COPYRIGHT NOTICE

This geotechnical log and its associated data (the Document) is licensed by the Queensland Department of Transport and Main Roads 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 the Department as follows: "(c) State of Queensland (Department of Transport and Main Roads) 2020, licensed under the CC BY 4.0 Licence". This licence does not apply to the Queensland Government logo 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 Departmental 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/



FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

PRO	JECT				RADE PROJECT GEOTECHNICAL INVEST					ЮИ		
LOCATION										C	OORDINATES 8975.0 E; 170571.7 N	
PRO.	PROJECT No		055		SURFACE R.L4.77	DATE STARTED _23/7/04_			D <u>23/7/0</u>	24	DATUM <u>SETP</u>	
JOB	No				DATUM _AHD		DAT	E COMPLETE	D <u>27/7/</u>	24	DRILLER R&D Drilling	Pty Ltd
DEРТН (m)	R.L. (m)	AUGER CASING WASH BORING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH エミュラゴ	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES
-	4.77	1050	REC %	"	SILTY CLAY - FILL [EARTH BUND]	7	⊃ > 1			9		S Fin
-1					Brown to mottled red, moist, mainly firm to occasionally stiff. Medium plasticity, slightly organic in the upper area.		CI		-		Bund wall 3,3,4 N=7	SPT
-2	2.07			×,								T-68.70
	2.07	- 3		. to	SILTY CLAY - FILL (??)						2,2,3 N=5	SPT
-3	0.87				Grey, moist, firm. High organic content. SAND / SILTY SAND - FILE.		OL	-			Possible hydraulically placed deposit	
T 28/4/05	-0.23	The state of the			Grey brown, wet, very loose.		SP- SM		-		HW,-,- N<1 Possible hydraulically placed deposit	SPT
DE GPJ ENG BOREHOLE FINAL GD	-2.03				SAND / SILTY SAND Pale brown, wet, medium dense.		SP- SM				7,8,11 N=19	SPT
BOREHOLE WITH LITHOLOGY GATEWAY NORTHERN UPGRADE.GPJ ENG BOREHOLE FINAL.GDT 28/4/05					CLAYEY GRAVEL - ALLUVIUM Red brown to mottled red brown, moist, medium dense. Some lateritic and concreted zones, angular to subangular gravel sizing up to 30mm.	X	G		-		4,7,8 N=15	SPT.
BOREHOLE WITH LITHOLO	-5.23	ŀ						-			7,7,9 N=16	SPT

REMARKS SPT N values in clayey gravel can overestimate density due to influence of coarser size gravel particles. Defect angles

LOGGED BY B.Woodgate & A.Dissanayake

have been measured with respect to a horizontal plane.

(c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.



FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE No	BH111
SHEET	2 of4
REFERENCE No	H9420

B.Woodgate & A.Dissanayake

PROJECT	_0	<u>ATI</u>	EWAY L	JPG	RADE PROJECT GEOTECHNICAL INVEST	<u>GA</u> 1	<u>ION</u>	- NORTHER	RN SECT	<u>ION</u>		_	
LOCATION		ON	TROL L	<u>INE</u>	: MCAO - Ch. 20093.7 - OFFSET 3.0 L					co	ORDINATES 8975.0 E; 170571.7 N		
PROJECT No		<u>M20</u>	<u> </u>		SURFACE R.L4.77						DATUM <u>SETP</u>		
JOB No					DATUM _AHD					24			
(m) HEAD (m)	S AUGER	WASH BORING CORE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	USC	INTACT STRENGTH	DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	TESTS	
- 10 - 25.2		П	1120 15	1,	CLAYEY GRAVEL - ALLUVIUM	2			1111		71010	6.K	
-11 -6.2	3				(As above) CLAYEY GRAVEL - ALLUVIUM Pale orange, moist, medium dense.		GC		. 		N=20 SPT		
- 12				,	Subangular to subrounded gravel sizing up to 30mm.						9,9,9 N=18		
-14											10,9,11 N=20		
DREHOLE FINAL GDT 28/4/05							GC		-		7,8,9 N=17		
BOREHOLE WITH LITHOLOGY GATEWAY NORTHERN UPGRADE.GPJ ENG BOREF C		, , , , , , , , , , , , , , , , , , ,		3, 12, 13, 14							6,9,14 N=23		
FHOLOGY GATEWAY NORTH											9,11,18 N=29);;; ;;;	
DIE WITH LIT								+	-		9,12,16 N=28	 [
		PT	d values	in cla	ayey gravel can overestimate density due to influenc				nodialaa	Dofost	angles LOGGED BY	-	

have been measured with respect to a horizontal plane.



FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE NO ___BH111 ___

SHEET __3 __ of __4 __

REFERENCE NO ___H9420 ___

PRO	JECT	<u>GAT</u>	<u>EWAY I</u>	JPG	RADE PROJECT GEOTECHNICAL INVEST	<u> [GA</u>]	ΓΙΟΝ	- NORTHERN SECT	<u>ION</u>		
	ATION				: MCAO - Ch. 20093.7 - OFFSET 3.0 L					OORDINATES 8975.0 E; 170571.7 N	
		<u> FM2</u>	<u>055</u>		SURFACE R.L4.77						
JOB	No				DATUM AHD		DAT	E COMPLETED _27/7/	04	DRILLER R&DDrilling	Pty Ltd _
DEPTH (m)	R.L. (m)	JGER ASING ASH BORING DRE DRILLING	RQD ()% CORE REC%	SAMPLE	MATERIAL DESCRIPTION	LITHOLOGY	SC EATHERING	INTACT DEFECT SPACING (mm)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
20	-15.23	₹0≩8	REC %	15	CLAYEY GRAVEL - ALLUVIUM	8X9	≝ ≅	37223788 (18/16/16/1	5		S H
-21	-16.73				(As above) Becoming dense with depth.		GC			11,17,22 N=39	SPT
-22				Profession of the Contract of	BASALT FINE TO MEDIUM GRAINED LAYERED, INTERMEDIATE TO BASIC, EXTRUSIVE IGNEOUS ROCK. HW: Pale green to green brown, moist, very dense silty sand comprising very low to low strength corestones and rock kernels throughout.					11,13,30/120 N>50	SPT
24							нw			30/100,-,- N>50	SPT
8/4/0		4						‡			
ENG BOREHOLE FINAL GDT 28/4/05	-20.23	4,0	(0)	· · · · · · · · · · · · · · · · · · ·	MW: Orange green to orange brown, subhorizontally layered, very low to low strength. Defects: - Subhorizontal stress relief joints <30deg (10-30/m) Joints <20deg (>10/m)		MVV			Is(50)=0.37 MPa	o -
											-
ADE			400					1.0.1		ls(50)=0.10 MPa	0
BOREHOLE WITH LITHOLOGY GATEWAY NORTHERN UPGRADE.GPJ ENG BOREHO	-22.28		(60)		SW: Dark grey to blue grey, subhorizontally layered, mainly medium to high strength. Defects: - Subhorizontal stress relief joints <30deg (3-7m) Joints @ 40deg (1/2m).		sw		· V	Is(50)=0.59 MPa Highly fractured zone Is(50)=2.46 MPa Is(50)=0.81 MPa Is(50)=1.50 MPa	0 -
BOREHOLE WITH	-25.23		100 (80)								-

REMARKS SPT N values in clayey gravel can overestimate density due to influence of coarser size gravel particles. Defect angles

have been measured with respect to a horizontal plane.

LOGGED BY B.Woodgate & A.Dissanayake

(c) State of Queensland (Department of Transport and Main Roads) 2020, CC BY 4.0. Please note copyright and limitation of liability notices on attached cover page.



FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/2-2004

BOREHOLE No	BH111
SHEET	_4_ of _4_
REFERENCE No	H9420

GATEWAY UPGRADE PROJECT GEOTECHNICAL INVESTIGATION - NORTHERN SECTION _ _ _ _ _ PROJECT CONTROL LINE: MCAO - Ch. 20093.7 - OFFSET 3.0 L LOCATION COORDINATES 8975.0 E; 170571.7 N PROJECT No FM2055 SURFACE R.L. __4.77_ __. DATE STARTED 23/7/04__ DATUM SETP DATUM _AHD __ DATE COMPLETED _27/7/04__ JOB No DRILLER R&D Drilling Pty Ltd R.L. ROD INTACT DEFECT ADDITIONAL DATA (m) ()% STRENGTH SPACING 500 Ê MATERIAL LITHOLOGY DEPTH AND SAMPLES DESCRIPTION SAMPL TESTS AUGER CASING WASH CORE I CORE **TEST RESULTS** -25.23 REÇ % 30 SW: (As above) Rock mass tends to break along subhorizontal layering joints with mild Is(50)=0.17 MPa handling. Is(50)=1.07 MPa sw 0 Defects are generally planar to irregular -31 Is(50)=2.65 MPa x open becoming tight with depth, rough, slightly altered and ironstained and occasionally infilled with concordant calcite 100 -26.78 and zeotile veinlets (<20mm thick) Borehole terminated at 31.55m -32 ENG BOREHOLE FINAL. UPGRADE.GPJ F37 GATEWAY N WITHLITHOLOGY REMARKS SPT N values in clayey gravel can overestimate density due to influence of coarser size gravel particles. Defect angles LOGGED BY B.Woodgate & A.Dissanayake have been measured with respect to a horizontal plane.

Project: Gateway Upgrade Project Geotechnical Investigation

Borehole No: BH 111
Start Depth: 25.00m
Finish Depth: 31.55m

Project No: FM2055 H No: 9420

