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

6 October 2014

Our Reference: 14370:PJF1940/503

Cranbourne Road Holdings
c/- Villawood Properties
Level 1 6 Riverside Quay
SOUTHBANK VIC 3006

Dear Sirs,

RE: LOT 503 OF THE PASADENA ESTATE (STAGE 5), CLYDE

Winslow Constructors Pty Ltd has recently constructed a residential subdivision (referred to as Stage 5 of The Pasadena Estate) which is located on the west side of Clyde – Five Ways Road in Clyde. As part of the subdivisional works, Civil Geotechnical Services were engaged by Winslow Constructors to provide inspection and testing services for the bulk earthworks associated with the construction of the residential allotments. The testing and inspection services were undertaken in accordance with the Level 1 requirements of AS 3798 – Guidelines on Earthworks for Commercial and Residential Developments.

Construction of the Lot noted above essentially involved a fill operation, with the estimated maximum depth of fill materials (excluding topsoil placement) being up to 2.5 metres in depth. However, there could be localised areas of slightly deeper fill materials arising from site stripping and foundation preparation works.

The fill materials were spread and compacted in 0.2 to 0.3 metre (solid) lifts using a vibrating pad foot roller and/or compactor. The fill materials essentially comprised clays that were sourced from adjacent stages of the Pasadena Estate. Compaction testing of these materials was performed at regular intervals (both vertically and laterally) during fill placement. The resulting density ratios were all in excess of 95% (standard compactive effort). A copy of the Level 1 report is attached.

The Cranbourne sheet of the Geological Survey Maps of Victoria shows the above site to be underlain by Tertiary aged deposits associated with the Baxter formation. These latter materials essentially comprise high plasticity clays that exhibit moderate to high shrink-swell surface movements when subjected to changes in seasonal soil moisture content. The anticipated geology and the foregoing description of the underlying materials were generally confirmed by site observations undertaken during construction of the subdivision (eg foundation preparation works, trench excavations etc).

As a consequence of the site earthworks, the founding medium for a conventional shallow footing system will most likely comprise the compacted fill materials. As the depth of the compacted clayey fill materials is in excess of 0.4 metres, a Class P classification in accordance with Section 2 of AS 2870 – Residential Slabs and Footings would normally be appropriate. However, as the fill materials that have been placed during the recent phase of construction have been placed in a controlled manner, a less severe classification would, in appropriate circumstances, be applicable.

After a consideration of the foregoing, together with the depth of fill placed and the materials utilised as controlled fill, the site has been reclassified as **CLASS H2**. Accordingly, a conventional shallow footing system that is founded in the 'undisturbed' fill materials could be satisfactorily utilised at this allotment.

The most appropriate foundation system for this allotment is a conventional stiffened raft slab founding in the controlled fill materials. Accordingly, it is recommended that a stiffened raft slab be utilised, with the slab designed and detailed in accordance with the Class H2 classification requirements of AS 2870. The edge and load bearing beams should be founded in the 'undisturbed' compacted clayey fill materials at a minimum depth of 0.5 metres below finished surface levels. Edge and load bearing beams founding in this manner would have an allowable bearing pressure of 100 kPa. The raft stiffening beams, provided that their contact pressures do not exceed 50 kPa, should be founded in the 'undisturbed' fill materials at a minimum depth of 0.2 metres below finished surface levels. The slab infill panels can be founded directly onto the 'undisturbed' compacted fill materials.

Consideration could also be given to utilising a waffle raft slab. However, if a waffle raft slab is utilised, the near surface topsoil and any loose and disturbed materials will need to be removed from the building footprint prior to construction. Previous experience suggests that this option will require the removal of up to 0.25 metres of topsoil materials and the like. However, there may be sections of the site where additional excavation depths are required. If a waffle raft slab is to be utilised, the waffle raft slab should be designed and detailed in accordance with the Class H2 classification requirements of AS 2870. Particular attention will also need to be directed towards ensuring that a stable moisture regime is maintained around the slab periphery. Furthermore, due to the significant problems that have been experienced with washout from the undersides of slab edges and corners, it will be necessary to found the perimeter beams into the 'undisturbed' compacted clayey fill materials for a distance of not less than 0.4 metres. Perimeter beams founding in this manner would have an allowable bearing pressure of 100 kPa. Internal beams may be founded in the 'undisturbed' compacted clayey fill materials at higher levels than the perimeter beams. An allowable bearing pressure of 100 kPa is also available for these latter beams.

The site classifications and design recommendations presented above assume that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to any structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction, garden bed development or tree root action.

Attention is drawn to Appendix B of AS 2870 and its referenced documents as a guide to maintenance requirements for any proposed structures. In particular, attention should be directed at the design stage towards ensuring that any structures are relatively flexible and well articulated (eg closely spaced full height articulation joints, minimal brickwork over or under widow openings etc). Guidance on articulation spacings and associated detailing are provided in Technical Note 61 - Articulated Walling which is published by The Cement and Concrete Association of Australia.

The base of all footing trenches should be carefully inspected to ensure that a satisfactory founding medium is achieved. If any doubt exists to the suitability or otherwise of the founding medium, this office should be consulted immediately.

Civil Geotechnical Services

Peter Fry Attachment: Level 1 report dated 6 October 2014 – Our Reference: 11145:PJF1939

CIVIL GEOTECHNICAL SERVICES
ABN 26 474 013 724
PO Box 678 Croydon Vic 3136
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6 October 2014

Our Reference: 11145:PJF1939

Cranbourne Road Holdings
c/- Villawood Properties
Level 1 6 Riverside Quay
SOUTHBANK VIC 3006

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
PASADENA ESTATE, CLYDE – STAGE 5

Please find attached our Report Nos 11145AA to 11145AH, 11189AA and 11189AB and 11370AA to 11370AJ that relate to the field density testing that was conducted within the filled allotments associated with the construction of Stage 5 of the above subdivision (refer also to the attached drawing).

The site stripping and associated filling works within this stage of the estate commenced in early April 2011 and continued on an ad hoc basis until mid to late October 2011.

The inspection and testing duties, which were performed by experienced geotechnical engineers and geotechnicians from this office, were undertaken in accordance with the Level 1 guidelines presented in AS 3798 - Guidelines on earthworks for commercial and residential developments. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement.

Prior to fill placement, the stripped surfaces were inspected to ensure that a firm foundation free of organic matter and the like was achieved. Any soft spots and unstable areas and the like that were encountered were removed down to a firm base and replaced with suitably compacted clays.

The fill materials during the recent construction phase were initially spread by a track mounted dozer and then compacted in 0.3 to 0.35 metre (loose) lifts using both a heavy vibrating pad foot roller and a compactor. The fill materials essentially comprised high plasticity clays that were sourced from adjacent stages. Compaction testing of these materials was performed at regular intervals (both vertically and laterally) to confirm that the method of fill placement was appropriate. Any areas that were deemed unsatisfactory were re-worked or given extra rolling to ensure that the compaction criteria was met.

The purpose of performing Level 1 inspection and testing duties is to ensure the quality of the as constructed fill pad(s) and to both minimise the costs of extensive testing and eliminate any unnecessary time delays arising from the testing process. Hence, the provision of Level 1 duties allows the contractor to undertake the filling operation whilst the testing authority monitors the quality control process of the operation. As part of this latter process, the testing authority monitors the compaction methodology on a visual basis and undertakes a number of randomly placed spot checks (ie field density and associated compaction tests) to confirm that the adopted methodology is appropriate.

The attached compaction results, which were located randomly throughout the depth and breadth of the filled areas, are considered to be representative of the bulk fill materials that were placed within the abovementioned stage by Winslow Constructors Pty Ltd during the aforementioned period (Winslow were contracted to undertake the bulk earthworks for Stage 5 of the Pasadena Estate).

The density ratios were all in excess of 95% (standard compactive effort) and the corresponding moisture ratios varied 2.5% either side of optimum moisture.

We are of the view that the bulk fill materials that have been placed within Stage 5 of the Pasadena Estate 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).

Accordingly, the fill materials would be deemed to comply with both the controlled fill requirements of Clause 1.8.13 of AS 2870 – Residential slabs and footings and the structural fill requirements of Clause 1.2.13 of AS 3798.

Please contact the undersigned if you require any additional information.

Yours faithfully,

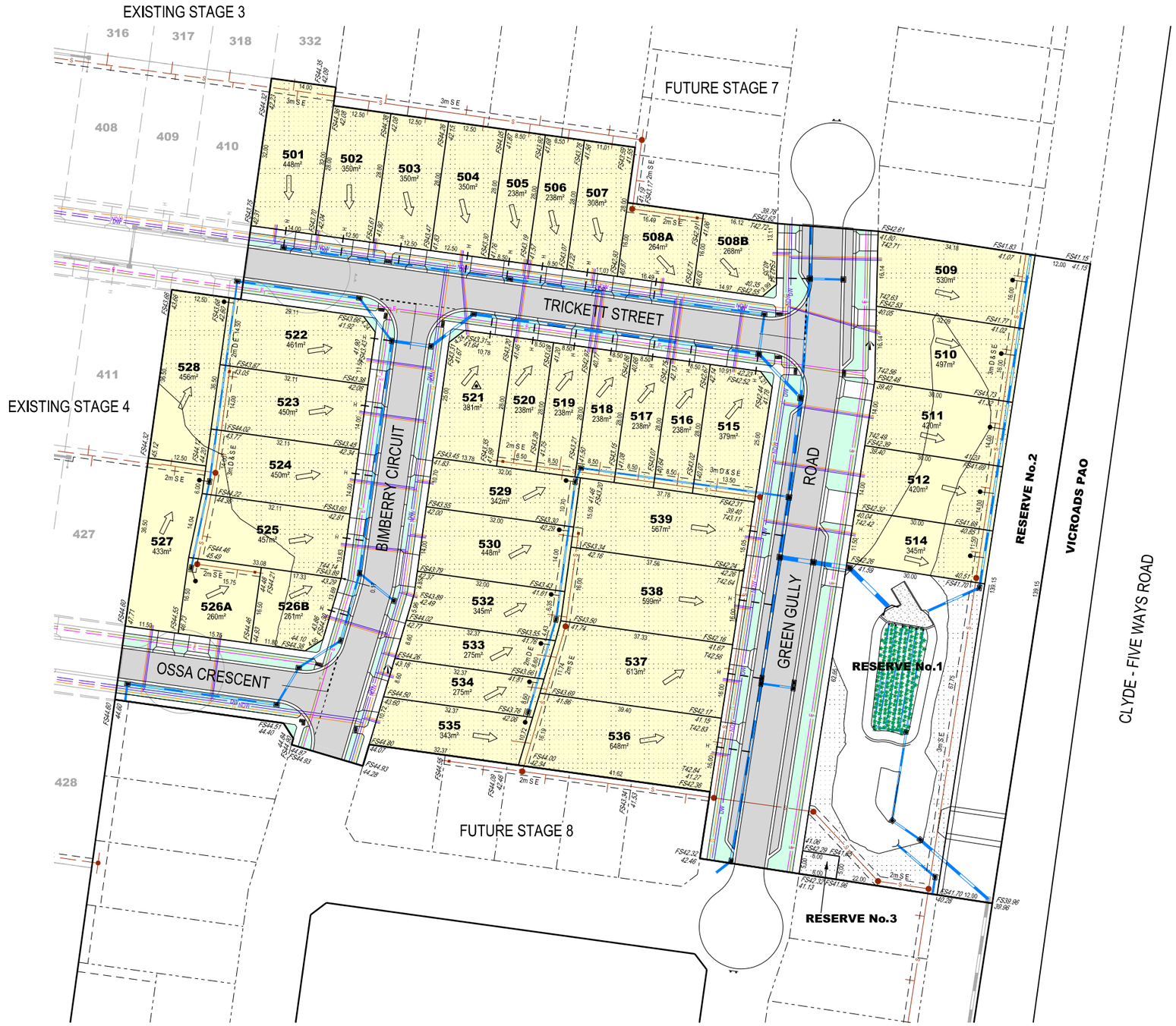
Civil Geotechnical Services

Peter Fry

SERVICE OFFSET TABLE

STREET \ SERVICE	WATER	ND WATER	GAS	POWER	NBN	SEWER
TRICKETT STREET	3.1 N	2.6 N	1.85 N	2.6 S	2.1 S	N/A
BIMBERRY CIRCUIT	3.1 E	2.6 E	2.1 E	2.6 W	2.1 W	N/A
OSSA CRESCENT	3.1 S	2.6 S	2.1 S	2.6 N	2.1 N	N/A
GREEN GULLY ROAD	3.1 W	2.6 W	2.1 W	2.6 E	2.1 E	1.0 W

NOTE: OFFSETS ARE FROM ROAD RESERVE BOUNDARY



1. The fill depth shown on this plan is for fill placed during construction of the subdivision while the site is under the control of Beveridge Williams and Co Pty Ltd. Beveridge Williams and Co Pty Ltd has no further knowledge or records of any other filling works throughout this subdivision.
2. Fill less than 150mm in depth is not shown on this plan.
3. The depth of fill can be determined by calculating the depth between
   a) the existing surface surveyed by Beveridge Williams & Co Pty Ltd undertaken September 2010 (ref: M3739-FL); and
   b) the proposed design surface shown on the allotments on this plan.
4. The fill depths shown do not take into consideration any breaching, grubbing and removal of topsoil which may occurr prior to filling of the land.
5. During the subdivision construction excavation works within the easements shown on this plan may be undertaken for the purposes of laying drainage, electrical, telecommunications, water and sewer main infrastructure.
6. Fill in reserves is not shown.
7. This plan should be read in conjunction with the plan of subdivision.

LEGEND

- PROPERTY INLETS / HOUSE DRAIN
- PROPOSED DRAINAGE (PIT)
- EXISTING DRAINAGE
- PROPOSED SEWERAGE (MH, IS, MS)
- EXISTING SEWERAGE
- WATER/NDW WATER/GAS/ELEC/NBN MAINS (DW, NDW, G, E, T)
- Ex WATER/NDW WATER/GAS/ELEC/OVERHEAD ELEC/NBN MAINS (DW, NDW, G, E, T)
- SERVICE CONDUITS - GAS (G) - WATER (W) - NON-DRINKING WATER (W)
- VEHICLE CROSSINGS
- EASEMENT
- EXTENT OF CUT & FILL
- BATTER SLOPE
- TACTILE GROUND SURFACE INDICATORS
- LOT RUNOFF DIRECTION
- FINISHED SURFACE LEVEL AT PROPERTY BOUNDARY 737.52
- FINISHED SURFACE LEVEL AT TOP OF BATTER FS38.05
- EXISTING SURFACE LEVEL 37.69
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- FILL AREA > 150mm

PRELIMINARY PRINT
NOT FOR CONSTRUCTION

Rev	Description	Date	By	App
P3	AMENDED FILL AREA FROM EXISTING SURFACE	01.10.14	RH	
P2	REMOVED LOTS 513 AND 531	21.03.14	RH	
P1	FIRST ISSUE	15.11.13	RH	

0 5 10 20 30 40 50
1:500 @ A1
1:1000 @ A3

Designed R.HABEL
Date 13.11.13
Drawn L.SUTHERLAND
Approved C.WHITE
Date APPDT
PS Number PS708779H

Beveridge Williams
development & environment consultants
1 Glenferrie Road
Malvern VIC 3144
ph: 03 9524 8888
www.beveridgewilliams.com.au

Project Details: PASADENA STAGE 5
CLYDE DEVELOPMENTS
CITY OF CASEY

Drawing Title: ENGINEERING DESIGN FOR CONTRACT OF SALE

Scale: 1:500 @ A1

Project Ref	Stage No	Drawing No	Rev
3830	05	SP 101	P3

F:\3830_Civil\STAGE 5\Cad\3830-05-SP.dgn

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AA
		Date Issued	09/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	19/04/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:37

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**4**	**5**	**-**
Location		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/m³*	1.75	1.79	1.75	1.74	1.79	-
Field moisture content	*%*	39.8	35.3	39.4	41.5	39.7	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	5	-
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/m³*	1.73	1.79	1.73	1.71	1.77	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	39.5	33.5	39.0	40.5	38.0	-

Moisture Variation From Optimum Moisture Content		0.5% wet	1.5% wet	0.5% wet	1.0% wet	1.5% wet	-

Density Ratio (R_{HD})	***%***	**101.0**	**100.5**	**101.0**	**101.5**	**101.0**	**-**

Material description

Test No 1 - 5 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AB
		Date Issued	30/04/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	27/04/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:34

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**6**	**7**	**8**	**9**	**10**	**-**
Location		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/m³*	1.75	1.75	1.76	1.73	1.78	-
Field moisture content	*%*	42.0	40.5	39.0	40.8	38.4	-

Test procedure AS 1289.5.7.1

Test No		6	7	8	9	10	-
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/m³*	1.75	1.72	1.71	1.74	1.77	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	39.5	39.5	38.0	39.0	36.0	-

Moisture Variation From Optimum Moisture Content		2.5% wet	1.0% wet	1.0% wet	1.5% wet	2.5% wet	-
Density Ratio (R_{HD})	*%*	**100.0**	**101.5**	**103.0**	**99.5**	**101.0**	**-**

Material description

Test No 6 - 10 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AC
		Date Issued	09/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	28/04/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:29

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**11**	**12**	**13**	**14**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.96	1.96	1.94	1.92	-	-
Field moisture content	*%*	21.7	19.8	23.4	24.6	-	-

Test procedure AS 1289.5.7.1

Test No		11	12	13	14	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.91	1.99	1.93	1.92	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	20.0	23.5	24.5	-	-

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

Density Ratio (R_{HD})	***%***	**102.5**	**98.5**	**100.5**	**100.0**	**-**	**-**

Material description

Test No 11 - 14 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AD
		Date Issued	09/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	29/04/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:23

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**15**	**16**	**17**	**18**	**19**	**-**
Location		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/m³*	1.99	1.86	2.00	1.99	1.84	-
Field moisture content	*%*	16.6	26.3	20.2	17.3	27.1	-

Test procedure AS 1289.5.7.1

Test No		15	16	17	18	19	-
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/m³*	1.99	1.90	1.96	1.99	1.85	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.0	25.5	22.5	19.0	26.5	-

Moisture Variation From Optimum Moisture Content		2.5% dry	0.5% wet	2.0% dry	1.5% dry	0.5% wet	-
Density Ratio (R_{HD})	*%*	**100.0**	**98.0**	**102.5**	**100.0**	**99.5**	**-**

Material description

Test No 15 - 19 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AE
		Date Issued	11/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	04/05/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:05

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**20**	**21**	**22**	**23**	**24**	**25**
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*	1.88	1.67	1.75	1.77	1.83	1.78
Field moisture content	*%*	22.6	41.4	44.0	41.4	34.7	34.1

Test procedure AS 1289.5.7.1

Test No		20	21	22	23	24	25
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*	1.97	1.72	1.71	1.74	1.79	1.80
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.5	40.0	44.0	40.0	33.5	34.0

Moisture Variation From Optimum Moisture Content	0.0%	1.5% wet	0.0%	1.5% wet	1.0% wet	0.0%

Density Ratio (R_{HD})	***%***	**95.5**	**97.5**	**102.0**	**101.0**	**102.0**	**99.0**

Material description

Test No 20 - 25 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AF
		Date Issued	13/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	05/05/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:15

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**26**	**27**	**28**	**29**	**30**	**31**
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*	1.75	1.80	1.77	1.75	1.89	1.91
Field moisture content	*%*	42.3	41.0	42.3	42.3	26.3	26.1

Test procedure AS 1289.5.7.1

Test No		26	27	28	29	30	31
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*	1.76	1.82	1.83	1.76	1.86	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	40.0	38.5	40.5	40.0	24.0	24.5

Moisture Variation From Optimum Moisture Content		2.5% wet	2.5% wet	1.5% wet	2.5% wet	2.5% wet	1.5% wet
Density Ratio (R_{HD})	*%*	**99.0**	**99.0**	**97.0**	**99.5**	**102.0**	**101.5**

Material description

Test No 26 - 31 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AG
		Date Issued	05/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	05/05/11
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		**32**	**33**	**-**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL		-	-	-	-	-	-
Measurement depth	*mm*	175	175	-	-	-	-
Field wet density	*t/m³*	1.99	1.78	-	-	-	-
Field moisture content	*%*	25.0	37.6	-	-	-	-

Test procedure AS 1289.5.7.1

Test No		32	33	-	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	-	-	-	-
Percent of oversize material	*wet*	0	0	-	-	-	-
Peak Converted Wet Density	*t/m³*	1.92	1.78	-	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	24.5	35.0	-	-	-	-

Moisture Variation From Optimum Moisture Content	0.5% wet	2.5% wet	-	-	-	-

Density Ratio (R_{HD})	*%*	**103.5**	**100.0**	**-**	**-**	**-**	**-**

Material description

Test No 32 - 33 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11145
		Report No	11145AH
		Date Issued	17/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	06/05/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:27

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**34**	**35**	**-**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL		-	-	-	-	-	-
Measurement depth	*mm*	175	175	-	-	-	-
Field wet density	*t/m³*	1.83	1.84	-	-	-	-
Field moisture content	*%*	35.5	31.5	-	-	-	-

Test procedure AS 1289.5.7.1

Test No		34	35	-	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	-	-	-	-
Percent of oversize material	*wet*	0	0	-	-	-	-
Peak Converted Wet Density	*t/m³*	1.73	1.83	-	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	33.5	29.5	-	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% wet	2.0% wet	-	-	-	-

Density Ratio (R_{HD})	*%*	**105.5**	**100.5**	**-**	**-**	**-**	**-**

Material description

Test No 34 - 35 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11189
		Report No	11189AA
		Date Issued	16/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	06/05/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:57

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**4**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.88	1.74	1.83	1.93	-	-
Field moisture content	*%*	27.8	38.2	35.5	30.7	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.87	1.71	1.79	1.92	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	27.0	37.0	33.5	29.0	-	-

Moisture Variation From Optimum Moisture Content		1.0% wet	1.0% wet	2.0% wet	2.0% wet	-	-

Density Ratio (R_{HD})	*%*	**100.5**	**101.5**	**102.0**	**100.5**	**-**	**-**

Material description

Test No 1 - 4 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11189
		Report No	11189AB
		Date Issued	18/05/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	10/05/11
Location	CLYDE NORTH	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:02

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**5**	**6**	**7**	**8**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.79	1.81	1.81	1.73	-	-
Field moisture content	*%*	41.5	43.5	40.9	40.4	-	-

Test procedure AS 1289.5.7.1

Test No		5	6	7	8	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.80	1.82	1.82	1.77	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	39.5	41.0	39.0	38.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% wet	2.5% wet	2.0% wet	1.5% wet	-	-

Density Ratio (R_{HD})	***%***	**99.5**	**99.5**	**99.0**	**98.0**	**-**	**-**

Material description

Test No 5 - 8 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AA
		Date Issued	07/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	TG
Project	PASADENA - STAGE 5	*Date tested*	03/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:15

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**-**	**-**	**-**
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/m³*	1.83	1.77	1.76	-	-	-
Field moisture content	*%*	30.4	38.7	39.5	-	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	-	-	-
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/m³*	1.87	1.71	1.77	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	29.5	38.0	38.5	-	-	-

Moisture Variation From Optimum Moisture Content		1.0% wet	1.0% wet	1.0% wet	-	-	-
Density Ratio (R_{HD})	*%*	**98.0**	**104.0**	**99.5**	**-**	**-**	**-**

Material description

Test No 1 - 3 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AB
		Date Issued	07/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JHF
Project	PASADENA - STAGE 5	*Date tested*	04/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:51

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**4**	**5**	**6**	**-**	**-**	**-**
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/m³*	1.72	1.85	1.93	-	-	-
Field moisture content	*%*	34.0	29.8	26.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		4	5	6	-	-	-
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/m³*	1.81	1.95	1.98	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	33.0	30.5	27.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.0% wet	0.5% dry	1.0% dry	-	-	-

Density Ratio (R_{HD})	***%***	**95.0**	**95.0**	**97.5**	**-**	**-**	**-**

Material description

Test No 4 - 6 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AC
		Date Issued	07/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	TG
Project	PASADENA - STAGE 5	*Date tested*	05/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:10

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/m³*	1.90	1.89	1.97	-	-	-
Field moisture content	*%*	21.9	22.2	22.6	-	-	-

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/m³*	2.00	1.98	2.04	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	22.0	24.5	-	-	-

Moisture Variation From Optimum Moisture Content		0.5% wet	0.5% wet	2.0% dry	-	-	-
Density Ratio (R_{HD})	*%*	**95.0**	**95.5**	**96.5**	**-**	**-**	**-**

Material description

Test No 7 - 9 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AD
		Date Issued	11/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JHF
Project	PASADENA - STAGE 5	*Date tested*	06/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:44

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**10**	**11**	**12**	**-**	**-**	**-**
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/m³*	1.99	1.98	2.01	-	-	-
Field moisture content	*%*	21.5	24.9	21.5	-	-	-

Test procedure AS 1289.5.7.1

Test No		10	11	12	-	-	-
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/m³*	2.05	1.97	2.01	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	24.5	21.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% wet	0.5% wet	0.5% wet	-	-	-
Density Ratio (R_{HD})	*%*	**97.0**	**100.5**	**100.0**	**-**	**-**	**-**

Material description

Test No 10 - 12 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AE
		Date Issued	13/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JHF
Project	PASADENA - STAGE 5	*Date tested*	11/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:44

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**13**	**14**	**15**	**-**	**-**	**-**
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/m³*	1.90	1.92	1.92	-	-	-
Field moisture content	*%*	29.0	28.8	29.5	-	-	-

Test procedure AS 1289.5.7.1

Test No		13	14	15	-	-	-
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/m³*	1.90	1.95	1.95	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.0	27.0	28.5	-	-	-

Moisture Variation From Optimum Moisture Content		1.0% wet	2.0% wet	0.5% wet	-	-	-

Density Ratio (R_{HD})	*%*	**100.5**	**98.5**	**98.5**	**-**	**-**	**-**

Material description

Test No 13 - 15 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AF
		Date Issued	28/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JHF
Project	PASADENA - STAGE 5	*Date tested*	12/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:50

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**16**	**17**	**18**	**-**	**-**	**-**
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/m³*	1.97	1.89	2.03	-	-	-
Field moisture content	*%*	25.3	32.0	19.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		16	17	18	-	-	-
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/m³*	1.95	1.93	2.05	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	32.0	19.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% wet	0.0%	0.5% wet	-	-	-

Density Ratio (R_{HD})	*%*	**101.0**	**98.0**	**99.0**	**-**	**-**	**-**

Material description

Test No 16 - 18 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AG
		Date Issued	28/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	TG
Project	PASADENA - STAGE 5	*Date tested*	13/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:15

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**19**	**20**	**21**	**-**	**-**	**-**
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/m³*	1.90	1.89	1.89	-	-	-
Field moisture content	*%*	25.7	26.9	27.8	-	-	-

Test procedure AS 1289.5.7.1

Test No		19	20	21	-	-	-
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/m³*	1.97	1.93	1.93	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	24.0	26.5	26.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% wet	0.5% wet	1.5% wet	-	-	-
Density Ratio (R_{HD})	*%*	**96.5**	**98.5**	**98.0**	**-**	**-**	**-**

Material description

Test No 19 - 21 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AH
		Date Issued	28/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JHF
Project	PASADENA - STAGE 5	*Date tested*	14/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:27

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**22**	**23**	**24**	**25**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.92	1.95	1.95	1.91	-	-
Field moisture content	*%*	27.2	15.9	23.8	24.7	-	-

Test procedure AS 1289.5.7.1

Test No		22	23	24	25	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.92	2.04	1.93	1.95	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.5	16.0	23.5	24.5	-	-

Moisture Variation From Optimum Moisture Content		0.5% wet	0.0%	0.5% wet	0.0%	-	-
Density Ratio (R_{HD})	*%*	**100.0**	**95.5**	**101.0**	**98.0**	**-**	**-**

Material description

Test No 22 - 25 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AI
		Date Issued	28/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGE 5	*Date tested*	17/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 15:05

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**26**	**27**	**28**	**-**	**-**	**-**
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/m³*	1.80	1.91	2.00	-	-	-
Field moisture content	*%*	31.5	17.9	17.6	-	-	-

Test procedure AS 1289.5.7.1

Test No		26	27	28	-	-	-
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/m³*	1.86	2.01	2.02	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	31.0	18.0	18.0	-	-	-

Moisture Variation From Optimum Moisture Content	0.5% wet	0.5% dry	0.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**97.0**	**95.0**	**99.0**	**-**	**-**	**-**

Material description

Test No 26 - 28 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	11370
		Report No	11370AJ
		Date Issued	31/10/11
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	KC
Project	PASADENA - STAGES 5, 8 AND 9	*Date tested*	19/10/11
Location	CLYDE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:39

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**29**	**30**	**31**	**32**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.92	1.89	1.94	1.96	-	-
Field moisture content	*%*	11.0	12.6	13.1	12.8	-	-

Test procedure AS 1289.5.7.1

Test No		29	30	31	32	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.99	1.96	2.05	2.06	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	13.0	14.0	14.5	14.5	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	1.5% dry	1.5% dry	2.0% dry	-	-

Density Ratio (R_{HD})	***%***	**96.5**	**96.0**	**95.0**	**95.0**	**-**	**-**

Material description

Test No 29 - 32 Clay Fill