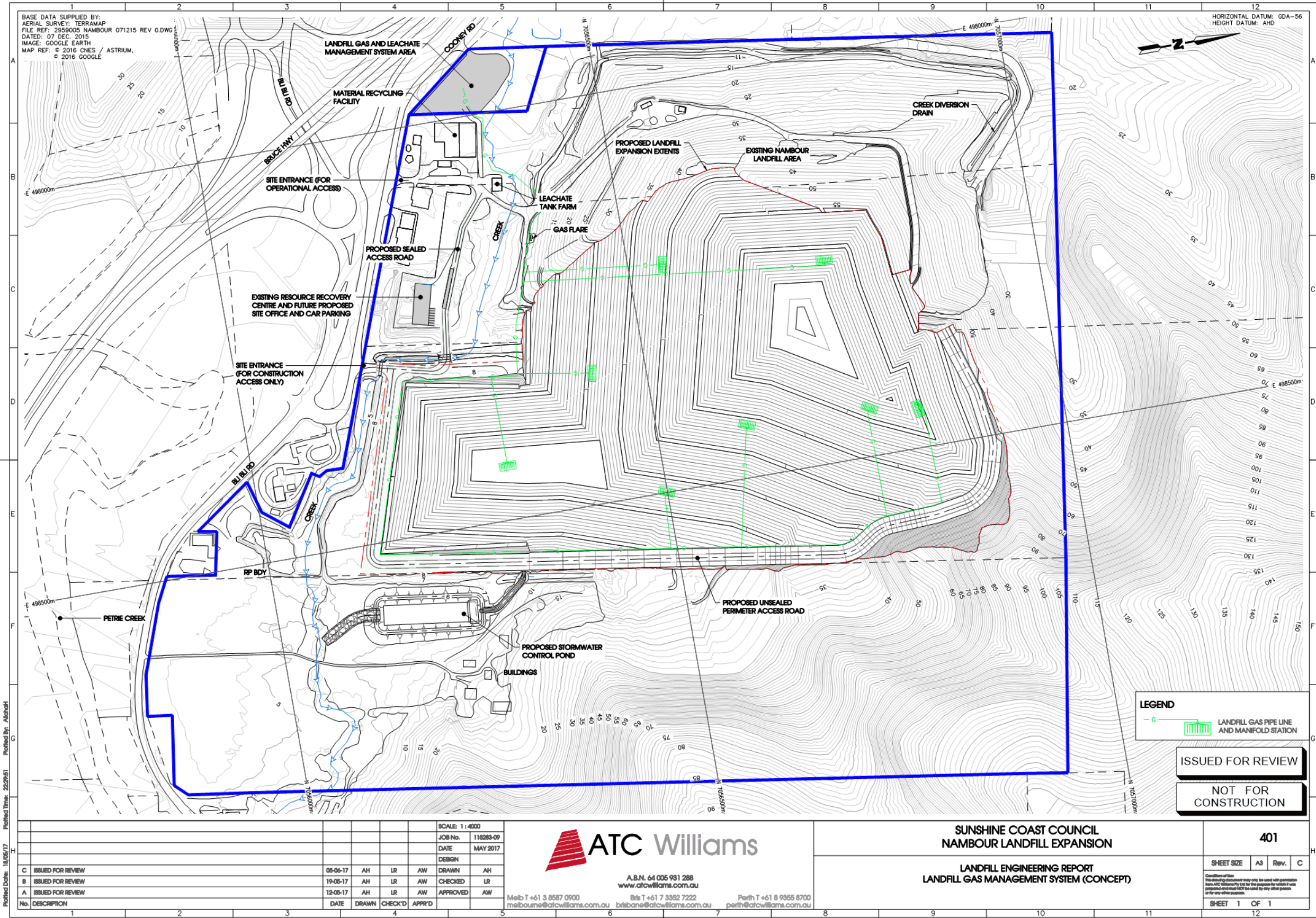












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Profiled Date: 18/05/17
 Profiled By: Alsharif
 Profiled Time: 22:29:51

LEGEND
 LANDFILL GAS PIPE LINE AND MANIFOLD STATION

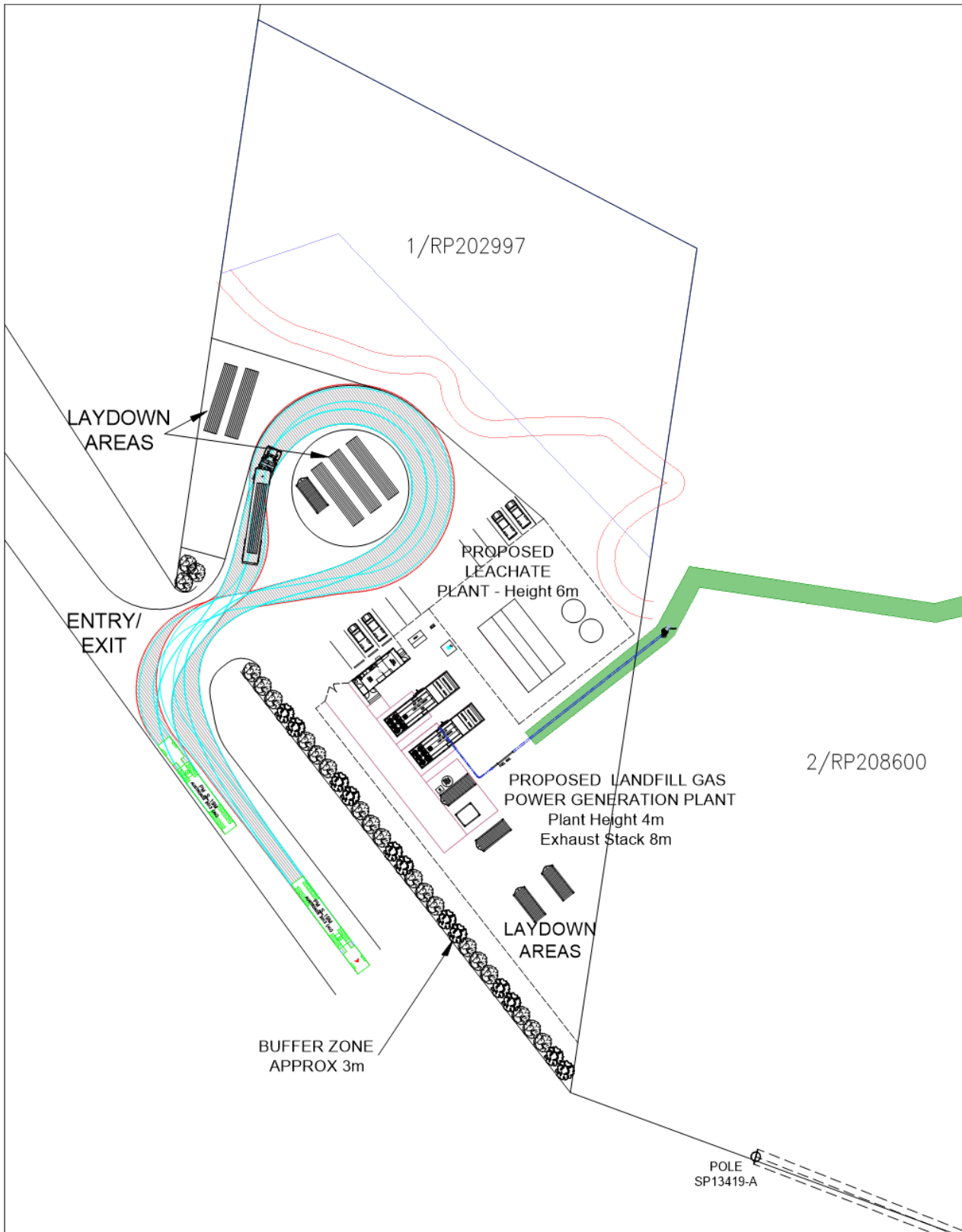
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SUNSHINE COAST COUNCIL
NAMBOUR LANDFILL EXPANSION
LANDFILL ENGINEERING REPORT
LANDFILL GAS MANAGEMENT SYSTEM (CONCEPT)
401
 SHEET SIZE A3 Rev. C
 SHEET 1 OF 1



 MARK RIGBY & ASSOCIATES <i>excellence in environmental management</i>		CLIENT SUNSHINE COAST COUNCIL	JOB NUMBER MRA 17- 001							
Suite 1, 37 Commerce Drive, Robina PO Box 480 Robina QLD, 4226		PH (07) 5578 7040 FAX (07) 7758 7313 MOB 0417 797 486	DRAWING FIGURE 1							
PROJECT NAMBOUR LANDFILL EXPANSION MCU DEVELOPMENT APPLICATION		TITLE PROPOSED LEACHATE & LANDFILL GAS MANAGEMENT AREA								
DESIGNED	DRAWN	CHECKED	APPROVED	DATE	SCALE	LEVEL DATUM	SHEET SIZE	CAD FILE	ISSUE	REV
SI	SI	AR	MR	JUNE 2017	NTS		A4			FINAL

Nambour Landfill Expansion
Landscape Intent Plan

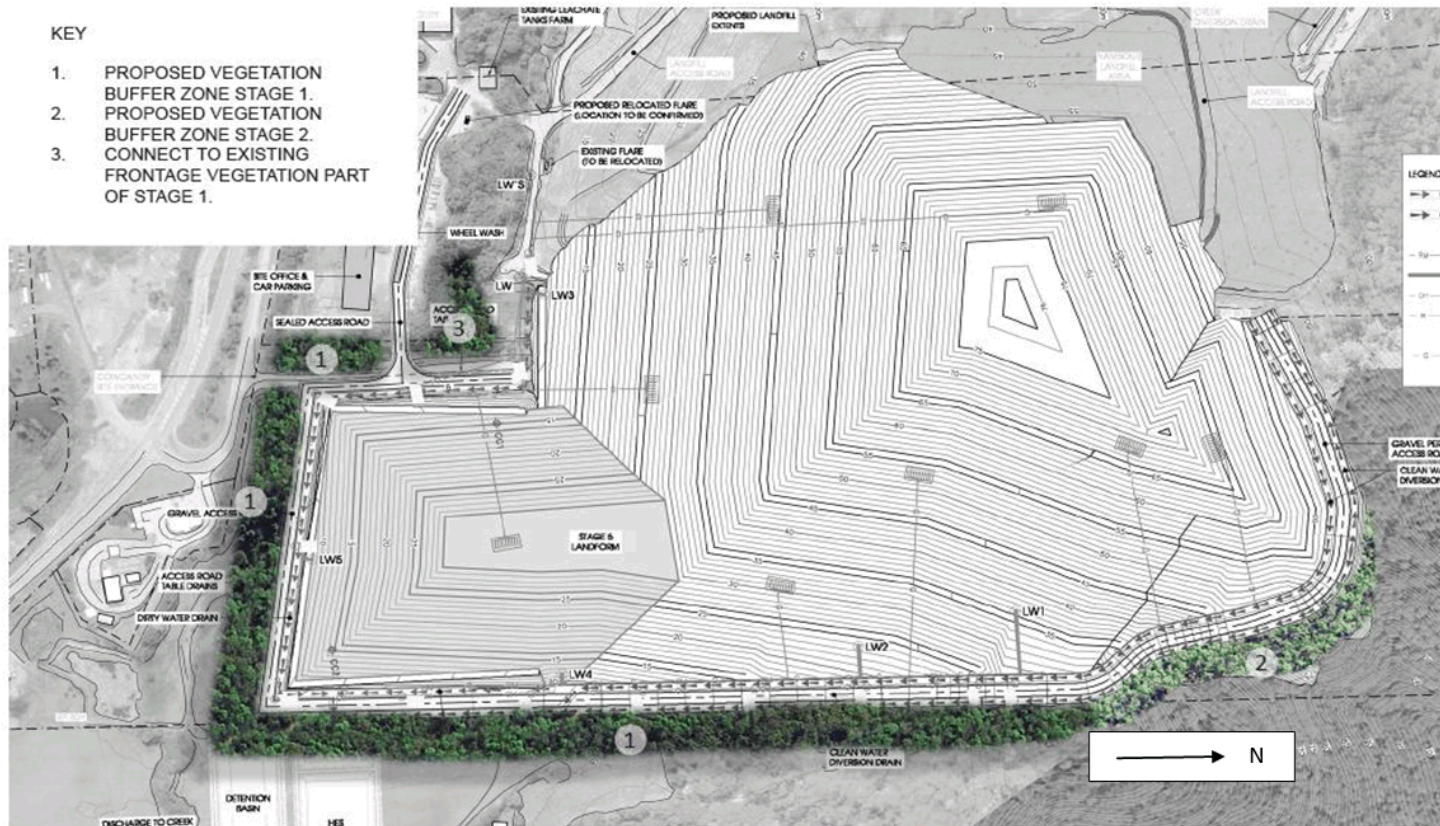


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1.0 Landscape Intent Plan

KEY

1. PROPOSED VEGETATION BUFFER ZONE STAGE 1.
2. PROPOSED VEGETATION BUFFER ZONE STAGE 2.
3. CONNECT TO EXISTING FRONTAGE VEGETATION PART OF STAGE 1.



Final Landfill Footprint design from ATC Williams

**Nambour Landfill Expansion
Landscape Intent Plan**



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<u>Botanical name:</u>	<u>Family name:</u>	<u>Common name:</u>	<u>Habit</u>	<u>Botanical name:</u>	<u>Family name:</u>	<u>Common name:</u>	<u>Habit</u>
<i>Acacia leiocalyx</i>	Mimosaceae	Black Wattle	ST	<i>Ficus watkinsiana</i>	Moraceae	Strangler Fig	T
<i>Acacia maidenii</i>	Mimosaceae	Maiden's Wattle	ST	<i>Glochidion ferdinandi</i>	Euphorbiaceae	Cheese Tree	ST
<i>Acacia melanoxylon</i>	Mimosaceae	Black Wattle	ST			Umbrella Cheese Tree	ST
<i>Alchornea ilicifolia</i>	Euphorbiaceae	Native Holly	S	<i>Glochidion sumatranum</i>	Euphorbiaceae	Tree	ST
<i>Allocasuarina littoralis</i>	Casuarinaceae	Black She Oak	ST	<i>Gmelina leichhardtii</i>	Verbenaceae	White Beech	T
<i>Alphitonia excelsa</i>	Rhamnaceae	Red Ash	ST	<i>Guioa semiglauc</i>	Sapindaceae	Guioa	ST
<i>Alpinia caerulea</i>	Zingiberaceae	Native Ginger	G	<i>Hibiscus splendens</i>	Malvaceae	Pink Hibiscus	S
<i>Aphananthe philippinensis</i>	Ulmaceae	Rough-leaved Elm	ST	<i>Hibiscus tiliaceus</i>	Malvaceae	Cottonwood	ST
<i>Archontophoenix cunninghamiana</i>	Arecaceae	Bangalow Palm	T	<i>Homalanthus nutans</i>	Euphorbiaceae	Bleeding Heart	ST
<i>Backhousia myrtifolia</i>	Myrtaceae	Grey Myrtle	ST	<i>Jagera pseudorhus</i>	Sapindaceae	Foambark	ST
<i>Breynia oblongifolia</i>	Euphorbiaceae	Coffee Bush	S	<i>Litsea leefeana</i>	Lauraceae	Brown Bolly Gum	ST
<i>Castanospermum australe</i>	Fabaceae	Blackbean	T	<i>Livistona australis</i>	Arecaceae	Cabbage Tree Palm	ST
<i>Clerodendrum tomentosum</i>	Verbenaceae	Hairy Clerodendrum	S	<i>Lomandra longifolia</i>	Laxmanniaceae	Mat Rush	G
<i>Commersonia bartramia</i>	Byttneriaceae	Brown Kurrajong	ST	<i>Lomandra hystrix</i>	Laxmanniaceae	Creek Mat Rush	G
<i>Corymbia intermedia</i>	Myrtaceae	Pink Bloodwood	T	<i>Lophostemon confertus</i>	Myrtaceae	Brush Box	T
<i>Cryptocarya glaucescens</i>	Lauraceae	Jackwood	ST	<i>Lophostemon suaveolens</i>	Myrtaceae	Swamp Turpentine	T
<i>Cryptocarya laevigata</i>	Lauraceae	Glossy Laurel	ST	<i>Mallotus philippensis</i>	Euphorbiaceae	Red Kamala	ST
<i>Cryptocarya macdonaldii</i>	Lauraceae	Rusty Laurel	ST			Broad-leaf Paperbark	T
<i>Cryptocarya microneura</i>	Lauraceae	Brown Jack	ST	<i>Melaleuca quinquenervia</i>	Myrtaceae	White Bottlebrush	ST
<i>Cryptocarya obovata</i>	Lauraceae	White Walnut; Pepperberry	T	<i>Melaleuca saligna</i>	Myrtaceae	White Bottlebrush	ST
<i>Cryptocarya sclerophylla</i>	Lauraceae	Hard-leaved Cryptocarya	ST	<i>Melicope elleryana</i>	Rutaceae	Pink Euodia	ST
<i>Cryptocarya triplinervis</i> var. <i>pubens</i>	Lauraceae	Hairy Three-veined Cryptocarya	T	<i>Mischocarpus pyriformis</i>	Sapindaceae	Yellow Pear-fruit	ST
<i>Cupaniopsis anacardioides</i>	Sapindaceae	Tuckeroo	T	<i>Myrsine variabilis</i>	Myrsinaceae	Muttonwood	ST
				<i>Neolitsea dealbata</i>	Lauraceae	White Bolly Gum	ST
				<i>Notelaea longifolia</i>	Oleaceae	Large Mock-olive	ST
				<i>Olea paniculata</i>	Oleaceae	Native Olive	T
				<i>Pittosporum undulatum</i>	Pittosporaceae	Native Daphne	ST
				<i>Polyscias elegans</i>	Araliaceae	Celerywood	ST
				<i>Pouteria australis</i>	Sapotaceae	Black Apple	ST

**Nambour Landfill Expansion
Landscape Intent Plan**



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<u>Botanical name:</u>	<u>Family name:</u>	<u>Common name:</u>	<u>Habit</u>	<u>Botanical name:</u>	<u>Family name:</u>	<u>Common name:</u>	<u>Habit</u>
<i>Cupaniopsis parvifolia</i>	Sapindaceae	Small-leaved Tuckeroo	ST	<i>Pouteria chartacea</i>	Sapotaceae	Thin-leaved Condoe	ST
<i>Dianella caerulea</i>	Hemerocallidaceae	Blueberry Lily	G	<i>Scolopia braunii</i>	Flacourtiaceae	Flintwood	ST
<i>Drypetes deplanchei</i>	Euphorbiaceae	Yellow Tulip	ST	<i>Symplocos stawellii</i>	Symplocaceae	White Hazelwood	ST
<i>Dysoxylum rufum</i>	Meliaceae	Hairy Rosewood	T	<i>Syzygium australe</i>	Myrtaceae	Scrub Cherry	ST
<i>Elaeocarpus reticulatus</i>	Elaeocarpaceae	Blueberry Ash	ST	<i>Syzygium floribundum</i>	Myrtaceae	Weeping Lilly Pilly	T
<i>Endiandra discolor</i>	Lauraceae	Rose Walnut	T	<i>Syzygium ingens</i>	Myrtaceae	Red Apple	T
<i>Eucalyptus grandis</i> *	Myrtaceae	Flooded Gum	T	<i>Syzygium oleosum</i>	Myrtaceae	Blue Lily Pily	T
<i>Eucalyptus microcorys</i> *	Myrtaceae	Tallowwood	T	<i>Syzygium smithii</i>	Myrtaceae	Creek Lily Pily	ST
<i>Eucalyptus propinqua</i> *	Myrtaceae	Grey Gum	T	<i>Tabernaemontana pandacaqui</i>	Apocynaceae	Banana Bush	S
<i>Eucalyptus tereticornis</i> *	Myrtaceae	Forest Red Gum	T	<i>Trema tomentosa</i>	Ulmaceae	Native Peach	S
<i>Euroschinus falcatus</i>	Anacardiaceae	Pink Poplar, Ribbonwood	ST	<i>Tristaniopsis laurina</i>	Myrtaceae	Water Gum Kanuka	T
<i>Ficus coronata</i>	Moraceae	Creek Sandpaper Fig	ST	<i>Wikstroemia indica</i>	Thymelaeaceae	Tie Bush	S

* Avoid plantings of large eucalypt trees within 10m of the road edge to reduce fuel load fallout onto the road including large limbs thereby reducing maintenance requirements (bushfire requirement).

**Nambour Landfill Expansion
Landscape Intent Plan**

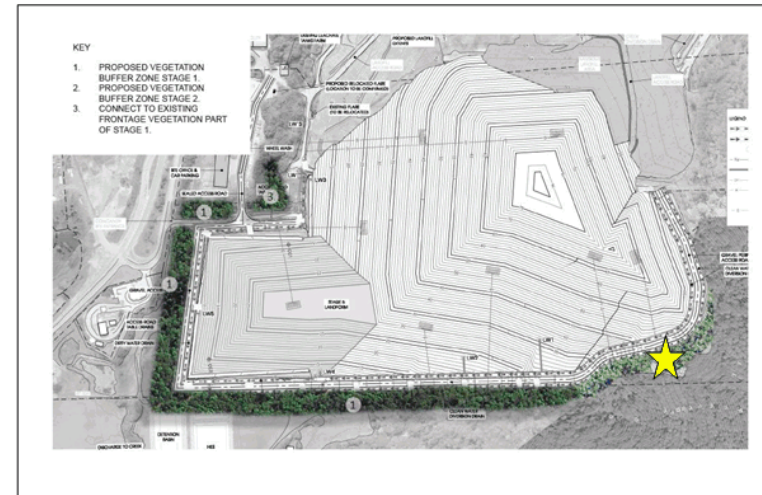


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2.2 Buffer Planting Areas 2

20m wide buffer zones with screening the primary intent.

Year	Buffer Scope of Works
2023	Stage 2 Buffer Zone 2 & 3 Planting
2023-2024	Stage 2 Establishment Period, watering, weed control and maintenance (to be detailed in Detail Landscape Plan)
2024 - Onwards	Continued maintenance, weed control and planting of replacement plant (to be detailed in Detail Landscape Plan)



Species Planting Palette

Planting Palette Buffer Zone 2 Derived from RE12.12.15 Corymbia intermedia open forest on igneous rock

NOTE: RE mapping for Buffer Area 2 indicates the presence of 12.12.2, however groundtruthing found this to be incorrect and is in fact 12.12.15. This buffer area will integrate with the existing vegetation on Lot 1/CG2584.

Species have been chosen from a combination of RE Technical Descriptions and Site Survey conducted by Native Foresters in 2016. Species have been further selected based on planting requirements i.e. no vines, ground ferns, small herbs or slow growing species and those which are generally available in cultivation.

Specific bushfire requirements to be considered in the detail design:

- Install a row of *Lomandra hystrix* @ 1m centres followed by a row of low flammability shrubs @1.5-2m centres along newly exposed forest edges to reduce fire risk (i.e. catch embers and screen smoke) and help re-instate a natural edge.
- The planting palette should preference the use of rainforest species on the species list.

**Nambour Landfill Expansion
Landscape Intent Plan**



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Botanical name:	Family name:	Common name:	Habit	Botanical name:	Family name:	Common name:	Habit
<i>Acacia disparrima</i> ssp. <i>disparrima</i>	Mimosaceae	Hickory Wattle	ST	<i>Goodenia rotundifolia</i>	Goodeniaceae	Star Goodenia	G
<i>Acacia penninervis</i>	Mimosaceae	Mountain Hickory	ST	<i>Guioa semiglauc</i>	Sapindaceae	Guioa	ST
<i>Allocasuarina littoralis</i>	Casuarinaceae	Black She Oak	ST	<i>Hovea acutifolia</i>	Fabaceae	Purple Pea	S
<i>Alphitonia excelsa</i>	Rhamnaceae	Red Ash	ST	<i>Indigofera australis</i>	Fabaceae	Native Indigo	S
<i>Alpinia caerulea</i>	Zingiberaceae	Native Ginger	G	<i>Jagera pseudorhus</i>	Sapindaceae	Foambark	ST
<i>Archidendron grandiflorum</i>	Mimosaceae	Pink Laceflower	ST			Tailed Sword-sedge	G
<i>Callicarpa pedunculata</i>	Verbenaceae	Callicarpa	S	<i>Lepidosperma laterale</i>	Cyperaceae		G
<i>Clerodendrum floribundum</i>	Verbenaceae	Lolly Bush	ST	<i>Lomandra confertifolia</i> ssp. <i>pallida</i>	Laxmanniaceae	no common name	G
<i>Corymbia intermedia</i>	Myrtaceae	Pink Bloodwood	T	<i>Lomandra hystrix</i>	Laxmanniaceae	Creek Mat Rush	G
<i>Cryptocarya microneura</i>	Lauraceae	Brown Jack	ST			Many-flowered	G
<i>Denhamia celastroides</i>	Celastraceae	Denhamia	S	<i>Lomandra multiflora</i>	Laxmanniaceae	Mat Rush	G
<i>Dianella caerulea</i>	Hemerocallidaceae	Blueberry Lily	G	<i>Lophostemon confertus</i>	Myrtaceae	Brush Box	T
<i>Eucalyptus acmenoides</i> *	Myrtaceae	White Mahogany	T	<i>Lophostemon suaveolens</i>	Myrtaceae	Swamp Turpentine	ST
<i>Eucalyptus microcorys</i> *	Myrtaceae	Tallowwood	T	<i>Myrsine variabilis</i>	Myrsinaceae	Muttonwood	ST
<i>Eucalyptus propinqua</i> *	Myrtaceae	Grey Gum	T	<i>Notelaea longifolia</i>	Oleaceae	Large Mock-olive	ST
		Northern Grey		<i>Pittosporum undulatum</i>	Pittosporaceae	Native Daphne	ST
<i>Eucalyptus siderophloia</i> *	Myrtaceae	Ironbark	T	<i>Polyscias elegans</i>	Araliaceae	Celerywood	ST
<i>Eupomatia laurina</i>	Eupomatiaceae	Bolwarra	S	<i>Psychotria daphnoides</i>	Rubiaceae	Smooth Psychotria	S
		Umbrella Cheese		<i>Psychotria loniceroides</i>	Rubiaceae	Hairy Psychotria	S
<i>Glochidion sumatranum</i>	Euphorbiaceae	Tree	ST	<i>Zieria smithii</i>	Rutaceae	Sandfly Zieria	S

* Avoid planting of large eucalypt trees within 10m of the road edge to reduce fuel load fallout onto the road including large limbs thereby reducing maintenance requirements (bushfire requirement).

Nambour Landfill Expansion
Landscape Intent Plan



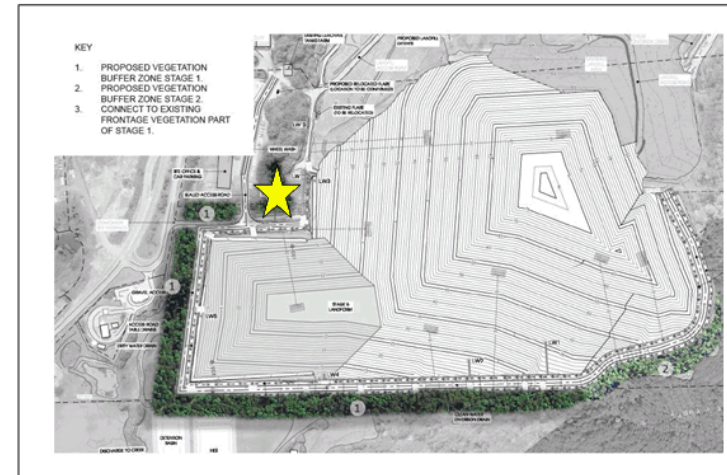
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2.3 Buffer Planting Areas 3

10 - 20m wide buffer zones with screening the primary intent

Timing

Year	Buffer Scope of Works
2018	Stage 1 Buffer Zone 3 Planting
2018-2019	Stage 1 Establishment Period, watering, weed control and maintenance (to be detailed in Detail Landscape Plan)
2019 - 2023	Continued maintenance, weed control and planting of replacement plant (to be detailed in Detail Landscape Plan)



Species Planting Palette

Planting Palette Buffer Zone 3 Derived from RE12.3.2 and is intended to connect with existing frontage vegetation.

Species have been chosen from a combination of RE Technical Descriptions and Site Survey conducted by Native Foresters in 2016. Species have been further selected based on planting requirements i.e. no vines, ground ferns, small herbs or slow growing species and those which are generally available in cultivation.

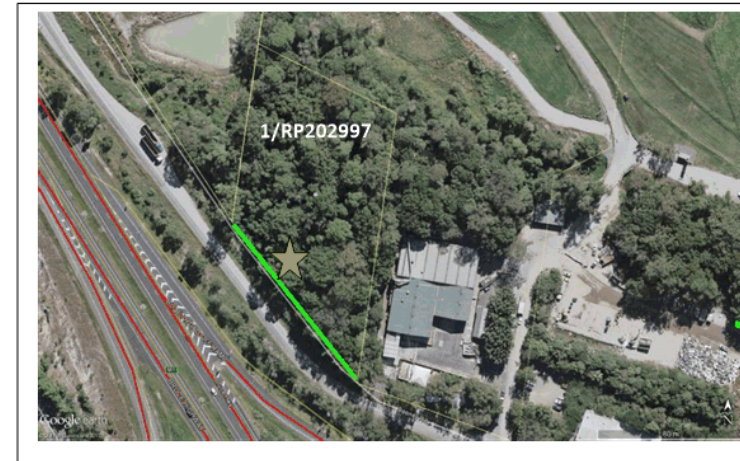
Planting Palette is the same as Buffer Zone 1 as it is representative of RE 12.3.2 Wet sclerophyll - *Eucalyptus grandis* tall open forest on alluvial plains.

**Nambour Landfill Expansion
Landscape Intent Plan**



2.4 Buffer Planting Areas 4

This buffer zone contains existing vegetation that will provide a visual screen to proposed landfill related activities to be established on this site. The intent of Buffer Zone 4 is to retain a 3m wide vegetated zone along the Cooney Road street boundary. Planting is not intended, however if additional screening is required planting can occur. The species planting palette should be derived from Buffer Zone 1 planting palette. The focus of management in this zone will be weed management.



3m wide buffer zones with screening the primary intent

Year	Buffer Scope of Works
2018 - onwards	Stage 1 Buffer Zone Management Focus on weed management

Species Planting Palette

Planting Palette Buffer Zone 4 Derived from RE12.3.2.

Species have been chosen from a combination of RE Technical Descriptions and Site Survey conducted by Native Foresters in 2016. Species have been further selected based on planting requirements i.e. no vines, ground ferns, small herbs or slow growing species and those which are generally available in cultivation.

Planting Palette (if required) is the same as Buffer Zone 1 as it is representative of RE 12.3.2.