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

20th September 2023

Our Reference: 23691:NB1674

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
SMITHS LANE - STAGE 26 (CLYDE NORTH)

Please find attached our Report No's 23691/R001 to 23691/R007 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 August 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).

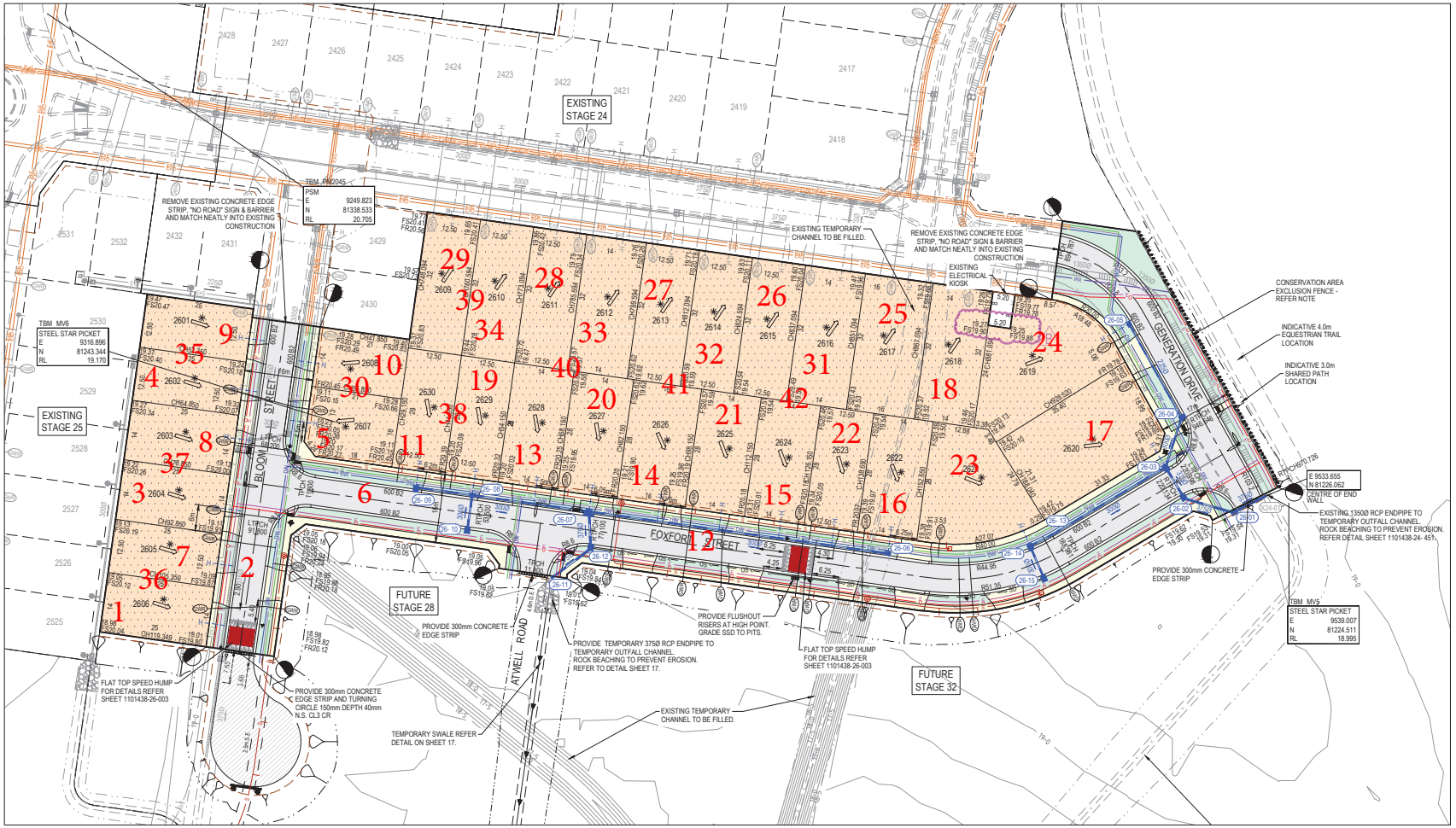
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1




LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS (INDICATIVE ONLY)
- ELECTRICITY (UNDERGROUND)
- ELECTRICITY (OVERHEAD)
- OPTIC FIBRE
- TELECOMMUNICATIONS
- GAS
- WATER
- RECYCLED WATER
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELECOMMUNICATIONS
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING MELBOURNE WATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- TOP OF RETAINING WALL
- BOTTOM OF RETAINING WALL
- RIDGE LINE
- RETAINING WALL
- ZERO LOT LINES
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY
- TREE PROTECTION ZONE (TPZ)

LEGEND:

- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- LOT HATCHING
- ROAD PAVEMENT
- FOOTPATH
- DRIVEWAY
- INDUSTRIAL STRENGTH DRV / LANEWAYS
- NATURE STRIP
- RESERVES
- ELECTRICAL KIOSK
- DRAINAGE RESERVE
- MAINTENANCE ACCESS TRACK
- DRY OUT AREA

LEGEND FOR SUBSURFACE DRAINAGE

ALL DRAINS HAVE 100 DIA CLASS 1000 PERFORATED PLASTIC PIPE UNLESS OTHERWISE SPECIFIED CORRUGATED PIPE - MINIMUM GRADE 1% SMOOTH PIPE MINIMUM GRADE 0.3%

- TYPE 3 SUB SURFACE DRAIN. REFER TO VICROADS STD. DRG. SD 1601
- FLUSHOUT RISER. REFER TO VICROADS STD. DRG. SD 1631

# Approximate field density test location

ROAD LAYOUT TABLE

| Road Name | Reserve Width (m) | Road Width (m) | | | Kerb Type | | Verge Width (m) | |
|---|---|---|---|---|---|---|---|---|
| | | Lip to Lip | Inv to Inv | Back to Back | Nth/West | Sth/East | Nth/West | Sth/East |
| BLOOM STREET | 16.00 | 6.40 | 7.30 | 7.60 | 600 B2 | 600 B2 | 4.20 | 4.50 |
| FOXFORT STREET | 16.00 | 6.40 | 7.30 | 7.60 | 600 B2 | 600 B2 | 4.50 | 4.20 |
| GENERATION DRIVE | 17.00 | 6.40 | 7.30 | 7.60 | 600 B2 | 600 B2 | 5.70 | 4.00 |

SERVICE OFFSET TABLE

| Location | Gas | | ND - Water | | Water | | Electricity | | Telecommunication | | Sewer | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Side | Offset (m) | Side | Offset (m) | Side | Offset (m) | Side | Offset (m) | Side | Offset (m) | Side | Offset (m) |
| BLOOM STREET | E | 2.25 | E | 2.70 | E | 3.20 | W | 2.60 | W | 1.85 | W/E | 1.00 |
| FOXFORT STREET | N | 2.25 | N | 2.70 | N | 3.20 | S | 2.60 | S | 1.85 | N/S | 1.00 |
| GENERATION DRIVE | W | 2.25 | W | 2.70 | W | 3.20 | E | 1.20 | E | 0.50 | W | 1.00 |

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

EXCLUSION FENCING NOTE:

BEFORE THE COMMENCEMENT OF ANY WORKS WITHIN 30m OF THE CONSERVATION AREA, EXCLUSION FENCING (eg CHAINLINK OR WELDED MESH) MUST BE CONSTRUCTED TO A HEIGHT OF 2m, MOUNTED ON VERTICAL STEEL PIPES AT 3m INTERVALS, DRIVEN 0.7m INTO THE GROUND.

NO WORKS TO COMMENCE UNTIL A LICENSED SURVEYOR HAS CONFIRMED TO DEWLP THAT ALIGNMENT OF PROTECTION FENCE MATCHES THE OUTER EXTENTS OF APPROVED CONSTRUCTION FOOTPRINT AS SHOWN ON THE EMP.

SIGNS STATING "CONSERVATION AREA - NO GO ZONE" CONSISTENT WITH COUNCIL REQUIREMENTS AND SECURELY AFFIXED TO FENCING AT 30m INTERVALS AND AT A HEIGHT OF 1.5m.

CONSTRUCTION, WORKS, VEHICLE TRAFFIC, OR PLACEMENT OR STORAGE OF STRUCTURES OR MATERIALS ARE NOT PERMITTED WITHIN THE NO GO ZONE

**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

**BEFORE YOU DIG**

www.byda.com.au

FOR CONSTRUCTION



| REV | DESCRIPTION | DATE | DRN. | APP. |
|---|---|---|---|---|
| B | KIOSK LEVELS AMENDED | 18.08.23 | BP | LM |
| A | ISSUED FOR CONSTRUCTION | 17.07.23 | LM | SY |

SMITHS LANE
CLYDE NORTH

SCALE 1:500 AT A1 SIZE

| | |
|---|---|
| Designed | B.PAPPALARDO |
| Date | 22.05.2023 |
| Drawn | M.F. JAURIGUE |
| Checked | L.MURRAY |
| Date | 25.05.2023 |
| Approved | S.YOUNG |
| Reg. No. | PE005936 |
| Date | 25.05.2023 |
| PS Number | PS915533M |

Beveridge Williams
Development & Infrastructure Consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

| | |
|---|---|
| Project Details | SMITHS LANE<br>STAGE 26<br>CITY OF CASEY, R5982 |
| Drawing Title | LAYOUT PLAN<br>(SHEET 1 OF 2) |

Sheet 04 of 17
Scale 1:500 @ A1

| Project Ref | Stage No | Drawing No | Rev |
|---|---|---|---|
| 1101438 | 26 | 010 | B |

K:\Jobs Data\1101438 110 Smiths Lane, Clyde (MIRVAC)_Eng\Stage 26\Drawings\1101438-26-010-LAY.dwg

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R001 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 21/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:00

*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/m³* | 2.03 | 2.02 | 1.92 | 1.94 | 2.03 | 1.98 |
| *Field moisture content* | *%* | 22.9 | 23.0 | 24.5 | 22.9 | 24.6 | 22.9 |

*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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.00 | 2.01 | 2.00 | 1.97 | 2.03 | 1.99 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 23.0 | 25.0 | 27.0 | 22.5 | 27.0 | 25.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.0% | 2.0% dry | 2.0% dry | 0.0% | 2.0% dry | 2.0% dry |

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 ( $R_{HD}$ )*** | *%* | **101.0** | **101.0** | **96.0** | **98.5** | **100.5** | **99.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 1 - 6 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | Job No | 23691 |
| | | Report No | 23691/R002 |
| | | Date Issued | 13/09/23 |
| Client | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Tested by | SB |
| Project | SMITHS LANE - STAGE 26 | Date tested | 22/08/23 |
| Location | CLYDE NORTH | Checked by | JHF |

**Feature** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:30

*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/m³* | 2.00 | 2.03 | 2.05 | 2.05 | 2.05 | 2.05 |
| *Field moisture content* | *%* | 15.4 | 17.2 | 19.1 | 18.7 | 19.1 | 17.1 |

*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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.02 | 2.02 | 2.04 | 2.04 | 2.04 | 2.05 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 17.5 | 19.5 | 19.5 | 21.0 | 21.5 | 19.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.5% dry | 2.0% dry | 0.0% | 2.0% dry | 2.0% dry | 2.0% dry |

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 ( $R_{HD}$ )*** | *%* | **99.0** | **101.0** | **100.5** | **101.0** | **100.5** | **100.5** |

*Material description*

No 7 - 12 Clay Fill



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Accredited for compliance with
ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R003 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 23/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 12:00 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **13** | **14** | **15** | **16** | **17** | **18** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.96 | 2.02 | 2.01 | 1.98 | 2.03 | 1.97 |
| *Field moisture content* | *%* | 20.2 | 20.5 | 23.4 | 21.5 | 19.1 | 18.8 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|
| *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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 1.99 | 2.01 | 2.00 | 2.00 | 2.04 | 2.02 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 22.5 | 21.0 | 23.5 | 23.5 | 21.5 | 19.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% dry | 0.0% | 0.0% | 2.0% dry | 2.0% dry | 0.0% |

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 ( $R_{HD}$ )*** | *%* | **98.5** | **100.5** | **101.0** | **99.0** | **99.5** | **97.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 13 - 18 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R004 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 24/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:00

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **19** | **20** | **21** | **22** | **23** | **24** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.90 | 1.87 | 1.87 | 1.79 | 1.90 | 1.95 |
| *Field moisture content* | *%* | 26.1 | 25.6 | 23.0 | 25.9 | 26.4 | 25.0 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|
| *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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.00 | 1.96 | 1.96 | 1.86 | 1.91 | 1.99 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 28.5 | 26.0 | 25.0 | 25.0 | 27.0 | 27.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% dry | 0.0% | 2.0% dry | 1.0% wet | 0.5% dry | 2.0% dry |

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 ( $R_{HD}$ )*** | *%* | **95.5** | **95.5** | **95.5** | **96.0** | **99.5** | **98.5** |

*Material description*

No 19 - 24 Clay Fill



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Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R005 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 25/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:30

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **25** | **26** | **27** | **28** | **29** | **30** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.06 | 2.12 | 2.01 | 1.91 | 1.89 | 1.87 |
| *Field moisture content* | *%* | 20.6 | 18.0 | 18.8 | 19.0 | 19.3 | 18.3 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|
| *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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.07 | 2.13 | 2.02 | 1.98 | 1.96 | 1.90 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 22.5 | 19.5 | 21.0 | 21.5 | 19.0 | 18.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% dry | 1.5% dry | 2.0% dry | 2.0% dry | 0.5% wet | 0.0% |

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 ( $R_{HD}$ )*** | *%* | **100.0** | **99.5** | **100.0** | **96.5** | **96.5** | **98.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 25 - 30 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R006 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 28/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 12:00 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **31** | **32** | **33** | **34** | **35** | **36** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.95 | 1.92 | 1.82 | 1.98 | 1.96 | 1.91 |
| *Field moisture content* | *%* | 16.8 | 19.0 | 18.7 | 17.5 | 18.7 | 19.0 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 31 | 32 | 33 | 34 | 35 | 36 |
|---|---|---|---|---|---|---|---|
| *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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 1.99 | 1.98 | 1.88 | 1.97 | 1.99 | 1.95 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 19.0 | 19.0 | 19.5 | 19.0 | 21.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% dry | 0.0% | 0.0% | 2.0% dry | 0.0% | 2.5% dry |

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 ( $R_{HD}$ )*** | *%* | **98.0** | **97.0** | **96.5** | **100.5** | **98.5** | **98.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 31 - 36 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 23691 |
| | | *Report No* | 23691/R007 |
| | | *Date Issued* | 13/09/23 |
| *Client* | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | *Tested by* | SB |
| *Project* | SMITHS LANE - STAGE 26 | *Date tested* | 29/08/23 |
| *Location* | CLYDE NORTH | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:00

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **37** | **38** | **39** | **40** | **41** | **42** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 1.98 | 2.03 | 1.93 | 1.94 | 1.98 |
| *Field moisture content* | *%* | 18.3 | 19.7 | 18.3 | 18.1 | 19.8 | 18.3 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 37 | 38 | 39 | 40 | 41 | 42 |
|---|---|---|---|---|---|---|---|
| *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* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.00 | 1.98 | 2.02 | 1.94 | 1.92 | 1.97 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.0 | 22.0 | 20.5 | 18.0 | 19.5 | 20.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% dry | 2.0% dry | 2.0% dry | 0.0% | 0.0% | 2.5% dry |

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 ( $R_{HD}$ )*** | *%* | **101.0** | **100.0** | **100.5** | **99.5** | **101.0** | **100.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 37 - 42 Clay Fill





Approved Signatory : Justin Fry