

Cored Borehole Log

Borehole No.	LS/BK12
Sheet	2 of 3
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.8m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Drill Type : TRUCK MOUNTED JACRO 200 Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER.

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects	Defect Description
HQ CASING				1.0		SEE SHEET 1 FOR DETAILS.						
				2.0		CORING STARTED AT 2.0m.						
NMLC TRIPLE TUBE	80%	NOT MONITORED		3.0		SANDSTONE, orange/grey, bedding is sub-perpendicular to core axis, some cross bedding evident, some ironstaining and iron leaching.	HW		D=0.88 D=0.72			BP, some leaching Fracture Joint, 5-10°, planar, rough BP Joint, 5°, wavy rough BP, leached BP Crush zone, 20mm
				4.0			MW		D=0.84 D=0.84			Clay seams, 10mm
				5.0		Carbonaceous wisps and lenses along bedding	SW/ Fr		D=0.90 D=1.08			Joint, 10°, planar, rough, ironstained BP, ironstained Clay seams, 5mm BP, ironstained BP, ironstained Joint, 40°, wavy, ironstained, rough Joint, 50-60°, planar, ironstained, 20mm BP BP, along carbonaceous lense BP
				6.0		SANDSTONE, grey, massive.	SW/ Fr		D=0.88 D=0.96			
				7.0								
				8.0					D=1.48 D=1.28			
				9.0		SHALE SEAM, dark grey, laminated	FW		D=1.0 D=1.08			BP BP
				10.0		SANDSTONE, massive, grey, some shale lenses and seams, some cross bedding evident, some carbonaceous wisps, some quartz conglomerate seams.	SW MW		D=1.2 D=0.88			Quartz conglomerate, 30mm Clay seam, 10mm Clay seam, 5mm

Logged By : S.C.

Date : 9.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Cored Borehole Log

Borehole No.	LS/BH12
Sheet	3 of 3
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.8m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200

Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects	Defect Description
			Metres			As above.	MW	0-10		0-10		
				11		HOLE TERMINATED AT 10.15m. *BP - BEDDING PARTING.						

Logged By : S.C.

Date : 9.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI
JOB NO 2757

BOREHOLE NO LS/BH13
BOX 1 OF 1
DEPTH 0.70 TO 5.57 M



LS/BH13

CORE STARTED AT 0.7m



Cored Borehole Log

Borehole No.	LS/BH13
Sheet	1 of 1
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=16.0m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER.

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam) (A=axial)	Core Length (mm)	Defects	Defect Description
TRIPLE CONE				Metres								
						PAVEMENT - 70mm. Rock Rolled to 0.7m to fit barrel in mask - sandstone.						
				1.0		CORING STARTED AT 0.7m.						
						SANDSTONE, red/grey, massive, some ironstaining and leaching.	HW		D=0.44 D=0.44			Core loss Clay seam, 4mm
						CORE LOSS - 70mm.	SW/ Fr					
				2.0		As above.			D=1.48 D=0.96			Joint, 0-5°, wavey, rough, ironstained
						SANDSTONE, medium grained, grey, bedding is sub-perpendicular to core axis, some cross bedding evident, some carbonaceous wisps along bedding.	Fr					
				3.0					D=1.40 D=1.48			
				4.0					D=0.4** D=1.24			*BP Clay seam, 5mm
				5.0					D=1.32 D=1.54 D=1.7 D=1.5			
				6.0		HOLE TERMINATED AT 5.57m.						
						*BP - BEDDING PARTING ** - BROKE ALONG BEDDING						
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 10.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH14
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.9m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure	Consistency or Relative Density	Field Test Results	Geological Profile
				Metres						
							REINFORCED CONCRETE - 130mm.			PAVEMENT
						SW	SAND, medium to fine grained, brown/yellow.	LOOSE		FILL
							CLAYEY GRAVELLY SAND, medium grained, some clay, some sandstone and basalt gravel and some cobbles, well graded.			
SPT1				1.0		SC	CLAYEY SAND, fine to medium grained, mottled grey/orange, some sandstone gravel, some clay, well graded, some organic matter.	LOOSE/ MEDIUM DENSE	SPT1: 3,3,9 N = 12	RESIDUAL SOIL
						SW/SP	SAND, medium grained, orange, trace of clay.	DENSE		EW SANDSTONE
				2.0			CORING STARTED AT 1.45m.			
							SEE SHEET 2 FOR DETAILS.			
				3.0						
				4.0						
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : S.C.	Date : 10.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH14

BOX 1 OF 1

DEPTH 1.45 TO 4.60 M



LS/BH14

CORING STARTED AT 1.45m



2

3

4

Cored Borehole Log

Borehole No.	LS/BH14
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.9m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200

Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER.

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa ($D=diam$ $A=axial$)	Core Length (mm)	Defects	Defect Description
HQ CASING				1.0		SEE SHEET 1 FOR DETAILS. CORING STARTED AT 1.45m. CORE LOSS - 100mm.						
NMLC TRIPLE TUBE	90%	NOT MONITORED		2.0		SANDSTONE, orange, massive, some ironstaining.	HW		D=1.12 D=1.02			Core loss Sandy clay seam, 25mm Joint, 70-80°, wavy, rough
				3.0		SANDSTONE, orange/grey, bedding is sub-perpendicular to core axis, some cross bedding, some carbonaceous wisps along bedding.	MW		D=0.72 D=0.76			*BP Joint, 0-5°, wavy, rough
				4.0			SW/ Fr		D=1.24** D=1.16			Joints, 5°, planar, rough, ironstained Clay seam, 5mm BP, clay smear BP
									D=1.12 D=0.6			Joint, 5°, rough, clay coating
				5.0		HOLE TERMINATED AT 4.6m.						
				6.0		*BP - BEDDING PARTING. ** - BROKE ALONG BEDDING.						
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 10.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH15
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.9m
Angle From Vertical :	0°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type : HAND AUGER Hole Diameter : 100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
		HAND AUGER				SM SC	SILTY SAND, fine to medium grained, brown, some organic matter, trace of sandstone gravel. CLAYEY GRAVELLY SAND, fine to medium grained, orange/brown, some clay, some sandstone gravel and cobbles.	LOOSE LOOSE		TOPSOIL/FILL FILL
				1.0			CORING STARTED AT 0.65m ON EW SANDSTONE.			
				2.0			SEE SHEET 2 FOR DETAILS.			
				3.0						
				4.0						
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : s.c.

Date : 10.7.1990.

Checked By : p.m.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH15
BOX 1 OF 1
DEPTH 0.65 TO 3.65 M



LS/BH15

CORING STARTED AT 0.65m



Cored Borehole Log

Borehole No.	LS/EH15
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.9m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER.

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam) (A=axial)	Core Length (mm)	Defects	Defect Description
NMLC TRIPLE TUBE	75%	NOT MONITORED		Metres								
				1.0		SEE SHEET 1 FOR DETAILS. CORING STARTED AT 0.65m. SANDSTONE, orange, medium grained. CORE LOSS - 120mm.	FW HW		D=0.36 D=0.36			Core loss Clay seam, 30mm, joint on bottom, 15° BP BP
				2.0		SANDSTONE, orange/grey, medium grained, bedding is sub-perpendicular to core axis, some cross bedding evident, some ironstaining and leaching.	SW		D=1.48 D=1.4			Crush zone, 50mm Clay seam, 10mm Joint, 5°, planar, rough BP
				3.0			MW		D=1.9 D=1.84 D=1.52 D=1.48			Joint, 5°, planar, rough BP Joint, 5-70°, planar, rough
				4.0		HOLE TERMINATED AT 3.65m. *BP - BEDDING PLANE PARTING						BP Joint, 5-10°, planar, rough, c. coat.
				5.0								
				6.0								
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 10.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH:16
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.8m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
		HAND					SILTY SAND, fine to medium grained, dark brown, some organic matter.	LOOSE		TOPSOIL/FILL
		AUGER				SC	CLAYEY GRAVELLY SAND, fine to medium grained, mottled orange/brown, some clay, some sandstone gravel and cobble fragments.	LOOSE		FILL
SPT1		SOLID FLIGHT		1.0		SW	GRAVELLY SAND, fine to medium grained, mottled brown/orange, trace of clay, some sandstone gravel and cobble fragments, well graded.	LOOSE	SPT1: 2,2,2 N = 4	
				2.0						
				3.0			CORING STARTED AT 2.25m.			
				4.0			SEE SHEET 2 FOR DETAILS.			
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : s.c.	Date : 10.7.1990.	Checked By : p.m.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH16

BOX 1 OF 1

DEPTH 2.25 TO 5.55 M



LS/BH16

CORE STARTED AT 2.25m



Cored Borehole Log

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD. PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI Drill Type : TRUCK MOUNTED JACRO 200 Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER						Borehole No. LS/BH16	
						Sheet 2 of 2	
						Job No. 2757	
						Location : SEE FIGURE 2	
						Collar Level : APPROX. RL=15.8m Angle From Horizontal 90° Bearing : --	

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects
HQ CASING				1.0		SEE SHEET 1 FOR DETAILS.					
				2.0		CORING STARTED AT 2.25m.					
NMLC TRIPLE TUBE	75%	NOT MONITORED				SANDSTONE BOULDERS - FILL?					
						CORE LOSS - 0.45m.					
						SANDSTONE, massive, orange/grey, some ironstaining and iron leaching along defects.	HW		D=0.14 D=0.04		Core loss Fracture zone, 50mm Clay seam, 20mm Clay seam, 35mm Clay seam, 10mm Joint, 5°, wavy rough, clay filled Clay seam, 15mm
							MW		D=0.24 D=0.32		
						iron leached	HW		D=0.32 D=0.28 D=0.5 D=2.65**		*BP BP Clay seam, 10mm Clay seam, 15mm Joint, 70°, wavy, rough, clay smear
			6.0		HOLE TERMINATED AT 5.55m. *BP - BEDDING PLANE PARTING ** - IRONSTAINING.						
				7.0							
				8.0							
				9.0							
				10.0							

Logged By : S.C.

Date : 10.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH17
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.8m
Angle From Vertical :	0°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRRIBILLI

Equipment Type : TRUCK MOUNTED JACRO 200
Hole Diameter : 100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
		HAND AUGER				SW	SILTY GRAVELLY SAND, fine to medium grained, brown, some organic matter, some sandstone and basalt gravel.	LOOSE		TOPSOIL/FILL
				1.0		SW	CLAYEY GRAVELLY SAND, fine to medium grained, mottled orange/brown, some clay, some sandstone and basalt gravel, well graded.	LOOSE		FILL
SPT1						SW	SILTY CLAYEY SAND, fine to medium grained, dark brown, trace of sandstone gravel.	LOOSE	SPT1: 4,3,4 N = 7	
		SOLID FLIGHT AUGER		2.0			SANDSTONE COBBLES in a medium grained, orange, sand matrix.			
				3.0		SW	CLAYEY GRAVELLY SAND, fine to medium grained, brown/dark grey, some clay, some sandstone gravel and cobbles, well graded.	LOOSE		
						SC	CLAYEY SAND, medium grained, mottled grey/orange, some clay.	DENSE		EW SANDSTONE
				4.0			CORING STARTED AT 3.7m.			
							SEE SHEET 2 FOR DETAILS.			
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : s.c.

Date : 10.7.1990.

Checked By : p.m.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH17
BOX 1 OF 1
DEPTH 3.70 TO 6.60 M



LS/BH17

CORING STARTED AT 3.70m

4

5

6

CORE
LOSS-1M

PL-PL-PL

Cored Borehole Log

Borehole No.	LS/BH17
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=15.8m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam) (A=axial)	Core Length (mm)	Defects
HQ CASING				Metres							
				1.0		SEE SHEET 1 FOR DETAILS.					
				2.0							
				3.0							
				4.0		CORING STARTED AT 3.7m. SANDSTONE, massive, ironstaining medium grained, some iron leaching.	HW		D=0.1 D=0.1		Clay seam, 10mm Joint, 60°, planar, rough *BP
				5.0		CORE LOSS - 130mm.	MW		D=0.96 D=1.28		Joint, 45-50°, planar, rough, clay smear BP
				6.0		SANDSTONE, medium grained, red/grey, some ironstaining and leaching, some cross bedding.	HW/MW		D=0.68 D=0.64		Core loss Clay seam, 30mm BP
				7.0		SANDSTONE, massive, medium grained, some ironstaining.	HW		D=0.84 D=1.0		Joint, 35°, planar, rough, ironstained
				8.0		HOLE TERMINATED AT 6.6m.	MW/SW				
				9.0		*BP - BEDDING PLANE PARTINGS.					
				10.0							

Logged By : S.C.

Date : 11.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH18
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=21.9m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
	TRICONE	ROCKROLLER				SW	CLAYEY GRAVELLY SAND, fine to medium grained, some clay, some sandstone gravel and cobbles, (used rock rolled to get through) some concrete, glass.	LOOSE		FILL
						SC	CLAYEY SAND, medium grained, orange, some clay.	LOOSE		RESIDUAL SOIL
			1.0				CORING STARTED AT 0.8m.			
			2.0				SEE SHEET 2 FOR DETAILS.			
			3.0							
			4.0							
			5.0							
			6.0							
			7.0							
			8.0							
			9.0							
			10.0							

Logged By : S.C.	Date : 17.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH18
BOX 1 OF 1

DEPTH 0.80 TO 5.85 M



LS/BH18

CORING STARTED AT 0.8-



Cored Borehole Log

Borehole No.	LS/BH18
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level : APPROX. RL=21.9m	
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER

HQ CASING Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam) (A=axial)	Core Length (mm)	Defects	Defect Description
			Metres									
				1.0		SEE SHEET 1 FOR DETAILS. CORING STARTED AT 0.8m.						
				2.0		SANDSTONE, medium grained, grey/orange, bedding is sub-perpendicular to core axis, some ironstaining.	MW		D=0.96 D=0.80			*BP Joint, 5°, planar, rough, clay coating BP, ironstained Fracture, ironstained Clay seam, 10°, 15mm Joint, 20°, clay filled, 15mm Core loss Clay seam, 40mm Clay seam, 25mm Clay seam, 20mm
				3.0		CORE LOSS - 70mm.	HW		D=0.28 D=0.26			
				4.0		As above.	MW TO SW					
				5.0					D=0.92 D=0.84**			BP Joint, 5-10°, planar, rough BP BP Joint, 5°, planar, clay coating, ironstained BP BP
				6.0					D=1.2 D=1.3			Clay seam, 5mm BP, along carbonaceous wisps
				7.0					D=1.34 D=1.44			
				8.0					D=0.96 D=1.04			BP
				9.0								
				10.0								
						HOLE TERMINATED AT 5.85m.						
						*BP - BEDDING PLANE PARTING. ** - BROKE ALONG JOINT.						

Logged By : S.C.

Date : 11.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH19
Sheet	1 of 2
Job No.	2757
Location	: SEE FIGURE 2
Collar Level	: APPROX. RL=18.6m
Angle From Vertical	: 0°
Bearing	: --

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIRIBILLI
Equipment Type	: TRUCK MOUNTED JACRO 200
Hole Diameter	: 100mm

Samples	Water	Casing	R.L.	Depth Metres	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
	FLIGHT ALIGER					SW	CONCRETE - 100mm.	LOOSE		PAVEMENT
						SC	SAND, fine to medium grained, brown, well graded.	LOOSE		FILL
							SILTY GRAVELLY SAND, fine to medium grained, brown, some sandstone gravel, trace of clay, well graded.	LOOSE		RESID. SOIL
				1.0			CLAYEY SAND, fine to medium grained, orange, some clay, trace of sandstone gravel.			
				2.0			CORING STARTED AT 0.8m.			
				3.0			SEE SHEET 2 FOR DETAILS.			
				4.0						
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : S.C.	Date : 11.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH19

BOX 1 OF 1

DEPTH 0.80 TO 4.80 M



LS/BH19

CORING START AT 0.80

1

2

3

4

Cored Borehole Log

Borehole No.	LS/BH19
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. 18.58
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMCL, 3.0m, WATER.

HO CASING/Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam) A=axial	Core Length (mm)	Defects	Defect Description
			Metres									
NMCL TRIPLE TUBE	0%	NOT MONITORED		1.0		SEE SHEET 1 FOR DETAILS.						
						CORING STARTED AT 0.8m.						
						SANDSTONE, massive, medium grained, orange/red/grey, some ironstaining and iron leaching.	HW EW		D=0.32			Joint, 20°, planar, rough *BP
						CORE LOSS - 20mm.						Joint, 20°, planar, rough, clay filled, 5mm
				2.0		As above.	HW		D=1.12 D=0.4			BP, some leaching
						CORE LOSS - 100mm.						Joint, 5°, planar, rough
												Fracture zone, 160mm
												Clay seam, 260mm
												Core loss
												Clay seam, 30mm
												BP
												BP, leached
												Joint, 30°, planar, rough, clay coating
												Joint, 10-15°, wavy, rough, clay filled, 10mm
												BP, clay coating
												BP, leached
												Fractured zone, 60mm
												Core loss
												Clay seam, 60mm
												Joint, 70°, planar, rough, clay coating with BP cutting accross BP
												BP
												Clay seam, 5mm
												BP
				5.0		HOLE TERMINATED AT 4.8m.						
						*BP - BEDDING PLANE PARTING.						
				6.0								
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 12.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	
LS/DH20	
Sheet	1 of 2
Job No.	
2757	
Location : SEE FIGURE 2	
Collar Level : APPROX. RL=17.1m	
Angle From Vertical : 0°	
Bearing : --	

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type : TRUCK MOUNTED JACRO 200
Hole Diameter : 100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
NONE TAKEN	NOT ENCOUNTERED	AUGER	0.15			SW	CONCRETE, 150mm thick.	N/A		PAVEMENT
			0.60			SC	CLAYEY GRAVELLY SAND, brown, fine to coarse grained, low to medium plasticity fines, moist.	LOOSE		FILL
			1.0				CLAYEY SAND, yellow-orange-brown, fine to medium grained, medium plasticity fines, moist.	MEDIUM DENSE		RESID. SOIL/ EW SANDSTONE
							DIFFICULT DRILLING WITH TC BIT - START CORING AT 1.05m.			
				2.0						
				3.0						
				4.0						
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : P.M.	Date : 11.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH20

BOX 1 OF 1

DEPTH 1.05 TO 4.30 M



LS/
BH20

CORE LOGS

2

3

4

Cored Borehole Log

Borehole No.	LS/BH20
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=17.1m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRRIBILLI
Drill Type : TRUCK MOUNTED JACRO 200 Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects	Defect Description
HO CASING				1.0		CORING STARTED AT 1.03m.						
NMLC TRIPLE TUBE	0%			2.0		CORE LOSS - 0.5m.						Core loss
				2.0		CLAYEY SAND, fine to medium grained, mottled orange/grey, some sandstone cobbles - RESIDUAL SOIL.	EW					Clay seam
	75%			3.0		SANDSTONE, massive, orange/grey, some ironstaining, medium grained.	EW/ HW		D=0.65 D=0.8			BP Clay seam, 30mm Joint, 40°, planar, clay filled, 20mm Clay seam, 25mm
				4.0		As above but banded with bedding perpendicular to core axis.	MW		D=1.36 D=1.04			BP Clay seam, 25mm BP
		NOT MONITORED		4.0		CORE STOPPED AT 4.3m.			D=0.84 D=1.0			BP, clay smear
				5.0								
				6.0								
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.	Date : 12.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH21

BOX 1 OF 1

DEPTH 0.70 TO 4.10 M



LS/BH21

CORING STARTED AT 0.7m

ALFA
LSS-150



Cored Borehole Log

Borehole No.	LS/BH21
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Sheet 1 of 1

Job No. 2757

Location : SEE FIGURE 2

Collar Level : APPROX. RL=13.3m
Angle From Horizontal 90°
Bearing : --

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 3.0m, WATER

Roller Method/Casing		R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	I _s (50) MPa (D=diam) A=axial	Core Length (mm)	Defects	Defect Description
NMLC TRIPLE TUBE	TRICONE						CONCRETE - 170mm.						
		85%			1.0		GRAVELLY CLAYEY SAND, fine to medium grained, brown-grey, some clay, some sandstone and basal gravel - FILL. SANDSTONE at 0.22m, rock rolled to fit barrel in mask.	EW/ HW		D=0.8 D=0.92			CORING STARTED AT 0.7m. Core loss Clay seam, 130mm *BP BP Clay seam, 40mm
			NOT MONITORED		2.0		CORE LOSS - 150mm. SANDSTONE, orange/grey, medium grained, massive, some ironstaining.	MW/ SW		D=0.68 D=0.8			Joint, 15°, irregular, rough Clay seam, 260mm BP, leached Core loss BP
		75%			3.0		SANDSTONE, red/grey, banded, coarse grained. CORE LOSS - 100mm. SANDSTONE, orange, medium to coarse grained, some quartz pebble clasts and banding, some ironstaining and leaching. Shale clast.	FW HW MW		D=1.08 D=1.20			Joint, 10°, planar, clay coating BP
					4.0		HOLE TERMINATED AT 4.10m. *BP - BEDDING PLANE PARTING. ** - IRONSTAINING.			D=1.12 D 2.24**			BP, ironstained Joint, 5-10°, planar, clay fill, 5mm
					5.0								
					6.0								
					7.0								
					8.0								
					9.0								
					10.0								

Logged By : S.C. Date : 12.7.1990.

Checked By : P.M. Date : 30.7.1990.

Borehole Log

Borehole No.	LS/BH22
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=23.5m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
NO SAMPLE TAKEN	NOT OBSERVED	ROCK ROLLER - TRICONE	HARD AUGER	0.0		SG	BRICKS - 70cm.	LOOSE		PAVEMENT
				1.0		SW	SAND, fine to medium grained, yellow/brown, well graded.			
				2.0			GRAVELLY SAND, fine to medium grained, grey brown, some sandstone charcoal/slag gravel fragments, moist.			
NO SAMPLE TAKEN	NOT OBSERVED	ROCK ROLLER - TRICONE	HARD AUGER	3.0			GRAVELLY SAND, fine to medium grained, brown/orange, trace of clay, some sandstone, basalt and slag gravel/cobble fragments, some root matter at top - 0.4m to 0.5m, moist, well graded.			FILL
				4.0			Drilling getting harder - no sandstone cobble			
				5.0		SC				
NO SAMPLE TAKEN	NOT OBSERVED	ROCK ROLLER - TRICONE	HARD AUGER	6.0						RESIDUAL SOIL / FILL
				7.0						
				8.0						
NO SAMPLE TAKEN	NOT OBSERVED	ROCK ROLLER - TRICONE	HARD AUGER	9.0						
				10.0						
						SC	bottom of tricone - CLAYEY SAND/SANDY CLAY, fine grained, orange, some clay, medium plast. fines.			
NO SAMPLE TAKEN	NOT OBSERVED	ROCK ROLLER - TRICONE	HARD AUGER				CORING STARTED AT 5.43m, ROCK ROLLER BECOMING HARD TO DRILL.			

Logged By : s.c.	Date : 13.7.1990.	Checked By : p.m.	Date : 30.7.1990.
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TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH22
BOX 1 OF 1
DEPTH 5.43 TO 8.76 M



LS/BH22

CORING STARTED AT 5.43m

CORING

6

7

8

Cored Borehole Log							Borehole No.	LS/BH:22		
							Sheet	2	of 2	
CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.							Job No.	2757		
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRRIBILLI							Location :	SEE FIGURE 2		
Drill Type : TRUCK MOUNTED JACRO 200 Barrel Type, Length, Drilling fluid: NMLC, 1.5m, WATER							Collar Level : APPROX. RL=23.5m Angle From Horizontal 90° Bearing : --			
Method/Casing	R.Q.D./Lift	Water	R.L. Metres	Depth Graphic Log	Soll or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (Q=diam) A=axial)	Core Length (mm)	Defects
H.O CASING			1.0 2.0 3.0 4.0 5.0		SEE SHEET 1 FOR DETAILS.					
					CORING STARTED AT 5.43m.					
			6.0		CORE LOSS - 0.95mm					Core loss
NMLC TRIPLE TUBE	0%	NOT MONITORED	7.0 8.0		SANDSTONE, fine to medium grained, grey/orange, some ironstaining and leaching.	EW HW				Clay seam, 50mm Joint, 45°, planar, rough, clay coating Joint, 30°, planar, rough Joint, 30°, planar, rough *BP Clay seam, 530mm Crush zone, 50mm Clay seam, 10mm Clay seam, 40mm Clay seam, 25mm Clay seam, 90mm Clay seam, 60mm Joint, 5-10°, planar, rough, clay coating, 5mm BP BP
	55%					MW		D=0		
						SW/MW		D=0.78 D=0.8		
			9.0		HOLE TERMINATED AT 8.76m.			D=0.8		
			10.0		*BP - BEDDING PLANE PARTING.					

Logged By : S.C.

Date : 13.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Borehole Log

Borehole No.	LS/BH23
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=23.8m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth Metres	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
NO SAMPLES	NOT OBSERVED	ROCK ROLLER - TRICONE		1.0		SW	CONCRETE - 100mm.	LOOSE		PAVEMENT
						SW	SAND, medium grained, yellow-brown, roots. GRAVELLY SAND, medium grained, brown-grey, some sandstone and slag gravel fragments.			FILL
						SW	GRAVELLY SAND, fine to medium grained, orange/brown, some sandstone gravel fragments. <u>change of wash colour and no gravel coming up.</u>	LOOSE		
						SW	SAND, medium to fine grained, orange/yellow, well graded (obtained from wash).	LOOSE		RESIDUAL SOIL
				3.0			CORING STARTED AT 2.46m AS WASH IS SAME COLOUR AS SANDSTONE IN PREVIOUS HOLES. SEE SHEET 2 FOR DETAILS.			
				4.0						
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : s.c.	Date : 13.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH23

BOX 1 OF 1

DEPTH 2.46 TO 4.16 M



LS/BH23

CORING STARTED AT 2.46 m



Cored Borehole Log

Borehole No.	LS/BH23
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=23.8m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 1.5m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (Q=diam) (A=axial)	Core Length (mm)	Defects	Defect Description
HQ CASING				Metres								
				1.0		SEE SHEET 1 FOR DETAILS.						
				2.0								
						CORING STARTED AT 2.46m. CORE LOSS - 100mm.						
NMLC TRIPLE TUBE	50%	NOT MONITORED		3.0		SANDSTONE, medium grained, orange/grey, bedding is sub-perpendicular to core axis, some ironstaining and leaching.	HW		D=0.12 D=0.10			Core loss Sub-vertical fracture Clay seam, 120mm Joint, 20°, planar, rough Joint, 5°, planar, rough, leached *BP Clay seam, 330mm
				4.0			TO EW MW / SW		D=0.4 D=0.44			
						HOLE TERMINATED AT 4.16m.						
						*BP - BEDDING PLANE PARTING.						
				5.0								
				6.0								
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 10.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	LS/BH24
Sheet	1 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=24.3m
Angle From Vertical :	0°
Bearing :	--

CLIENT:	TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT:	NEW SCHOOL DEVELOPMENT - LORETO KIRIRIBILLI
Equipment Type :	TRUCK MOUNTED JACRO 200
Hole Diameter :	100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
NO SAMPLES TAKEN	LOSS OF WATER BENEATH CONCRETE	ROCK ROLLER TRICONE				SW	CONCRETE - 100mm.	V. LOOSE		PAVEMENT
				1.0		SW	SAND, fine to medium grained, yellow/brown, well graded.			
				2.0			GRAVELLY SAND, fine to medium grained, drilling is very ragged suggesting gravel.	VERY LOOSE		FILL
						SW	On bottom of drill bit - sand, fine to medium, yellow, well graded.	DENSE		EW SANDSTONE
				3.0			CORING STARTED AT 2.41m DRILLING GETTING HARDER.			
				4.0			SEE SHEET 2 FOR DETAILS.			
				5.0						
				6.0						
				7.0						
				8.0						
				9.0						
				10.0						

Logged By : s.c.	Date : 17.7.1990.	Checked By : p.m.	Date : 30.7.1990.
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TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRRIBILLI
JOB NO 2757

BOREHOLE NO LS/BH24
BOX 1 OF 1
DEPTH 2.41 TO 4.77 M



LS/BH24

CORING STARTED 27/11



Cored Borehole Log

Borehole No.	LS/BH24
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=24.3m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Drill Type : TRUCK MOUNTED JACRO 200 Barrel Type, Length, Drilling fluid: NMLC, 1.5m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth Metres	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects	Defect Description
HQ CASING				1.0		SEE SHEET 1 FOR DETAILS						
				2.0								
				3.0		CORING STARTED AT 2.41m. SANDSTONE RUBBLE - FILL.						
	0%					CORE LOSS - 160mm .						
						SANDSTONE, orange/grey, some ironstaining.						
						SANDSTONE, banded, grey, bedding is 90° to core axis, ironstaining			D=0.1** D=0.32			Core loss Clay seam, 20mm Joint, 20°, planar, rough, clay filled, 5mm Fracture zone, 100mm Clay seam, 320mm Fracture zone, 50mm
NMLC TRIPLE TUBE	75%	NOT MONITORED		4.0		SANDSTONE, massive, grey, some ironstaining.	MW/ SW		D=0.56 D=0.48			*BP BP Joint, 45°, irregular, rough, ironstaining
							MW/ HW		D=0.32 D=0.48			Joint, 25°, planar, rough BP Joint, 50°, planar, rough, ironstained BP, ironstained
				5.0		HOLE TERMINATED AT 4.77m.						
						*BP - BEDDING PLANE PARTING.						
						** - BROKE ALONG BEDDING.						
				6.0								
				7.0								
				8.0								
				9.0								
				10.0								

Logged By : S.C.

Date : 17.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

Borehole Log

Borehole No.	
LS/BH25	
Sheet	of
1	2
Job No.	
2757	
Location : SEE FIGURE 2	
Collar Level : APPROX. RL=21.2m	
Angle From Vertical : 0°	
Bearing : --	

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.
PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI
Equipment Type : TRUCK MOUNTED JACRO 200
Hole Diameter : 100mm

Samples	Water	Casing	R.L.	Depth	Graphic Log	U.S.C.S.	Material Description, Structure Soil Type : Plasticity or Particle Characteristics, Colour, Secondary and Minor Components, Moisture, Structure.	Consistency or Relative Density	Field Test Results	Geological Profile
NO SAMPLE	NOT OBSERVED	ROCK ROLLER	Metres							
					SW		CONCRETE - 100mm.			PAVEMENT
					SG		SAND, fine to medium grained, yellow, well graded. GRAVELLY SAND, fine to medium grained, yellow-brown, trace of clay, some sandstone gravel.	VERY LOOSE		FILL
			1.0				CORING STARTED AT 0.96m, ON SANDSTONE.			
							SEE SHEET 2 FOR DETAILS.			
			2.0							
			3.0							
			4.0							
			5.0							
			6.0							
			7.0							
			8.0							
			9.0							
			10.0							

Logged By : s.c.	Date : 17.7.1990.	Checked By : P.M.	Date : 30.7.1990.
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Peter J. Burgess & Associates Pty Ltd

TAYLOR THOMSON WHITTING
NEW SCHOOL DEVELOPMENT
LORETO - KIRIBILLI

JOB NO 2757

BOREHOLE NO LS/BH25

BOXES 1 & 2 OF 2

DEPTH 0.96 TO 8.20 M



LS/BH25

CORING STARTED AT 0.96m



Cored Borehole Log

Borehole No.	LS/BH25
Sheet	2 of 2
Job No.	2757
Location :	SEE FIGURE 2
Collar Level :	APPROX. RL=21.2m
Angle From Horizontal	90°
Bearing :	--

CLIENT: TAYLOR THOMSON WHITTING PTY. LTD.

PROJECT: NEW SCHOOL DEVELOPMENT - LORETO KIRIBILLI

Drill Type : TRUCK MOUNTED JACRO 200
Barrel Type, Length, Drilling fluid: NMLC, 1.5m, WATER

Method/Casing	R.Q.D./Lift	Water	R.L.	Depth	Graphic Log	Soil or Rock Substance Description	Degree of Weathering	Estimated Strength Range	Is(50) MPa (D=diam A=axial)	Core Length (mm)	Defects	Defect Description
HO CASING				1.0		SEE SHEET 1 FOR DETAILS. CORING STARTED AT 0.96m.						
NMLC TRIPLE TUBE	65%			2.0		SANDSTONE, medium grained, orange/grey, bedding is about 90° to core axis, some ironstaining, some carbonaceous wisps along bedding.	MW HW/ EW		D=0.12 D=0.14		*BP Joint, 30°, planar, rough Clay seam, 120mm Joint, 5°, planar, rough, ironstained Clay seam, 5mm BP Joint, 30°, closed, ironstained BP BP, ironstained BP, ironstained BP Joint, 70°, planar, rough, ironstained Joint system, 30°, planar, rough, ironstained Joint, 45°, planar, rough, ironstained Drilling breaks Core loss Joint, 60°, planar, rough, ironstained, 10mm Joint, 10°, planar, rough, ironstained Clay seam, 10°, 5mm Clay seam, 5mm BP Joint, 10°, irregular, rough BP Fracture zone, 30mm Joint, 5°, planar, rough Fracture zone, 50mm Joint, 5°, planar, rough, ironstained BP BP Fracture zone, 50mm BP	
	60%			3.0			MW/ SW		D=0.52 D=0.52			
	60%			4.0		CORE LOSS - 50mm As above.	MW/ SW		D=0.44 D=0.46			
				5.0					D=0.4 D=0.26**			
	95%			6.0		SANDSTONE, massive, fine grained grey.	SW/ Fr		D=1.42 D=1.48			
				7.0		coarser grained -						
	95%			7.0		COAL, black, brittle.	Fr		D=0.72 D=0.54			
				8.0		SANDSTONE, grey, bedding is about 90° to core axis, some cross bedding, some carbonaceous wisps along bedding.			D=1.0 D=0.92			
				9.0		HOLE TERMINATED AT 8.2m.						
				10.0		*BP - BEDDING PLANE PARTING ** - BROKE ALONG BEDDING						

Logged By : S.C.

Date : 11.7.1990.

Checked By : P.M.

Date : 30.7.1990.



Peter J. Burgess & Associates Pty Ltd

APPENDIX B

Jeffery and Katauskas Pty Ltd
CONSULTING GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS

JOB NO. 239035Y

BH1

START CORING AT 1.12m

1

CL
0.05m

2

END OF BH AT 2.62m



Borehole No.
1
1/1

CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI ASSOCIATION INCORPORATED																								
Project: PROPOSED ALTERATIONS AND ADDITIONS																								
Location: 89 CARABELLA STREET, KIRRIBILLI. NSW																								
Job No. 23903SY				Core Size: NMLC				R.L. Surface: ≈ 26.9m																
Date: 28-5-10				Inclination: VERTICAL				Datum: AHD																
Drill Type: MEVELLE				Bearing: -				Logged/Checked by: A.M./WJ																
Water Loss/Level	Barrel Lift	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX I _s (50)																DEFECT DETAILS	
							EL	VL	L	M	H	VH	EH	500	300	100	50	30	10	DEFECT SPACING (mm)	DESCRIPTION Type, inclination, thickness, planarity, roughness, coating. Specific General			
		0		REFER TO TEST PIT 1 CROSS SECTIONAL SKETCH																				
		1		START CORING AT 1.12m																				
FULL RET- URN				CORE LOSS 0.05m	DW	L																		
				SANDSTONE: fine to medium grained, red and light grey.																				
				SANDSTONE: medium to coarse grained, light grey.																				
				SANDSTONE: fine to coarse grained, red brown, orange brown and light grey.																				
		2				M																		
				END OF BOREHOLE AT 2.62																				
		3																						
		4																						
		5																						
		6																						
		7																						

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CONSULTING GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS

JOB NO. 239035Y

BH2

START CORING AT 0.3m

0

1

CORE LOSS 0.21m

EOBH @ 1.8m



Borehole No.
2
1/1

CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI ASSOCIATION INCORPORATED																				
Project: PROPOSED ALTERATIONS AND ADDITIONS																				
Location: 89 CARABELLA STREET, KIRRIBILLI. NSW																				
Job No. 23903SY				Core Size: NMLC				R.L. Surface: ~27.4m												
Date: 28-5-10				Inclination: VERTICAL				Datum: AHD												
Drill Type: MEVELLE				Bearing: -				Logged/Checked by: A.M./WTF												
Water Loss/Level	Barrel Lift	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX $I_s(50)$												DEFECT DETAILS	
							EL	VL	L	M	H	VH	EH	500	300	100	50	30	10	DEFECT SPACING (mm)
		0		REFER TO TEST PIT 1 CROSS SECTIONAL SKETCH START CORING AT 0.3m																
FULL RET- URN		1		SANDSTONE: fine to medium grained, red brown, bedded at 20°.	DW	M-H				X										
				SANDSTONE: medium to coarse grained, light grey and red brown.						X										
				CORE LOSS 0.21m	DW	L				X										
		2		SANDSTONE: medium to coarse grained, light grey and red brown, bedded at 20°. END OF BOREHOLE AT 1.8m															- Be, 20°, STEPPED, HEALED	
		3																		
		4																		
		5																		
		6																		
		7																		



Borehole No.

3

1/2

BOREHOLE LOG

Client: LORETO KIRIRIBILLI ASSOCIATION INCORPORATED

Project: PROPOSED ALTERATIONS AND ADDITIONS

Location: 89 CARABELLA STREET, KIRIRIBILLI. NSW

Job No. 23903SY

Method: HAND AUGER

R.L. Surface: ≈ 29.9m

Date: 28-5-10

Datum: AHD

Logged/Checked by: A.M./WT

Groundwater Record	SAMPLES				Field Tests	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel. Density	Hand Penetrometer Readings (kPa.)	Remarks
	ES	USO	DB	DS									
					REFER TO DCP TEST RESULTS	0			REFER TO TEST PIT 3 CROSS SECTIONAL SKETCH				
						1		-	FILL: Clayey sandy gravel, fine to coarse grained sub angular sandstone and brick, brown, fine to coarse grained sand, low plasticity clay.	(M)	-	-	COMMENCED WASH BORE FROM 1.0m APPEARS MODERATELY COMPACTED APPEARS WELL COMPACTED
						2		SC	CLAYEY SAND: fine to medium grained, yellow brown.	(M)	MD	-	
						3			REFER TO CORED BOREHOLE LOG				
						4							
						5							
						6							
						7							

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JOB No. 23903SY

BH3

START CORING AT 2.78m

2

CORE LOSS 0.22

3

CORE LOSS 0.32m

4

END OF BH AT 4.68m



Borehole No.
3
2/2

CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI ASSOCIATION INCORPORATED																				
Project: PROPOSED ALTERATIONS AND ADDITIONS																				
Location: 89 CARABELLA STREET, KIRRIBILLI. NSW																				
Job No. 23903SY				Core Size: NMLC				R.L. Surface: ≈ 29.9m												
Date: 28-5-10				Inclination: VERTICAL				Datum: AHD												
Drill Type: MEVELLE				Bearing: -				Logged/Checked by: A.M./WT												
Water Loss/Level	Barrel Lift	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX I _s (50)												DEFECT DETAILS	
							EL	VL	L	M	H	VH	EH	500	300	100	50	20	10	DEFECT SPACING (mm)
		2		START CORING AT 2.78m																
		3		CORE LOSS 0.22m																
FULL RET- URN				SANDSTONE: fine to medium grained, orange and light grey, bedded at 20°.	DW	M				X										
				CORE LOSS 0.32m																
		4		SANDSTONE: fine to coarse grained, orange brown, red brown and light grey, with dark grey laminae.	DW	M-H				X										
										X										
		5		END OF BOREHOLE AT 4.68m																
		6																		
		7																		
		8																		
		9																		

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JOB NO. 23903SY

BH4

START CORING A 1.46m

1

CL 0.1m

2

3

END OF BH AT 3.06m



Borehole No.
4
1/1

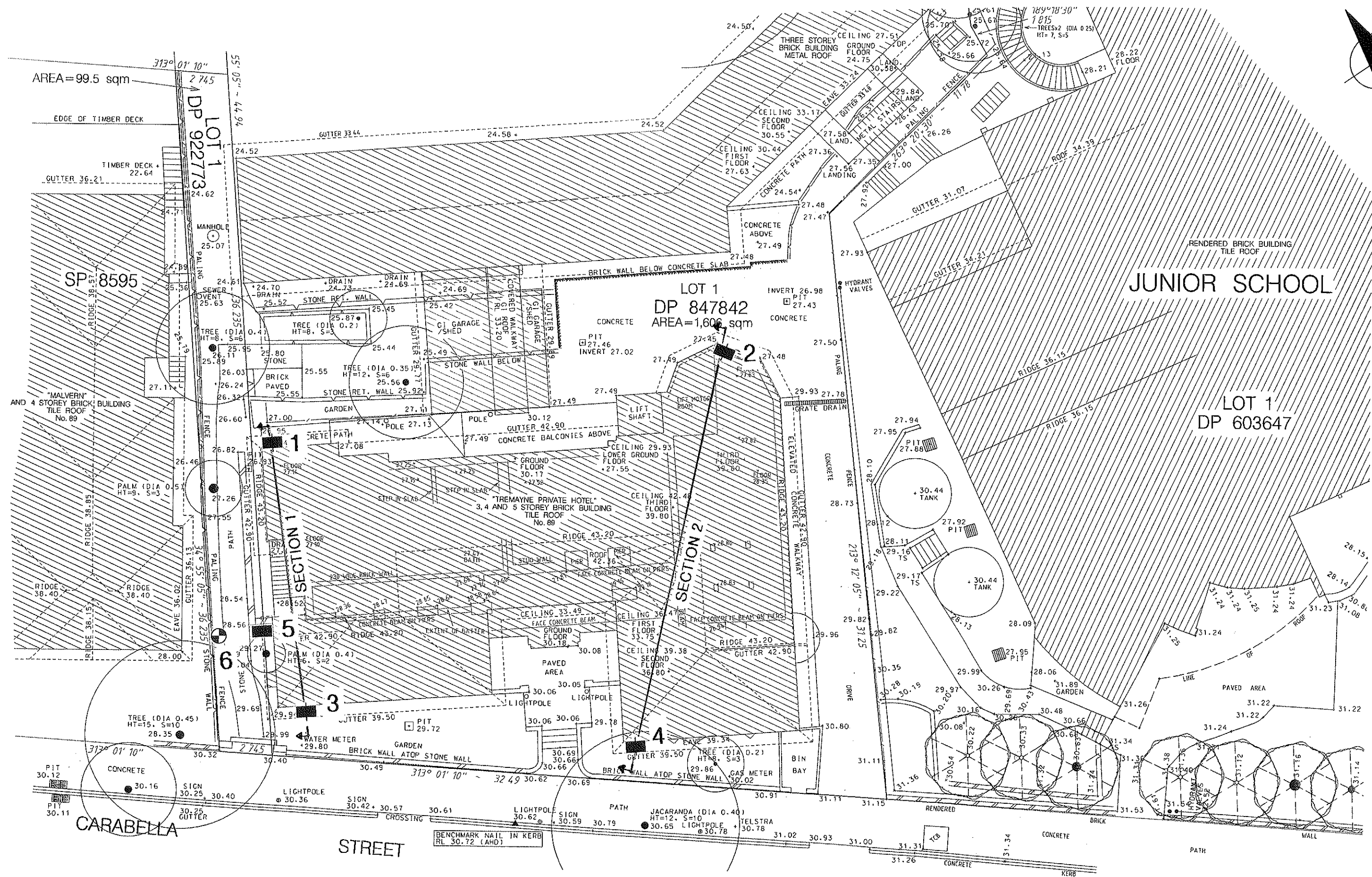
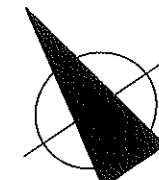
CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI ASSOCIATION INCORPORATED																						
Project: PROPOSED ALTERATIONS AND ADDITIONS																						
Location: 89 CARABELLA STREET, KIRRIBILLI. NSW																						
Job No. 23903SY				Core Size: NMLC				R.L. Surface: ≈ 29.8m														
Date: 28-5-10				Inclination: VERTICAL				Datum: AHD														
Drill Type: MEVELLE				Bearing: -				Logged/Checked by: A.M./WT														
Water Loss/Level	Barrel Lift	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX I _s (50)												DEFECT SPACING (mm)		DEFECT DETAILS Type, inclination, thickness, planarity, roughness, coating.	
							EL	VL	L	M	H	VH	EH	500	300	100	50	20	10	Specific	General	
		0		REFER TO TEST PIT 4 CROSS SECTIONAL SKETCH																		
		1																				
				START CORING AT 1.46m																		
FULL RET- URN		2		SANDSTONE: fine to medium grained, orange and red brown, with light grey laminae, bedded at 25°.	DW	M		X														
		3						X														
								X										- Be, 25°, P, S, IS				
				END OF BOREHOLE AT 3.06m																		
		4																				
		5																				
		6																				
		7																				



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRRIBILLI						
Project:	PROPOSED ALTERATIONS AND ADDITIONS						
Location:	89 CARABELLA STREET, KIRRIBILLI, NSW						
Job No.	23903SY			Hammer Weight & Drop: 9kg/510mm			
Date:	27-5-10			Rod Diameter: 16mm			
Tested By:	A.M.			Point Diameter: 20mm			
Number of Blows per 100mm Penetration							
Test Location	RL ~26.9m	RL ~26.9m	RL ~27.4m	RL ~29.9m	RL ~29.8m	RL ~28.6m	RL ~28.6m
Depth (mm)	1	1A	2	3	4	5	6
0 - 100	EXCAVATED	EXCAVATED	4	EXCAVATED	EXCAVATED	EXCAVATED	1
100 - 200	↓	↓	3	↓	↓	↓	↓
200 - 300			6				2
300 - 400			30/10mm				4
400 - 500			REFUSAL				6
500 - 600							4
600 - 700	↓	↓			↓	↓	30/60mm
700 - 800	1	2			↓	1	REFUSAL
800 - 900	↓	1		↓	10	15	
900 - 1000	↓	↓		8	10	18	
1000 - 1100	25/30mm	25/25mm		4	8	11	
1100 - 1200	REFUSAL	REFUSAL		4	7	3	
1200 - 1300				3	5	2	
1300 - 1400				5	3	2	
1400 - 1500				6	25/75mm	2	
1500 - 1600				10	REFUSAL	8	
1600 - 1700				17		10	
1700 - 1800				16		10	
1800 - 1900				10		11	
1900 - 2000				11		8	
2000 - 2100				16		30/50mm	
2100 - 2200				7		REFUSAL	
2200 - 2300				4			
2300 - 2400				7			
2400 - 2500				8			
2500 - 2600				14			
2600 - 2700				25/70mm			
2700 - 2800				REFUSAL			
2800 - 2900							
2900 - 3000							
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal 3. Survey datum is AHD.						

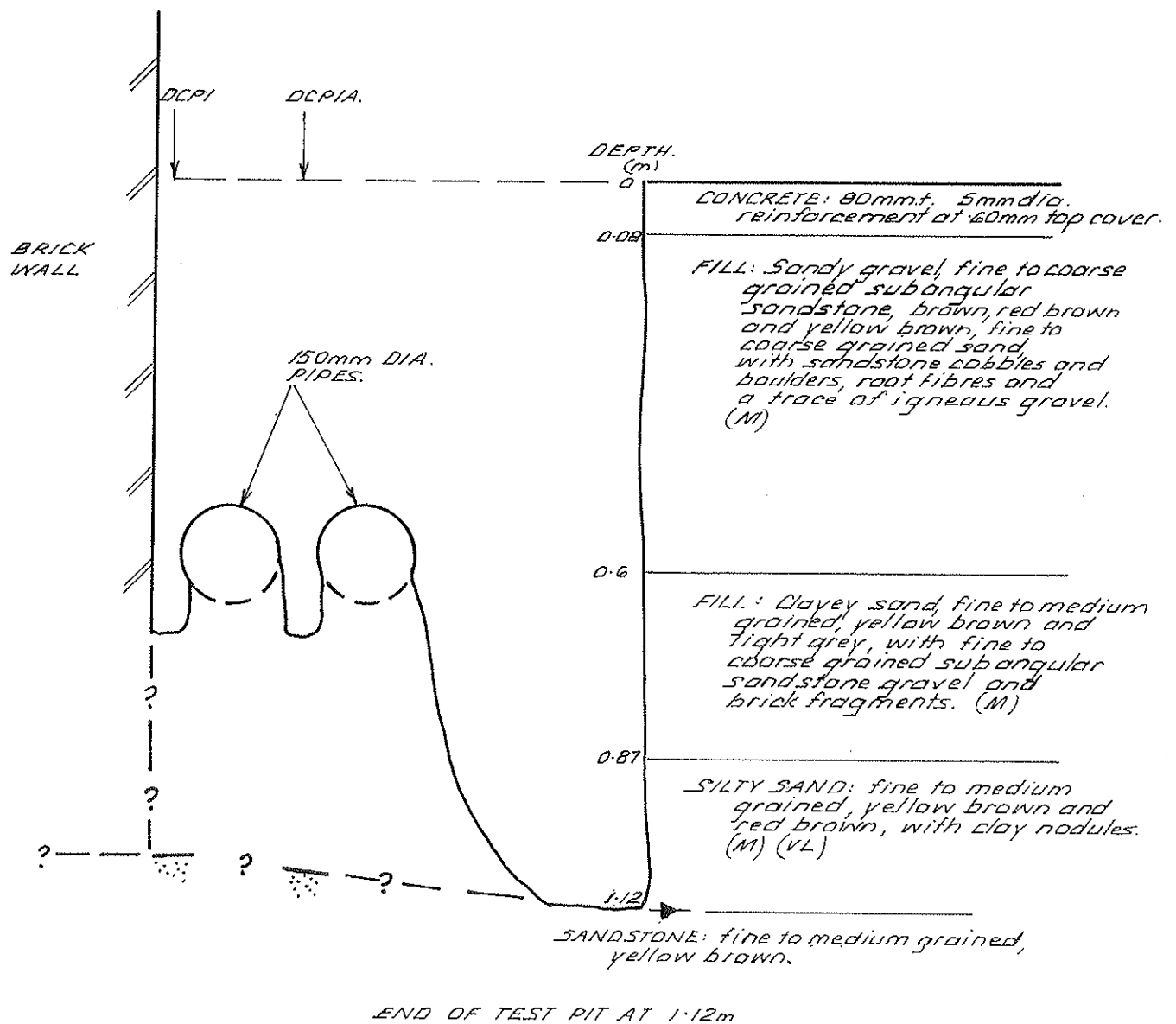


- LEGEND**
- TEST PIT AND DCP TEST
 - TEST PIT, DCP TEST AND BOREHOLE
 - DCP TEST

INVESTIGATION LOCATION PLAN

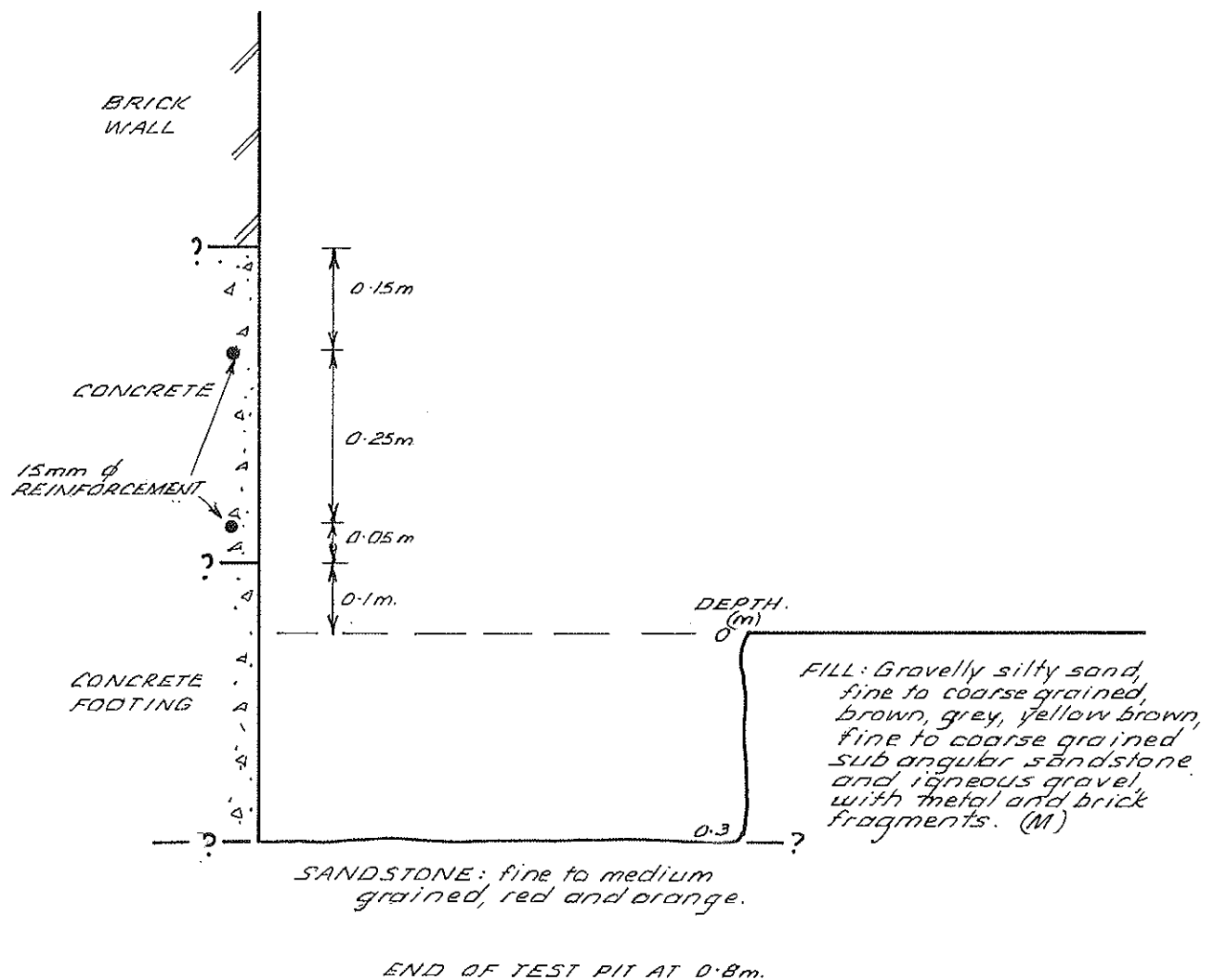
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Report No. 23903SY Figure No. 1



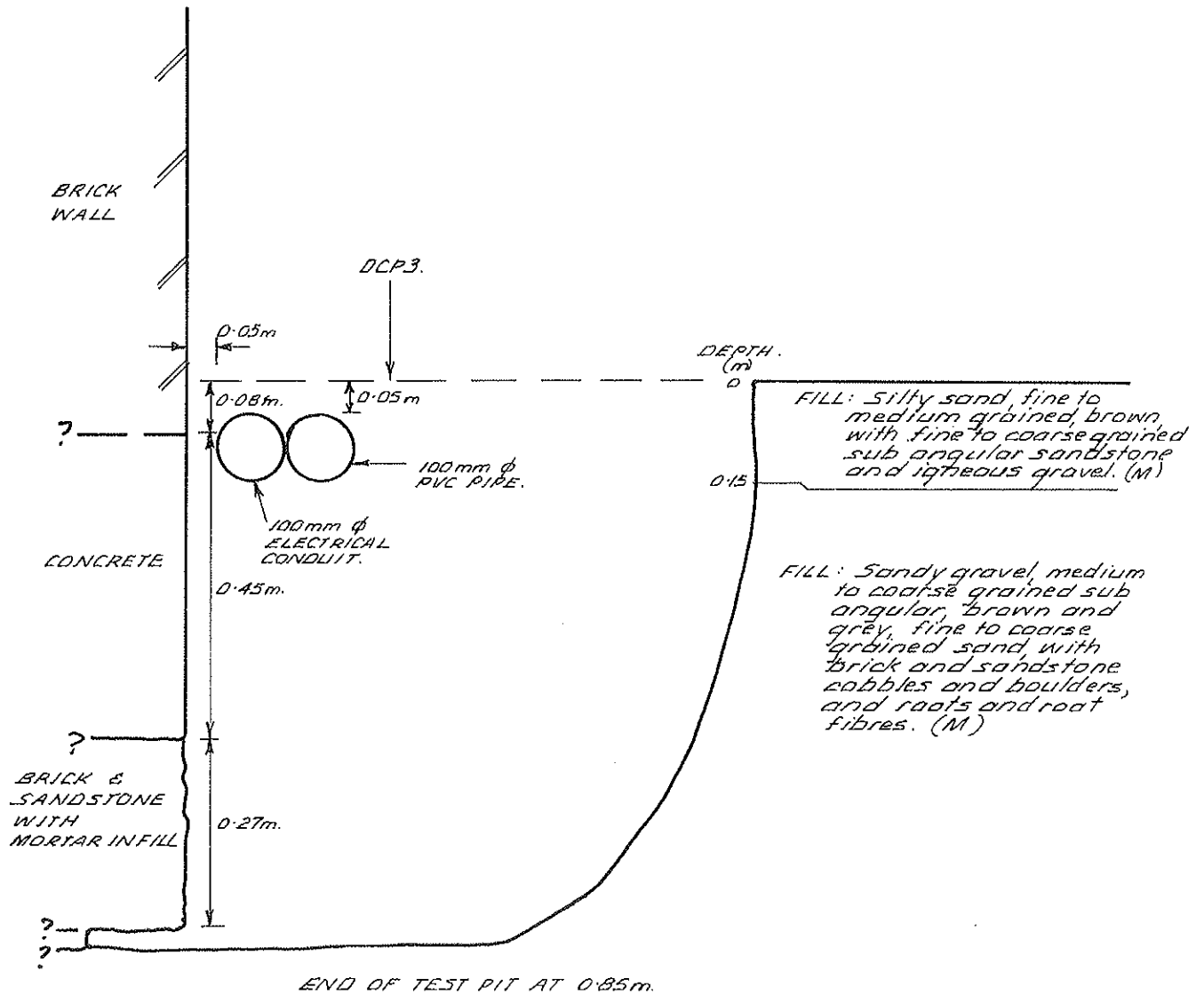
TEST PIT 1





TEST PIT 2





TEST PIT 3

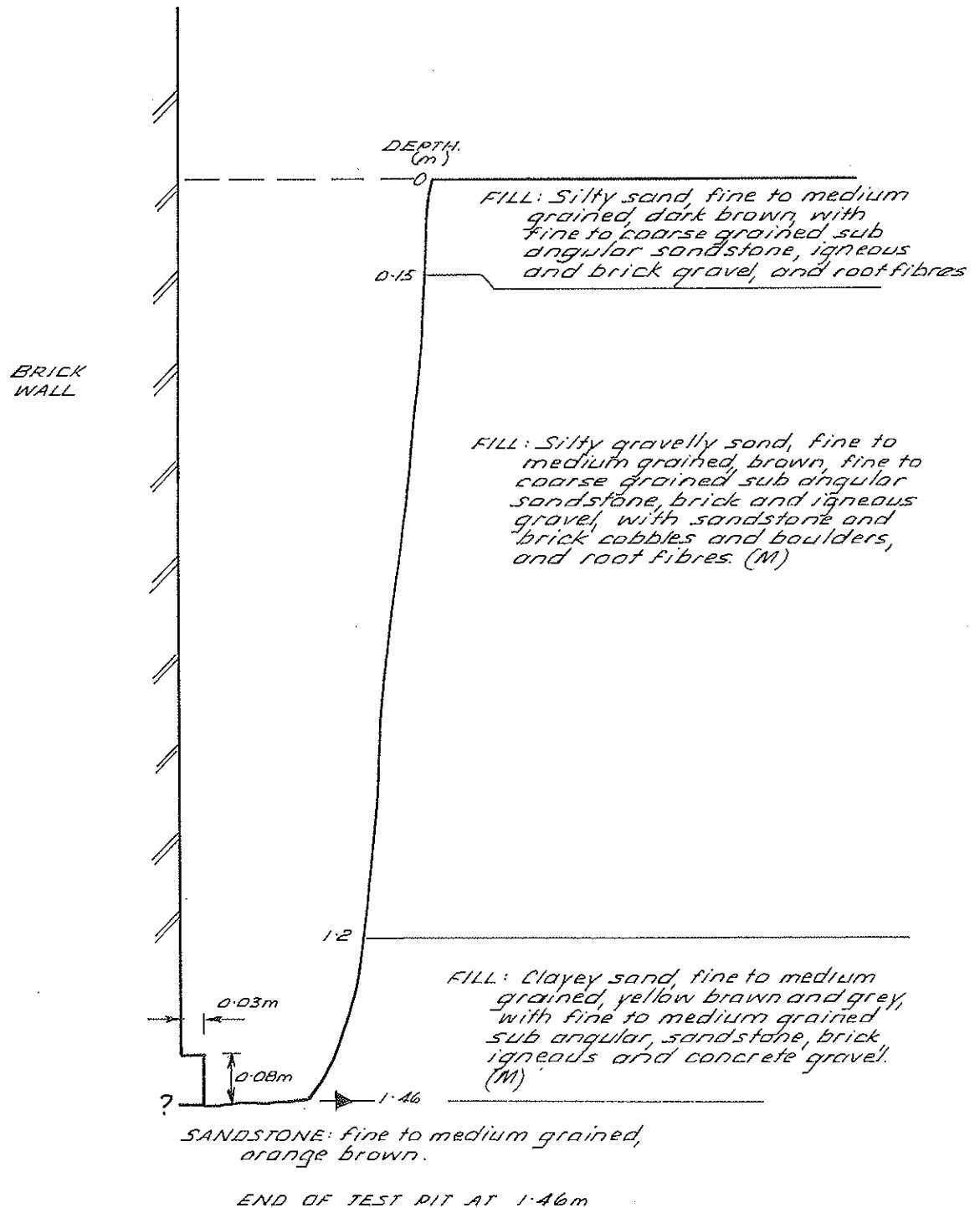
SCALE (M)



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Report No. 23903SY

Figure No.4



TEST PIT 4

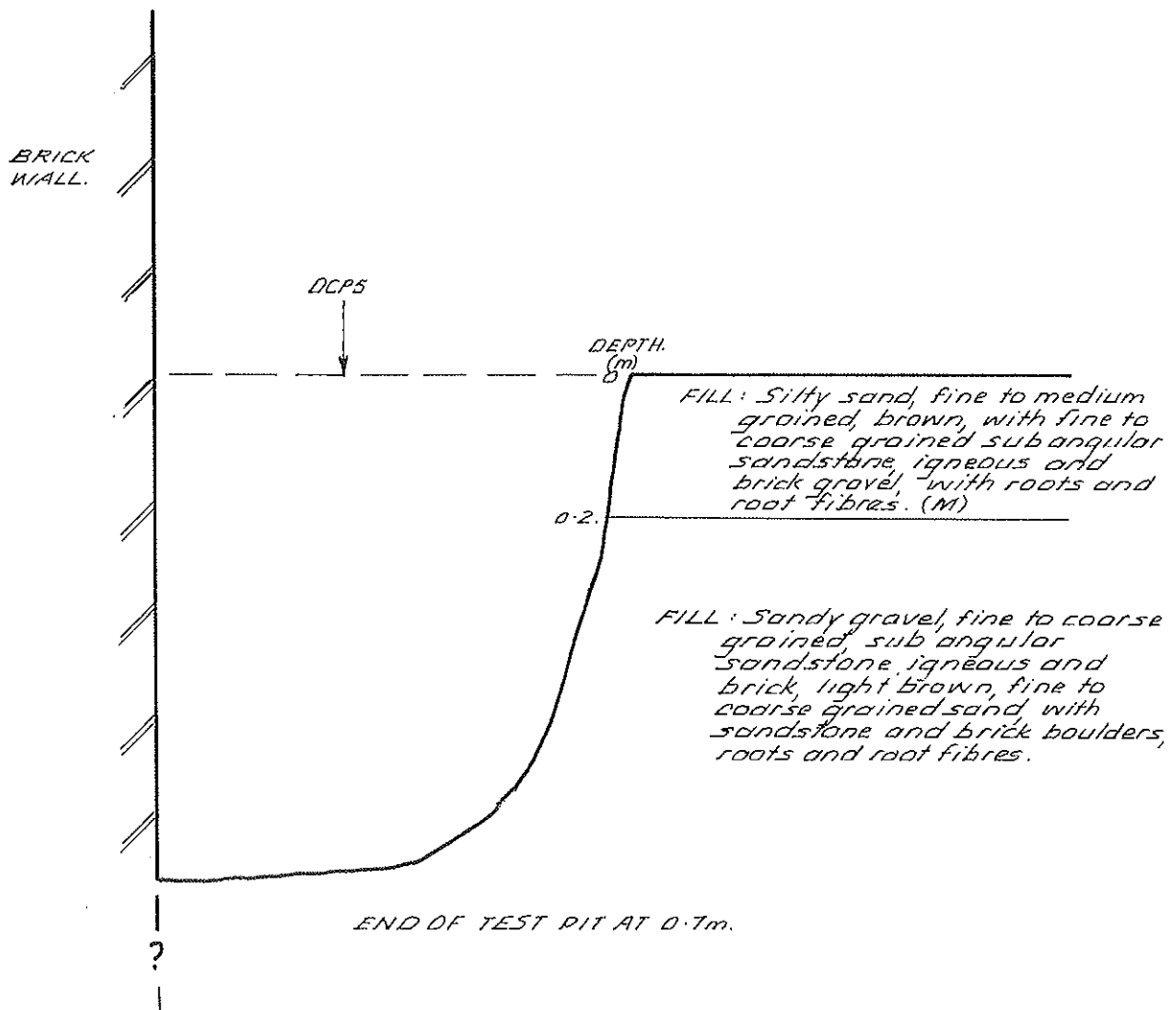


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Report No. 23903SY

Figure No. 5





TEST PIT 5

SCALE (M)

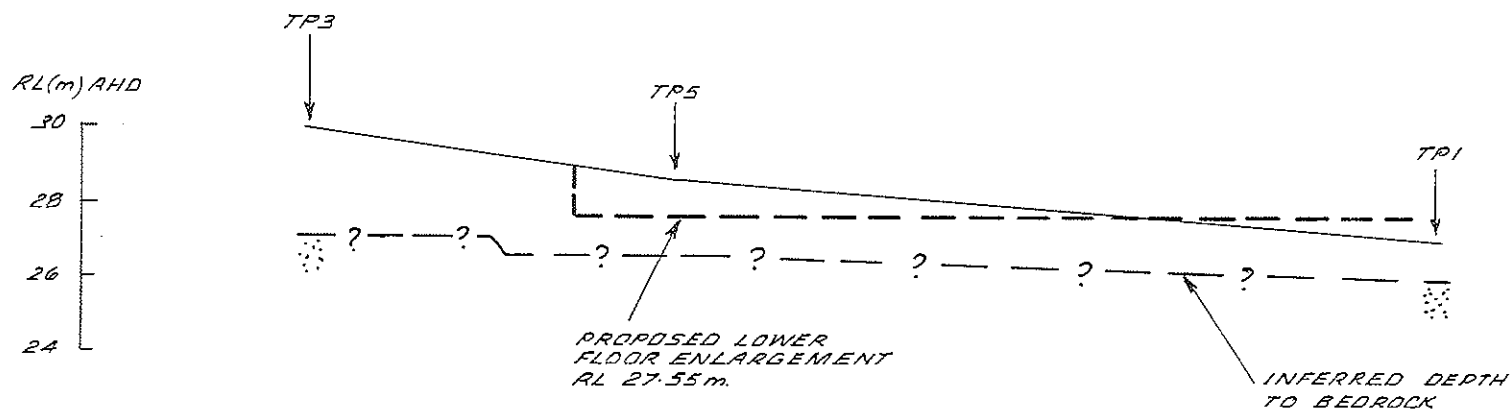


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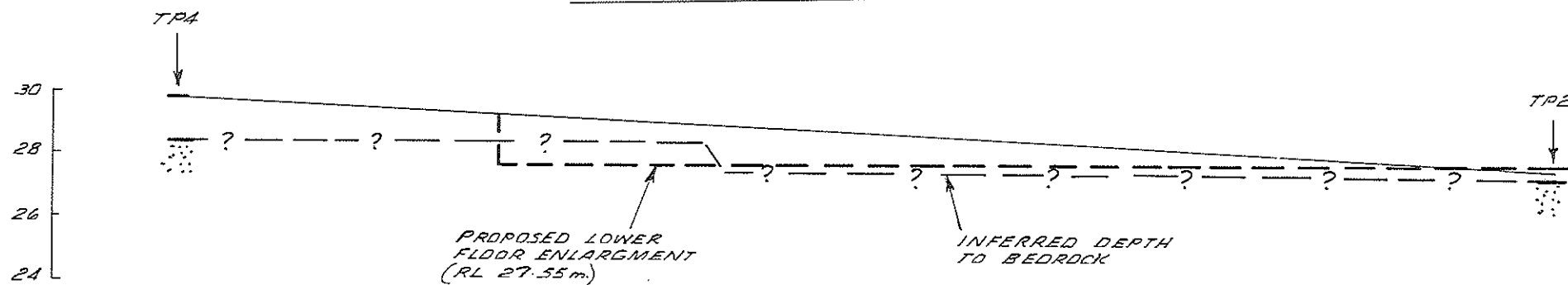


Report No. 23903SY

Figure No.6



CROSS SECTION 1-1



CROSS SECTION 2-2



APPENDIX C



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRRIBILLI						
Project:	RETAINING WALL STABILITY ASSESSMENT						
Location:	89 CARABELLA ROAD, KIRRIBILLI, NSW						
Job No.	24708SY			Hammer Weight & Drop: 9kg/510mm			
Date:	18-3-11			Rod Diameter: 16mm			
Tested By:	M.T.			Point Diameter: 20mm			
Number of Blows per 100mm Penetration							
Test Location	RL ~21.57m	RL ~20.78m	RL ~20.63m	RL ~20.63m	RL ~21.01m	RL ~20.27m	RL ~20.04m
Depth (mm)	1	2	3A	3B	4	5	6
0 - 100	↓	SUNK	SUNK	1	SUNK	5	1
100 - 200	1	↓	↓	1	17	1	3
200 - 300	↓	↓	↓	1	3	16	6
300 - 400	↓	1	1	↓	5	1	4
400 - 500	↓	2	2	↓	3	3	3
500 - 600	1	2	3	1	3	5	4
600 - 700	5	4	3/100mm	2	2	7	3
700 - 800	2	7	REFUSAL	2	9	5	5
800 - 900	8	2		8	5	16/60mm	5
900 - 1000	23	2		2	15	REFUSAL	2
1000 - 1100	30/50mm	2		2	11		4
1100 - 1200	REFUSAL	10/100mm		2	14		3
1200 - 1300		REFUSAL		6/90mm	15		3
1300 - 1400				REFUSAL	16		3
1400 - 1500					7		5
1500 - 1600					9		14/50mm
1600 - 1700					8/50mm		REFUSAL
1700 - 1800					REFUSAL		
1800 - 1900							
1900 - 2000							
2000 - 2100							
2100 - 2200							
2200 - 2300							
2300 - 2400							
2400 - 2500							
2500 - 2600							
2600 - 2700							
2700 - 2800							
2800 - 2900							
2900 - 3000							
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal						



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRRIBILLI						
Project:	RETAINING WALL STABILITY ASSESSMENT						
Location:	89 CARABELLA ROAD, KIRRIBILLI, NSW						
Job No.	24708SY			Hammer Weight & Drop: 9kg/510mm			
Date:	18-3-11			Rod Diameter: 16mm			
Tested By:	M.T.			Point Diameter: 20mm			
Number of Blows per 100mm Penetration							
Test Location	RL ~18,27m	RL ~16,74m					
Depth (mm)	7	8					
0 - 100		1					
100 - 200	↓	5					
200 - 300	3	3					
300 - 400	3	15					
400 - 500	5	24					
500 - 600	6	13					
600 - 700	6	12					
700 - 800	2	6					
800 - 900	3	2					
900 - 1000	10	4					
1000 - 1100	5	5					
1100 - 1200	10	4					
1200 - 1300	10	6					
1300 - 1400	8	5					
1400 - 1500	11	5					
1500 - 1600	11	4					
1600 - 1700	10/5mm	3					
1700 - 1800	REFUSAL	10/20mm					
1800 - 1900		REFUSAL					
1900 - 2000							
2000 - 2100							
2100 - 2200							
2200 - 2300							
2300 - 2400							
2400 - 2500							
2500 - 2600							
2600 - 2700							
2700 - 2800							
2800 - 2900							
2900 - 3000							
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal						



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRRIBILLI						
Project:	RETAINING WALL STABILITY ASSESSMENT						
Location:	89 CARABELLA ROAD, KIRRIBILLI, NSW						
Job No.	24708SY			Hammer Weight & Drop: 9kg/510mm			
Date:	18-3-11			Rod Diameter: 16mm			
Tested By:	M.T.			Point Diameter: 20mm			
Number of Blows per 100mm Penetration							
Test Location	RL ~24.63	RL ~24.46m	RL ~24.51m	Test Location			
Depth (mm)	9	10	11	Depth (mm)	9	11	
0 - 100	9	1	3	3000-3100	4	7	
100 - 200	6	1	4	3100-3200	33/100mm	8	
200 - 300	22	2	2	3200-3300	REFUSAL	7	
300 - 400	10	1	3	3300-3400		11	
400 - 500	15	1	4	3400-3500		7	
500 - 600	4	1	9	3500-3600		7	
600 - 700	9	3	2	3600-3700		10	
700 - 800	2	↓	1	3700-3800		8	
800 - 900	7	2	2	3800-3900		25/50mm	
900 - 1000	9	2	1	3900-4000		REFUSAL	
1000 - 1100	17	4	↓	4000-4100			
1100 - 1200	22	2	↓	4100-4200			
1200 - 1300	9	1	4	4200-4300			
1300 - 1400	10	2	2	4300-4400			
1400 - 1500	8	2	1	4400-4500			
1500 - 1600	5	1	1	4500-4600			
1600 - 1700	6	2	↓	4600-4700			
1700 - 1800	14	11	1	4700-4800			
1800 - 1900	15	7	4	4800-4900			
1900 - 2000	18	8	4	4900-5000			
2000 - 2100	9	1	6	5000-5100			
2100 - 2200	15	16	3	5100-5200			
2200 - 2300	13	13	7	5200-5300			
2300 - 2400	16	30/90mm	5	5300-5400			
2400 - 2500	14	REFUSAL	4	5400-5500			
2500 - 2600	8		17	5500-5600			
2600 - 2700	15		14	5600-5700			
2700 - 2800	21		7	5700-5800			
2800 - 2900	7		10	5800-5900			
2900 - 3000	7		13	5900-6000			
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal						



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRRIBILLI						
Project:	RETAINING WALL STABILITY ASSESSMENT						
Location:	89 CARABELLA ROAD, KIRRIBILLI, NSW						
Job No.	24708SY			Hammer Weight & Drop: 9kg/510mm			
Date:	18-3-11			Rod Diameter: 16mm			
Tested By:	M.T.			Point Diameter: 20mm			
Number of Blows per 100mm Penetration							
Test Location	RL ~24.24m	RL ~23.84m		Test Location			
Depth (mm)	12	13		Depth (mm)	12	13	
0 - 100	1	2		3000-3100	21	17	
100 - 200	2	1		3100-3200	30	18	
200 - 300	2	1		3200-3300	30/60mm	14	
300 - 400	3	4		3300-3400	REFUSAL	7	
400 - 500	4	4		3400-3500		4	
500 - 600	3	18		3500-3600		6	
600 - 700	3	13		3600-3700		9	
700 - 800	4	8		3700-3800		10	
800 - 900	9	32		3800-3900		7	
900 - 1000	5	10		3900-4000		16	
1000 - 1100	4	7		4000-4100		12	
1100 - 1200	7	12		4100-4200		12	
1200 - 1300	12	13		4200-4300		10	
1300 - 1400	6	6		4300-4400		24	
1400 - 1500	4	7		4400-4500		21	
1500 - 1600	5	15		4500-4600		19	
1600 - 1700	4	9		4600-4700		14	
1700 - 1800	4	10		4700-4800		8	
1800 - 1900	5	12		4800-4900		19	
1900 - 2000	4	11		4900-5000		15	
2000 - 2100	4	18		5000-5100		6	
2100 - 2200	8	30		5100-5200		6	
2200 - 2300	14	19		5200-5300		7	
2300 - 2400	7	12		5300-5400		7	
2400 - 2500	5	9		5400-5500		10	
2500 - 2600	5	8		5500-5600		7	
2600 - 2700	14	7		5600-5700		6	
2700 - 2800	11	8		5700-5800		9	
2800 - 2900	12	10		5800-5900		8	
2900 - 3000	10	8		5900-6000		12	
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal						



DYNAMIC CONE PENETRATION TEST RESULTS

Client:	LORETO KIRIBILLI						
Project:	RETAINING WALL STABILITY ASSESSMENT						
Location:	89 CARABELLA ROAD, KIRIBILLI, NSW						
Job No.	24708SY	Hammer Weight & Drop: 9kg/510mm					
Date:	18-3-11	Rod Diameter: 16mm					
Tested By:	M.T.	Point Diameter: 20mm					
Number of Blows per 100mm Penetration							
Test Location				Test Location			
Depth (mm)	13			Depth (mm)			
6000-6100	40/60mm			9000-9100			
6100-6200				9100-9200			
6200-6300				9200-9300			
6300-6400				9300-9400			
6400-6500				9400-9500			
6500-6600				9500-9600			
6600-6700				9600-9700			
6700-6800				9700-9800			
6800-6900				9800-9900			
6900-7000				9900-10000			
7000-7100				10000-10100			
7100-7200				10100-10200			
7200-7300				10200-10300			
7300-7400				10300-10400			
7400-7500				10400-10500			
7500-7600				10500-10600			
7600-7700				10600-10700			
7700-7800				10700-10800			
7800-7900				10800-10900			
7900-8000				10900-11000			
8000-8100				11000-11100			
8100-8200				11100-11200			
8200-8300				11200-11300			
8300-8400				11300-11400			
8400-8500				11400-11500			
8500-8600				11500-11600			
8600-8700				11600-11700			
8700-8800				11700-11800			
8800-8900				11800-11900			
8900-9000				11900-12000			
Remarks:	1. The procedure used for this test is similar to that described in AS1289.6.3.2-1997, Method 6.3.2. 2. Usually 8 blows per 20mm is taken as refusal						

APPENDIX D

BOREHOLE LOG

Borehole No.

1

1/1

Client: QSI PTY LTD
Project: PROPOSED LIFT SHAFT
Location: LORETO COLLEGE, CARABELLA STREET, KIRRIBILLI, NSW

Job No. 25882P

Method: SPIRAL AUGER
JK250

R.L. Surface: N/A

Date: 20-7-12

Datum:

Logged/Checked by: R.V.C./PW

Groundwater Record	SAMPLES			Field Tests	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel. Density	Hand Penetrometer Readings (kPa.)	Remarks
	ES	U50	D8									
DRY ON COMPLETION OF AUGERING					0		-	CONCRETE: 145mm.t				20mm DIAMETER REINFORCEMENT
				N = 11 3,6,5				FILL: Sand, fine to medium grained, grey brown, trace of sandstone gravel.	M			APPEARS MODERATELY COMPACTED
					1			FILL: Sand, fine to medium grained, grey brown, with crushed igneous rock gravel.				
				N = 32 2,9,23				FILL: Sand, fine to medium grained, grey brown, trace of crushed igneous rock, slag and ash.				
					2			FILL: Sand, fine to medium grained, grey brown, trace of fine grained sandstone gravel, clay nodules and organic material.				APPEARS POORLY COMPACTED
				N = 1 7,0,1								
					3							
					4		-	SANDSTONE: fine to medium grained, light grey.	DW	M		LOW TO MODERATE 'TC' BIT RESISTANCE
								REFER TO CORED BOREHOLE LOG				
					5							
					6							
					7							

Client: QSI Pty Ltd
Project: Proposed Lift Shaft
Location: Loreto College, Kirribilli
Date: 20/07/2012



SCALE (CM)

25882 P BHI START CORING AT 4.20m

4

5

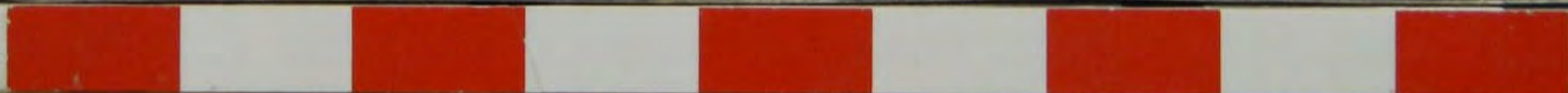
6

7

8

9

END OF BHI AT 9.87m



CORED BOREHOLE LOG

Borehole No.

1

2/2

Client: QSI PTY LTD

Project: PROPOSED LIFT SHAFT

Location: LORETO COLLEGE, CARABELLA STREET, KIRRIBILLI, NSW

Job No. 25882P

Core Size: NMLC

R.L. Surface: N/A

Date: 20-7-12

Inclination: VERTICAL

Datum:

Drill Type: JK250

Bearing: -

Logged/Checked by: R.V.C./P.V.

Water Loss/Level	Barrel Lift	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX I _s (50)	DEFECT DETAILS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
								DEFECT SPACING (mm)							DESCRIPTION Type, inclination, thickness, planarity, roughness, coating.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
								EL	VL	L	M	H	VH	EH	500	300	100	50	30	10	Specific	General																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		4		START CORING AT 4.20m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

APPENDIX E



Borehole No.
1
1 / 4

BOREHOLE LOG

Client: LORETO KIRRIBILLI LIMITED
Project: PROPOSED MASTERPLAN AND DEVELOPMENT SSD
Location: 85 CARABELLA STREET, KIRRIBILLI, NSW

Job No.: 30067S **Method:** SPIRAL AUGER **R.L. Surface:** 27.4 m
Date: 19/12/16 **Datum:** AHD
Plant Type: TIGHT SITE DRILL RIG **Logged/Checked By:** K.S./P.S.

Groundwater Record	SAMPLES				Field Tests	RL (m AHD)	Depth (m)	Graphic Log	Unified Classification	DESCRIPTION	Moisture Condition/ Weathering	Strength/ Rel Density	Hand Penetrometer Readings (kPa)	Remarks
	ES	U50	DB	DS										
									-	CONCRETE: 180mm.t				
						27				FILL: Clayey sand, fine to medium grained, brown, with fine to medium grained igneous gravel.	W			
							1			SANDSTONE: fine to medium grained, brown, with iron indurated bands.				
										REFER TO CORED BOREHOLE LOG				
						26								
							2							
						25								
							3							
						24								
							4							
						23								
							5							
						22								
							6							
						21								

CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI LIMITED
Project: PROPOSED MASTERPLAN AND DEVELOPMENT SSD
Location: 85 CARABELLA STREET, KIRRIBILLI, NSW

Job No.: 30067S **Core Size:** NMLC **R.L. Surface:** 27.4 m
Date: 19/12/16 **Inclination:** VERTICAL **Datum:** AHD
Plant Type: TIGHT SITE DRILL RIG **Bearing:** N/A **Logged/Checked By:** K.S./P.S.

Water Loss/Level Barrel Lift	RL (m AHD)	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX $I_p(50)$	DEFECT DETAILS	
								DEFECT SPACING (mm)	DESCRIPTION Type, inclination, thickness, planarity, roughness, coating.
							EL-0.03 VL-0.1 L-0.3 M-1 H-3 VH-10 EH	500 300 100 50 30 10	Specific General
		27		START CORING AT 0.38m					
100% RETURN		1		SANDSTONE: fine to coarse grained, dark red brown.	DW	H			(1.13m) Be, 15°, Un, R
		26		CORE LOSS 0.44m					(1.40m) FRACTURED ZONE 20mm.t
90% RETURN		2		SANDSTONE: fine to coarse grained, light grey mottled red brown, with iron indurated bands.	DW	H			(1.90m) J, 90°, P, S (2.13m) XWS, 5°, 3 mm.t
		25							(2.61m) Be, 5°, P, S
66% RETURN		24							(3.65m) XWS, 0°, 5 mm.t (3.72m) Be, 5°, P, S, IS
		23		SANDSTONE: fine to medium grained, light grey, with dark grey laminae, cross bedded at 0-10°.					(3.90m) XWS, 0°, 4 mm.t (3.91m) XWS, 0°, 6 mm.t
100% RETURN		22							(5.12m) Be, 5°, P, S
		21							

CORED BOREHOLE LOG

Job No.: 30067S **Core Size:** NMLC **R.L. Surface:** 27.4 m
Date: 19/12/16 **Inclination:** VERTICAL **Datum:** AHD
Plant Type: TIGHT SITE DRILL RIG **Bearing:** N/A **Logged/Checked By:** K.S./P.S.

Water Loss/Level		Barrel Lift	RL (m AHD)	Depth (m)	Graphic Log	CORE DESCRIPTION	Weathering	Strength	POINT LOAD STRENGTH INDEX I _s (50)	DEFECT DETAILS					
										DETECT SPACING (mm)	DESCRIPTION				
											Type, inclination, thickness, planarity, roughness, coating.				
											Specific	General			
100% RETURN			20			SANDSTONE: fine to medium grained, light grey, with dark grey laminae, cross bedded at 0-10°.	DW	H	EL-0.03						
									VL-0.1						
									L -0.3						
									M -1						
									H -3						
									VH-10						
									EH						
								</							



Borehole No.
1
4 / 4

CORED BOREHOLE LOG

Client: LORETO KIRRIBILLI LIMITED
Project: PROPOSED MASTERPLAN AND DEVELOPMENT SSD
Location: 85 CARABELLA STREET, KIRRIBILLI, NSW

Job No.: 30067S **Core Size:** NMLC **R.L. Surface:** 27.4 m
Date: 19/12/16 **Inclination:** VERTICAL **Datum:** AHD
Plant Type: TIGHT SITE DRILL RIG **Bearing:** N/A **Logged/Checked By:** K.S./P.S.

Water Loss/Level	Barrel Lift	RL (m AHD)	Depth (m)	Graphic Log	CORE DESCRIPTION Rock Type, grain characteristics, colour, structure, minor components.	Weathering	Strength	POINT LOAD STRENGTH INDEX $I_p(50)$	DEFECT DETAILS	
									DEFECT SPACING (mm)	DESCRIPTION Type, inclination, thickness, planarity, roughness, coating.
								EL-0.03 VL-0.1 J-0.3 M-1 H-3 VH-10 EH	500 300 100 50 30 10	Specific General
100% RETURN		13			SANDSTONE: fine to medium grained, light grey, with dark grey laminae.	DW	H			(14.70m) XWS, 5°, 2 mm.t
		15								
		12								(15.41m) Be, 5°, P, R
		16								
		11			as above, but no cross bedding.					(16.34m) Be, 0°, P, R
		17								(16.91m) J, 70°, P, R
		10								(17.07m) XWS, 10°, 2 mm.t
										(17.67m) J, 60°, Un, R
										(17.80m) Be, 5°, P, R
		18			END OF BOREHOLE AT 17.83 m					
		9								
		19								
		8								
		20								
		7								