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**Queensland  
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**GEOTECHNICAL  
BOREHOLE LOG**

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

BOREHOLE No **BH06**

Sheet 1 of 4

REFERENCE No **H12967**

PROJECT	Boyne River Bridge Repalcement		
LOCATION	Pier 2, RHS	COORDINATES 323461.5 E; 7159911.4 N	
PROJECT No	FG6482	SURFACE RL 114.46m	PLUNGE 90°
			DATE STARTED 02/09/2017
			GRID DATUM MGA Z56
JOB No	249/435/375550	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 04/09/2017
			DRILLER NorthCoast Drilling

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
	114.16				Sandy Silty CLAY (Topsoil) Brown, moist, firm, medium plasticity. Trace root fibres.	(CI)					
1	113.46			A	Sandy GRAVEL and Cobbles (Alluvium) Brown, moist, very loose. Medium to coarse grained sand, fine to medium grained gravel, sub rounded.	(GP)				2, 2, 2 N=4	SPT
2				B	Sandy GRAVEL and Cobbles (Alluvium) Brown, wet, very loose. Medium to coarse grained sand, fine to medium grained gravel, sub rounded.	(GP)				hw, 1, hw N=1	SPT
3	111.66			C	Sandy GRAVEL and Cobbles (Alluvium) Brown grey, wet, medium dense. Medium to coarse grained sand, fine to medium grained gravel, sub angular.	(GP)				14, 11, 7 N=18	SPT
4				D	Trace silt. 4.1m: Cobble	(GP)				30/100	SPT
5				E		(GP)				16, 8, 9 N=17	SPT
6				F		(GP)				7, 9, 10 N=19	SPT
7	107.31			G	Silty SAND (Alluvium) Brown grey, wet, medium dense. Fine to medium grained sand. Low plasticity fines. Trace fine grained gravel.	(SM)				8, 5, 6 N=11	SPT
8	106.46			H	Silty Clayey SAND (Alluvium) Grey, brown, wet, very dense. Fine to medium grained sand. Trace fine to medium grained gravel.	(SC)				9, 10, 30/140	SPT
9	105.96			I	Silty CLAY with Sand (Residual) Brown grey, moist, hard. High plasticity. Fine grained sand.	(CH)				13, 30/140	SPT
	104.46										

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REMARKS: Je1 - Evergreen Formation.

<b>LOGGED BY</b>	<b>REVIEWED BY</b>
M. de Gee	S. Foley



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BOREHOLE No **BH06**

Sheet 2 of 4

REFERENCE No **H12967**

PROJECT	Boyne River Bridge Repalcement				
LOCATION	Pier 2, RHS			COORDINATES 323461.5 E; 7159911.4 N	
PROJECT No	FG6482	SURFACE RL	114.46m	PLUNGE	90°
				DATE STARTED	02/09/2017
				GRID DATUM	MGA Z56
JOB No	249/435/375550	HEIGHT DATUM	AHD	BEARING	°
				DATE COMPLETED	04/09/2017
				DRILLER	NorthCoast Drilling

DEPTH (m)	R.L. (m)	FAUGER 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	VH	H	M	J	VI	EL	EC	VC	C	M	W		
11				J	Silty CLAY with Sand (Residual) Cont'd.	(CH)												14, 23, 30/130	SPT		
12				K														15, 30/130	SPT		
13	101.31			L														15, 30/145	SPT		
14				M	Clayey SAND (Residual) Pale grey grey and brown, moist, very dense. Fine to coarse grained sand. Medium plasticity clay.	(SC)												10, 30/145	SPT		
15	100.16		(55)	N	SANDSTONE (Je1) HW: Grey minor brown, fine to medium grained, medium bedded, very low to low strength. Occasional siltstone layers up to 20mm. -BP: 10°-25° (6-7/m), Pl-Un/Ro, OP- Tl, Cn-Ct -Js: 45°-70° (2/m), Pl/Sm-Ro, OP, Cn- Vr	HW												14.95m-15.24m: HFZ 15.68m-16.05m: HFZ	D (14.55m) A (14.56m)		
16			100 (0)			XW													D (15.47m) A (15.48m)		
17			100 (26)			HW												16.80m-16.84m: XW	D (16.93m) A (16.94m)		
18			100 (28)			MW												17.38m-17.46m: XW	D (17.58m) A (17.59m)		
19			100 (48)			HW													D (18.15m) A (18.17m)		
	94.46					MW													D (19.20m) A (19.21m) D (19.73m) A (19.75m)		

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REMARKS: Je1 - Evergreen Formation.

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M. de Gee

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BOREHOLE No **BH06**

Sheet 3 of 4

REFERENCE No **H12967**

PROJECT	Boyne River Bridge Repalcement		
LOCATION	Pier 2, RHS	COORDINATES 323461.5 E; 7159911.4 N	
PROJECT No	FG6482	SURFACE RL 114.46m	PLUNGE 90°
			DATE STARTED 02/09/2017
			GRID DATUM MGA Z56
JOB No	249/435/375550	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 04/09/2017
			DRILLER NorthCoast Drilling

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		EC		M	W	VW	EW
												VH	H	VL	EL				
21			100 (62)		SANDSTONE (Je1) HW: Cont'd.	.....	MW												
							HW			20.60m-20.75m: BZ									
							MW	VL-L	VC										
							XW												
22							HW			Is(50)=0.04 MPa Is(50)=0.08 MPa	D (21.66m) A (21.67m)								
							MW	LM	VC										
23			100 (45)				MW			Is(50)=0.33 MPa Is(50)=0.10 MPa	D (22.90m) A (22.92m)								
							HW												
24	90.36				SILTSTONE (Je1) MW: Pale grey grey, fine grained, thinly bedded, very low to low strength. With sandstone interbed up to 200mm. -BP: 5°-20° (6-7/m), Pl/Ro, OP-Tl, Vr-Ct -Js: 45°-70° (2/m), Pl/Sm, OP-CD, Cn-Vr	xxxx	MW	L											
							HW			Is(50)=0.36 MPa Is(50)=0.27 MPa	D (23.40m) A (23.41m)								
25			100 (54)				MW			Is(50)=0.62 MPa Is(50)=0.43 MPa UCS=3.93 MPa	D (25.25m) A (25.26m) (25.44m)								
							HW			Is(50)=0.25 MPa Is(50)=0.18 MPa	D (25.81m) A (25.82m)								
26			96 (12)	CORE LOSS			MW	L	VC										
							HW			Is(50)=0.10 MPa Is(50)=0.07 MPa	D (26.75m) A (26.77m)								
27			97 (0)	CORE LOSS			MW	VL	VC	Is(50)=0.06 MPa	D (27.14m)								
							HW												
28			97 (25)	CORE LOSS			MW												
							HW												
							XW												
29	84.46						MW												
							HW			Is(50)=0.11 MPa Is(50)=0.22 MPa	D (29.54m) A (29.55m)								

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REMARKS: Je1 - Evergreen Formation.

LOGGED BY	REVIEWED BY
M. de Gee	S. Foley



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BOREHOLE No **BH06**

Sheet 4 of 4

REFERENCE No **H12967**

PROJECT	Boyne River Bridge Repalcement		
LOCATION	Pier 2, RHS	COORDINATES 323461.5 E; 7159911.4 N	
PROJECT No	FG6482	SURFACE RL 114.46m	PLUNGE 90°
			DATE STARTED 02/09/2017
			GRID DATUM MGA Z56
JOB No	249/435/375550	HEIGHT DATUM AHD	BEARING °
			DATE COMPLETED 04/09/2017
			DRILLER NorthCoast Drilling

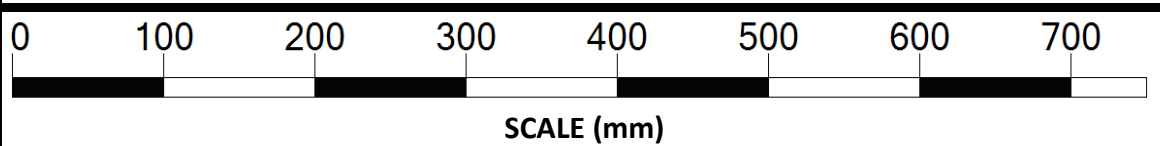
DEPTH (m)	R.L. (m)	FAUGER CASING WASHBORING CORE DRILLING	RQD (%)	CORE REC %	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USCS WEATHERING	INTACT STRENGTH	DEFECT SPACING	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS	
													EH
31			100 (24)			SILTSTONE (Je1) MW: Cont'd.	XXXX	MW	L	C	UCS=0.88 MPa Is(50)=0.20 MPa Is(50)=0.14 MPa Is(50)=0.20 MPa	(30.50m) D (30.66m) A (30.67m) D (30.94m)	
			100 (11)				XXXX	MW	L	VC	31.30m-31.40m: XW		
			100 (18)				XXXX	HW	L	VC	31.81m-31.84m: HFZ	Is(50)=0.30 MPa D (31.60m)	
			100 (21)				XXXX	XW	L	C	32.30m-32.40m: HFZ		
			100 (36)			From 32.5m: With dark grey siltstone interbeds.	XXXX	MW	L	C	32.62m-32.66m: HFZ	Is(50)=0.25 MPa D (32.45m) Is(50)=0.38 MPa A (32.46m)	
			100 (0)				XXXX	XW	M	C	33.10m-33.30m: HFZ		
			100 (64)				XXXX	MW	L	C	33.40m-33.45m: HFZ 33.60m-33.70m: HFZ 33.86m-33.90m: XW 34.08m-34.13m: XW 34.13m-34.25m: HFZ, Cly	Is(50)=0.37 MPa D (33.48m) Is(50)=0.41 MPa A (33.49m)	
							XXXX	HW	L	C	35.17m-35.30m: HFZ	Is(50)=0.13 MPa D (34.88m) Is(50)=0.16 MPa A (34.89m)	
							XXXX	XW	L	C	35.60m-36.00m: HFZ		
							XXXX	MW	L	C	36.23m-36.55m: XW zone, Cly	Is(50)=0.08 MPa D (36.19m) Is(50)=0.30 MPa A (36.20m)	
							XXXX	XW	L	C	37.56m-37.70m: XW zone, Cly	Is(50)=0.23 MPa D (37.07m) Is(50)=0.11 MPa A (37.08m)	
	76.76					Borehole completed at 37.70m	XXXX						

REMARKS: Je1 - Evergreen Formation.	<b>LOGGED BY</b>	<b>REVIEWED BY</b>
	M. de Gee	S. Foley

**CORE PHOTO LOG**  
 DEPARTMENT OF TRANSPORT AND MAIN ROADS  
 GEOTECHNICAL SECTION



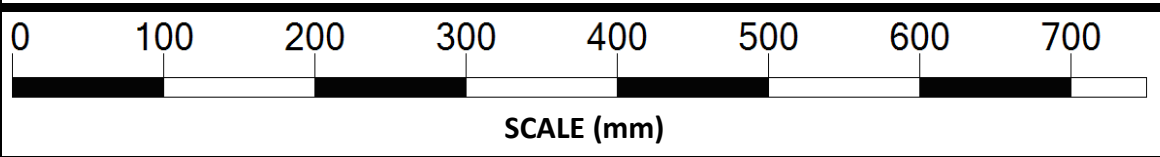
Project Name	<b>Boyne River Bridge Replacement</b>		
Project No.	FG6482	Date	02/09/2017
Borehole No.	BH06	Reference No.	H12967
Location	Pier 2, RHS	Start Depth (m)	14.30
Submitted By	M. de Gee	Finish Depth (m)	37.70
Remarks			



**CORE PHOTO LOG**  
 DEPARTMENT OF TRANSPORT AND MAIN ROADS  
 GEOTECHNICAL SECTION



Project Name	<b>Boyne River Bridge Replacement</b>		
Project No.	FG6482	Date	02/09/2017
Borehole No.	BH06	Reference No.	H12967
Location	Pier 2, RHS	Start Depth (m)	14.30
Submitted By	M. de Gee	Finish Depth (m)	37.70
Remarks			



**CORE PHOTO LOG**  
 DEPARTMENT OF TRANSPORT AND MAIN ROADS  
 GEOTECHNICAL SECTION



Project Name	<b>Boyne River Bridge Replacement</b>		
Project No.	FG6482	Date	02/09/2017
Borehole No.	BH06	Reference No.	H12967
Location	Pier 2, RHS	Start Depth (m)	14.30
Submitted By	M. de Gee	Finish Depth (m)	37.70
Remarks			

