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Queensland Government

GEOTECHNICAL BOREHOLE LOG

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/8-2014

BOREHOLE No **CRR994**

Sheet 1 of 1

REFERENCE No **H13152**

PROJECT Cross River Rail (CRR) Project - Additional Geotechnical Investigation

LOCATION O'Connell Terrace COORDINATES 503291.7 E; 6963906.0 N

PROJECT No FG6470 SURFACE RL 16.51m PLUNGE 90° DATE STARTED 30/08/2018 GRID DATUM MGA94

JOB No HEIGHT DATUM AHD BEARING ° DATE COMPLETED 30/08/2018 DRILLER Geodrill

DEPTH (m)	R.L. (m)	AUGER CASING WASHBORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS	
													EH
16.39						Sandy CLAY (Topsoil)	(CL)						
16.01						Dark brown, moist, soft. Low plasticity. Fine to medium grained sand. Trace sub-angular fine gravel. Rootlets, grass.	(CH)						
15.31			(25)			Sandy CLAY (Residual)	XW						
						Grey, pale brown, moist, firm. High plasticity. Fine grained sand.	HW						
						TUFF (Rif)							
						XW: Recovered as, pale grey, moist, dense, fine grained Silty SAND (SM). Trace fine, sub-angular gravel.							
						TUFF (Rif)							
			93 (80)			MW: Pale grey, grey with orange staining, fine grained with medium gravel sized clasts, massive, high to very high strength.	MW					D (1.24m) A (1.39m)	
												D (1.63m) A (1.65m)	
												D (1.98m) A (2.00m)	
												D (2.47m) A (2.50m) D (2.72m) A (2.77m)	
												(3.46m)	
			100 (59)									D (3.87m) A (3.90m)	
												D (4.36m) A (4.40m)	
												D (5.11m) A (5.15m)	
			100 (78)			from 5.79m: Pale red, pale grey and grey with orange staining, clasts up to 20mm.						D (6.19m) A (6.21m) (6.41m)	
												D (6.91m) A (6.94m) D (7.21m) A (7.24m)	
			100 (73)				SW					D (8.13m) A (8.16m)	
			100				MW						
	8.04					Borehole completed at 8.47m							

REMARKS: Rif - Brisbane Tuff	LOGGED BY	REVIEWED BY
	ND	S.Foley

Detailed Discontinuity Description Log



This form is intended for the detailed description of discontinuities and defects as measured in outcrop by line mapping, or as they occur downhole in drilled rock core. The descriptions and abbreviations used shall be in accordance with Australian Standard AS1726-1993 Geotechnical site investigations and TMR Geotechnical Terms and Symbols Form F:GEOT017/8.

Project Name		Cross River Rail - Stage 2				Project No	FG6470			
Site ID / Borehole No.		CRR994				Surface RL	16.509			
Geologist		Nick Dewar				Date	30/08/2018			
						Page	1	of	3	
Traverse Chainage; or Down hole depth (rock core)	Type LP / BP / FP / J etc.	Dip ° / Dip Direction °; or Angle ° from horizontal (rock core)	Planarity Stp / Un / PI	Roughness Ro / Sm / SI	Roughness Class I to IX	Aperture CD / OP / FL / TI	Infilling Cn / St / Vr / Ct ¹	Zones ¹ SZ / CZ / HFZ / AZ	Other	
1.2-1.26								HFZ		
1.26	J	20-50	Un	Ro	IV	OP	Vr		Cly	
1.33	J	10	Un	Ro	IV	OP	Cn			
1.36	J	20	Un	Ro	IV	OP	Vr		Cly	
1.42	J	20	PI	Ro	VII	OP	Vr		Cly	
1.45	J	15	Un	Ro	IV	OP	Vr		Cly	
1.51	J	35	PI	Ro	VII	OP	Vr		Cly	
1.53	J	Oct-30	Un	Ro	IV	OP/TI	St		Fe	
1.54	J	20	Un	Ro	IV	CD/TI	Cn			
1.56	J	15	Un	Ro	IV	OP	St/Vr		Fe/Cly	
1.59	J	5	Un	Ro	IV	OP	St/Vr		Fe/Cly	
1.70	J	5	Un	Ro	IV	OP	St		Fe	
1.82	J	70	Un	Ro	IV	CD	St		Fe	
1.87	J	5	Un	Ro	IV	OP	St		Fe	
1.92-1.94	SM								XW	
2.06	J	10	Un	Ro	IV	OP	Vr		Cly	
2.12	J	0	Un	Ro	IV	OP	St		Fe	
2.12-2.26	J	90	PI	Ro	VII	OP	Vr		Cly	
2.17	J	10	Un	Ro	IV	OP	St		Fe	
2.21	J	10	Un	Ro	IV	CD/TI	Cn			
2.22	J	5	Un	Ro	IV	OP	St		Fe	
2.26	J	10	PI	Ro	VII	OP	Vr		Cly	
2.32	J	0	Un	Ro	IV	OP	Vr		Cly	
2.38	J	5	Un	Ro	IV	OP	Vr		Cly	
2.41	J	10	PI	Ro	VII	OP	St		Fe	
2.53	J	10	Un	Ro	IV	OP	St		Fe	
2.54	J	15	Un	Ro	IV	OP	St		Fe	
2.85	J	10	Un	Ro	IV	OP	St		Fe	
2.93	J	5	PI	Ro	VII	OP	St/Vr		Fe/Coal	
2.96	J	0	PI	Ro	VII	OP	St/Vr		Fe/Coal	
2.97	J	5	Un	Ro	IV	CD	Vr		Coal	

Note: 1. Describe zones and coatings in terms of composition and thickness (mm)

F:GEOT 533/9 – 2014

Detailed Discontinuity Description Log



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Project Name		Cross River Rail - Stage 2				Project No	FG6470		
Site ID / Borehole No.		CRR994				Surface RL	16.509		
Geologist		Nick Dewar				Date	30/08/2018		
						Page	2	of	3
3.41	J	10	Un	Ro	IV	TI	St		Fe
3.42	J	10	Un	Ro	IV	OP	St/Vr		Fe/Coal
3.72	J	10	Un	Ro	IV	CD/TI	St		Fe
3.83	J	10	Un	Ro	IV	TI	St		Fe
3.84	J	10	PI	Ro	VII	OP	St/Vr		Fe/Coal
3.97	J	0	Un	Ro	IV	OP	St/Vr		Fe/Coal
3.98	J	30	Un	Ro	IV	CD	St		Fe
4.03	J	10	Un	Ro	IV	OP	St/Vr		Fe/Coal
4.04	J	15	Un	Ro	IV	CD	St		Fe
4.09	J	10	Un	Ro	IV	CD	St		Fe
4.1-4.25	J	60-90	Un	Ro	IV	TI/CD	St		Fe
4.19	J	0	Un	Ro	IV	TI/CD	St/Vr		Fe/Coal
4.33	J	10	Un	Ro	IV	OP	Vr		Cly
4.50	J	5	Un	Ro	IV	CD	St		Fe
4.53	J	10	Un	Ro	IV	CD	St		Fe
4.58	J	30	PI	Ro	VII	OP	St		Fe
4.62	J	5	PI	Ro	VII	OP	St		Fe
4.64	J	20	Un	Ro	IV	OP	St/Vr		Cly
4.93	J	5	PI	Ro	VII	OP	St		Fe
5.21	J	5	Un	Ro	IV	OP	Cn		
5.23	J	5	Un	Ro	IV	CD/TI	Cn		
5.28	J	10	Un	Ro	IV	CD/TI	Cn		
5.30	J	20	Un	Ro	IV	OP	St/Vr		Fe/Cly
5.32	J	10	Un	Ro	IV	CD	Cn		
5.43	J	30	Un	Ro	IV	OP	St		Fe
5.44	J	30	Un	Ro	IV	CD	St		Fe
5.51	J	10	Un	Ro	IV	OP	St		Fe
5.28	J	10	Un	Ro	IV	CD/TI	Cn		
6.10	J	5	Un	Ro	IV	OP	St		Fe
6.30	J	5	Un	Ro	IV	OP	St		Fe
6.31	J	5	Un	Ro	IV	OP	St		Fe
6.40	J	10	Un	Ro	IV	OP	St		Fe
6.68	J	10	PI	Ro	VII	OP	St		Fe
6.74	J	20	Un	Ro	IV	OP	St		Fe
6.75	J	5	Un	Ro	IV	OP	St		Fe
6.76	J	30	Un	Ro	IV	CD	St		Fe
6.87	J	10	PI	Ro	VII	OP	St		Fe

Note: 1. Describe zones and coatings in terms of composition and thickness (mm)

F:GEOT 533/9 – 2014

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Project Name		Cross River Rail - Stage 2				Project No.	FG6470		
Site ID / Borehole No.		CRR994				Surface RL	16.509		
Geologist		Nick Dewar				Date	30/08/2018		
						Page	3	of	3
7.05	J	5	Un	Ro	IV	OP	Cn		
7.11	J	30	Un	Ro	IV	TI	St		Fe
7.12	J	30	Un	Ro	IV	TI/CD	St		Fe
7.13-7.22	J	70	Un	Ro	IV	CD/FL	St		Fe
7.41	J	10	Un	Ro	IV	OP	Cn		
7.58	J	20	Un	Ro	IV	OP	St		Fe
7.61	J	0	PI	Ro	VII	OP	St		Fe
7.64	J	10	Un	Ro	IV	CD/TI	St		Fe
7.65-7.95	J	80	Un	Ro	IV	CD/TI	St		Fe
7.80	J	10	Un	Ro	IV	OP	St		Fe
7.97	J	0	PI	Ro	VII	OP	St		Fe
8.03	J	10	PI	Ro	VII	OP	St		Fe
8.10	J	40	Un	Ro	IV	CD/FL	St		Fe
8.22	J	10	Un	Ro	IV	CD	TI	St	Fe
8.24-8.37	J	80	Un	Ro	IV	CD/TI	St		Fe
8.33-8.41	J	60-90	Un	Ro	IV	CD/TI	St		Fe

Note: 1. Describe zones and coatings in terms of composition and thickness (mm)
 F:GEOT 533/9 – 2014

Project Name	Cross River Rail CRR 2018 – Geotechnical Investigation		
Project No.	FG6470	Date	29/08/2018
Borehole No.	CRR994	Reference No.	H13152
Location	O'Connell Terrace	Start Depth (m)	1.1
Submitted By	J. Armstrong	Finish Depth (m)	8.47

