



Douglas Partners
Geotechnics • Environment • Groundwater

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LMC
Project 37996
28 April 2005

Estate Constructions of Australia Pty Ltd
B2/ 11 Hudson Avenue
CASTLE HILL NSW 2154

By Facsimile: 8850 3622

Attn: Mr Adam Byrnes

Dear Sir

**IN-SITU WASTE CLASSIFICATION
140 MARSDEN STREET, PARRAMATTA**

1. INTRODUCTION

Douglas Partners Pty Ltd (DP) carried out a waste classification at 140 Marsden Street, Parramatta on 8 April 2005. The purpose of this investigation was to classify the insitu material at the above site for offsite disposal. The assessment was conducted at the request of Mr Adam Byrnes of Estate Constructions of Australia Pty Ltd.

It is understood the site is to be redeveloped into a multistorey commercial and residential development with basement car parking. Archaeological relics are also located at the site. Therefore the development of the site is to be conducted in multiple stages, the first being the removal of the upper approximately 0.5m of filling material to expose the archaeological relics. This waste classification assessment was conducted to classify filling material from this first stage of excavation for offsite disposal. It is estimated that approximately 1850 m³ of material (in-ground volume) is to be disposed off the site, at this stage.

The site is currently used as a carpark and is covered by gravel fill with some bitumen and grassed areas. The surrounding site uses are commercial/industrial.

Integrated Practical Solutions



Offices: Sydney, Newcastle, Brisbane, Melbourne, Perth, Wyong, Campbelltown, Townsville, Cairns, Wollongong, Darwin
Principals: K A Boddle, J C Braybrooke, M Y Broise, G Eastwood, J P Harvey, S R Jones, J Lean, A N Loc, R W Lumsdale, F MacGregor, P McDonald, G W McIntosh, J M Nash, M J Thom, R Tong, T J Wignat, A J Wilson, G R Wilson, G S Young
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2. SCOPE OF WORKS

The scope of works for the insitu waste classification of the material comprised:-

- Drilling 8 bores with a bobcat mounted auger drilling rig in selected areas across the carpark to a maximum depth of 1.2m. Nineteen samples were collected (including two replicates for QA/QC purposes) from the 8 bores.
- Sixteen samples were selected and dispatched to a NATA accredited laboratory for analysis of the following common contaminants:-
 - Heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc);
 - Total Recoverable Hydrocarbons (TRH) and Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX);
 - Polynuclear Aromatic Hydrocarbons (PAH);
 - Polychlorinated Biphenyls (PCBs);
 - Organochlorine Pesticides (OCP);
 - Asbestos; and
 - Phenols.
- Based on the total concentration of the contaminants, laboratory analysis was performed on four selected samples for TCLP (leachability) testing for heavy metals (Cr, Pb, Ni and Hg);
- Based on initial results, the client requested further testing to delineate the depth of filling material and presence of asbestos across the site. Therefore an additional 27 test pits were excavated to a maximum depth of 0.6m. One sample of filling material from each pit was collected for selected laboratory analysis of the common contaminants outlined in dot point 2 above. Subsequent TCLP (leachability) testing was also conducted on selected samples.
- A letter report to provide a classification of the material for off-site disposal.

3. RESULTS

Filling material was identified in surficial materials to a maximum encountered depth of 1.2m across the entire site. Filling materials typically comprised dark brown gravelly sandy filling with terracotta tile, bitumen roadbase, bricks, charcoal, glass and some fibrous sheeting fragments. Filling in test locations 28 and 33, comprised a light brown silty sandy clay filling with concrete and some fibrous sheeting fragments.

Natural materials underlying the filling material on the site were observed to be light brown or grey or red, light brown fine grained silty sandy clay or silty clays with ironstone gravel. Natural material was observed in test bores 1, 2, 6, 7 and 8 and in test pits 24, 27, 32 and 35, as shallow as 0.2m (see Drawing 1, Appendix A for test bore/ pit locations and Appendix B for test bore logs).

The results of the laboratory analysis are presented in the following tables:-

- Table 1 - Results of Laboratory Analysis for Heavy Metals;
- Table 2 - Results of Laboratory Analysis for TRH/BTEX;
- Table 3 - Results of Laboratory Analysis for PAH; and
- Table 4 -- Results of Laboratory Analysis for Asbestos.

Laboratory results for phenols, organo-chlorine pesticides (OCP) and polychlorinated biphenyls (PCB) were all below detection limits.

The full laboratory results are attached.


Table 1 - Results of Laboratory Analysis for Heavy Metals

Sample ID	As		Cd		Cr		Cu		Pb		Ni		Zn		Hg	
	SCC* (mg/kg)	TCLP** (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)
Filling Material																
1/0.05-0.2	<PQL	-	1	-	12	<PQL	51	0.19	500	0.02	30	0.02	600	0.26	-	-
3/0.3-0.4	4	-	<PQL	-	8	-	15	-	78	-	4	-	63	0.13	-	-
4/0.1-0.3	<PQL	-	<PQL	-	9	-	30	-	340	-	7	-	200	0.46	<PQL	-
4/0.9-1.2	<PQL	-	<PQL	-	7	-	17	-	380	-	3	-	78	0.32	-	-
5/0.1-0.3	<PQL	-	<PQL	-	23	<PQL	46	0.08	100	0.1	150	0.1	200	0.1	-	-
5/0.8-1.0	3	-	<PQL	-	10	-	35	-	410	-	9	-	180	0.76	-	-
6/0.05-0.3	3	-	<PQL	-	14	<PQL	46	0.13	960	0.004	11	0.004	370	0.65	<PQL	-
7/0.05-0.4	<PQL	-	<PQL	-	13	-	20	-	170	-	8	-	98	0.08	-	-
8/0.05-0.3	<PQL	-	<PQL	-	7	-	21	-	130	-	2	-	65	0.22	-	-
9/0-0.3	<PQL	-	<PQL	-	7	-	13	-	670	-	13	-	310	0.48	-	-
10/0-0.3	4	-	0.6	-	7	-	19	-	640	-	4	-	280	0.9	-	-
11/0-0.3	<PQL	-	<PQL	-	6	-	14	0.91	1128	-	3	-	180	0.56	-	-
12/0-0.3	4	-	1	-	13	-	54	-	370	-	32	-	380	0.2	-	-
13/0-0.3	<PQL	-	<PQL	-	13	-	29	-	250	-	16	-	190	0.09	-	-
14/0-0.2	5	-	0.7	-	16	-	53	-	950	-	11	-	350	0.42	-	-
15/0-0.2	<PQL	-	1	-	7	-	27	-	290	-	5	-	99	0.23	-	-
16/0-0.1	<PQL	-	<PQL	-	11	<PQL	29	-	270	-	9	-	170	0.3	-	-
17/0-0.2	<PQL	-	<PQL	-	9	-	28	-	710	-	6	-	350	0.98	-	-
18/0-0.4	4	-	0.6	-	11	-	25	-	980	-	9	-	390	0.72	-	-
19/0-0.4	5	-	2	-	26	<PQL	86	0.13	1084	0.006	16	0.006	730	0.66	-	-
20/0-0.3	4	-	0.6	-	20	-	55	-	470	-	17	-	430	0.45	-	-
21/0-0.3	<PQL	-	<PQL	-	7	-	25	-	210	-	4	-	130	0.6	-	-
22/0-0.1	<PQL	-	<PQL	-	19	-	25	-	230	-	27	0.009	120	<PQL	-	-
23/0-0.1	<PQL	-	<PQL	-	11	-	29	-	220	-	18	-	180	0.33	-	-
24/0-0.3	6	-	<PQL	-	21	-	6	-	13	-	6	-	12	<PQL	-	-
25/0-0.2	<PQL	-	<PQL	-	9	-	26	-	540	-	10	-	260	0.41	-	-
26/0-0.5	29	0.086	<PQL	-	13	<PQL	40	-	430	-	7	-	320	0.48	-	-
27/0-0.1	11	<PQL	0.9	-	25	<PQL	140	0.16	520	-	13	-	590	0.5	-	-
28/0-0.3	3	-	0.5	-	7	-	16	3.1	1592	-	4	-	880	0.35	-	-
29/0-0.1	<PQL	-	<PQL	-	25	<PQL	37	-	78	0.02	62	0.02	140	<PQL	-	-

Waste Classification
 140 Marsden Street, Parramatta
 Estate Constructors of Australia Pty Ltd

Project 37996
 April 2005



Sample ID	As		Cd		Cr		Cu		Pb		Ni		Zn		Hg	
	SCC* (mg/kg)	TCLP** (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)	SCC (mg/kg)	TCLP (mg/L)
Filling Material																
1/0.05-0.2	<PQL	-	1	-	12	<PQL	51	-	500	0.19	33	0.02	600	-	0.26	-
30/0.0-2	4	-	0.6	-	25	-	42	-	220	-	71	-	240	-	0.19	-
30/0.5-0.6	4	-	<PQL	-	11	-	58	-	1223	0.19	13	-	230	-	0.84	<PQL
31/0.0-5	6	-	<PQL	-	11	-	29	-	410	-	9	-	180	-	0.83	-
32/0.0-4	4	-	<PQL	-	15	-	33	-	390	-	24	-	210	-	0.49	-
33/0.0-2	4	-	<PQL	-	11	-	19	-	380	-	11	-	290	-	2.5	<PQL
34/0.0-4	4	-	1	-	11	-	69	-	630	-	6	-	650	-	130	<PQL
35/0.0-3	<PQL	-	<PQL	-	8	-	14	-	580	-	5	-	210	-	16	<PQL
Natural Material																
1/0.3-0.8	<PQL	-	<PQL	-	3	-	2	-	12	-	2	-	10	-	<PQL	-
2/0.2-0.4	<PQL	-	<PQL	-	4	-	<PQL	-	2	-	1	-	1	-	<PQL	-
2/0.4-1.0	<PQL	-	<PQL	-	5	-	2	-	6	-	1	-	4	-	<PQL	-
6/0.3-0.4	<PQL	-	<PQL	-	8	-	5	-	27	-	0.9	-	74	-	0.14	-
7/0.9-1.0	<PQL	-	<PQL	-	8	-	4	-	13	-	1	-	13	-	<PQL	-
8/0.8-1.0	<PQL	-	<PQL	-	8	-	4	-	12	-	2	-	8	-	<PQL	-
FB2/080405	<PQL	-	<PQL	-	8	-	4	-	10	-	2	-	6	-	<PQL	-
PQL	3	-	0.5	-	0.5	-	0.005	-	2	-	0.2	-	0.5	-	0.05	0.0005
Waste Classification Threshold Criteria (without TCLP**)																
Inert Waste (CT1)	10	-	2	-	10	-	-	-	10	-	4	-	-	-	0.4	-
Solid Waste (CT2)	100	-	20	-	100	-	-	-	100	-	40	-	-	-	4	-
Industrial Waste (CT3)	400	-	80	-	400	-	-	-	400	-	160	-	-	-	16	-
Waste Classification Threshold Criteria (with TCLP*)																
Inert Waste	500	0.5	100	0.1	1900	0.5	ND	1500	0.5	1050	0.2	ND	50	0.02		
Solid Waste	500	5.0	100	1.0	1900	5	ND	1500	5	1050	2	ND	50	0.2		
Industrial Waste	2000	20	400	4	7600	20	ND	6000	20	4200	8	ND	200	0.8		

FB2/080405 Field replicate of 8/0.8-1.0

* Specific Contaminant Concentration (Total Concentration)

** Toxicity Characteristics Leaching Procedure

1. NSW EPA (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Table A3: Contaminant Threshold Values for Waste Classification of Non-Liquid wastes without doing the Leaching Test
2. NSW EPA (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Table A4: Leachable Concentration (TCLP) and Total Concentration (SCC) Values for Non-Liquid Waste Classification

Table 2 - Results of Laboratory Analysis for TRH/BTEX

Sample ID	TRH		Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)
	C6-C9 (mg/kg)	C10-C40 (mg/kg)				
1/0.05-0.2	<PQL	360	<PQL	<PQL	<PQL	<PQL
3/ 0.3-0.4	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
4/0.1- 0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
4/ 0.9- 1.2	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
5/ 0.1- 0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
5/ 0.8- 1.0	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
6/0.05- 0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
7/0.05- 0.4	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
9/0-0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
16/0-0.1	<PQL	141	<PQL	<PQL	<PQL	<PQL
17/0-0.2	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
18/0-0.4	<PQL	230	<PQL	<PQL	<PQL	<PQL
21/0-0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
24/0-0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
29/0-0.1	<PQL	126	<PQL	<PQL	<PQL	<PQL
31/0-0.5	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
35/0-0.3	<PQL	<PQL	<PQL	<PQL	<PQL	<PQL
PQL	20	120	0.5	0.5	0.5	1.5
Waste Classification Threshold Criteria (without TCLP ^{**}) ¹						
Inert Waste (CT1)	650	5000	1	28.8	60	100
Solid Waste (CT2)	650	10000	10	288	600	1000
Industrial Waste (CT3)	2600	40000	40	1152	2400	4000

^{**} Toxicity Characteristics Leaching Procedure

1. NSW EPA (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Table A3: Contaminant Threshold Values for Waste Classification of Non-Liquid wastes without doing the Leaching Test

Table 3 - Results of Laboratory Analysis for PAH

Sample ID	Total PAH		Benzo(a)pyrene	
	SCC* (mg/kg)	TCLP** (µg/L)	SCC (mg/kg)	TCLP** (µg/L)
1/0.05-0.2	5.9	-	0.5	-
3/0.3-0.4	0	-	<PQL	-
4/0.1-0.3	15	-	1.3	-
4/0.9-1.2	0.7	-	0.1	-
5/0.1-0.3	13	-	1.0	-
5/0.8-1.0	1.7	-	0.1	-
6/0.05-0.3	14	-	0.8	-
7/0.05-0.4	4.6	-	0.4	-
9/0-0.3	6.1	-	0.4	-
16/0-0.1	24	0	1.8	<PQL
17/0-0.2	10	-	0.8	-
19/0-0.4	65	0	5.1	<PQL
21/0-0.3	7.0	-	0.5	-
24/0-0.3	0	-	<PQL	-
29/0-0.1	27	0	1.7	<PQL
31/0-0.5	12	-	0.9	-
35/0-0.3	11	-	0.7	-
PQL	0	0	0.05	0.5
Waste Classification Threshold Criteria (without TCLP**) ¹				
Inert Waste (CT1)	N/A	-	0.08	-
Solid Waste (CT2)	N/A	-	0.8	-
Industrial Waste (CT3)	N/A	-	3.2	-
Waste Classification Threshold Criteria (with TCLP) ²				
Inert Waste	200	-	1	0.004
Solid Waste	200	-	10	0.04
Industrial Waste	800	-	23	0.16

* Specific Contaminant Concentration (Total Concentration)

** Toxicity Characteristics Leaching Procedure

N/A Not applicable

1. NSW EPA (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Table A3: Contaminant Threshold Values for Waste Classification of Non-Liquid wastes without doing the Leaching Test
2. NSW EPA (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes. Table A4: Leachable Concentration (TCLP) and Total Concentration (SCC) Values for Non-Liquid Waste Classification

Table 4 - Results of Laboratory Analysis for Asbestos

Sample ID	Asbestos in Soil
1/0.05-0.2	Amosite and chrysotile asbestos detected
3/ 0.3-0.4	No asbestos detected
4/0.1- 0.3	No asbestos detected
5/ 0.1- 0.3	Amosite and chrysotile asbestos detected
6/0.05- 0.3	No asbestos detected
8/ 0-0.5- 0.3	No asbestos detected
9/0-0.3	No asbestos detected
10/0-0.3	No asbestos detected
11/0-0.3	No asbestos detected
12/0-0.3	No asbestos detected
13/0-0.3	No asbestos detected
14/0-0.2	No asbestos detected
15/0-0.2	No asbestos detected
16/0-0.1	No asbestos detected
17/0-0.2	No asbestos detected
18/0-0.4	No asbestos detected
19/0-0.4	No asbestos detected
20/0-0.3	Chrysotile asbestos detected
21/0-0.3	No asbestos detected
22/0-0.1	No asbestos detected
23/0-0.1	No asbestos detected
24/0-0.3	No asbestos detected
25/0-0.2	No asbestos detected
26/0-0.5	No asbestos detected
27/0-0.1	No asbestos detected
28/0-0.3	Chrysotile asbestos detected
29/0-0.1	No asbestos detected
30/0-0.2	Chrysotile asbestos detected
30/0.5- 0.6	No asbestos detected
31/0-0.5	No asbestos detected
32/0-0.4	No asbestos detected
33/0-0.2	No asbestos detected
34/0-0.4	No asbestos detected
35/0-0.3	No asbestos detected

4. DISCUSSION AND CONCLUSION

Filling

For purposes of the waste classification, results were compared against the NSW EPA (1999) Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non Liquid Wastes*. The analytical results were initially assessed against Table A3: Contaminant Threshold Values for Waste Classification of Non-Liquid wastes without performing the Leaching Test (TCLP).

Levels of chemical contaminants were generally low in most samples, however some exceedances of the screening criteria (without TCLP) were noted for chromium, lead, mercury, nickel and benzo(a)pyrene.

In particular the mercury level recorded in sample 34/0-0.4 exceeded the threshold total concentration value for 'Solid Waste'. This sample was located in the 'north-eastern portion' of the site. Mercury results for test bores 33 and 35, also located in the 'north-eastern portion', were also found to contain elevated levels of mercury. It is therefore considered that the filling in the 'north-eastern portion' of the site should be classified separately from the remaining portion of the site.

'North-eastern Portion' of the site:

In view of the elevated mercury concentration levels detected, the filling material in the 'north-eastern portion' of the site is, therefore, classified as '**Industrial Waste**', due to chemical contamination and requires disposal to an appropriately licensed NSW EPA landfill facility licensed to accept 'Industrial Waste' with respect to chemical contaminants in accordance with the NSW EPA (1999) Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non Liquid*. The 'north-eastern portion' of the site is bounded by test pit locations 32, 28 and 27 and the north and east site boundaries.

Remainder of the site:

For the remainder of the site, all sample results were generally below the screening criteria (without TCLP), except lead concentration in sample 28/0-0.3. Further TCLP (leachability) testing was subsequently conducted on the "worst case" samples. Results exceeded the leachable concentration (SCC2) criteria for 'Solid Waste' for lead in sample 28/0-0.3. Statistical analysis was conducted on all filling samples over the remainder of the site to calculate the 95% upper confidence limit (UCL) for the average concentration of lead. The US EPA (2004) ProUCL Version 3.0 statistical program was used for calculations and recommended using the approximate gamma UCL result as it best suited the distribution of data. The average concentration was calculated as 639.3mg/kg which is below the 'Solid Waste' (SCC2) concentration of 1500mg/kg. The 95% UCL for the average TCLP concentration for lead in filling material in the remainder of the site was calculated as 4.27 mg/L (using 99% Chebyshev) and hence the material is classified as 'Solid Waste' with respect to chemical contaminants other than asbestos.

However, fragments of fibrous cement sheeting were observed during site works and positively identified as amosite and chrysotile asbestos in filling material at 1/0.05- 0.2, 5/0.1- 0.3, 20/0-0.3, 28/0-0.3, 30/0-0.2. Based on these results and given the similar nature of filling material observed across the site (except in the 'north-eastern portion') which comprised silty sand with building rubble, the filling material across the remainder of the site is considered to soil contaminated by asbestos. As all material has to be accorded the highest waste

classification, the filling material over the remainder of the site is classified as '**Asbestos Contaminated Waste**' which is suitable for disposal at an appropriately licensed NSW EPA 'Solid Waste' landfill facility in accordance with the NSW EPA (1999) Environmental Guidelines: *Assessment, Classification and Management of Liquid and Non Liquid*.

Material of Natural Origin

Natural material was observed to be light brown or grey or red, light brown fine grained silty sandy clay or silty clays with ironstone gravel. No odours, discolouration or foreign objects such as brick, tile or wood were observed in this material.

On the basis of visual inspection and in accordance with the NSW EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Waste* (1999), the silty clay material is classifiable as Virgin Excavated Natural Material (VENM), provided it is not cross-contaminated with anthropogenic inclusions and shows no sign of aesthetic concern.

Important Note:

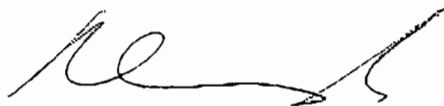
DP's assessment is necessarily based on the result of limited site investigations and sample testing. Neither DP, nor any other reputable consultant, can provide unqualified warranties nor does DP assume any liability for site conditions not observed, or accessible during the time of the investigations.

Despite all reasonable care and diligence, the materials encountered and concentrations of contaminants measured may not be representative of conditions between the locations sampled and investigated. In addition, site characteristics may change at any time in response to variations in natural conditions, chemical reactions and other events, e.g. groundwater movement and or spillages of contaminating substances. These changes may occur subsequent to DP's investigations and assessment.

This report and associated documentation and the information herein have been prepared solely for the use of Estate Constructions of Australia Pty Ltd and interested parties at the time and is valid (for the purposes of transport of material) for a period of one month only from the date of issue. Any other reliance assumed by third parties on this report shall be at such parties' own risk. Any ensuing liability resulting from use of the report by third parties cannot be transferred to DP.

Please note that Part 5.6, Section 143 of the Protection of the Environment Operations (POEO) Act 1997 states that is an offence for waste to be transported to a place that cannot lawfully be used as a facility to accept that waste. It is the duty of the owner and transporter of the waste to ensure that the waste is disposed of appropriately. DP accept no liability for the unlawful disposal of waste materials from any site. Before disposal of the material to a licensed landfill is undertaken, the waste producer will require to obtain prior consent from the landfill.

Yours faithfully
DOUGLAS PARTNERS PTY LTD



 **Lisa Carson**
Environmental Scientist

Reviewed by:

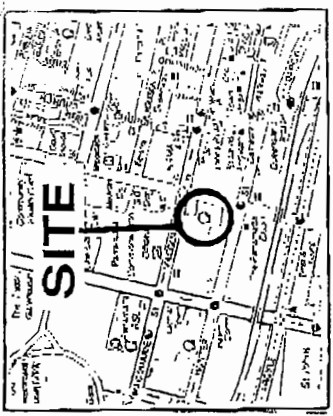
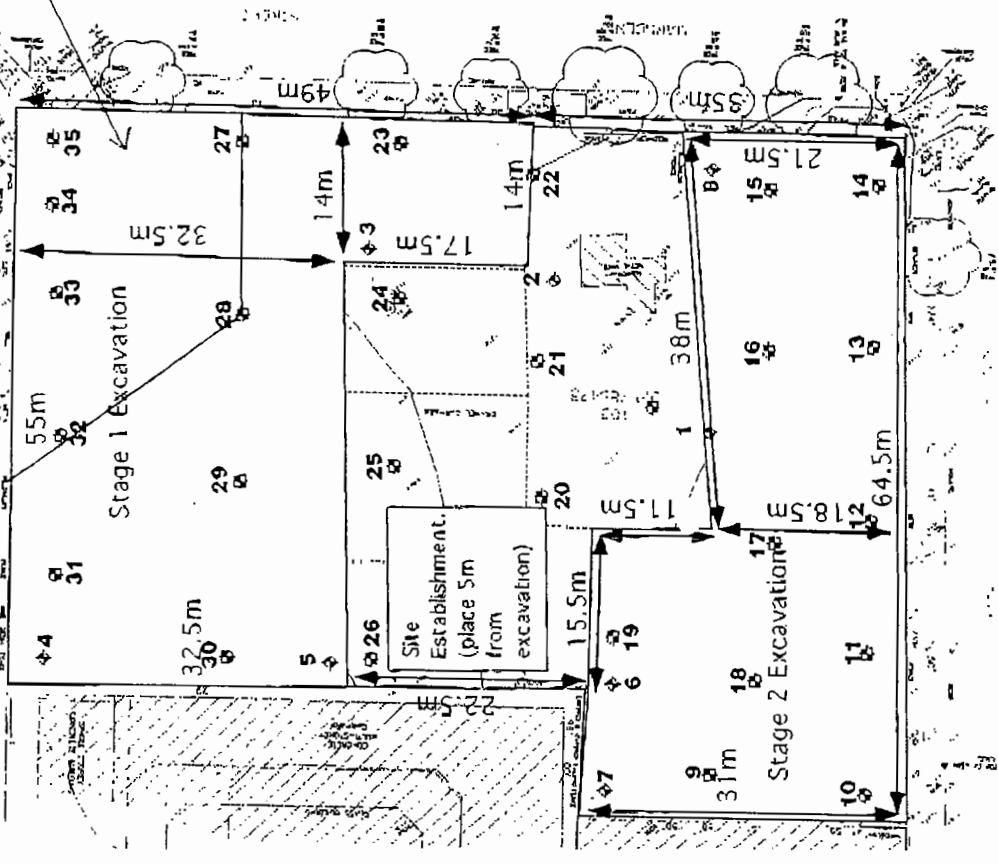


Ronnie Tong
Manager, Environmental Services

Attached - Drawing 1



'North-eastern portion'



LEGEND
◆ TEST BORE LOCATION
□ TEST PIT LOCATION

DP **Douglas Partners**
Geotechnical Engineering, Groundwater
Sydney, Newcastle, Brisbane,
Melbourne, Perth, Sydney,
Canberra, Adelaide, Hobart,
Darwin, Alice Springs

TITLE: Location of Test Bores Waste Classification 140 Mardden Street PARRAMATTA	
CLIENT: Esale Constructions of Australia	PROJECT NO: 37995
DRAWN BY: PSCH SCALE: As shown	OFFICE: SYDNEY
APPROVED BY:	DATE: 8.1.2005
	DRAWING NO: 1