



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 22653  
Report No 22653/R001  
Date Issued 26/09/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	16/09/22
Location	SUNBURY	Checked by	JHF

Feature	CONSTRUCTION LAYER	Layer thickness	150 mm	Time: 11:27
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#### Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	-
Location	Sacred Drive		Zoogie Road	Notch Road		
	710 1.8 north of kerb	760 1.8 south of kerb	20 1.8 east of kerb	50 1.8 east of kerb	100 1.8 west of kerb	
Approximate depth below FSL						
Measurement depth mm	125	125	125	125	125	-
Field wet density t/m <sup>3</sup>	1.78	1.76	1.76	1.74	1.75	-
Field moisture content %	22.6	23.3	22.2	25.3	22.2	-

#### 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/m <sup>3</sup>	1.77	1.75	1.76	1.73	1.75	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	23.5	24.0	23.0	26.5	23.0	-

Moisture Variation From Optimum Moisture Content	1.0% dry	0.5% dry	1.0% dry	1.0% dry	1.0% 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 ( $R_{HD}$ )	%	100.5	100.0	100.5	100.5	100.0	-
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#### Material description

No 1 - 5 40mm Type A - Masalkovski Quarries

AVRLOT HILF V1.10 MAR 13



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ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 22653  
Report No 22653/R002  
Date Issued 27/09/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	16/09/22
Location	SUNBURY	Checked by	JHF

Feature	CAPPING	Layer thickness	200 / 160 mm	Time:	11:32
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	6	7	8	9	10	-
Location	Sacred Drive		Zoogie Road	Notch Road		
	710 1.8 north of kerb	760 1.8 south of kerb	20 1.8 east of kerb	50 1.8 west of kerb	100 1.8 east of kerb	
Approximate depth below FSL						
Measurement depth mm	175	175	125	125	125	-
Field wet density t/m <sup>3</sup>	1.91	2.05	1.96	1.90	1.90	-
Field moisture content %	18.4	21.5	18.8	20.7	17.4	-

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/m <sup>3</sup>	1.90	2.04	1.95	1.90	1.90	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	19.5	22.0	19.5	21.5	18.5	-

Moisture Variation From Optimum Moisture Content	1.0% dry	0.5% dry	0.5% dry	1.0% dry	1.0% 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 ( $R_{HD}$ )	%	100.5	101.0	100.5	100.0	100.0	-
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Material description

No 6 - 10 40mm Type A - Masalkovski Quarries

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 22653  
Report No 22653/R003  
Date Issued 03/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	03/10/22
Location	SUNBURY	Checked by	JHF

**Feature** CLASS 3      **Layer thickness** 100 / 160 mm      **Time:** 11:50:48

AS 12892.1.1 & 5.8.1

Test No		11	12	13			
Location		Zoogie Road	Sacred Drive				
Chainage		20	710	760			
Offset		1.8	1.7	1.8			
		east of kerb	north of kerb	south of kerb			
Approximate depth from F.S.L.	m						
Measurement depth	mm	75	150	150			
Field wet density	t/m <sup>3</sup>	2.38	2.32	2.34			
Field dry density	t/m <sup>3</sup>	2.26	2.22	2.23			
Field moisture content	%	5.0	5.0	5.0			

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203HOJAS)

Date of assignment		27/09/2022					
Material source and location		20mm Class 3 - Holcim, Oaklands Junction					
Compactive effort		MODIFIED					
Maximum Dry Density	t/m <sup>3</sup>	2.26					
Optimum Moisture Content	%	5.5					

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	19.0	19.0	19.0			
Percent of oversize material	wet	-	-	-			
Percent of oversize material	dry	-	-	-			
Adjusted Maximum Dry Density	t/m <sup>3</sup>	-	-	-			
Adjusted Optimum Moisture Content	%	-	-	-			

Moisture Variation From Optimum Moisture Content	0.5% dry	1.0% dry	1.0% dry			
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Moisture Ratio (R <sub>m</sub> )	%	90.0	86.0	86.5			
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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>D</sub> )	%	100.0	98.0	98.5			
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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 22653  
Report No 22653/R004  
Date Issued 07/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	04/10/22
Location	SUNBURY	Checked by	JHF

Feature	CONSTRUCTION LAYER	Layer thickness	150 mm	Time: 10:13
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	14	15	-	-	-	-
Location	Bluey Crescent					
	60 1.8 north of kerb	110 1.8 south of kerb				
Approximate depth below FSL						
Measurement depth mm	125	125	-	-	-	-
Field wet density t/m <sup>3</sup>	1.81	1.88	-	-	-	-
Field moisture content %	27.8	28.3	-	-	-	-

Test procedure AS 1289.5.7.1

Test No	14	15	-	-	-	-
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/m <sup>3</sup>	1.81	1.86	-	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	29.0	29.5	-	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% dry	1.0% 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 ( $R_{HD}$ )	%	100.0	101.0	-	-	-	-
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Material description

No 14 - 15 40mm Type A - Masallkovski Quarries

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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 22653  
Report No 22653/R005  
Date Issued 07/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	05/10/22
Location	SUNBURY	Checked by	JHF

Feature	CAPPING	Layer thickness	160 mm	Time: 10:15
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	16	17	-	-	-	-
Location	Bluey Crescent					
	60 1.8 north of kerb	110 1.7 south of kerb				
Approximate depth below FSL						
Measurement depth	mm	125	125	-	-	-
Field wet density	t/m <sup>3</sup>	1.82	1.83	-	-	-
Field moisture content	%	28.9	29.8	-	-	-

Test procedure AS 1289.5.7.1

Test No	16	17	-	-	-	-
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/m <sup>3</sup>	1.82	1.82	-	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	30.0	30.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.0% dry	0.5% 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 ( $R_{HD}$ )	%	100.0	100.5	-	-	-	-
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Material description

No 16 - 17 40mm Type A - Masallkovski Quarries

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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 22653  
Report No 22653/R006  
Date Issued 11/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	11/10/22
Location	SUNBURY	Checked by	JHF

Feature	CLASS 3	Layer thickness	100 mm	Time:	14:39:27
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AS 12892.1.1 & 5.8.1

Test No	18	19	20	21		
Location	Notch Road		Bluey Crescent			
Chainage	50	100	60	110		
Offset	1.8	1.8	1.8	1.8		
	east	west	north	south		
	of kerb	of kerb	of kerb	of kerb		
Approximate depth from F.S.L.	m					
Measurement depth	mm	75	75	75	75	
Field wet density	t/m <sup>3</sup>	2.40	2.38	2.37	2.39	
Field dry density	t/m <sup>3</sup>	2.30	2.27	2.27	2.27	
Field moisture content	%	4.5	4.5	4.5	5.0	

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 203HOJAS)

Date of assignment	27/09/2022
Material source and location	20mm Class 3 - Holcim, Oaklands Junction
Compactive effort	MODIFIED
Maximum Dry Density	t/m <sup>3</sup> 2.26
Optimum Moisture Content	% 5.5

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0		
Percent of oversize material	wet	-	-	-	-		
Percent of oversize material	dry	-	-	-	-		
Adjusted Maximum Dry Density	t/m <sup>3</sup>	-	-	-	-		
Adjusted Optimum Moisture Content	%	-	-	-	-		

Moisture Variation From Optimum Moisture Content	1.0% dry	1.0% dry	1.0% dry	0.5% dry		
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Moisture Ratio (R <sub>m</sub> )	%	79.5	82.5	80.5	90.0		
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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>D</sub> )	%	101.5	100.5	100.0	100.5		
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*Justin Fry*

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 22653  
Report No 22653/R007  
Date Issued 19/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	REDSTONE ESTATE - STAGE 8	Date tested	19/10/22
Location	SUNBURY	Checked by	JHF

Feature	CLASS 2	Layer thickness	130 mm	Time:	09:00:03
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AS 12892.1.1 & 5.8.1

Test No	22					
Location	Zoogie Road					
Chainage Offset	20 1.3 west of kerb					
Approximate depth from F.S.L.	m					
Measurement depth	mm	100				
Field wet density	t/m <sup>3</sup>	2.40				
Field dry density	t/m <sup>3</sup>	2.28				
Field moisture content	%	5.0				

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202HOJBX)

Date of assignment	17/10/2022
Material source and location	20mm Class 2 - Holcim, Oaklands Junction
Compactive effort	MODIFIED
Maximum Dry Density	t/m <sup>3</sup> 2.27
Optimum Moisture Content	% 6.0

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	19.0				
Percent of oversize material	wet	-				
Percent of oversize material	dry	-				
Adjusted Maximum Dry Density	t/m <sup>3</sup>	-				
Adjusted Optimum Moisture Content	%	-				

Moisture Variation From Optimum Moisture Content	1.0% dry					
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Moisture Ratio (R <sub>m</sub> )	%	85.0				
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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>D</sub> )	%	100.5				
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Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 22653  
Report No 22653/R008  
Date Issued 27/10/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	27/10/22
Location	SUNBURY	Checked by	JHF

Feature	CLASS 2	Layer thickness	110 mm	Time:	10:54:40
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AS 12892.1.1 & 5.8.1

Test No		23	24				
Location		Sacred Drive					
Chainage		710	760				
Offset		1.8	1.8				
		north	south				
		of kerb	of kerb				
Approximate depth from F.S.L.	m						
Measurement depth	mm	100	100				
Field wet density	t/m <sup>3</sup>	2.40	2.39				
Field dry density	t/m <sup>3</sup>	2.28	2.27				
Field moisture content	%	5.5	5.5				

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202HOJBX)

Date of assignment		17/10/2022
Material source and location		20mm Class 2 - Holcim, Oaklands Junction
Compactive effort		MODIFIED
Maximum Dry Density	t/m <sup>3</sup>	2.27
Optimum Moisture Content	%	6.0

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve	mm	19.0	19.0				
Percent of oversize material	wet	-	-				
Percent of oversize material	dry	-	-				
Adjusted Maximum Dry Density	t/m <sup>3</sup>	-	-				
Adjusted Optimum Moisture Content	%	-	-				

Moisture Variation From Optimum Moisture Content	1.0% dry	0.5% dry				
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Moisture Ratio (R <sub>m</sub> )	%	87.0	90.0				
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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>D</sub> )	%	100.5	100.0				
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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon, Vic 3136

Job No 22653  
Report No 22653/R009  
Date Issued 04/11/2022

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AM
Project	REDSTONE ESTATE - STAGE 8	Date tested	03/11/22
Location	SUNBURY	Checked by	JHF

Feature	CLASS 2	Layer thickness	130 mm	Time:	09:55:54
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AS 12892.1.1 & 5.8.1

Test No	25	26	27	28		
Location	Notch Road		Bluey Crescent			
Chainage Offset	50 1.8 east of kerb	100 1.8 west of kerb	60 1.8 north of kerb	110 1.8 south of kerb		
Approximate depth from F.S.L. m						
Measurement depth mm	125	125	125	125		
Field wet density t/m <sup>3</sup>	2.39	2.40	2.40	2.41		
Field dry density t/m <sup>3</sup>	2.26	2.28	2.28	2.27		
Field moisture content %	5.5	5.5	5.5	6.0		

Laboratory Compaction AS 1289.5.2.1 & 5.4.2 Assigned Values (See Report No 202HOJBX)

Date of assignment	17/10/2022
Material source and location	20mm Class 2 - Holcim, Oaklands Junction
Compactive effort	MODIFIED
Maximum Dry Density t/m <sup>3</sup>	2.27
Optimum Moisture Content %	6.0

Test procedure AS 1289.5.4.1

Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0		
Percent of oversize material wet	-	-	-	-		
Percent of oversize material dry	-	-	-	-		
Adjusted Maximum Dry Density t/m <sup>3</sup>	-	-	-	-		
Adjusted Optimum Moisture Content %	-	-	-	-		

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% dry	0.5% dry	0.0% dry		
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Moisture Ratio (R <sub>m</sub> ) %	94.0	90.0	89.0	98.5		
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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>D</sub> ) %	100.0	100.5	100.5	100.0		
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