COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Cross River Rail Delivery Authority under the <u>Creative Commons Attribution 4.0 Licence</u> (CC BY 4.0). When reusing the Document, in whole or in part, please attribute as follows: "(c) Cross River Rail Delivery Authority 2023, licensed under the CC BY 4.0 Licence, prepared by Douglas Partners". This licence does not apply to logos or trademarks.

LIMITATION OF LIABILITY

The CC BY 4.0 Licence contains a comprehensive Disclaimer of Warranties and Limitation of Liability. In addition, please note that this Document was prepared for the Cross River Rail Delivery Authority use only. Reuse of the Document by anyone for any other purpose could result in error and/or loss. You should obtain professional advice before making decisions based on the contents of the Document.

When reproducing any part of this Document, you must also reproduce this limitation of liability notice in addition to the italicised attribution statement above.

Retrieved from the Queensland Geotechnical Database http://qgd.org.au/

CLIENT: AECOM Australia Pty Ltd PROJECT: Cross River Rail - Phase 1 LOCATION: Noble Street, Fairfield

SURFACE LEVEL: 20.4 m AHD **EASTING:** 502768 NORTHING: 6958035 DIP/AZIMUTH: -90°/--

BORE No: CRR103 PROJECT No: 74321.00 DATE: 15 April 2010 SHEET 1 OF 4

		Description	Degree of Weathering Cappic	Rock Strength	Fracture	Discontinuities				n Situ Testing
씸	Depth (m)	of	raph	Strength Water Water	Spacing (m)	B - Bedding J - Joint	Туре	ore :. %	RaD %	Test Results &
		!	WH WH WAS SW	Ex Low Very Low Low Medium High Very High Ex High	0.00	S - Shear D - Drill Break	Тy	Sec	ጸ 🌡	Comments
20	- 0.4	grey sandy gravel filling, fine to								
19							S			10,12,15 N = 27
	-2									10,13,14
18	2.	TUFF - extremely low to very low strength, extremely weathered, grey and red-brown mottled tuff, subhorizontal flattening lineation					S	**************************************		N = 27
17	3	- becoming very low strength				(See attached sheet for abbreviations)	S	A TOTAL AND A TOTA		30/150mm
	3.	TUFF - extremely low strength, highly weathered, fractured, grey and purple-brown mottled tuff, subhorizontal flattening lineation (poorly lithified) becoming grey				Defects generally overprinted by pervasive weathering 4.15m: J, 70°, un, ti			and the state of t	
3 V		- bcoming purple-grey - becoming grey SANDSTONE - extremely low strength, highly weathered, fractured, grey fine to medium grained sandstone, bedding at 10° (poorly lithified) - becoming grey and orange-brown				4.35m: J, 30°, un, sm, cf 10mm 4.44m: J, 25°, pl, sm, cf 10mm 4.53m: J, 35°, pl, sm, cf 5mm 4.64m: J, 65°, un, sm, cf 3mm 4.8m: J, 60°, pl, ro, cc	С	100	57	

LOGGED: MAH CASING: HW to 3.5m RIG: MD300 **DRILLER:** Taberner

TYPE OF BORING: Auger 0.00-3.80m, NMLC Core 3.80-20.00m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: PVC standipe installed

SAMPLING & IN SITU TESTING LEGEND

pp Pocket penetrometer (kPa)
pp Pocket Auger sample
Disturbed sample
Bulk sample
Tube sample (x mm dia.)
Water sample
Core drilling





CLIENT: AECOM Australia Pty Ltd PROJECT: Cross River Rail - Phase 1 LOCATION: Noble Street, Fairfield

SURFACE LEVEL: 20.4 m AHD **EASTING:** 502768 **NORTHING:** 6958035 DIP/AZIMUTH: -90°/--

BORE No: CRR103 PROJECT No: 74321.00 **DATE:** 15 April 2010 SHEET 2 OF 4

]	Description	Degree of Weathering	Rock Strength	Fracture	Discontinuities	Sa			n Situ Testing
쮼	Depth (m)	of	Degree of Weathering	Ex Low Control	Spacing (m)	B - Bedding J - Joint	Туре	ore %	Rab %	Test Results &
		Strata	WH W W W W W	Ex Low Very Low Medium High Very High Ex High	0.05	S - Shear D - Drill Break	F	0 %	α ັ	Comments
14	5.0	banded becoming very low to medium strength, moderately to slightly weathered, clay seams to 15mm at 30-50mm spacings to 5.08m becoming medium strength, moderately weathered, slightly fractured, orange-brown becoming medium strength 5mm clay seam 8mm clay seam 80mm extremely low strength band becoming low strength, moderately to slightly weathered becoming very low strength becoming low, highly to moderately weathered, medium to				14.89m: J, 10°, pl, sm, cf 17mm 5.07m: B, 10°, pl, sm, cf 10mm subhorizontal drill breaks at 100-300mm spacings 5.4m: B, sm, un, ro, cc, ag 5.43m 5.6m: B, 10°, pl, sm, cf 5mm 5.76m: J, 30°, pl, sm, cc 5.83m: J, sv, un, ro, lim, to 6.05m 6.09m: J, 30°, pl, sm, cc 6.12m: J, 50°, un, ro, lim 6.15m: J, sv, un, ti, lim, to 6.25m 6.28m: J, 70°, un, ro, lim	С	100	57	PL(A) = 2.7MPa PL(D) = 0.9MPa
13	6.55 6.53 6.65	coarse grained sandstone 100mm low to medium strength, highly to moderately weathered, fractured, orange-brown, fine to coarse breccia interbed becoming very low to low strength CORE LOSS CONGLOMERATE - medium to high strength, highly to moderately weathered, fractured, orange-brown, fine to coarse grained conglomerate - becoming low to medium strength becoming extremely low strength - becoming low to medium strength - becoming low strength, moderately weathered becoming low to medium strength - becoming low to medium strength				6.41m: J, 45°, un, ro, lim 6.43m: frg to 6.5m, di 6.45m: J, sv, un, ro, cf 10mm, to 6.70m 6.5m: CORE LOSS: 30mm 6.85m: J, sv, un, ro, cf 10mm, to 7.10m 7.09m: J, 55°, un, sm 7.38m: J, sv, un, ro, cf 10mm, to 8.00m 7.73m: J, 25°, pl, ro 7.85m: J, 30°, un, ro, cf	C	98	91	PL(A) = 0.6MPa PL(D) = 0.4MPa PL(A) = 0.33MPa PL(A) = 0.08MPa
***************************************	9	strength, highly weathered becoming very low strength				8.85m: frg to 9.0m, di				
-		- 40mm clay band				9.14m; J, 45°, un, ro, cc				
11 11		- 10mm clay seam				9.7m: frg to 10m, di	С	100	95	
}							C	100	100	

CASING: HW to 3.5m RIG: MD300 **DRILLER:** Taberner LOGGED: MAH

TYPE OF BORING: Auger 0.00-3.80m, NMLC Core 3.80-20.00m

WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: PVC standipe installed

SAMPLING & IN SITU TESTING LEGEND

pp Pocket penetrometer (kPa)
pp Pocket penetrometer (kPa)
pp Photo ionisation detector
s Standard penetration test
standard penetration test
pt Point load strength (s[50] MPa
V Shear Vane (kPa)
v Water seep Water level Auger sample
Disturbed sample
Bulk sample
Tube sample (x mm dia.)
Water sample
Core drilling





CLIENT: AECOM Australia Pty Ltd PROJECT: Cross River Rail - Phase 1 LOCATION: Noble Street, Fairfield

SURFACE LEVEL: 20.4 m AHD **EASTING:** 502768 NORTHING: 6958035 DIP/AZIMUTH: -90°/--

BORE No: CRR103 PROJECT No: 74321.00 **DATE: 15 April 2010** SHEET 3 OF 4

		Description	Degree of Weathering	ဋ _	Rock Strength	Fracture Spacing	Discontinuities		,		n Situ Testing
凒	Depth (m)	of Strata	200	Local	Very Low Low Medium High Vory High Ex High	(m) S	B - Bedding J - Joint S - Shear D - Drill Break	Туре	Sore %.5	RaD %	Test Results &
H	10.0	CONGLOMERATE (as before)		<u>ن</u> م	E S E S E	V 0.05	O - Grical D - Grill Break		28	ш.	Comments
10	-11	becoming moderately weathered, grey and yellow-brown mottled - becoming moderately to slightly					10.15m: J, 45°, pl, sm, cf 4mm 10.3m: frg to 10.5m, di 10.37m: J, 45°, un, sm, lim, cc	С	100	100	PL(A) = 0.02MPa
-	-	weathered	1000			The state of the s					
	-12 12.0 - - 12.3	CORE LOSS		00			12m: CORE LOSS: 300mm				
8	-	- becoming extremely low strength, moderately weathered - becoming very low strength					12.6m: J, 60°, un, ro	С	63	37	
	- 12.8 - - 13 - 13.1	CORE LOSS					12.8m: CORE LOSS: 300mm				
		- becoming slightly weathered					13.26m: J, 20°, un, ti, lim				
-	~	- becoming moderately weathered			The state of the s				000	70	
-	- 14	- becoming slightly weathered						C	86	73	
9	-					200					PL(A) = 0.03MPa PL(D) = 0.04MPa
-	14.95	- high strength zone						***			PL(A) = 1.56MPa PL(D) = 1.23MPa

LOGGED: MAH RIG: MD300 **DRILLER:** Taberner CASING: HW to 3.5m

TYPE OF BORING: Auger 0.00-3.80m, NMLC Core 3.80-20.00m WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: PVC standipe installed

SAMPLING & IN SITU TESTING LEGEND

Process penetrometer (kPa)
PiD Photo ionisation detector
S Standard penetration test
PL Point load strength (ts(50) MPa
V Shear Vane (kPa)
D Water seep
Water level Auger sample
Disturbed sample
Bulk sample
Tube sample (x mm dia.)
Water sample
Core drilling





CLIENT: AECOM Australia Pty Ltd PROJECT: Cross River Rail - Phase 1 LOCATION: Noble Street, Fairfield

SURFACE LEVEL: 20.4 m AHD **EASTING:** 502768 NORTHING: 6958035 DIP/AZIMUTH: -90°/--

BORE No: CRR103 PROJECT No: 74321.00 **DATE:** 15 April 2010 SHEET 4 OF 4

	Denth	Description	Degree of Weathering	Rock Strength ់	Fracture Spacing	Discontinuities	Sampling & In Situ Tes			
본	Depth (m)	of	Degree of Weathering Signature of Signatur	Ex Low Cow Low Medium High High Kery High Kery High Kery High Kery High Water	(m)	B - Bedding J - Joint	Туре	o.o.	RQD %	Test Results &
	- 35.0	Strata	WH WW SX SX SX SX	Kery Wedy Very	0.0	S - Shear D - Drill Break	E.	O.S.	α,	Comments
5	15.0	SILTSTONE - extremely low strength, extremely weathered, fractured, grey, siltstone - becoming extremely low to very low strength banded, slightly to moderately weathered				Numerous drilling induced breaks in extremely low to low strength rock 15.5m: J, 60°, pl, sm, cc				
	- 16	- becoming slightly carbonaceous				16.54m: J, 50°, un, sm, cc	C	100	27	PL(A) = 0.09MPa
	-17				CATE THE TAX AND TAX A	16.85m: J, 60°, un, sm, cc				
	- - 18	- becoming low strength, fresh, bedding subhorizontal - becoming low strength				17.45m: J, 65°, un, sm 17.55m: J, 50°, un, sm	T T T T T T T T T T T T T T T T T T T	ANALYA ANALA MARIA		
2		- becoming extremely low strength, moderately weathered, crush zone to 19.65m				18.83m: crush zone to	ucs	- The state of the		2.301 MPa
-	- 19	20mm clay seam 50mm clay band				19.67m	C LAB LAB LAB		56	PL(A) = 0.33MP; PL(A) = 0.3MP; PL(D) = 0.04MP; PL(D) = 0.17MP;
		- becoming low to medium strength				19.65m: J, 40°, pl, sm 19.87m: J, 30°, pl, sm	**************************************			
	19.98	- bedding at 10°						<u></u>		L

RIG: MD300 **DRILLER:** Taberner LOGGED: MAH CASING: HW to 3.5m

TYPE OF BORING: Auger 0.00-3.80m, NMLC Core 3.80-20.00m WATER OBSERVATIONS: No free groundwater observed whilst augering

REMARKS: PVC standipe installed

SAMPLING & IN SITU TESTING LEGEND
pp Pocket penetrometer (kPa)
Plo Photo ionisation detector
S Standard penetration test
pp Point load strength Is(50) MPa
V Shear Vane (kPa)
V Water seep
Water seep
Water level Auger sample
Disturbed sample
Bulk sample
Tube sample (x mm dia.)
Water sample
Core drilling





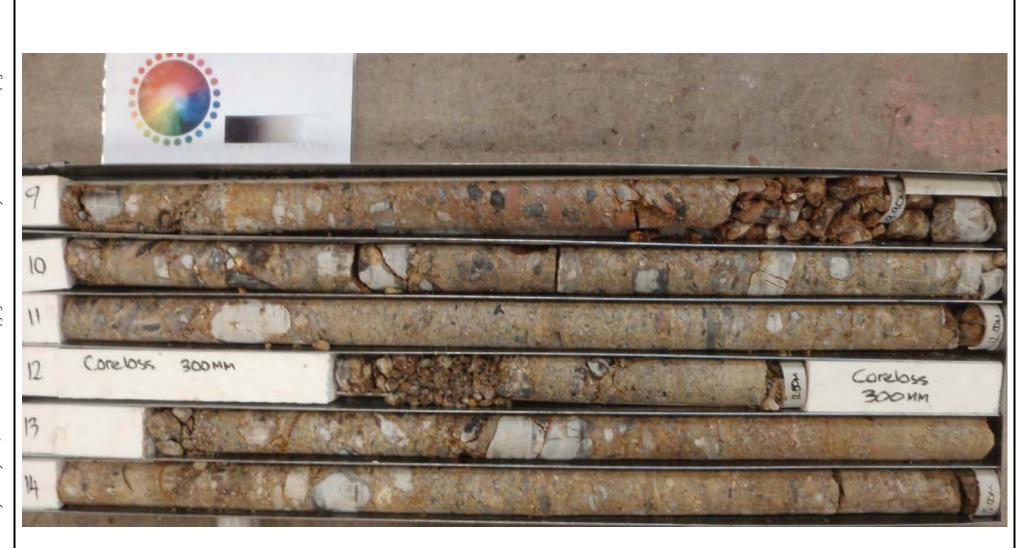


CROSS RIVER RAIL – PHASE 1 GEOTECHNICAL INVESTIGATION

BORE CRR103

Project 74321.00



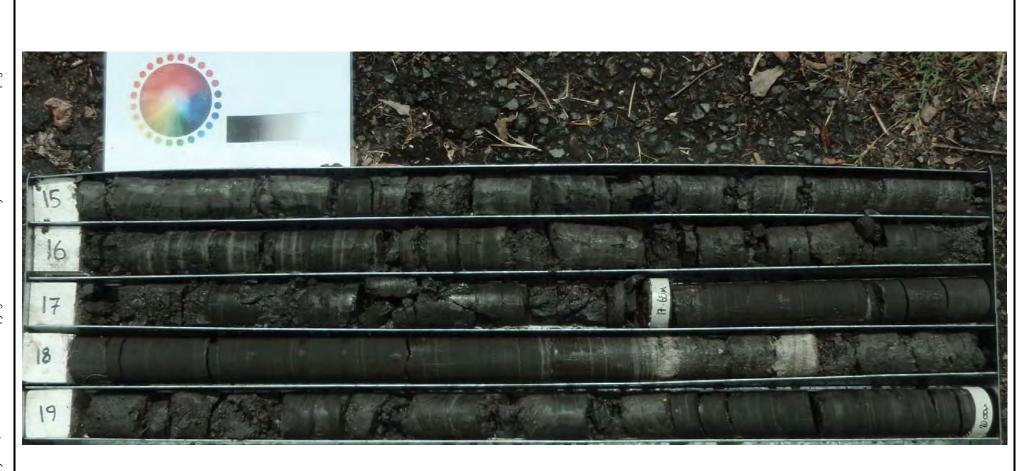


CROSS RIVER RAIL – PHASE 1 GEOTECHNICAL INVESTIGATION

BORE CRR103

Project 74321.00





CROSS RIVER RAIL - PHASE 1 GEOTECHNICAL INVESTIGATION

BORE CRR103

Project 74321.00

