Queensland Government
Department of Main Roads

ENGINEERING BOREHOLE

FOR GEOTECHNICAL TERMS AND SYMBOLS REFER FORM F:GEOT 017/3-2005

BOREHOLE No **BH35**
SHEET 1 of 2
REFERENCE No **H9730**

PROJECT IPSWICH MOTORWAY / LOGAN MOTORWAY GEOTECHNICAL INVESTIGATION
LOCATION Bertha St O'pass. Abutment A, Approximate Chainage 12860m, 6m left of control MC20. COORDINATES 28605.8 E; 146934.2 N
PROJECT No FG5404 SURFACE R.L. 10.90 DATE STARTED 14/08/05 DATUM Ipswich Motorway
JOB No 148/17A/57 DATUM AHD DATE COMPLETED 14/08/05 DRILLER Drillsure

DEPTH (m)	R.L. (m)	AUGER / CASING / WASH BORING / CORE DRILLING	RQD ( )% CORE REC %	SAMPLE	MATERIAL DESCRIPTION	USC	WEATHERING	INTACT STRENGTH (EH VH H M L VL EL)	DEFECT SPACING (mm) (20 60 200 600 2000)	GRAPHIC LOG	ADDITIONAL DATA AND TEST RESULTS	SAMPLES TESTS
0	10.90				**ASPHALT and ROAD BASE**							
	10.50				**CLAYEY SILT and GRAVEL** (Fill) Brown orange, iron stained, moist. Contains gravel up to 15mm size. Medium dense.							
1											7,11,7 N=18	SPT
	9.10				**CLAYEY SAND** (Fill) Grey, mottled with red iron stains, fine - medium grained, moist. Loose. Varies to Sandy Clay in parts.							
2												
3											2,2,2 N=4	SPT
	7.00				**SILTY CLAY** (Alluvium) Dark grey - black, organic, moist, stiff.	CI-CH					Old soil profile.	
4											3,4,7 N=11	SPT
	5.90				**SILTY CLAY** (Alluvium) Grey - yellow, intermediate plasticity, moist, firm. Trace fine sand. Minor thin, fine sand bands between 5.5 and 6m.							
5											2,2,3 N=5	SPT
6						CI						
7					Minor orange-brown iron staining, trace charcoal and fine sand, moist. Stiff.						3,4,7 N=11	SPT
8	2.36				**SANDSTONE** No Sample. Based on drillers logs only.						6/40mm HB N>50	SPT
9						XW-HW						
10	0.90											

ENGINEERING BOREHOLE FG5404 - BOREHOLES.GPJ QLD MAIN ROADS.GDT 16/11/05

REMARKS No groundwater reported during drilling. See Additional Descriptive Coding sheet for abbreviations.

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10	0.90		(84)		**Sandstone Cont'd.** Pale grey, minor yellow-brown iron staining throughout. Generally fine-medium grained, medium-coarse grained in parts.		MW				Is(50)=0.33 MPa Is(50)=0.48 MPa		x o
	0.10				**MUDSTONE** Dark grey, thinly laminated, low strength, bedding ~10°.						Is(50)=0.66 MPa Is(50)=0.40 MPa		x o
11	-0.38				**SANDSTONE** As before. Bedding ~10°. Numerous thin carbonaceous laminations parallel to bedding. Slightly silicified in parts. Occasional interbands of carbonaceous mudstone up to 0.2m thick. Defects mostly dip 10°, 20°, 70°. Defect surfaces are mostly PL, SR, C or O, CN or occasionally with a thin XW or clayey film. Brown iron stains on 70° defects.		SW				Is(50)=0.24 MPa Is(50)=0.22 MPa		x o
12											Is(50)=1.86 MPa Is(50)=2.18 MPa Jt, 70°, PL, SR-R, C-T, brown Fest coat.		x o
			100 (88)										
13													
14											Is(50)=0.63 MPa Is(50)=1.62 MPa Jt, 70°, PL-Un, SR, C, brown Fest coat.		x o
15											Jt, 70°, PL-Un, T, Fest. Is(50)=1.45 MPa Is(50)=1.27 MPa		x o
	-4.90		100		Borehole terminated at 15.8m								
16													
17													
18													
19													
20													

ENGINEERING BOREHOLE FG5404 - BOREHOLES.GPJ QLD MAIN ROADS.GDT 16/11/05

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Project: **Ipswich Motorway / Logan Motorway Interchange**

Borehole No: **BH35**

Start Depth: 10.00m
Finish Depth: 15.80m
Project No: FG5404
H No: 9730