




<div><div><div>British Geological Survey</div><div>NATURAL ENVIRONMENT RESEARCH COUNCIL</div></div></div>						<div>Site</div> <div>M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI - CONTRACT 2</div>		<div>Borehole Number</div> <div>RC1257</div>	
<div>Boring Method</div> <div>Cable Percussion</div>		<div>Casing Diameter</div> <div>140mm cased to 15.00m</div>		<div>Ground Level (mOD)</div> <div>125.20</div>		<div>Client</div> <div>Highways Agency</div>		<div>Job Number</div> <div>WAL060099</div>	
		<div>Location</div> <div>444700 E 357999 N</div>		<div>Dates</div> <div>08/11/2006</div>		<div>Engineer</div> <div>Arup</div>		<div>Sheet</div> <div>1/3</div>	
<div>Depth (m)</div>	<div>Sample / Tests</div>	<div>Casing Depth (m)</div>	<div>Water Depth (m)</div>	<div>Field Records</div>	<div>Level (mOD)</div>	<div>Depth (m) (Thickness)</div>	<div>Description</div>	<div>Legend</div>	<div>Water</div>
				<div>Groundwater was not apparent during boring(1) at 0.00m.</div>			<div>Rotary follow on from CP1257. For likely material description see cable percussion borehole CP1257.</div>		<div>▽1</div>

 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL						<b>Site</b> M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI - CONTRACT 2		<b>Borehole Number</b> <b>RC1257</b>	
<b>Boring Method</b> Cable Percussion		<b>Casing Diameter</b> 140mm cased to 15.00m		<b>Ground Level (mOD)</b> 125.20		<b>Client</b> Highways Agency		<b>Job Number</b> WAL060099	
		<b>Location</b> 444700 E 357999 N		<b>Dates</b> 08/11/2006		<b>Engineer</b> Arup		<b>Sheet</b> 2/3	
Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						(16.00)			
16.00					109.20	16.00	Generally weak to moderately weak (variably very weak) thinly laminated dark grey MUDSTONE with occasional carbonised plant remains and rare subrounded coarse gravel size ironstone nodules. Fractures: where evident horizontal, very closely to closely spaced, smooth, planar, open, occasionally with soft slightly gravelly clay infill (up to 12mm), subvertical (70 degrees); smooth, planar.  Between 16.10m and 16.60m; generally non-intact.		
16.60	97	49	14	0	P1				
17.50-17.68 17.50					/30,41,29 SPT 0'/0 100/177				
18.10-18.31	67	13	0	0	U2	(5.10)	Between 18.50m and 20.50m; structure frequently lost, generally very weak to weak.		
19.00-19.19 19.00					/26,39,35 SPT 0'/0 100/186				
	93	24	7	0					
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL
								<b>Figure No.</b>	



 <b>British Geological Survey</b> NATURAL ENVIRONMENT RESEARCH COUNCIL						<b>Site</b> M1 WIDENING JUNCTION 21 TO 30 PRELIMINARY GI- CONTRACT 2			<b>Borehole Number</b> <b>RC1257</b>		
<b>Machine:</b> <b>Flush :</b> <b>Core Dia: mm</b> <b>Method :</b>		<b>Casing Diameter</b> 140mm cased to 15.00m		<b>Ground Level (mOD)</b> 125.20		<b>Client</b> Highways Agency			<b>Job Number</b> WAL060099		
		<b>Location</b> 444700 E 357999 N		<b>Dates</b> 08/11/2006		<b>Engineer</b> Arup			<b>Sheet</b> 3/3		
<b>Depth (m)</b>	<b>TCR</b>	<b>SCR</b>	<b>RQD</b>	<b>FI</b>	<b>Field Records</b>	<b>Level (mOD)</b>	<b>Depth (m) (Thickness)</b>	<b>Description</b>	<b>Legend</b>	<b>Water</b>	
20.50-20.51 20.50 20.60					/50 SPT 0'/0 50/6 P3		(5.10)	Between 20.50m and 20.60m; thin bed of strong siltstone.			
21.30			0	0		104.10 103.90	21.10 (0.20) 21.30	Recovered non-intact as weak brittle black COAL.			
22.00-22.15 22.00 22.10	95	40	28	0	/37,55,8 SPT 0'/0 100/153		(0.80)	Very weak becoming moderately weak to weak light grey MUDSTONE with frequent carbonised plant remains. Fractures: where evident very closely spaced, random, irregular.			
23.50-23.59 23.50					/57,43 SPT 0'/0 100/92						
24.00-24.25	100	77	52	0	U4		(3.90)				
25.00-25.00 25.00					/50 SPT 0'/0 50/4						
26.00 26.50-26.75 26.50-26.51 26.50			0	0							
26.00 26.50-26.75	100	87	79	0	U5 /50 SPT 0'/0 50/7	99.20	26.00	Generally moderately strong (variably moderately weak) dark grey thinly laminated MUDSTONE, thinly interbedded with moderately strong to strong light and dark grey thinly colour laminated siltstone. Fractures: horizontal (0 degrees to 15 degrees), closely and medium spaced, smooth, planar, occasionally with grey silt infill (up to 2mm); subvertical (75 degrees), smooth, planar to irregular.			
26.50-26.51 26.50	100	62	33	0							
28.00-28.00 28.00 28.00-28.30					/50 SPT 0'/0 50/2 U6		(3.50)				
28.00-28.00 28.00 28.00-28.30								Between 29.00m and 29.50m; 1 no vertical fracture.			
08/11/2006: 08/11/2006:						95.70	29.50	Complete at 29.50m			
<b>Remarks</b>								<b>Scale (approx)</b> 1:50	<b>Logged By</b> TL		
								<b>Figure No.</b>			