



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

12th October 2020

Our Reference: 20454:NB822

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
MARIGOLD – STAGE 4 (TARNEIT)**

Please find attached our Report No's 20454/R001 and 20454/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 testing was performed in October 2020.

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).

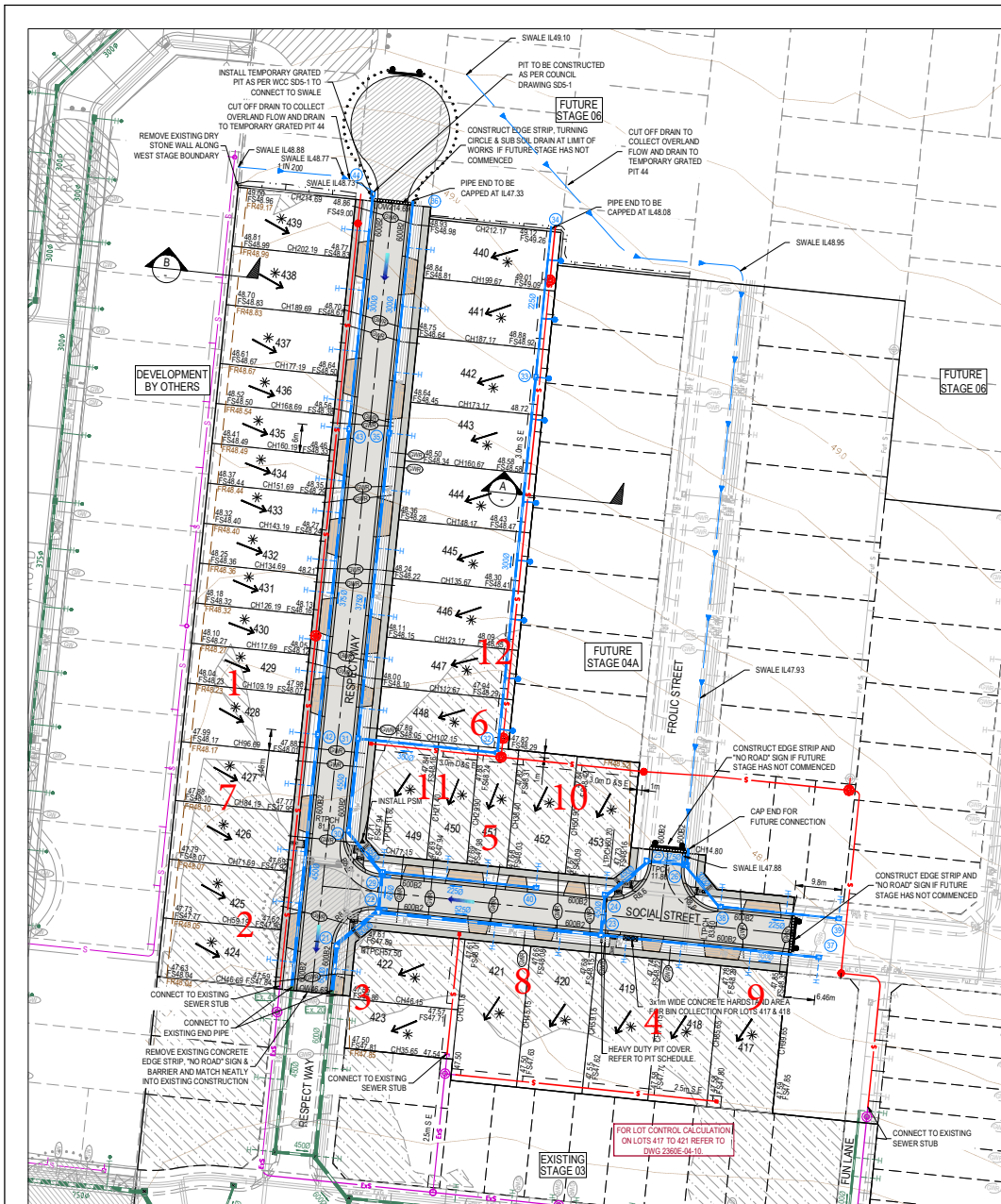
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

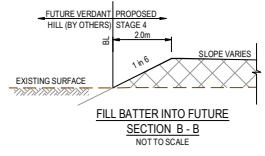
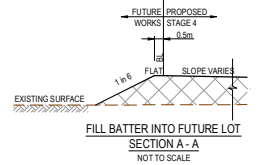
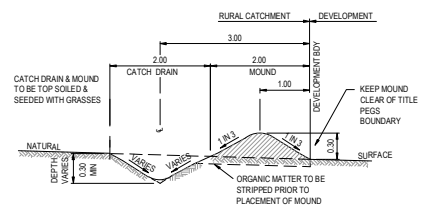
Nick Brock

FIGURE 1



ROAD NAME	RESERVE WIDTH	ROAD WIDTH (m)			KERB TYPE		VERGE WIDTH (m)	
		LP TO LP	INV TO INV	BACK TO BACK	NTHWEST	STHEAST	NTHWEST	STHEAST
RESPECT WAY	16.0	6.40	7.00	7.60	60082	60082	4.05	4.35
FROLIC STREET	16.0	6.40	7.00	7.60	60082	60082	4.05	4.35
SOCIAL STREET (LOT 449-453)	16.0	6.40	7.00	7.60	60082	60082	4.05	4.35

ROAD NAME	SERVICES OFFSET TABLE				
	GAS	WATER	RECYCLED WATER	ELECTRICITY	TELECOM
RESPECT WAY	2.10 E	3.10 E	2.60 E	2.60 W	1.85 W
FROLIC STREET	2.10 E	3.10 E	2.60 E	2.60 W	1.85 W
SOCIAL STREET (LOT 449-453)	2.10 S	3.10 S	2.60 S	2.60 N	1.85 N



Approximate field density test location

LEGEND: LAYOUT PLAN
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAIN DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- ELECTRICITY (U/GROUND)
- ELECTRICITY (O/HEAD)
- GAS
- TELSTRA
- OPTIC FIBRE
- WATER
- RECYCLE WATER
- AG DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING STORMWATER DRAIN
- EXISTING MAIN DRAIN
- EXISTING SWALE 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
- EXISTING STORMWATER DRAIN
- EXISTING MAIN DRAIN
- EXISTING SWALE 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
- FS140.35 FINISHED RIDGE LINE LEVEL
- CH270.00 CHANGING
- TW159.60 TOP OF RETAINING WALL LEVEL
- BW159.00 BOTTOM OF RETAINING WALL LEVEL
- PL147.00 EXISTING RETAINING WALL
- RETAINING WALL
- FUTURE RETAINING WALL
- STRUCTURAL FILL > 200mm DEEP
- EXISTING STRUCTURAL FILL > 200mm DEEP
- CUT > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- GRAZED IN DIRECTION OF FALL TO LEVEL INDICATED
- EDGE STRIP, SUBSOIL DRAIN, NO ROAD SIGN & BARRIER
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY SURVEY MARK
- PROPOSED DRIVEWAY & FOOTPATH
- PROPOSED INDUSTRIAL DRIVEWAY
- PROPOSED SHARED FOOTPATH
- PROPOSED ROAD PAVING
- EXISTING ROAD PAVING

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 **DIAL 1100 BEFORE YOU DIG**
www.1100.com.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL	TITLE	NAME
0		ISSUED FOR CONSTRUCTION	SHLC	BS	DRAWER	L.Chapple
					DESIGNER	S.Hossain
					CHECKED	E.Wang
					AUTHORISED	B.Sanderson
					REFERENCE No. 1	
					REFERENCE No. 2	

REVISION IN PROGRESS

ISSUED FOR CONSTRUCTION

Scale 1:500
SCALE AS SHOWN AT A1

Member of the Surlana Jurong Group
Colins Square, Tower 4, Level 20, 727 Colins St
Melbourne, VIC 3008
Ph 03 9514 1500

GROWLAND

Marigold - Stage 4
Wyndham City Council
Road and Drainage
Layout Plan

MELBOURNE REF: 359 F9
PROJECT/DRAWING No: 2360E-04-02
SHEET No: 02 of 13



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 20454
Report No 20454/R001
Date Issued 12/10/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 4	Date tested	07/10/20
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:00
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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	175
Field wet density	t/m ³	2.03	2.05	2.02	2.00	2.01	2.02
Field moisture content	%	26.1	20.7	20.9	22.1	20.9	15.3

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	19.0
Percent of oversize material	wet	7	0	6	0	4	0
Peak Converted Wet Density	t/m ³	2.07	2.11	2.08	2.05	2.09	2.10
Adjusted Peak Converted Wet Density	t/m ³	2.10	-	2.11	-	2.11	-
Optimum Moisture Content	%	26.0	22.0	21.0	22.5	21.0	15.5

Moisture Variation From Optimum Moisture Content	0.0%	1.5% dry	0.0%	0.5% dry	0.0%	0.5% dry
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Density Ratio (R _{HD})	%	96.5	97.0	96.0	97.5	95.5	96.0
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Material description

No 1 - 6 Clay Fill

AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 20454
Report No 20454/R002
Date Issued 12/10/2020

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	MARIGOLD - STAGE 4	Date tested	08/10/20
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No		7	8	9	10	11	12
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	175
Field wet density	t/m ³	2.01	2.00	2.01	2.09	1.96	2.01
Field moisture content	%	17.6	17.1	18.5	17.8	19.4	19.6

Test procedure AS 1289.5.7.1

Test No		7	8	9	10	11	12
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	7	6	9	0	5	7
Peak Converted Wet Density	t/m ³	2.02	2.01	2.01	2.14	2.04	2.00
Adjusted Peak Converted Wet Density	t/m ³	2.05	2.03	2.05	-	2.06	2.02
Optimum Moisture Content	%	19.0	20.0	20.5	19.0	19.0	21.5

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	2.0% dry	1.0% wet	0.5% wet	2.0% dry
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Density Ratio (R _{HD})	%	98.5	99.0	98.5	96.0	95.5	99.5
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Material description

No 7 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry