CH2M HILL

SOIL BORE LOG

Bore No. MW17D

Sheet 1 of 1

Project No:	110381	Easting (AMG)	317070.4	Equipment:	Solid Flight Auger
Project:	Macdonaldtown Triangle Offsite	Northing (AMG)	1247764.93	Contractor:	Macquarie Drilling
Site:	Former Gasworks Area	Elevation (mAHD):	21.33	Logged By:	VR
Date:	25-Sep-01	Water Level (mbtc):	2.07	Project Manager:	NR
Weather:	Hot, clear	Final Depth (mbgl):	1.22	Checked By:	

Depth (m)	Water Found	Sample Loc.	Sample Depth	Graphic Log	Soil Description (soil type, plasticity/grain size, colour, secondary/minor components, moisture, consistency)	Observation/Comments (visual contamination, odour, side collapse, etc.)
	Groundwater @ 2.07 m below top monument		0-0.5		Fill: Sandy CLAY, brown, low plasticity, coarse grain, gravel.	NVO
			0.5-1.1		Fill: Silty SAND, clayey, med plasticity, grey.	PID = 0.0 ppm
1.0		MW17D	140150 1.1-1.8		Fill: Silty CLAY, grey, plastic.	
2.0					CLAY, red, plastic, firm.	
3.0						
4.0						
5.0						Water Sample: MW17D041001 DUP01041001 taken: 4/10/01 Slug Test
6.0				Weathered Zone 5.5 - 9 m	CLAY, grey, med plasticity, weathered siltstone.	
7.0						
8.0					Weathered Shale	
9.0					Shale	
10.0						
11.0						
12.0					End of Hole @ 12 m	

Monument: Fill; Bentonite; Sand; Blank; Screen

Notes

mAHD:metres Australian Height Datum mbgl:metres below ground level mbtc:metres below top of casing

CH2M HILL

SOIL BORE LOG

Bore No. MW18D

Sheet 1 of 1

Project No:	110381	Easting (AMG)	317106.55	Equipment:	Solid Flight Auger
Project:	Macdonaldtown Triangle Offsite	Northing (AMG)	1247671.16	Contractor:	Macquarie Drilling
Site:	Former Gasworks Area	Elevation (mAHD):	19.49	Logged By:	VR
Date:	21-Sep-01	Water Level (mbtc):	3.57	Project Manager:	NR
Weather:	Overcast, humid	Final Depth (mbgl):	2.72	Checked By:	

Depth (m)	Water Found	Sample Loc.	Sample Depth	Graphic Log	Soil Description (soil type, plasticity/grain size, colour, secondary/minor components, moisture, consistency)	Observation/Comments (visual contamination, odour, side collapse, etc.)
0	Groundwater @ 3.57 m below top of monument				Fill: Sandy CLAY, brown, low plasticity, soft, loose, organic matter, fine grain.	NVO
1.0		MW18D	140150		CLAY, red, very firm, plastic	DUP02 and DUP03 taken PID = 15 ppm (max)
2.0						
3.0						
4.0						
5.0						Water Sample: MW18D031001 taken 3/10/01
6.0						
7.0					CLAY, grey, plastic, soft.	
8.0						
9.0						
10.0					Bedrock, grey, plastic, soft, moist. Water ingress.	
11.0						
12.0					End of Hole @ 12 m	

Weathered Zone 7 - 10 m

Monument

Fill

Blank

Bentonite

9.8

Sand

Screen

Notes

mAHD:metres Australian Height Datum mbgl:metres below ground level mbtc:metres below top of casing

CH2M HILL

SOIL BORE LOG

Bore No. MW19S

Sheet 1 of 1

Project No:	110381	Easting (AMG)	317095.38	Equipment:	Solid Flight Auger, Bunyip
Project:	Macdonaldtown Triangle Offsite	Northing (AMG)	1247675	Contractor:	Macquarie Drilling
Site:	Residences	Elevation (mAHD):	16.935	Logged By:	NR
Date:	20-Sep-01	Water Level (mbtc):	0.99	Project Manager:	NR
Weather:	Fine, warm	Final Depth (mbgl):	0.99	Checked By:	

Depth (m)	Water Found	Sample Loc.	Sample Depth	Graphic Log	Soil Description (soil type, plasticity/grain size, colour, secondary/minor components, moisture, consistency)	Observation/Comments (visual contamination, odour, side collapse, etc.)
1.0	Groundwater @ 0.99 m below top gatic		0.0-1.3		Fill: Silty SAND, clayey, black brown, low plast, soft, organic content.	NVO PID = 0.0 ppm
2.0		MW19S	120130		Silty CLAY, red brown, med plast, firm.	PID = 0.5 ppm
					CLAY, grey, high plasticity, soft.	
3.0					End of Hole 2.85 m	

Roadbox 0.35 Bent 0.85 Sand Screen

A31BurrenSt taken from 0.0 to 0.1 m approximately 2 m south of MW19S.

Sample: MW19S051001
DUP05051001
taken 5/10/01

4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0

Notes
mAHD:metres Australian Height Datum mbgl:metres below ground level mbtc:metres below top of casing

CH2M HILL

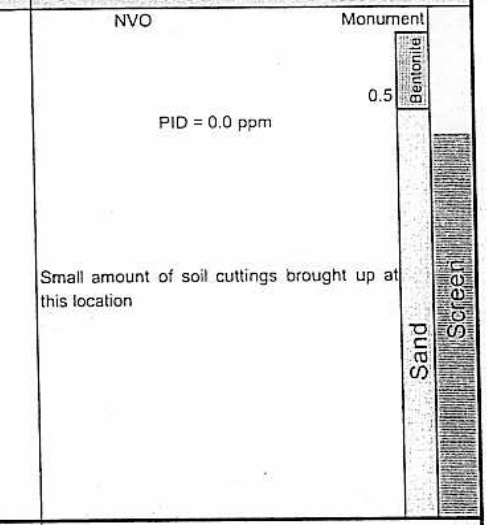
SOIL BORE LOG

Bore No. MW20S

Sheet 1 of 1

Project No:	110381	Easting (AMG)	317102.25	Equipment:	Solid Flight Auger
Project:	Macdonaldtown Triangle Offsite	Northing (AMG)	1247709.65	Contractor:	Macquarie Drilling
Site:	Former Gasworks Area	Elevation (mAHD):	19.66	Logged By:	VR
Date:	24-Sep-01	Water Level (mbtc):	3.52	Project Manager:	NR
Weather:	Fine, hot	Final Depth (mbgl):	2.67	Checked By:	

Depth (m)	Water Found	Sample Loc.	Sample Depth	Graphic Log	Soil Description (soil type, plasticity/grain size, colour, secondary/minor components, moisture, consistency)	Observation/Comments (visual contamination, odour, side collapse, etc.)
1.0	Groundwater @ 3.52 m below top monument	MW20S	0.05-0.3 090100		Fill: Sandy CLAY, brown, plastic, soft, coarse grain, wet.	NVO PID = 0.0 ppm
2.0						Small amount of soil cuttings brought up at this location
3.0					Wet	
4.0					End of Hole 4 m	
5.0						Water Sample: MW20S031001 taken 3/10/01
6.0						
7.0						
8.0						
9.0						
10.0						
11.0						
12.0						



Notes
mAHD:metres Australian Height Datum mbgl:metres below ground level mbtc:metres below top of casing

CLIENT: STATE RAIL

PROJECT: MACDONALDTOWN RISK ASSESSMENT

LOCATION: BURREN STREET, EVELEIGH

JOB N°: EN01669

Easting: 332350.1978 Northing: 6247818.07

Borehole Location: REFER TO FIGURE 1

Surface RL: 20.375m
Datum: AHD

BOREHOLE: MW35D

SHEET 1 of 2

Drill Rig: EXPLORER
Inclination: V
Direction: NA
Borehole Diameter: 110mm

Logged by: AF
Date: 7/12/04
Checked by:
Date:

DRILLING DATA					SAMPLING DATA		MATERIAL DATA							
METHOD	PENETRATION RESISTANCE	WATER	RL	DEPTH (M)	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE	CONSISTENCY DENSITY	WELL DETAILS	STRUCTURE AND ADDITIONAL OBSERVATIONS
ATC	H			0.0					FILL: Blue metal	D			Road box and lockable cap
	L-M			0.5					RESIDUAL SOIL: Silty CLAY, light grey, soft to firm				No odour NC
				1m					RESIDUAL SOIL: Silty CLAY, red, powdery				
				1.5									
				2m									
				2.5									Ø50mm PVC blank screen
				3m									
				3.5									
				4m									
				4.5					RESIDUAL SOIL: Silty CLAY, brown				
				5m									
				5.5					SHALE: extremely weathered, darker brown	M			
				6m									
				6.5									
				7m									
				7.5					SHALE: becoming grey				
				8m									

Report of borehole must be read in conjunction with accompanying notes and abbreviations

SKM
Sinclair Knight Merz Pty Ltd
100 Christie Street, St Leonards NSW 2065
Telephone: 9928 2100 Fax: 9928 2500
Web: www.skmconsulting.com

BOREHOLE REPORT

CLIENT: STATE RAIL

PROJECT: MACDONALDTOWN RISK ASSESSMENT

LOCATION: BURREN STREET, EVELEIGH

JOB N°: EN01669

Easting: 332350.1978 Northing: 6247818.07

Borehole Location: REFER TO FIGURE 1

Surface RL: 20.375m
Datum: AHD

BOREHOLE: MW35D

SHEET 2 of 2

Drill Rig: EXPLORER
Inclination: V
Direction: NA
Borehole Diameter: 110mm

Logged by: AF
Date: 7/12/04
Checked by:
Date:

DRILLING DATA					SAMPLING DATA		MATERIAL DATA						
METHOD	PENETRATION RESISTANCE	WATER	RL	DEPTH (M)	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE	CONSISTENCY DENSITY	WELL DETAILS	STRUCTURE AND ADDITIONAL OBSERVATIONS
ATC		▼		8m 8.5 9m 9.5 10m 10.5 11m 11.5 12m					SHALE: becoming grey	W		Bentonite Ø50mm PVC blank section Sand Ø50mm PVC screen section End cap	
				12.5 13m 13.5 14m 14.5 15m 15.5 16m					END of BOREHOLE at 12.2m				

Report of borehole must be read in conjunction with accompanying notes and abbreviations

SKM
Sinclair Knight Merz Pty Ltd
100 Christie Street, St Leonards NSW 2065
Telephone: 9928 2100 Fax: 9928 2500
Web: www.skmconsulting.com

BOREHOLE REPORT

CLIENT: STATE RAIL

PROJECT: MACDONALDTOWN RISK ASSESSMENT

LOCATION: BURREN STREET, MACDONALDTOWN

JOB N°: EN01669

Easting: 332350.776 Northing: 6247815.223

Borehole Location: SEE PLAN

Surface RL: 20.402m
Datum: AHD

BOREHOLE: MW35S

SHEET 1 of 1

Drill Rig: EDSON 3000
Inclination: V
Direction: N/A
Borehole Diameter: 125mm

Logged by: AK
Date: 15.02.05
Checked by:
Date:

DRILLING DATA					SAMPLING DATA		MATERIAL DATA						
METHOD	PENETRATION RESISTANCE	WATER	RL	DEPTH (M)	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE	CONSISTENCY DENSITY	WELL DETAILS	STRUCTURE AND ADDITIONAL OBSERVATIONS
AUGER TC BIT	M	GWNE		0.0					FILL: Sandy GRAVEL, fine to coarse grained basalt, grey, fine to coarse grained sand	D-M	D	Monument with lock; Bentonite	FILL: compacted
	L/M			0.5					FILL: Gravelly SILT, non plastic, black, fine gravel			Bentonite; Ø50mm PVC blank section	FILL: ASH
				1m									
				1.5					FILL: Silty CLAY, medium plasticity, pale grey	M		Ø50mm PVC screen section	FILL: Possibly reworked material
	M			2m					FILL; Silty CLAY, low to medium plasticity, pale grey and brown, friable, trace rootlets	D			
				2.5									
	H	16.02.05, 08.45		3m					Clayey SHALE, recovered as Silty Sandy GRAVEL, grey, fine to medium angular gravels of SHALE and sub-rounded gravels of ironstone, grey, low plasticity fines			Sand	Weathered bedrock
				3.5									
	H			4m					END of BOREHOLE at 4.0m, limit of investigation			End cap	
				4.5									
				5m									
				5.5									
				6m									
				6.5									
				7m									
				7.5									
				8m									

Report of borehole must be read in conjunction with accompanying notes and abbreviations

SKM
Sinclair Knight Merz Pty Ltd
100 Christie Street, St Leonards NSW 2065
Telephone: 9928 2100 Fax: 9928 2500
Web: www.skmconsulting.com

BOREHOLE REPORT

CLIENT: STATE RAIL

PROJECT: MACDONALDTOWN RISK ASSESSMENT

LOCATION: BURREN STREET, MACDONALDTOWN

JOB N°: EN01669

Easting: 332281.77 Northing: 6247737.325

Borehole Location: SEE PLAN

Surface RL: 20.238m
Datum: AHD

BOREHOLE: MW36S

SHEET 1 of 1

Drill Rig: EDSON 3000
Inclination: V
Direction: N/A
Borehole Diameter: 125mm

Logged by: AK
Date: 15.02.05
Checked by:
Date:

DRILLING DATA					SAMPLING DATA		MATERIAL DATA						
METHOD	PENETRATION RESISTANCE	WATER	RL	DEPTH (M)	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USC SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE	CONSISTENCY DENSITY	WELL DETAILS	STRUCTURE AND ADDITIONAL OBSERVATIONS
AUGER TC BIT	M			0.0					FILL: GRAVEL, coarse grained, grey	D		Monument with lock	BALLAST
	L			0.5					FILL: Silty CLAY, low to medium plasticity, grey, ash fines, with some fine to medium sand, section of small diameter metal pipe ~150mm long	M		Concrete Bentonite Ø50mm PVC blank section	ASH reworked clay ?
	H			1m					FILL: SLAG, cobbles boulders, blocky	D			1.0m-1.2m hard impediment
	M												1.4m-1.5m hard impediment
	H			1.5					FILL: Silty CLAY, medium plasticity, dark grey, black ash inclusions	M		Ø50mm PVC screen section	Reworked soils
	L	▽ 16.02.05, 09.00		2m						W			Possibly perched water
				2.5				CI-CH	Silty CLAY, medium to high plasticity, brown	M			NATURAL
				3m								Sand	
				3.5									
				4m					END of BOREHOLE at 4.0m, limit of investigation			End cap	
				4.5									
				5m									
				5.5									
				6m									
				6.5									
				7m									
				7.5									
				8m									

Report of borehole must be read in conjunction with accompanying notes and abbreviations

SKM
Sinclair Knight Merz Pty Ltd
100 Christie Street, St Leonards NSW 2065
Telephone: 9928 2100 Fax: 9928 2500
Web: www.skmconsulting.com

BOREHOLE REPORT