

PROPOSED LIFESTYLE COMMUNITY

LOT 2 & B DP1022067 - PALM LAKE RESORT, NORTHERN PRECINCT - OLD BAR, N.S.W, 2430
CIVIL ENGINEERING PACKAGE



LOCALITY PLAN

IMAGE SOURCE : NEARMAPS

DRAWING SCHEDULE

SHEET NUMBER	SHEET TITLE
NP-DA01.01	COVER SHEET, DRAWING SCHEDULE & LOCALITY PLAN
NP-DA03.01	EROSION & SEDIMENT CONTROL PLAN
NP-DA03.10	EROSION & SEDIMENT CONTROL DETAILS
NP-DA05.01	STORMWATER MANAGEMENT PLAN
NP-DA05.51	PAVEMENT, SIGNAGE & LINEMARKING PLAN
NP-DA05.71	ENTRY STATEMENT CONCEPT DESIGN
NP-DA06.01	SWEPT PATHS PLAN
NP-DA09.01	CIVIL DETAILS SHEET 1

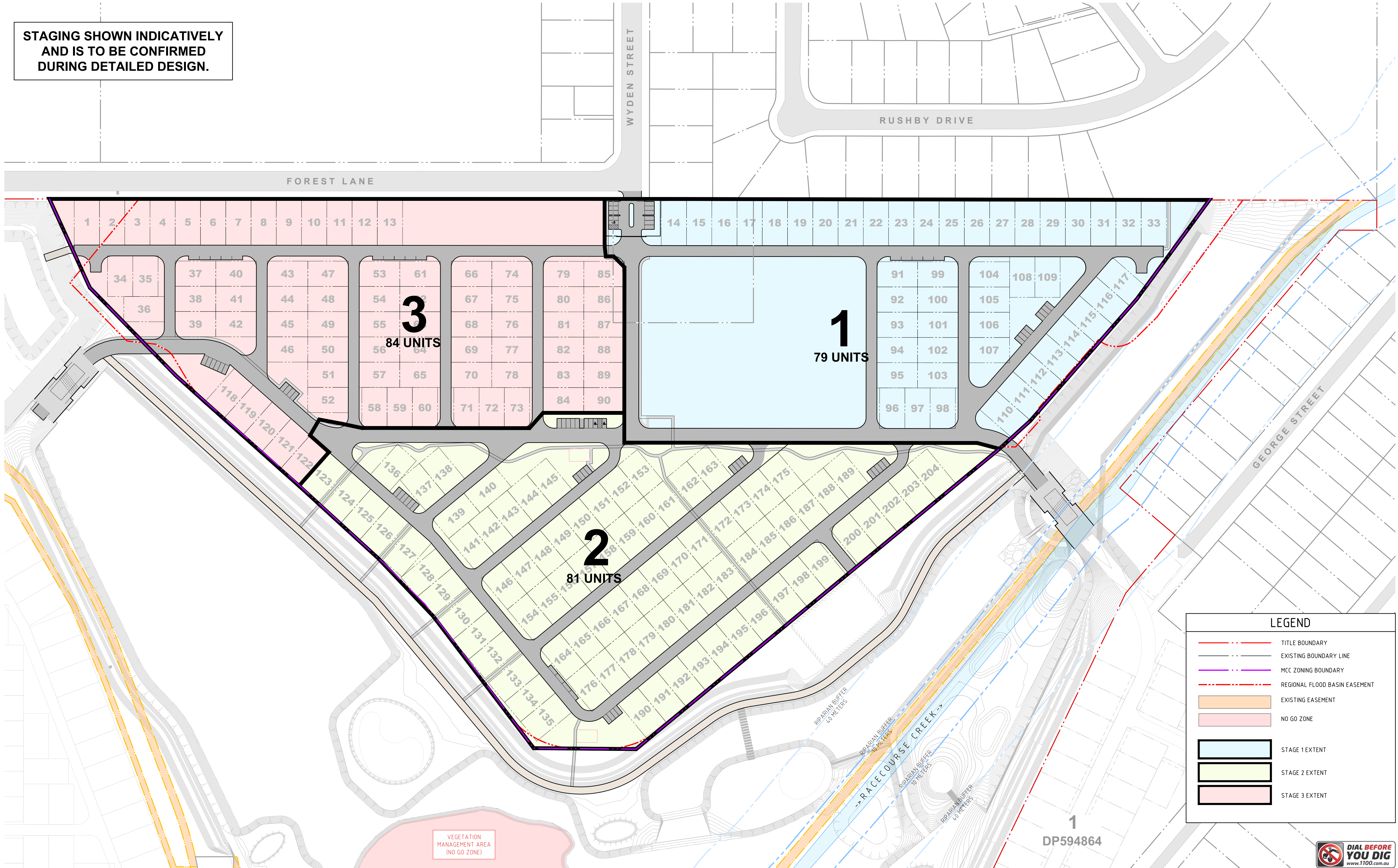
VERIFIER:
JOB MANAGER: CHIPER
DESIGNED: T SOUIRES
DRAWN: R KENNEDY



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.	PROJECT	DRAWING TITLE	JOB NUMBER
1	ISSUED FOR APPROVAL	RK		CP	30.10.24				PROPOSED LIFESTYLE COMMUNITY	CIVIL ENGINEERING PACKAGE	NL223154
2	ISSUED FOR APPROVAL	RK		CP	03.12.24						
3	ISSUED FOR APPROVAL	RK		CP	28.04.25						
						DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED.	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	NOT TO SCALE	PALM LAKE RESORT, NORTHERN PRECINCT OLD BAR, N.S.W, 2430	COVER SHEET, DRAWING SCHEDULE & LOCALITY PLAN	DRAWING NUMBER NP-DA01.01
											REVISION 3
DRAWING SHEET SIZE = A1											

STAGING SHOWN INDICATIVELY
AND IS TO BE CONFIRMED
DURING DETAILED DESIGN.



LEGEND

- TITLE BOUNDARY
- EXISTING BOUNDARY LINE
- MCC ZONING BOUNDARY
- REGIONAL FLOOD BASIN EASEMENT
- EXISTING EASEMENT
- NO GO ZONE
- STAGE 1 EXTENT
- STAGE 2 EXTENT
- STAGE 3 EXTENT



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR INFORMATION	RK		CP	5.02.25

CLIENT

Palm Lake Resort

DRAWING NOT TO BE USED FOR CONSTRUCTION
UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED.

ARCHITECT

VIA

THE COPYRIGHT OF THIS DRAWING REMAINS WITH
NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:1000 @ A1

0 10 20 30 40 50m

NORTHROP

Newcastle

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED LIFESTYLE COMMUNITY

LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W, 2430

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

GENERAL ARRANGEMENT
STAGING PLAN

JOB NUMBER

NL223154

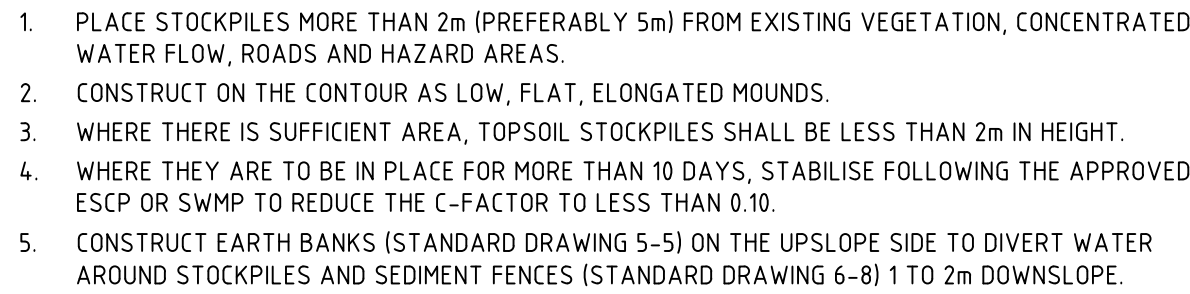
DRAWING NUMBER

NP-DA02.01

REVISION

1

DRAWING SHEET SIZE = A1

[illegible]

GRASSED WATERWAY

GRADIENT OF DRAIN 1-5%

DIRECTION OF FLOW

CAN BE CONSTRUCTED WITH OR WITHOUT CHANNEL.

ALL BATTER GRADES 2H:(1V) MAX.

2m MIN.

150mm MIN.

300mm MIN.

1. CONSTRUCT AT THE GRADIENT SPECIFIED ON THE ESCP OR SWMP, NORMALLY LESS THAN 1 PERCENT OR LEVEL.
2. AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
3. ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
4. ENSURE THE STRUCTURES ARE PROPERLY COMPACTED TO PREVENT FAILURE.
5. COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.
6. WHERE POSSIBLE, ENSURE THEY DISCHARGE WATERS ONTO EITHER STABILISED OR UNDISTURBED DISPOSAL SITES WITHIN THE SAME SUBCATCHMENT AREA FROM WHICH THE WATER ORIGINATED. APPROVAL MIGHT BE REQUIRED TO DISCHARGE INTO OTHER SUBCATCHMENTS.

The image contains three technical drawings of a silt fence:

- Perspective View (Top Left):** Shows a silt fence installed in a channel. The fence consists of a series of star pickets driven into the ground, connected by a self-supporting geotextile. The area upstream is labeled "DISTURBED AREA" and the area downstream is labeled "UNDISTURBED AREA". An arrow indicates the "DIRECTION OF FLOW".
- SECTION DETAIL (Top Right):** A cross-sectional view of the fence. It shows a vertical post (star picket) driven into the ground. The geotextile is attached to the post and extends into the ground. The ground surface is labeled "ON SOIL, 150mm x 100mm TRENCH WITH COMPACTED BACKFILL AND ON ROCK, SET INTO SURFACE CONCRETE". The distance from the post to the trench is labeled "600 MIN" and "600 TO 600".
- PLAN (Bottom):** A top-down view of the fence line. It shows a series of star pickets connected by a line. The distance between pickets is labeled "20m MAX (UNLESS STATED OTHERWISE ON SWMP/ESCP)". The distance from the picket to the trench is labeled "15m MIN". An arrow indicates the "FLOW" direction.

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

MINIMUM WIDTH 3m

MINIMUM LENGTH 15m

CONSTRUCTION SITE

PROPERTY BOUNDARY

200mm MINIMUM

300mm MINIMUM

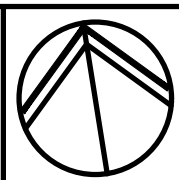
DGB 20 ROADBASE OR 30mm AGGREGATE

EXISTING ROADWAY

GEOTEXTILE FABRIC DESIGNED TO PREVENT INTERMINGLING OF SUBGRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS. GEOTEXTILE MAY BE A WOVEN OR NEEDLE-PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500 N

RUNOFF DIRECTED TO SEDIMENT TRAP/FENCE

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.



ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK.
NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.
THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE



Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROPOSED LIFESTYLE COMMUNITY

LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W, 2430

CIVIL ENGINEERING PACKAGE

EROSION & SEDIMENT CONTROL DETAILS

NL223154

DRAWING NUMBER

REVISION

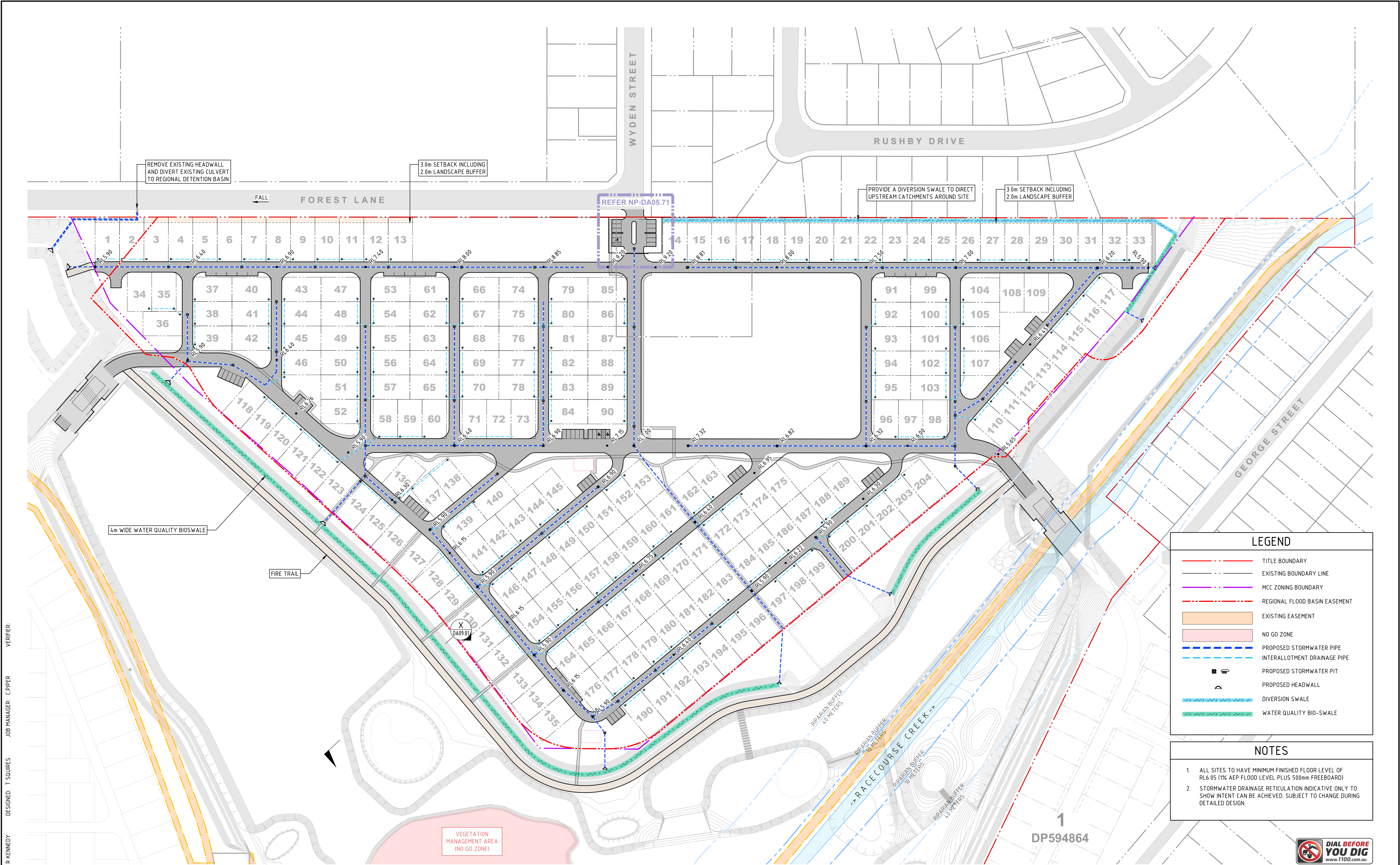
NP-DA03.10

DRAWING SHEET SIZE = A1

3. THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION UNTIL ENDORSED BY MID COAST COUNCIL.
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE APPROPRIATE FOR THE SEDIMENT TYPES OF THE SOILS ON-SITE, IN ACCORDANCE WITH THE 'BLUE BOOK' (MANAGING URBAN STORMWATER – SOILS AND CONSTRUCTION, LANDCOM, 2004), OR OTHER CURRENT RELEVANT INDUSTRY STANDARDS FOR EROSION AND SEDIMENT CONTROL FOR AUSTRALIAN CONDITIONS. THIS INCLUDES SEDIMENT TRAPS AND LINING OF CHANNELS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING A DETAILED WRITTEN RECORD OF ALL EROSION AND SEDIMENT CONTROLS ON-SITE DURING THE CONSTRUCTION PERIOD. THIS RECORD SHALL BE UPDATED ON A WEEKLY BASIS AND AFTER RAINFALL AND SHALL CONTAIN DETAILS ON THE CONDITION OF CONTROLS AND ANY/ALL MAINTENANCE, CLEANING AND BREACHES. THIS RECORD SHALL BE KEPT ON-SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE FOR INSPECTION BY THE PRINCIPAL CERTIFYING AUTHORITY AND THE SUPERINTENDENT DURING NORMAL WORKING HOURS.
6. INSTALL SEDIMENT PROTECTION FILTERS ON ALL NEW AND EXISTING STORMWATER INLET PITS IN ACCORDANCE WITH EITHER THE MESH AND GRAVEL INLET FILTER DETAIL SD6-11 OR THE GEOTEXTILE INLET FILTER DETAIL SD6-12 OF THE 'BLUE BOOK'.
7. ESTABLISH ALL REQUIRED SEDIMENT FENCES IN ACCORDANCE WITH DETAIL SD6-8 OF THE 'BLUE BOOK'.
8. INSTALL SEDIMENT FENCING, OR OTHER SEDIMENT CONTROL DEVICES, AROUND INDIVIDUAL BUILDING ZONES/AREAS AS REQUIRED AND AS DIRECTED BY THE SUPERINTENDENT OR APPROPRIATE COUNCIL OFFICER.
9. ALL TRENCHES INCLUDING ALL SERVICE TRENCHES AND SWALE EXCAVATION SHALL BE SIDE-CAST TO THE HIGH SIDE AND CLOSED AT THE END OF EACH DAYS WORK.
10. THE CONTRACTOR SHALL ENSURE THAT ALL VEGETATION (TREE, SHRUB AND GROUND COVER) WHICH IS TO BE RETAINED SHALL BE PROTECTED DURING THE DURATION OF CONSTRUCTION.
11. ALL VEGETATION TO BE REMOVED SHALL BE MULCHED ON-SITE AND SPREAD/STOCKPILED AS DIRECTED BY THE SUPERINTENDENT.
12. STRIP TOPSOIL IN AREAS DESIGNATED FOR STRIPPING AND STOCKPILE FOR RE-USE AS REQUIRED. ANY SURPLUS MATERIAL SHALL BE SPREAD ON-SITE AS DIRECTED BY THE SUPERINTENDENT OR REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH EPA GUIDELINES.
13. CONSTRUCT AND MAINTAIN ALL MATERIAL STOCKPILES IN ACCORDANCE WITH DETAIL SD4-1 OF THE 'BLUE BOOK' (INCLUDING CUT-OUT SWALES TO THE HIGH SIDE AND SEDIMENT FENCES TO THE LOW SIDE).
14. ENSURE STOCKPILES DO NOT EXCEED 2.0m HIGH. PROVIDE WIND AND RAIN EROSION PROTECTION AS REQUIRED IN ACCORDANCE WITH THE 'BLUE BOOK'.
15. PROVIDE WATER TRUCKS OR SPRINKLER DEVICES DURING CONSTRUCTION AS REQUIRED TO SUPPRESS DUST.
16. ONCE CUT/FILL OPERATIONS HAVE BEEN FINALIZED ALL DISTURBED AREAS THAT ARE NOT BEING WORKED ON SHALL BE RE-VEGETATED AS SOON AS IS PRACTICAL.

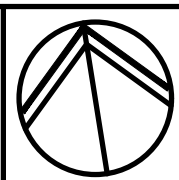
NOT FOR CONSTRUCTION

REVISION		DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT			PROJECT	DRAWING TITLE	JOB NUMBER	
1		ISSUED FOR APPROVAL		RK	CP	30.10.24				ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE. SCALE 1:1000 @ A1 	PROPOSED LIFESTYLE COMMUNITY LOT 2 & B DP1022067 PALM LAKE RESORT, NORTHERN PRECINCT OLD BAR, N.S.W, 2430 Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100	CIVIL ENGINEERING PACKAGE EROSION & SEDIMENT CONTROL DETAILS	NL223154 NP-DA03.10	REVISION 3
2		ISSUED FOR APPROVAL		RK	CP	03.12.24								
3		ISSUED FOR APPROVAL		RK	CP	28.04.25								
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED							THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD							
DRAWING SHEET SIZE = A1														



VERIFIER: CHIPER
JOB MANAGER: T SQUIRES
DESIGNED: R KENNEDY
DRAWN: R KENNEDY

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
1	ISSUED FOR APPROVAL	RK	CP	30.10.24		
2	ISSUED FOR APPROVAL	RK	CP	03.12.24		
3	ISSUED FOR APPROVAL	RK	CP	28.04.25		



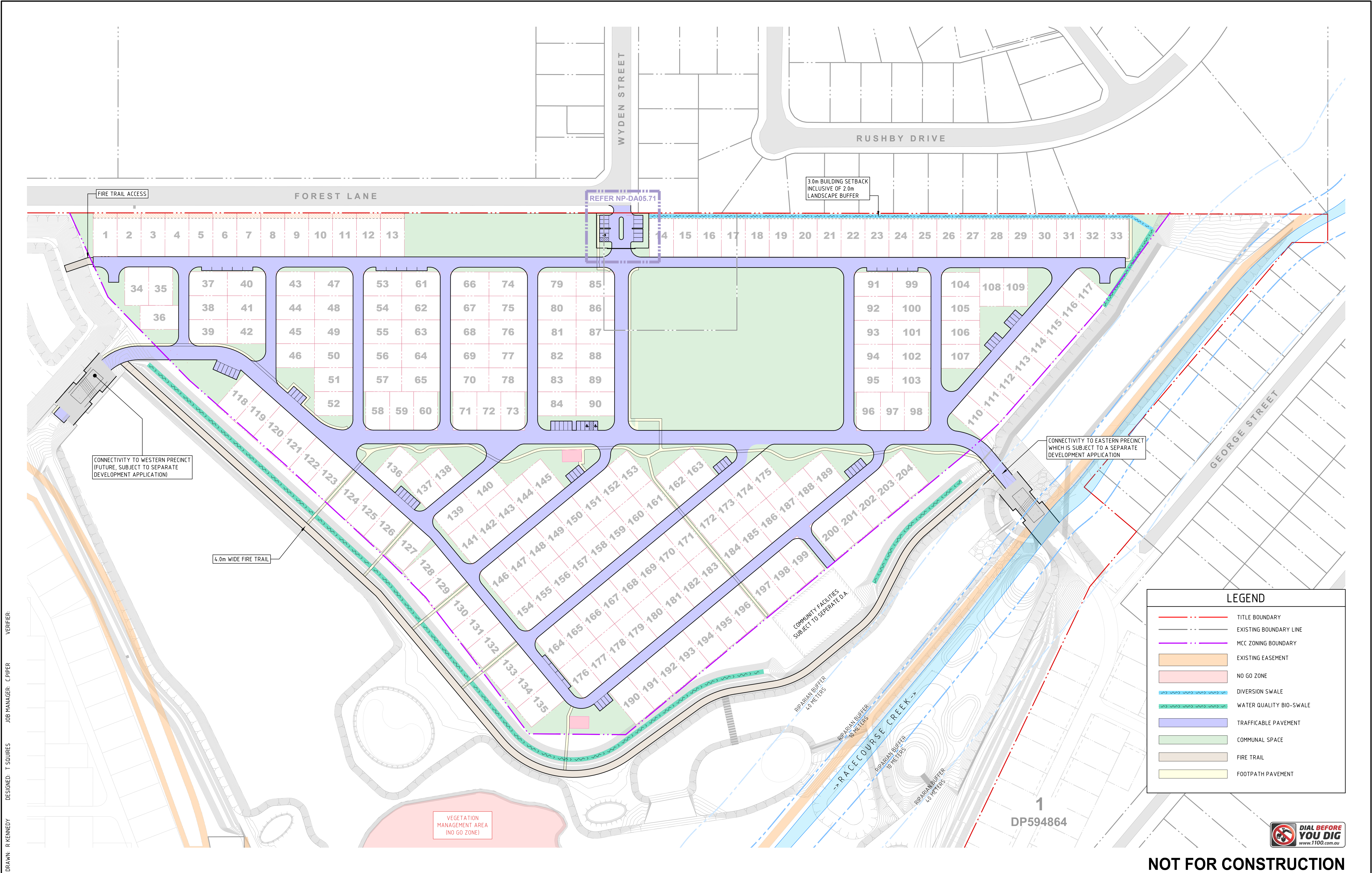
ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT
PROPOSED LIFESTYLE COMMUNITY
LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W. 2430

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
STORMWATER MANAGEMENT PLAN

JOB NUMBER
NL223154
DRAWING NUMBER
NP-DA05.01
REVISION
3
DRAWING SHEET SIZE = A1



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
1	ISSUED FOR APPROVAL	RK		CP	30.10.24	Palm Lake Resort
2	ISSUED FOR APPROVAL	RK		CP	03.12.24	
3	ISSUED FOR APPROVAL	RK		CP	28.04.25	



THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD

DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED.



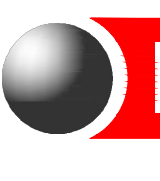
THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.



SCALE 1:1000 @ A1

Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100



Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROPOSED LIFESTYLE COMMUNITY
LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W, 2430

PROPOSED LIFESTYLE COMMUNITY
LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W, 2430

DRAWING TITLE
CIVIL ENGINEERING PACKAGE
PAVEMENT, SIGNAGE & LINEMARKING PLAN

JOB NUMBER
NL223154

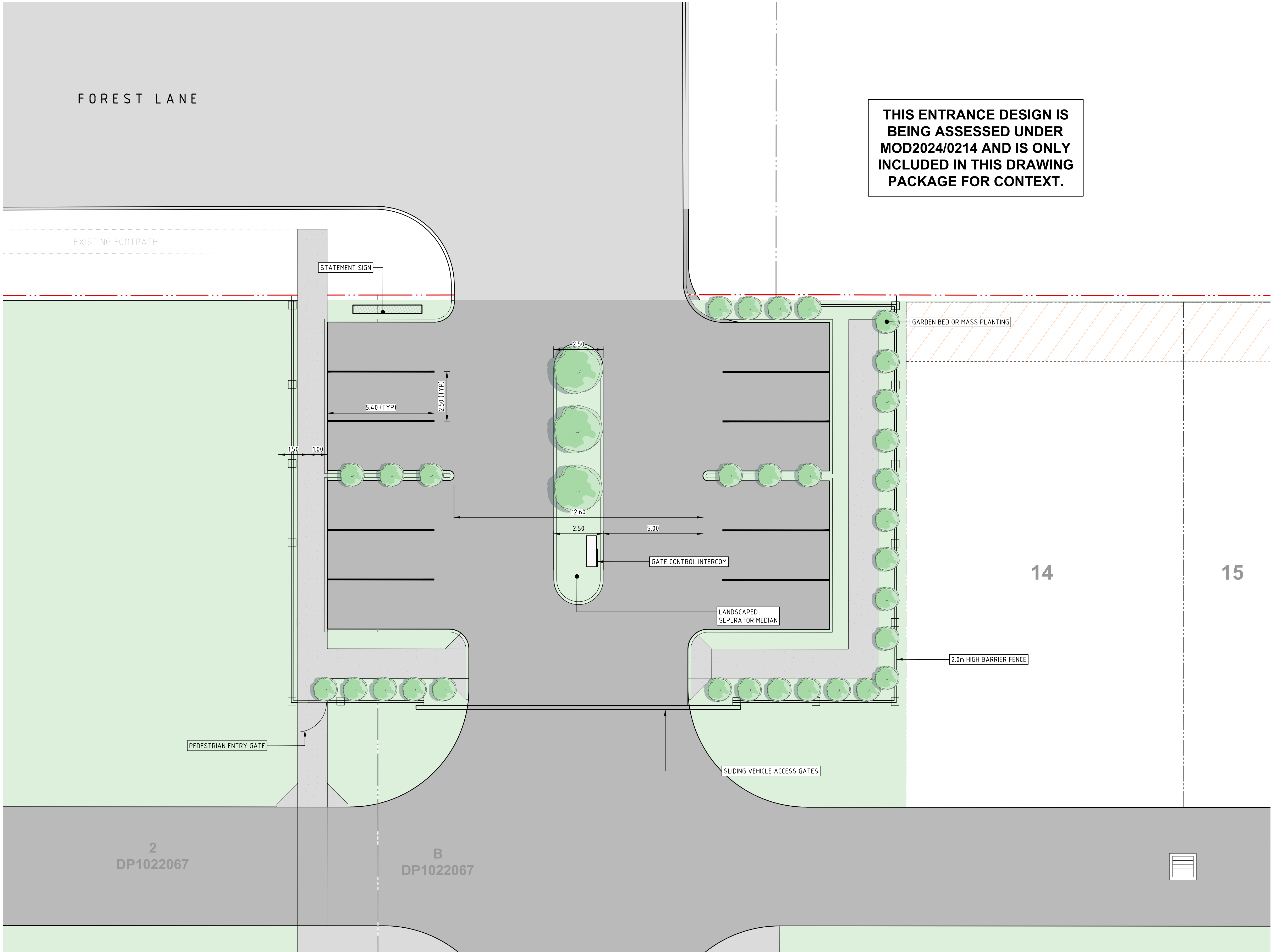
DRAWING NUMBER
NP-DA05.51

REVISION
3

DRAWING SHEET SIZE = A1

DRAWN: R KENNEDY
DESIGNED: T SQUIRES
JOB MANAGER: C PIPER
VERIFIER:

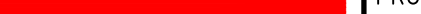
VERIFIER: CHIPER
JOB MANAGER: T SQUIRES
DESIGNED: R KENNEDY
DRAWN: R KENNEDY



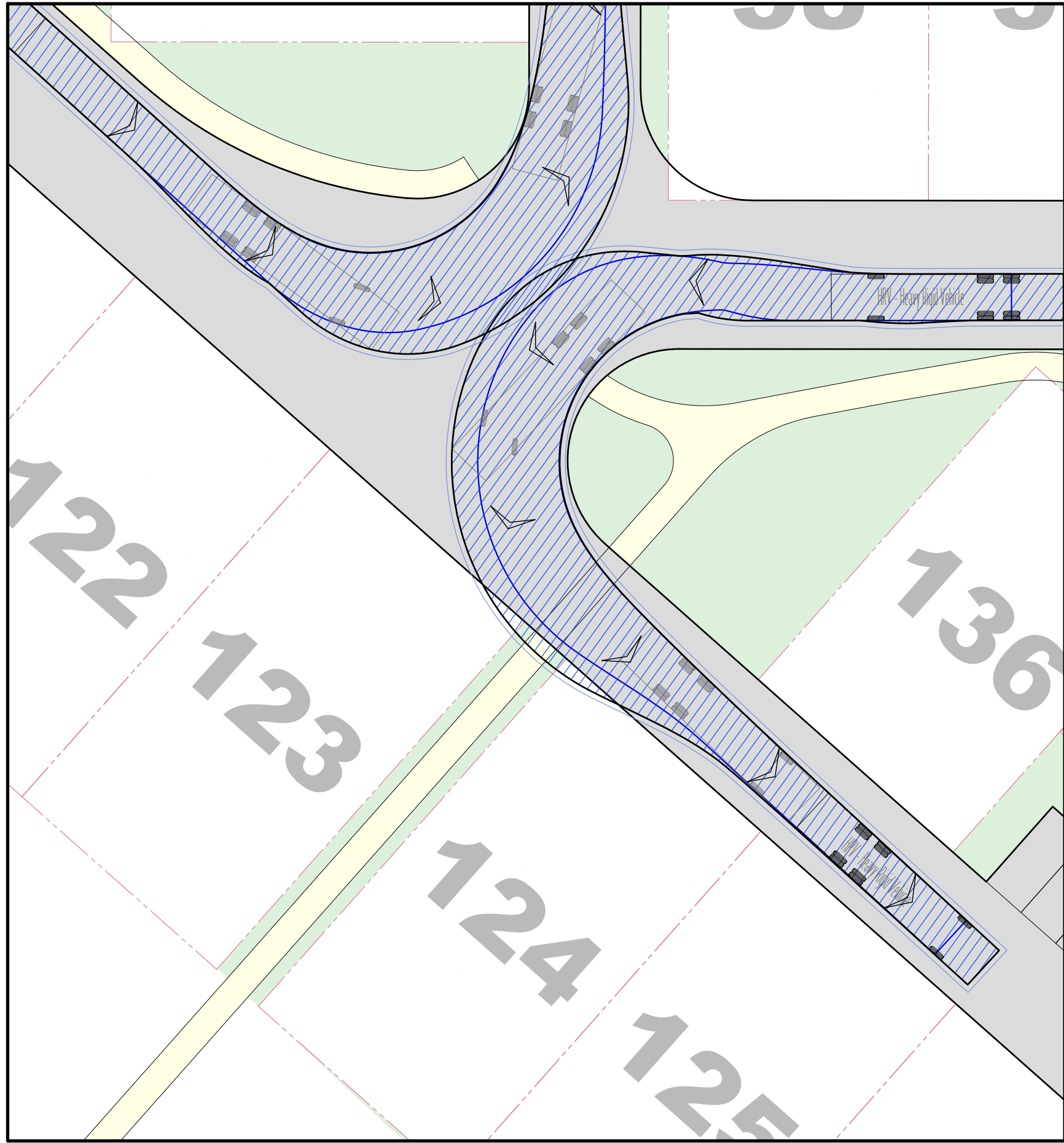
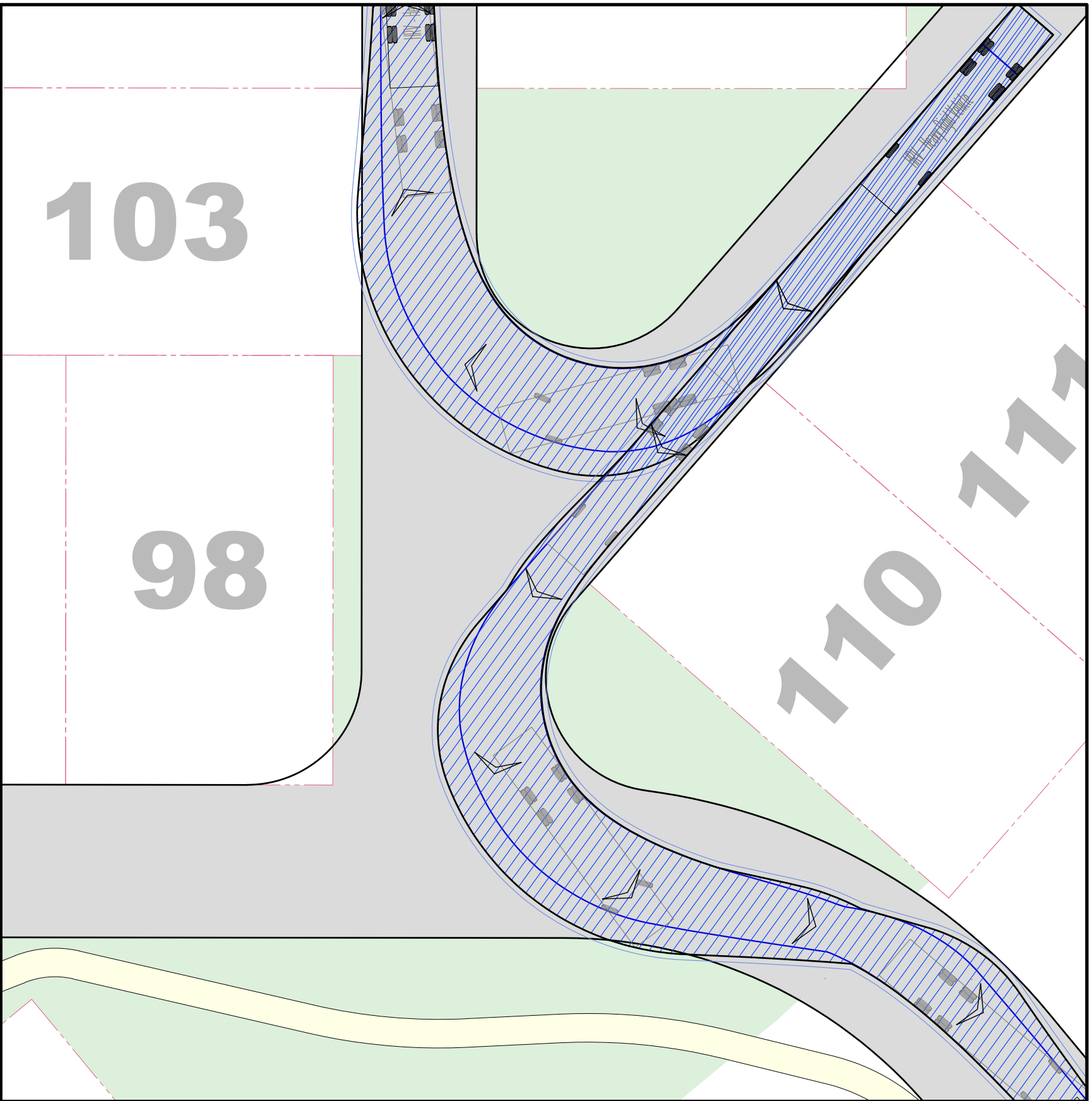
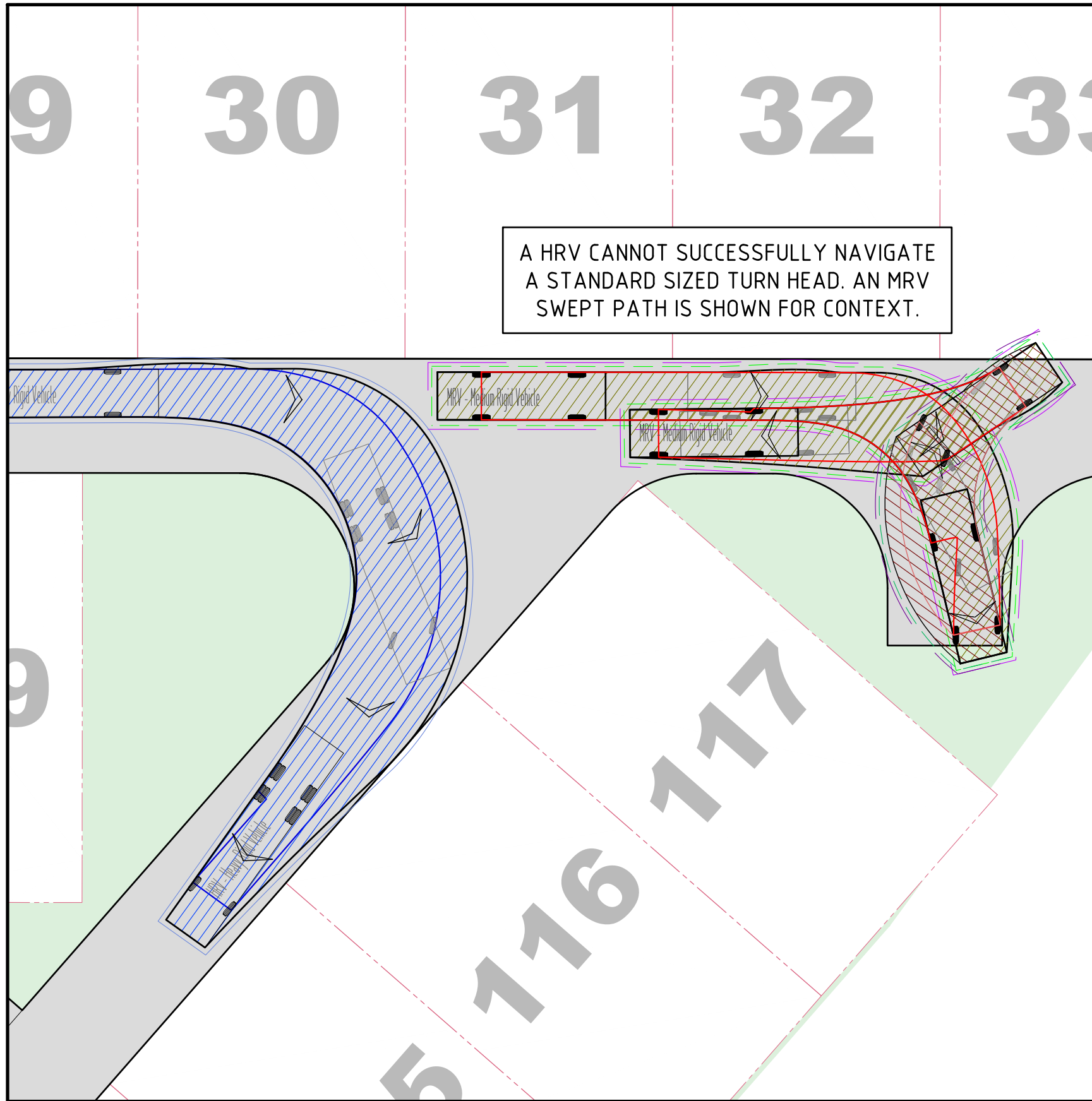
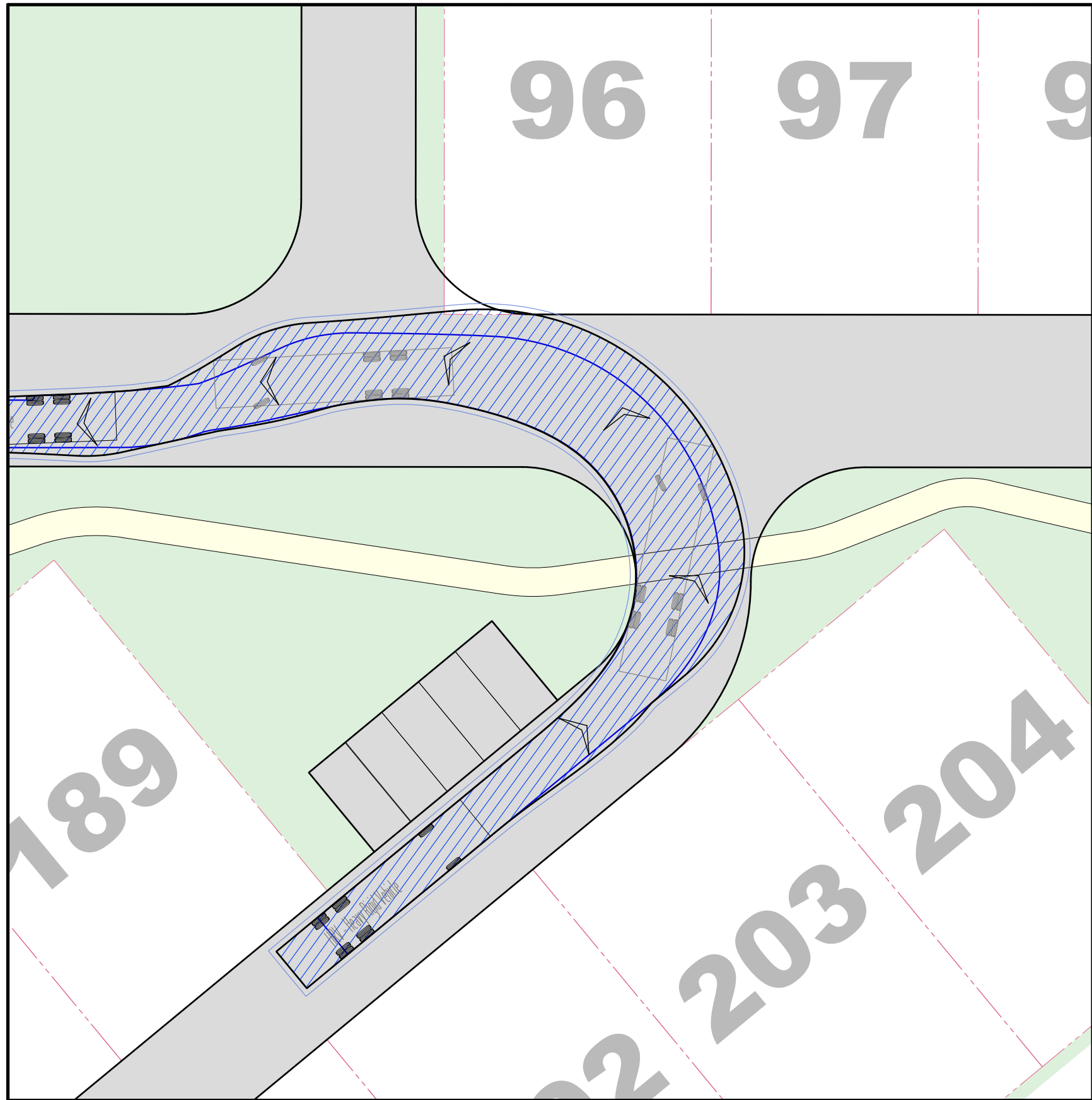
LEGEND	
	TITLE BOUNDARY LINE
	EXISTING BOUNDARY
	VEHICLE PAVEMENT
	PEDESTRIAN PAVEMENT
	LANDSCAPING



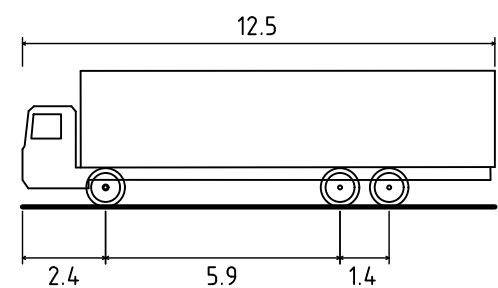
NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	SCALE	PROJECT	DRAWING TITLE	JOB NUMBER
1	ISSUED FOR APPROVAL	RK		CP	30.10.24	 DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	 THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	 Newcastle Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100	PROPOSED LIFESTYLE COMMUNITY LOT 2 & B DP1022067 PALM LAKE RESORT, NORTHERN PRECINCT OLD BAR, N.S.W, 2430	CIVIL ENGINEERING PACKAGE	NL223154
2	ISSUED FOR APPROVAL	RK		CP	03.12.24					DRAWING NUMBER	REVISION
3	ISSUED FOR APPROVAL	RK		CP	28.04.25					NP-DA05.71	3
										DRAWING SHEET SIZE = A1	

VERIFIER: JOB MANAGER: CIPER DESIGNED: T SOIRES DRAWN: R KENNEDY



VEHICLE PROFILE



HRV - HEAVY RIGID VEHICLE

OVERALL LENGTH	12.500m
OVERALL WIDTH	2.500m
OVERALL BODY HEIGHT	4.300m
TRACK WIDTH	2.500m
LOCK-TO-LOCK TIME	6.00s
KERB TO KERB TURNING RADIUS	12.500m
TRAVELLING SPEED	10 km/h

DISCLAIMER

THE TURNING PATHS/TEMPLATES PROVIDED HAVE BEEN PRODUCED USING SIMULATION SOFTWARE AND ARE TO BE USED AS A GUIDE ONLY. THESE SIMULATIONS MAY NOT REFLECT ACTUAL DRIVER BEHAVIOUR AND/OR EXPERIENCE UNDER ACTUAL DRIVING CONDITIONS.

IT IS NORTHROP'S INTENTION TO UTILISE STANDARD VEHICLES NOMINATED IN AS2890.1 AND AS2890.2 FOR ALL DESIGN/CHECKING VEHICLE SIMULATIONS AT AN IDEAL MOVEMENT SPEED OF 10km/h WITH A NOMINAL VEHICLE BODY OFFSET OF 500mm. WHERE MANOEUVRABILITY IS LIMITED AND SITE CONDITIONS ARE FAVOURABLE, AN ABSOLUTE MINIMUM SPEED OF 5km/h WITH AN ABSOLUTE MINIMUM VEHICLE BODY CLEARANCE OF 300mm MAY BE ADOPTED.

IF THE USE OF SPECIFIC VEHICLES (NOT DETAILED UNDER AS2890) IS REQUESTED, IT IS TO BE NOTED THAT THEIR DIMENSIONS AND MANOEUVRING CHARACTERISTICS HAVE BEEN INTERPRETED INTO THE SIMULATION SOFTWARE FROM INFORMATION PROVIDED BY SERVICE PROVIDERS AND VEHICLE MANUFACTURERS. NORTHROP ACCEPTS NO RESPONSIBILITY OF THE ACCURACY THESE VEHICLE MOVEMENTS, AND ANY MANOEUVRES PROVIDED SHOULD ONLY BE USED AS A GUIDE WITH ACTUAL DESIGN BEING BASED AROUND ENGINEERING ADVICE AND AUSTRALIAN STANDARDS.

AT ALL TIMES, STANDARD VEHICLE TURNING PATHS/TEMPLATES ARE TO TAKE DESIGN PRECEDENCE OVER ALL SPECIFIC VEHICLES UNDER NO CIRCUMSTANCE DOES THE SIMULATION PROVIDED RELIEVE ANY PARTY OF THEIR ROLE AND RESPONSIBILITY FOR PROVIDING DESIGN SOLUTIONS IN ACCORDANCE WITH GOOD DESIGN PRACTICES.

VEHICLE MOVEMENTS

FORWARD MOVEMENT



VEHICLE BODY



VEHICLE WHEELS



ADDITIONAL CLEARANCE OFFSET
(0.3m FROM BODY)

REVERSE MOVEMENT



VEHICLE BODY



VEHICLE WHEELS



ADDITIONAL CLEARANCE OFFSET
(0.3m FROM BODY)



NOT FOR CONSTRUCTION

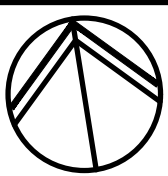
REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	RK		CP	03.12.24
2	ISSUED FOR INFORMATION	RK		CP	18.12.24
3	ISSUED FOR APPROVAL	RK		CP	28.04.25

Drawing Not to be used for construction unless verification signature has been added.



ARCHITECT

V / A



ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

SCALE 1:250@A1



Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT

PROPOSED LIFESTYLE COMMUNITY

LOT 2 & B DP1022067
PALM LAKE RESORT, NORTHERN PRECINCT
OLD BAR, N.S.W, 2430

DRAWING TITLE

CIVIL ENGINEERING PACKAGE

SWEPT PATHS PLAN

JOB NUMBER

NL223154

DRAWING NUMBER

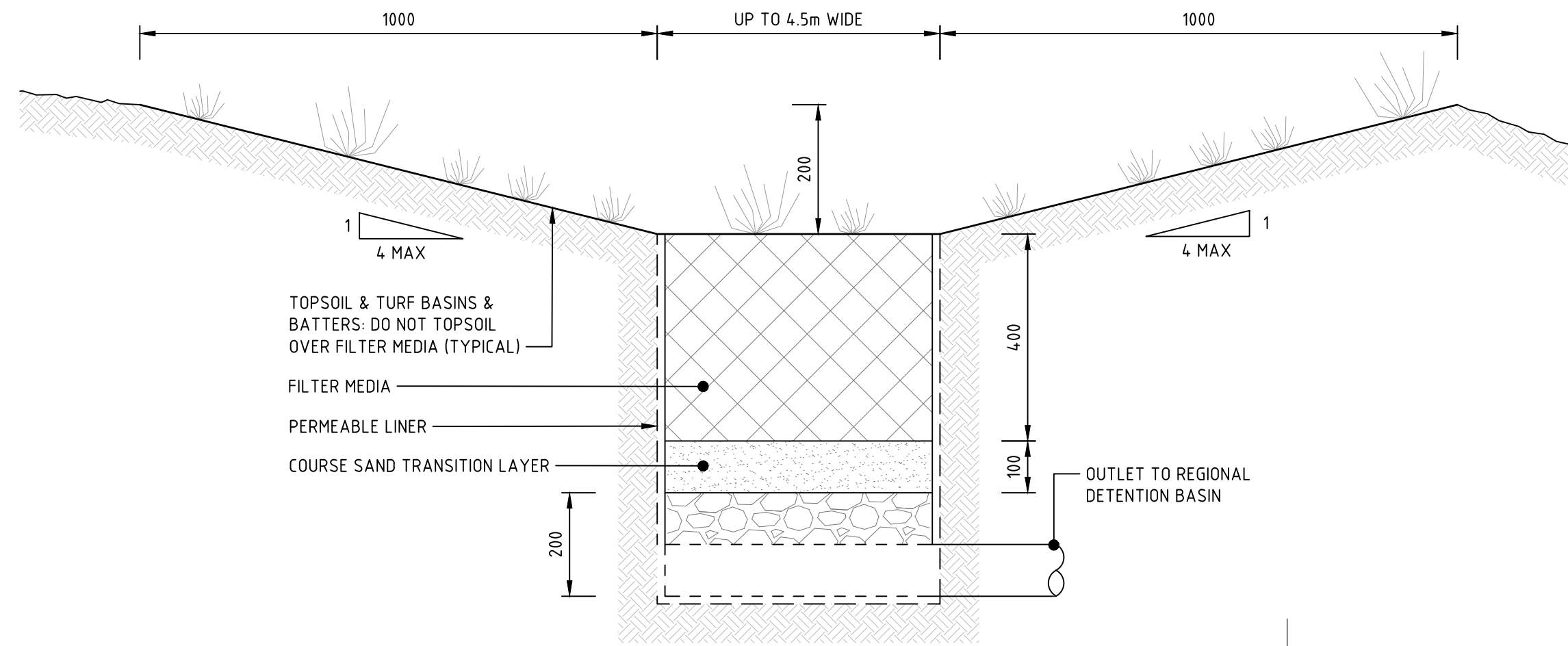
NP-DA06.01

REVISION

3

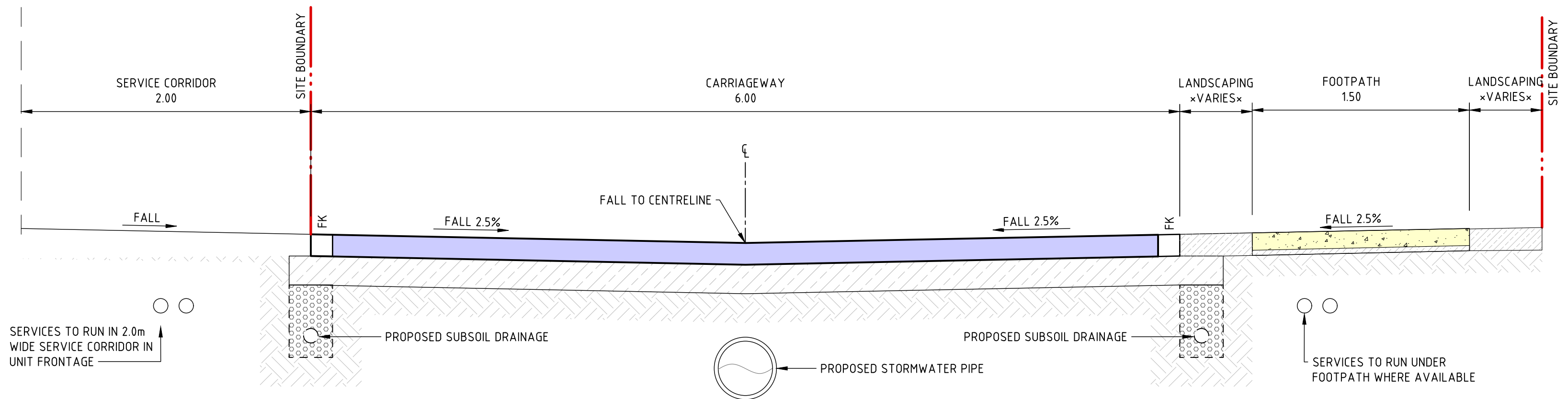
DRAWING SHEET SIZE = A1

VERIFIER: CHIPER
JOB MANAGER: TSQUIRES
DESIGNED: RKENNEDY
DRAWN: RKENNEDY

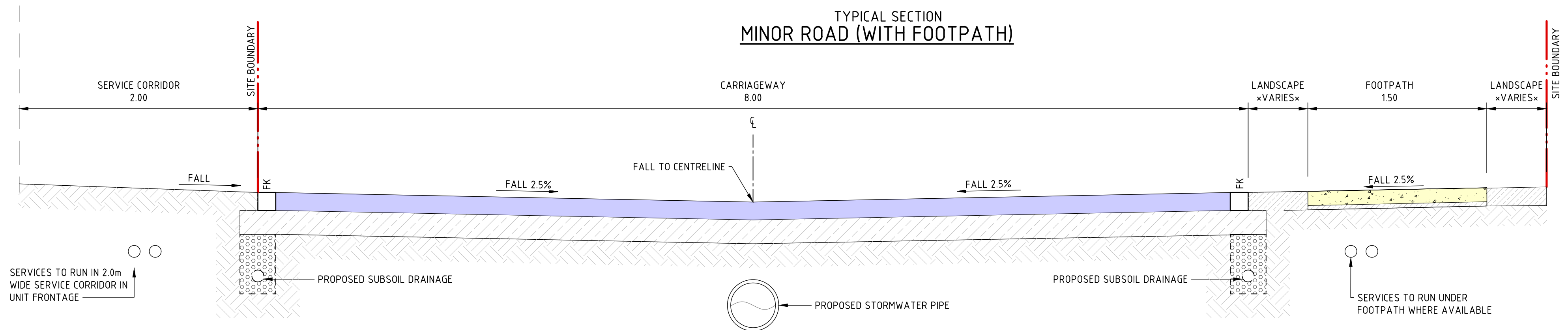


TYPICAL BIOFILTRATION SWALE DETAIL

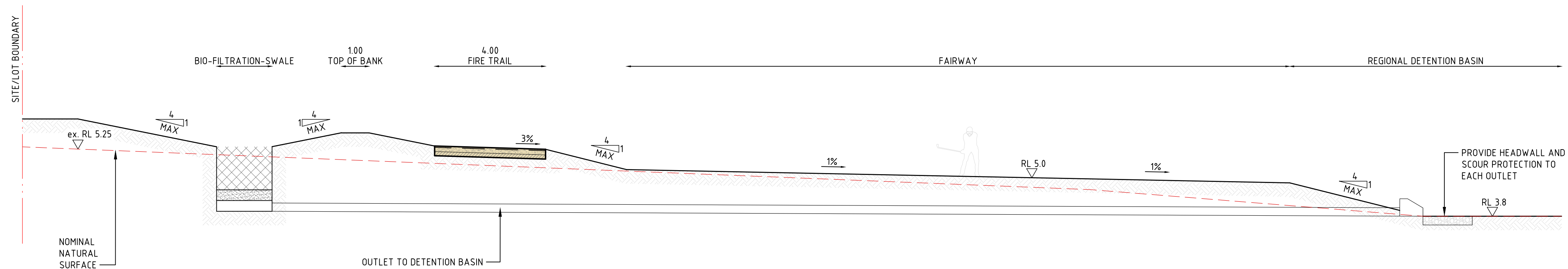
- BIOFILTRATION MEDIA - 400mm DEPTH COMPRISING A SANDY LOAM WITH A SATURATED
- HYDRAULIC CONDUCTIVITY OF 200mm/hr. THE FILTER MATERIAL MUST HAVE A TN CONTENT OF 733mg/kg, <5% ORGANIC MATERIAL & <54mg/kg OF ORTHOPHOSPHATE CONTENT.
- TRANSITION LAYER - 100mm DEPTH COMPRISING CLEAN WELL GRADED MEDIUM TO COARSE SAND WITH MINIMAL FINES.
- DRAINAGE LAYER - 200mm DEPTH COMPRISING 5mm GRAVEL.
- AN IMPERMEABLE LINER IS TO BE APPLIED TO BOTH SIDES & THE BASE OF THE SWALE MEDIA.
- THE SUBSOIL DRAINAGE IS TO DISCHARGE TO THE REGIONAL DETENTION BASIN



TYPICAL SECTION MINOR ROAD (WITH FOOTPATH)



TYPICAL SECTION MAJOR ROAD (WITH FOOTPATH)



SECTION X-X
SCALE 1:100



NOT FOR CONSTRUCTION

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED FOR APPROVAL	RK		CP	30.10.24
2	ISSUED FOR APPROVAL	RK		CP	03.12.25

CLIENT	Palm Lake Resort
ARCHITECT	V / A
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD

ARCHITECT	V / A
DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.

NORTHROP Newcastle Level 1, 215 Pacific Hwy, Charlestown NSW 2290 Ph (02) 4943 1777 Email newcastle@northrop.com.au ABN 81 094 433 100

PROJECT	PROPOSED LIFESTYLE COMMUNITY LOT 2 & B DP1022067 PALM LAKE RESORT, NORTHERN PRECINCT OLD BAR, N.S.W, 2430
---------	--

DRAWING TITLE	CIVIL ENGINEERING PACKAGE CIVIL DETAILS SHEET 1
---------------	--

JOB NUMBER	NL223154
DRAWING NUMBER	NP-DA09.01
REVISION	2
DRAWING SHEET SIZE	A1