FINAL 02/11/2017

Queensland Government

GEOTECHNICAL BOREHOLE LOG

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

BOREHOLE No **BH03**

Sheet 1 of 4

REFERENCE No **H12966**

PROJECT Boyne River Bridge Repalcement

LOCATION Pier 1, LHS

COORDINATES 323481.1 E; 7159921.9 N

PROJECT No FG6482 | SURFACE RL 118.12m | PLUNGE 90° | DATE STARTED 30/08/2017 | GRID DATUM MGA Z56

JOB No 249/435/375550 | HEIGHT DATUM AHD | BEARING ° | DATE COMPLETED 31/08/2017 | DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( ) % CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (EC VC C M W VW EW)	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0					Sandy SILT (Alluvium) Brown, moist, soft. Low plasticity.		(ML)				
1				A						2, 1, 2 N=3	SPT
	116.32										
2				B	Sandy SILT (Alluvium) Brown, moist, stiff to very stiff. Low plasticity.		(ML)			7, 8, 7 N=15	SPT
3	115.04			C						5, 7, 8 N=15	SPT
				D	SAND (Alluvium) Pale orange brown, moist, medium grained, very dense.						SPT
4				E			(SW)			4, 6, 30/110	SPT
5	113.12			F	SAND with Clay (Alluvium) Pale orange brown, moist, medium grained, medium dense. With bands of grey Silty Clay, medium plasticity.		(SC)			7, 9, 13 N=22	SPT
6	112.12			G	GRAVEL (Alluvium) Grey, fine to coarse grained. Medium dense.		(GP)			15, 15, 7 N=22	SPT
	111.82			H	Silty CLAY (Residual) Grey mottled pale orange brown, moist, very stiff, medium plasticity. Trace fine to medium grained gravel, fine to medium grained sand.		(CI)				SPT
7	111.12			I						5, 10, 15 N=25	SPT
8				J	Silty CLAY (Residual) Grey mottled pale orange brown, moist, very stiff, medium plasticity. Trace fine to medium grained gravel.		(CI)			4, 5, 15 N=20	SPT
9				K	9.0m: Becomes hard.					14, 24, 30 N=54	SPT
	108.12										

Continued on next sheet

REMARKS: Je1 - Evergreen Formation.

LOGGED BY	REVIEWED BY
M. de Gee	S. Foley

Queensland Government

GEOTECHNICAL BOREHOLE LOG

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BOREHOLE No **BH03**

Sheet 2 of 4

REFERENCE No **H12966**

PROJECT Boyne River Bridge Repalcement

LOCATION Pier 1, LHS

COORDINATES 323481.1 E; 7159921.9 N

PROJECT No FG6482 | SURFACE RL 118.12m | PLUNGE 90° | DATE STARTED 30/08/2017 | GRID DATUM MGA Z56

JOB No 249/435/375550 | HEIGHT DATUM AHD | BEARING ° | DATE COMPLETED 31/08/2017 | DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	RQD ( ) % / CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USCS WEATHERING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
11			L	Silty CLAY (Residual) Cont'd	(Cl)	15, 25, 30/140	SPT
			M			30/120	SPT
12	106.12		N	Silty CLAY with Sand (Residual) Grey mottled brown and pale grey, moist, hard. Fine to medium grained, medium plasticity. Fine grained sand.	(Cl)	14, 21, 26 N=47	SPT
13	105.12		O	SANDSTONE (Je1) XW: Recovered as Silty Clay, grey mottled brown, medium plasticity with fine grained sand.	XW	18, 30/140	SPT
14	104.12	(36)		SANDSTONE (Je1) HW: Pale brown grey, fine to coarse grained with some fine grained layers up to 200mm, medium bedded, low strength. -BP: 0°-15° (4-5/m), PL/Ro, OP, Sandy Clay Ct -Js: 40°-50° (1/m), Stp/Ro, OP-TI, Cly Vr -J: 85° (1/m), Pl/Ro, OP, Ct	HW	Is(50)=0.19 MPa Is(50)=0.14 MPa	D (14.25m) A (14.26m)
						14.53m-14.58m: XW	
15						14.94m-15.03m: XW	
						Is(50)=0.14 MPa Is(50)=0.13 MPa	D (15.20m) A (15.21m)
		100				15.65m-15.71m: XW	
16		(26)					
						16.43m-16.47m: XW	
						16.73m-16.74m: XW	
17		89	CORE LOSS		XW		
		(79)			MW		
18						Is(50)=0.15 MPa Is(50)=0.15 MPa	D (17.82m) A (17.83m)
		100					
19		(59)					
					HW	Is(50)=0.14 MPa Is(50)=0.03 MPa	D (19.45m) A (19.47m)
	98.12						

Continued on next sheet

REMARKS: Je1 - Evergreen Formation.

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BOREHOLE No **BH03**

Sheet 3 of 4

REFERENCE No **H12966**

PROJECT Boyne River Bridge Repalcement

LOCATION Pier 1, LHS

COORDINATES 323481.1 E; 7159921.9 N

PROJECT No FG6482 | SURFACE RL 118.12m | PLUNGE 90° | DATE STARTED 30/08/2017 | GRID DATUM MGA Z56

JOB No 249/435/375550 | HEIGHT DATUM AHD | BEARING ° | DATE COMPLETED 31/08/2017 | DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	RQD ( ) % / CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USCS WEATHERING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
21		100 (27)		SANDSTONE (Je1) HW: Cont'd.	HW	Is(50)=0.28 MPa Is(50)=0.18 MPa 20.82m-20.87m: CZ 21.18m-21.22m: CZ	D (20.60m) A (20.64m)
22		100 (86)			XW	Is(50)=0.13 MPa Is(50)=0.09 MPa	D (21.54m) A (21.55m)
23					HW	Is(50)=0.20 MPa Is(50)=0.15 MPa	D (22.58m) A (22.59m)
24		100 (59)				Is(50)=0.16 MPa Is(50)=0.17 MPa 23.40m-23.44m: HFZ	D (23.30m) A (23.32m)
25	93.46			SILTSTONE (Je1) MW: Pale brown-grey, fine grained, medium bedded, medium strength. Interbedded with fine to medium grained orange grey sandstone up to 150mm thick, low to medium strength. -BP: 20°-30° (4-6/m), Pl/Ro, OP-TI, St, Sinf -Js: 40°-60° (6-8/m), Pl/Ro, TI-CD, St-Vr, Sinf	MW	Is(50)=0.13 MPa Is(50)=0.15 MPa Is(50)=0.18 MPa Is(50)=0.09 MPa	D (24.64m) A (24.66m) D (24.92m) A (25.00m)
26			CORE LOSS		XW	26.00m-26.40m: SZ	
27		95 (93)			XW	26.55m-26.93m: SZ Is(50)=0.19 MPa Is(50)=0.56 MPa 27.34m-27.35m: BP: 10°, Pl/Ro, OP, Ct, Sinf	D (27.05m) A (27.06m)
28					MW	Is(50)=0.77 MPa Is(50)=0.65 MPa	D (27.82m) A (27.83m)
29						Is(50)=1.10 MPa Is(50)=0.50 MPa	D (28.60m) A (28.62m)
	88.12	100				Is(50)=0.10 MPa Is(50)=0.18 MPa	D (29.80m) A (29.82m)

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REMARKS: Je1 - Evergreen Formation.

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BOREHOLE No **BH03**

Sheet 4 of 4

REFERENCE No **H12966**

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LOCATION Pier 1, LHS

COORDINATES 323481.1 E; 7159921.9 N

PROJECT No FG6482 | SURFACE RL 118.12m | PLUNGE 90° | DATE STARTED 30/08/2017 | GRID DATUM MGA Z56

JOB No 249/435/375550 | HEIGHT DATUM AHD | BEARING ° | DATE COMPLETED 31/08/2017 | DRILLER NorthCoast Drilling

DEPTH (m)	R.L. (m)	RQD ( ) % / CORE REC %	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
31		(97)	SILTSTONE (Je1) MW: Cont'd.					UCS=1.69 MPa Is(50)=0.73 MPa Is(50)=0.46 MPa	(30.16m) D (30.23m) A (30.24m)
32						MH	VC	Is(50)=0.57 MPa Is(50)=0.32 MPa	D (31.60m) A (31.61m)
33		100 (75)			MW		C	32.95m-33.00m: HFZ Is(50)=0.35 MPa Is(50)=0.17 MPa	D (33.23m) A (33.24m)
34			Becoming very thinly to thinly bedded. Dark grey to brown-grey.			MH	M	Is(50)=1.20 MPa	D (34.44m)
35							VC	Is(50)=1.20 MPa	A (34.95m)
	82.64								
36	82.02	100	SANDSTONE (Je1) MW: Grey brown, fine to coarse grained, massive, medium strength.		MW	M	M	Is(50)=0.33 MPa Is(50)=0.33 MPa	D (35.85m) A (35.86m)
			Borehole completed at 36.10m						
37									
38									
39									

REMARKS: Je1 - Evergreen Formation.

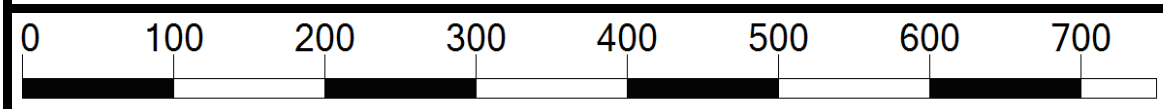
LOGGED BY	REVIEWED BY
M. de Gee	S. Foley

TMR GEOTECHNICAL BOREHOLE LOG - CREATED WITH HOLEBASE SI

CORE PHOTO LOG
DEPARTMENT OF TRANSPORT AND MAIN ROADS
GEOTECHNICAL SECTION

Queensland Government

Project Name	**Boyne River Bridge Replacement**		
Project No.	FG6482	Date	30/08/2017
Borehole No.	BH03	Reference No.	H12966
Location	Pier 1, LHS	Start Depth (m)	14.00
Submitted By	M. de Gee	Finish Depth (m)	36.10
Remarks			



SCALE (mm)

CORE PHOTO LOG
DEPARTMENT OF TRANSPORT AND MAIN ROADS
GEOTECHNICAL SECTION

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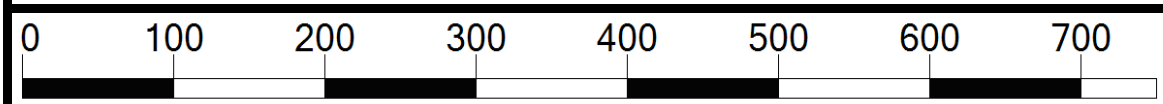
Borehole No.	BH03	Reference No.	H12966
Location	Pier 1, LHS	Start Depth (m)	14.00
Submitted By	M. de Gee	Finish Depth (m)	36.10
Remarks			



SCALE (mm)

CORE PHOTO LOG
DEPARTMENT OF TRANSPORT AND MAIN ROADS
GEOTECHNICAL SECTION

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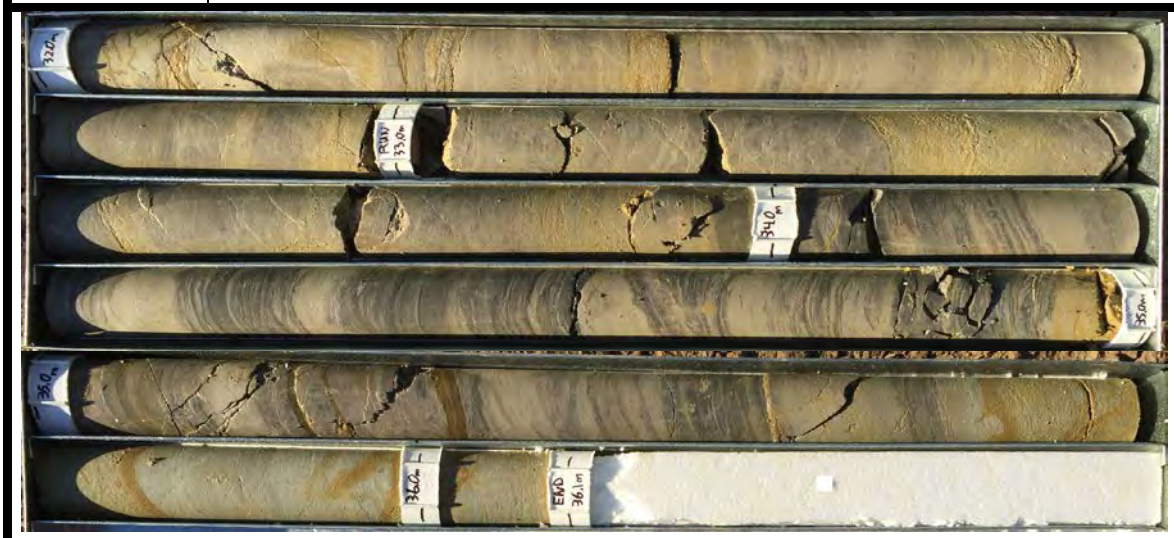
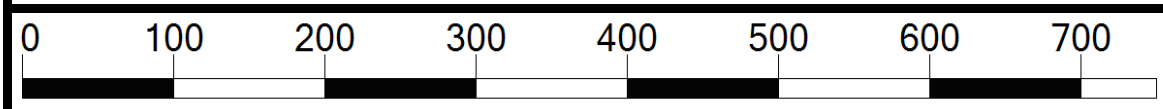
Borehole No.	BH03	Reference No.	H12966
Location	Pier 1, LHS	Start Depth (m)	14.00
Submitted By	M. de Gee	Finish Depth (m)	36.10
Remarks			





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