



**CIVIL GEOTECHNICAL SERVICES**  
**ABN 26 474 013 724**  
**PO Box 678 Croydon Vic 3136**  
**Telephone: 9723 0744 Facsimile: 9723 0799**

10<sup>th</sup> August 2023

Our Reference: 23473:NB1577

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**ASPIRE – STAGE 36A (PLUMPTON)**

Please find attached our Report No's 23473/R001 & 22473/R002 which relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density was performed in June 2023.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

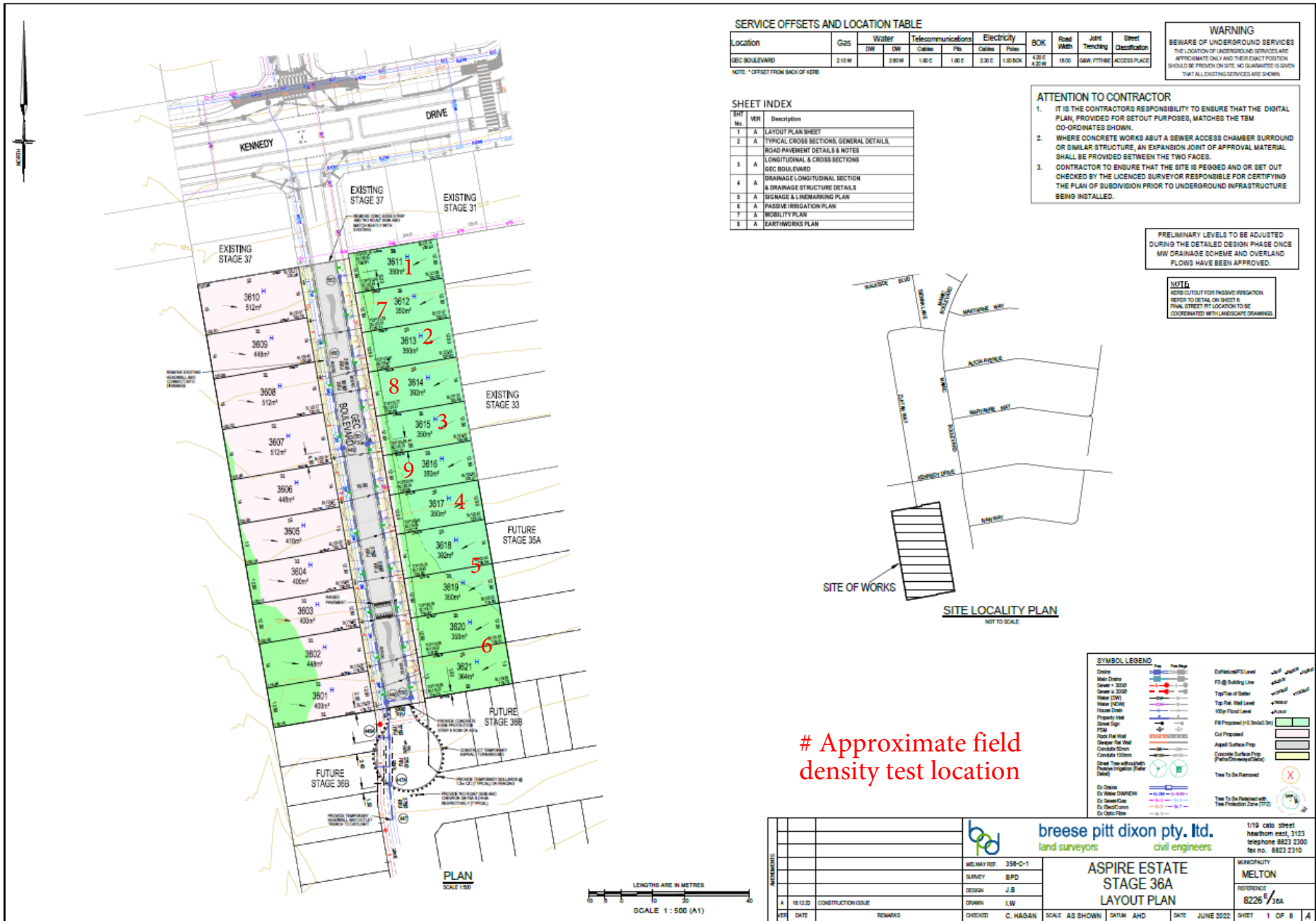
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to be 'Nick Brock', is written over a light blue circular stamp.

Nick Brock

# FIGURE 1



### SERVICE OFFSETS AND LOCATION TABLE

Location	Gas	Water		Telecommunications		Electricity		BOK	Road Width	Joint Trenching	Street Classification
		DW	DW	Cables	Fibre	Cables	Fibre				
GEC BOULEVARD	2.10 W	2.80 W	1.80 E	1.80 E	2.30 E	1.30 BOK	4.20 E	4.20 W	18.00	GAW, FTTH	ACCESS PLACE

NOTE: \* OFFSET FROM BACK OF KERB

**WARNING**  
BEWARE OF UNDERGROUND SERVICES  
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

### SHEET INDEX

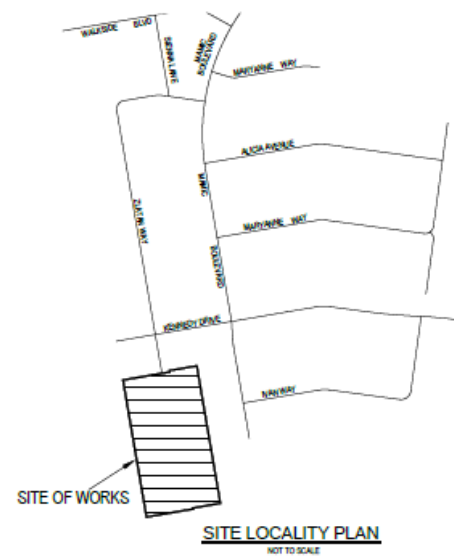
SHT No.	VER.	Description
1	A	LAYOUT PLAN SHEET
2	A	TYPICAL CROSS SECTIONS, GENERAL DETAILS, ROAD PAVEMENT DETAILS & NOTES
3	A	LONGITUDINAL & CROSS SECTIONS GEC BOULEVARD
4	A	DRAINAGE LONGITUDINAL SECTION & DRAINAGE STRUCTURE DETAILS
5	A	SIGNAGE & LINEMARKING PLAN
6	A	PASSIVE IRRIGATION PLAN
7	A	MOBILITY PLAN
8	A	EARTHWORKS PLAN

### ATTENTION TO CONTRACTOR

- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TSM CO-ORDINATES SHOWN.
- WHERE CONCRETE WORKS ABOUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVAL MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.
- CONTRACTOR TO ENSURE THAT THE SITE IS PEGGED AND OR SET OUT CHECKED BY THE LICENCED SURVEYOR RESPONSIBLE FOR CERTIFYING THE PLAN OF SUBDIVISION PRIOR TO UNDERGROUND INFRASTRUCTURE BEING INSTALLED.

PRELIMINARY LEVELS TO BE ADJUSTED DURING THE DETAILED DESIGN PHASE ONCE FINAL DRAINAGE SCHEME AND OVERLAND FLOWS HAVE BEEN APPROVED.

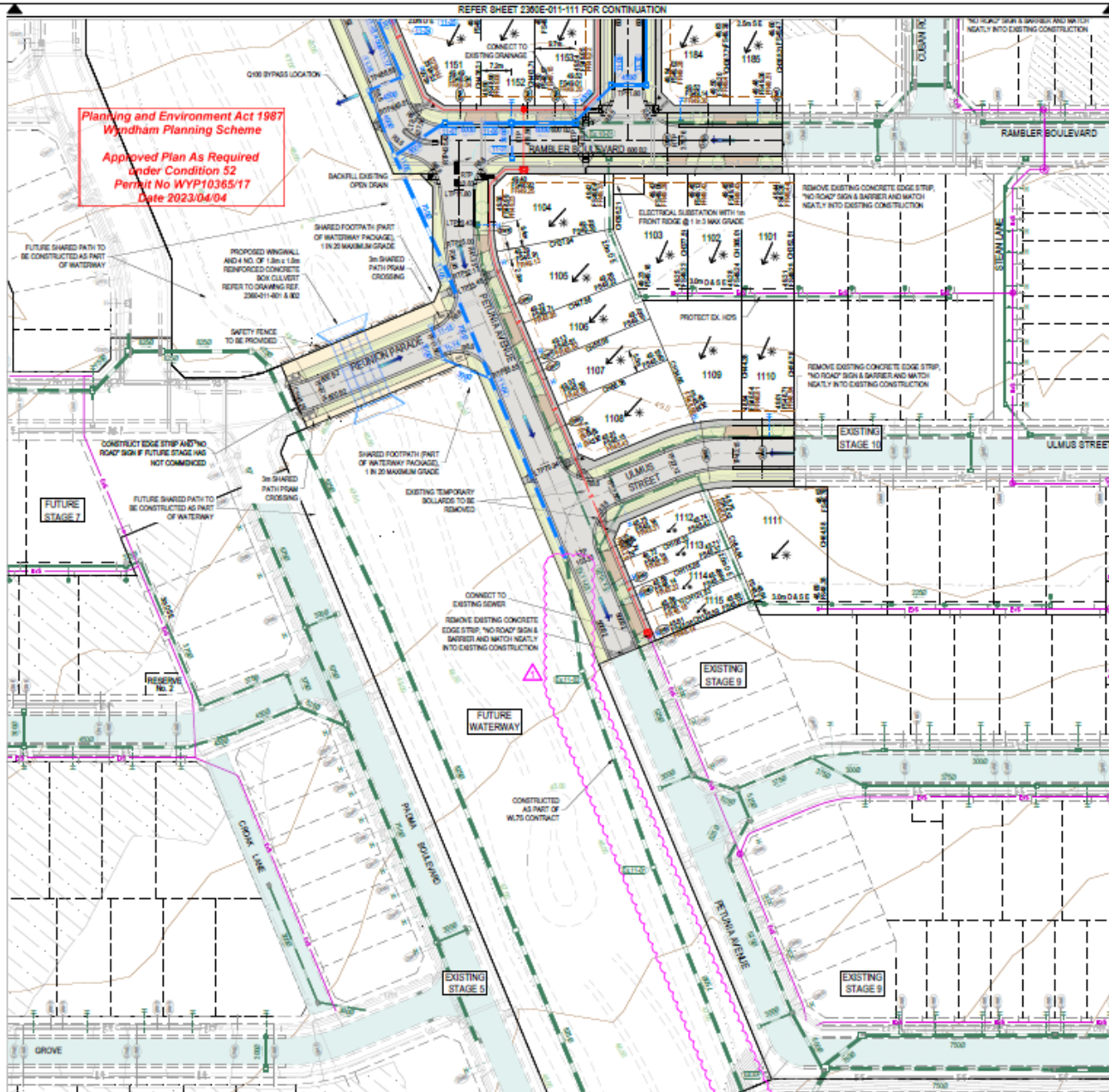
**NOTE**  
HERE-CUTOUT FOR PASSIVE IRRIGATION REFER TO DETAIL ON SHEET 6 FINAL STREET TRY LOCATION TO BE COORDINATED WITH LANDSCAPE DRAWINGS



# Approximate field density test location

SYMBOL LEGEND		SYMBOL LEGEND	
Circle	Prop	Prop	Prop
Main Drain	Prop	Prop	Prop
Sewer + 3000	Prop	Prop	Prop
Sewer + 2000	Prop	Prop	Prop
Water (DW)	Prop	Prop	Prop
Water (NCR)	Prop	Prop	Prop
House Drain	Prop	Prop	Prop
Property Line	Prop	Prop	Prop
Street Sign	Prop	Prop	Prop
Prop	Prop	Prop	Prop
Rock Ret Wall	Prop	Prop	Prop
Sewer Ret Wall	Prop	Prop	Prop
Concrete Stone	Prop	Prop	Prop
Concrete 100mm	Prop	Prop	Prop
Street Tree without/with Passive Irrigation (P/I Detail)	Prop	Prop	Prop
Do Drain	Prop	Prop	Prop
Do Water DRAIN	Prop	Prop	Prop
Do Sewer Gas	Prop	Prop	Prop
Do Black/Comm	Prop	Prop	Prop
Do Cable Fibre	Prop	Prop	Prop
Enfilation/FI Level	Prop	Prop	Prop
FS @ Building Line	Prop	Prop	Prop
Top/Fin of Saker	Prop	Prop	Prop
Top Ret. Wall Level	Prop	Prop	Prop
100yr Flood Level	Prop	Prop	Prop
FI Proposed (+0.2m/0.3m)	Prop	Prop	Prop
Cut Proposed	Prop	Prop	Prop
Asphalt Surface Prop	Prop	Prop	Prop
Concrete Surface Prop (P/I/Drainage/Other)	Prop	Prop	Prop
Tree To Be Retained	Prop	Prop	Prop
Tree To Be Retained with Tree Protection Zone (TPZ)	Prop	Prop	Prop

		<b>breese pitt dixon pty. ltd.</b> land surveyors civil engineers		1/19 c880 street melbourne vic 31123 telephone 8823 2300 fax no. 8823 2310
MILEWAY REF: 358-C-1 SURVEY: BPD DESIGN: J.S. DRAWN: L.W.		<b>ASPIRE ESTATE STAGE 36A LAYOUT PLAN</b>		MUNICIPALITY <b>MELTON</b> REFERENCE <b>8226/36A</b>
METAMENTS A 18/12/22 CONSTRUCTION ISSUE	CHECKED: C. HAGAN SCALE: AS SHOWN DATUM: AHD	DATE: JUNE 2022	SHEET: 1 OF 8	A



**Planning and Environment Act 1987**  
**Wyndham Planning Scheme**  
**Approved Plan As Required**  
**under Condition 52**  
**Permit No WYP10355/17**  
**Date 2023/04/04**

LEGEND - LAYOUT PLAN	
	STORMWATER DRAIN, TPT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (E) GROUND
	ELECTRICITY (E) HEAD
	GAS
	TELSTRA
	OPTIC FIBRE
	WATER
	RECYCLE WATER
	AG DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING ELECTRICITY OVERHEAD
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING OPTIC FIBRE
	EXISTING WATER
	EXISTING RECYCLED WATER
	EXISTING AG DRAIN
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE ELECTRICITY OVERHEAD
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE OPTIC FIBRE
	FUTURE WATER
	FUTURE RECYCLED WATER
	FUTURE AG DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	ZERO LOT LINES
	EXISTING SURFACE LEVEL
	FINISHED BUILDING LINE LEVEL
	FINISHED EDGE LINE LEVEL
	CHANGE
	STRUCTURAL FILL > 300mm DEEP
	CUT > 300mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRAVEL IN DIRECTION OF FALL TO LEVEL INDICATED
	ROAD STRIP, SURFACE DRAIN, NO ROAD SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED INDUSTRIAL DRIVEWAY
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING
	3m DIAMETER TREE RING

**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works. [CALL 1100 BEFORE YOU DIG](http://www.1100.com.au).

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAWN	DESIGNED	CHECKED	APPROVED
A	06.05.24	ISSUED TO COUNCIL FOR APPROVAL	D. MARIANO	C. BARTOLAGA	C. DIXON	M. BOURMESTER
B	26.07.23	CHANGES, CONTOURS AND LOT LEVELS AMENDMENTS	C. BARTOLAGA	C. BARTOLAGA	C. DIXON	M. BOURMESTER
C	03.11.23	ISSUED FOR CONSTRUCTION	K. KING	C. BARTOLAGA	C. DIXON	M. BOURMESTER
1	17.03.23	DRAINAGE CONSTRUCTED AS PART OF W/LS CONTRACT	C. PIRRE	C. DIXON	C. DIXON	M. BOURMESTER

PLAN OF SUB. NO. PS60888

PERMIT REF. NO. WYP10355/17

**ISSUED FOR CONSTRUCTION**

Scale 1:500

Member of the Stubbins Group

**SMC**

100 Stubbins Avenue, Geelong, VIC 3220

**GROWLAND**

Margold - Stage 11  
Wyndham City Council  
Road and Drainage  
Layout Plan - 2

359 F9 PROJECT NUMBER: 2360E-011-112

03 of 30



# COMPACTION ASSESSMENT

Job No 23473  
 Report No 23473/R001  
 Date Issued 10/08/2023

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ASPIRE - STAGE 36A	Date tested	21/07/23
Location	PLUMPTON	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 15:15
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### Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6	
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	
Field wet density	t/m <sup>3</sup>	1.91	1.86	1.89	1.90	2.03	2.04
Field moisture content	%	16.5	16.3	13.7	16.7	15.9	18.1

### Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6	
Compactive effort	Standard						
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	
Percent of oversize material	wet	0	0	0	0	0	
Peak Converted Wet Density	t/m <sup>3</sup>	1.95	1.92	1.95	1.95	2.10	2.11
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	18.5	18.0	16.0	19.0	18.0	19.5

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	2.5% dry	2.5% dry	2.0% dry	1.5% dry
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density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio ( R <sub>HD</sub> )	%	98.0	97.0	97.0	97.5	96.5	96.5
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### Material description

No 1 - 6 Clay Fill
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AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909  
 Accredited for compliance with  
 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 23473  
 Report No 23473/R002  
 Date Issued 27/07/23

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BS
Project	ASPIRE - STAGE 36A	Date tested	24/07/23
Location	PLUMPTON	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 15:19
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### Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	-	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL						
Measurement depth	mm	175	175	175	-	-
Field wet density	t/m <sup>3</sup>	2.09	1.91	1.92	-	-
Field moisture content	%	19.3	19.1	22.1	-	-

### Test procedure AS 1289.5.7.1

Test No	7	8	9	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	-	-
Percent of oversize material	wet	0	0	0	-	-
Peak Converted Wet Density	t/m <sup>3</sup>	2.12	1.97	1.98	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	22.0	21.5	23.5	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	1.5% dry	-	-	-
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density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio ( R <sub>HD</sub> )	%	99.0	97.0	97.0	-	-
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### Material description

No 7 - 9 Clay Fill
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AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909  
 Accredited for compliance with  
 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry