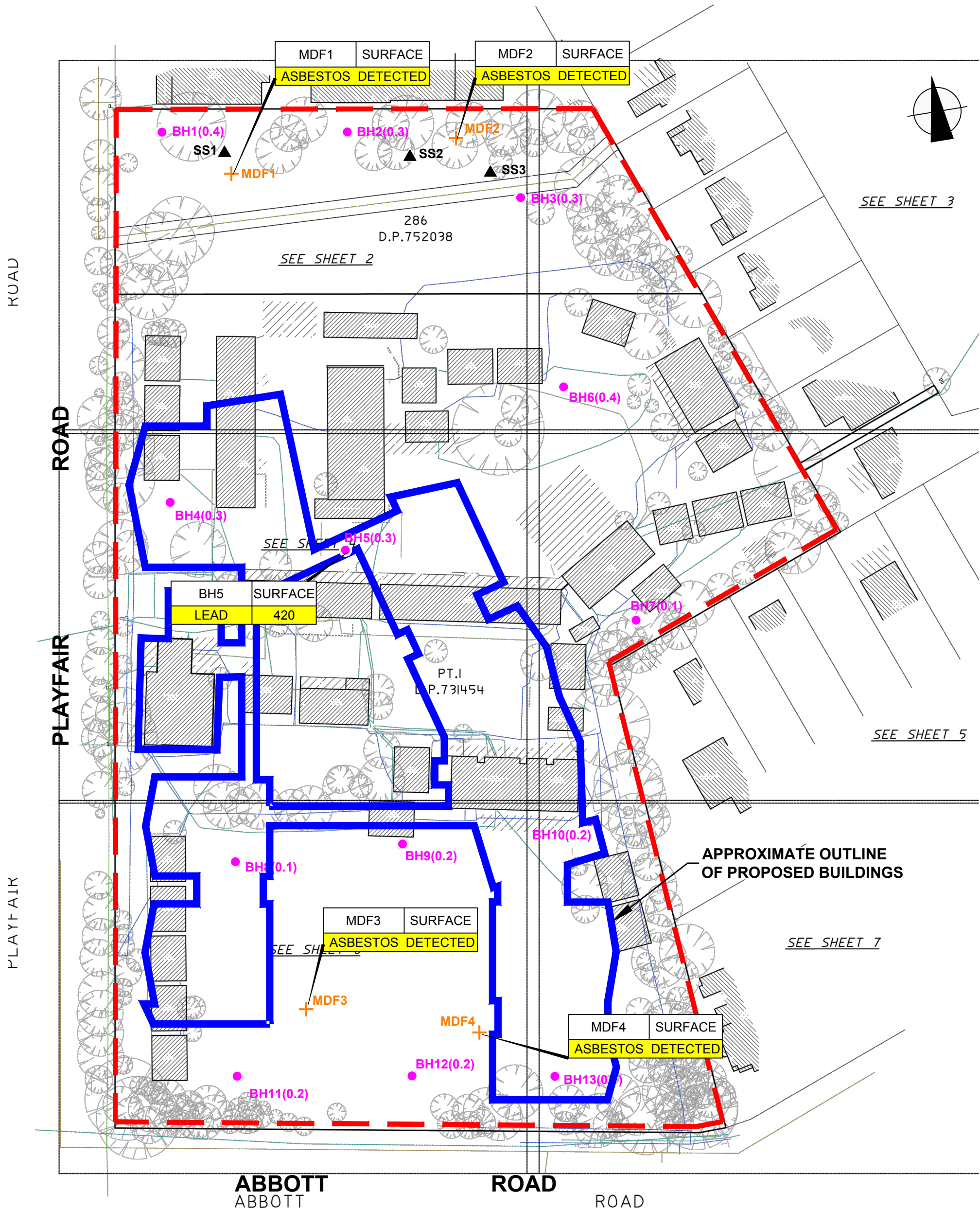


PLOT DATE: 15/05/2018 9:40:24 AM DWG FILE: S:\5 EIS\5C EIS JOBS\2000\SE2816KD NORTH CURL CURILCAD\E2816KD.DWG

© EIS



LEGEND

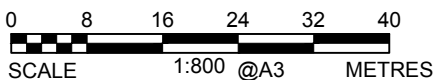
- APPROXIMATE SITE BOUNDARY
- BH (FILL DEPTH)
- + SURFACE SAMPLE FIBRE CEMENT FRAGMENT (FCF)
- ▲ SURFACE SAMPLE (SS) SOIL

SAMPLE ID	DEPTH (metres)
CHEMICAL	CONCENTRATION (mg/kg)

SOIL CONTAMINATION ABOVE SAC FOR HUMAN HEALTH RISK

APPROXIMATE SITE BOUNDARY

LOT	DP	AREA	OWNER
DP 731454	DP 731454	231.32m ²	MINISTER FOR EDUCATION AND YOUTH AFFAIRS
DP 731454	DP 731454	185.57m ²	THE STATE OF NEW SOUTH WALES



This plan should be read in conjunction with the EIS report.

SCHEDULE OF CERTIFICATES OF TITLE/OWNERSHIP

SECOND SCHEDULE
D725002 LAND EXCLUDES MINERALS
I, THE LAND IS A RESERVE WITHIN THE MEANING OF PART 5 OF THE CROWN LANDS ACT 1989 AND DEALINGS IN THE LAND UNDER THAT ACT, WHICH MAY REQUIRE CONSENT OF THE MINISTER.

Title: SITE CONTAMINATION PLAN	
Location: CURL CURL NORTH PUBLIC SCHOOL CURL CURL, NSW	
Report No: E29816KD	Figure No: 3
ENVIRONMENTAL INVESTIGATION SERVICES	



LABORATORY SUMMARY TABLES

TABLE A SOIL LABORATORY RESULTS COMPARED TO HILs All data in mg/kg unless stated otherwise																						
			HEAVY METALS								PAHs		ORGANOCHLORINE PESTICIDES (OCPs)							OP PESTICIDES (OPPs)	TOTAL PCBs	ASBESTOS FIBRES
			Arsenic	Cadmium	Chromium VI ²	Copper	Lead	Mercury	Nickel	Zinc	Total PAHs	B(a)P TEQ ³	HCB	Endosulfan	Methoxychlor	Aldrin & Dieldrin	Chlordane	DDT, DDD & DDE	Heptachlor	Chlorpyrifos		
PQL - Envirolab Services			4	0.4	1	1	1	0.1	1	1	-	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100
Site Assessment Criteria (SAC) ¹			100	20	100	6000	300	40	400	7400	300	3	10	270	300	6	50	240	6	160	1	Detected/Not Detected
Sample Reference	Sample Depth	Sample Description																				
BH1	0.1-0.2	Fill: silty sand	LPQL	LPQL	6	9	30	LPQL	1	36	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH2	0.1-0.2	Fill: silty sand	LPQL	LPQL	3	3	18	LPQL	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH2	0.5-0.95	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA
BH3	0.1-0.2	Fill: silty sand	LPQL	LPQL	2	5	130	LPQL	1	60	0.48	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH4	0.1-0.2	Fill: silty sand	LPQL	LPQL	4	28	230	0.4	3	120	0.26	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH5	0.2-0.3	Fill: silty sand	30	LPQL	2	14	420	0.3	2	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH6	0.1-0.2	Fill: silty sand	LPQL	LPQL	3	12	110	0.1	2	110	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH6	0.5-0.95	Sand	LPQL	LPQL	1	7	3	LPQL	LPQL	26	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA
DUPA	-		29	LPQL	2	13	320	0.3	1	52	0.06	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA
BH7	0.0-0.1	Fill: silty sand	LPQL	LPQL	3	8	34	0.2	1	90	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH7	0.5-0.95	Silty sand	LPQL	LPQL	6	3	5	LPQL	2	63	LPQL	LPQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH8	0.0-0.1	Fill: silty sand	LPQL	LPQL	LPQL	1	15	LPQL	LPQL	6	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH8	0.5-0.95	Silty sand	LPQL	LPQL	21	LPQL	6	LPQL	4	2	LPQL	LPQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH9	0.0-0.1	Fill: silty sand	LPQL	LPQL	1	5	15	LPQL	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH10	0.0-0.1	Fill: silty sand	LPQL	LPQL	5	6	12	LPQL	3	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH10	1.7-1.95	Clayey sand	LPQL	LPQL	8	LPQL	5	LPQL	1	2	LPQL	LPQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH11	0.0-0.1	Fill: silty sand	LPQL	LPQL	5	6	15	LPQL	3	19	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH11	0.5-0.95	Silty sand	LPQL	LPQL	2	LPQL	3	LPQL	LPQL	LPQL	LPQL	LPQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BH12	0.0-0.1	Fill: silty sand	LPQL	LPQL	2	4	16	LPQL	1	19	0.74	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH13	0.0-0.1	Fill: silty sand	LPQL	LPQL	4	4	13	LPQL	1	49	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected
BH13	0.5-0.95	Silty sand	LPQL	LPQL	LPQL	LPQL	2	LPQL	LPQL	LPQL	LPQL	LPQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS1	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected
SS2	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected
SS3	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected
MDF1	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected
MDF2	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected
MDF3	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected
MDF4	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected
Total Number of Samples			21	21	21	21	21	21	21	21	21	21	16	16	16	16	16	16	16	16	16	20
Maximum Value			30	LPQL	21	28	420	0.4	4	120	0.74	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NC
Statistical Analysis on Fill Samples																						
Number of Fill Samples ⁴			NC	NC	NC	NC	13	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Mean Value ⁴			NC	NC	NC	NC	81	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Standard Deviation ⁴			NC	NC	NC	NC	121.0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
% UCL ⁴			NC	NC	NC	NC	95	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
UCL Value ⁴			NC	NC	NC	NC	227.7	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Explanation:																						
1 - Site Assessment Criteria (SAC): NEPM 2013, HIL-A: 'Residential with garden/accessible soils; children's day care centers; preschools; and primary schools'																						
2 - The results are for Total Chromium which includes Chromium III and VI. For initial screening purposes, we have assumed that the samples contain only Chromium VI unless demonstrated otherwise by additional analysis.																						
3 - B(a)P TEQ - Benzo(a)pyrene Toxicity Equivalence Quotient has been calculated based on 8 carcinogenic PAHs and their Toxic Equivalence Factors (TEFs) outlined in NEPM 2013																						
4 - Statistical calculation undertaken using ProUCL version 5.0 (USEPA). Statistical calculation has only been undertaken using data from fill samples																						
Concentration above the SAC			VALUE																			
Abbreviations:																						
PAHs: Polycyclic Aromatic Hydrocarbons			UCL: Upper Level Confidence Limit on Mean Value																			
B(a)P: Benzo(a)pyrene			HILs: Health Investigation Levels																			
PQL: Practical Quantitation Limit			NA: Not Analysed																			
LPQL: Less than PQL			NC: Not Calculated																			
OPP: Organophosphorus Pesticides			NSL: No Set Limit																			
OCP: Organochlorine Pesticides			SAC: Site Assessment Criteria																			
PCBs: Polychlorinated Biphenyls			NEPM: National Environmental Protection Measure																			

TABLE B SOIL LABORATORY RESULTS COMPARED TO HSLs All data in mg/kg unless stated otherwise												
					C ₆ -C ₁₀ (F1)	>C ₁₀ -C ₁₆ (F2)	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene	PID ²
PQL - Envirolab Services					25	50	0.2	0.5	1	3	1	
HSL Land Use Category ¹					RESIDENTIAL WITH ACCESSIBLE SOIL							
Sample Reference	Sample Depth	Sample Description	Depth Category	Soil Category								
BH1	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH2	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH2	0.5-0.95	Sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH3	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH4	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH5	0.2-0.3	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH6	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	4.5
BH6	0.5-0.95	Sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
DUPA	-		0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH7	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH7	0.5-0.95	Silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH8	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH8	0.5-0.95	Silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH9	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH10	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH10	1.7-1.95	Clayey sand	1m to <2m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	1.1
BH11	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH11	0.5-0.95	Silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH12	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH13	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
BH13	0.5-0.95	Silty sand	0m to < 1m	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0
Total Number of Samples					21	21	21	21	21	21	21	21
Maximum Value					LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	4.5
Explanation: 1 - Site Assessment Criteria (SAC): NEPM 2013 2 - Field PID values obtained during the investigation Concentration above the SAC VALUE The guideline corresponding to the elevated value is highlighted in grey in the Site Assessment Criteria Table below Abbreviations: UCL: Upper Level Confidence Limit on Mean Value NC: Not Calculated PQL: Practical Quantitation Limit HSLs: Health Screening Levels NL: Not Limiting LPQL: Less than PQL NA: Not Analysed SAC: Site Assessment Criteria NEPM: National Environmental Protection Measure												

SITE ASSESSMENT CRITERIA

					C ₆ -C ₁₀ (F1)	>C ₁₀ -C ₁₆ (F2)	Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
PQL - Envirolab Services					25	50	0.2	0.5	1	3	1
HSL Land Use Category ¹					RESIDENTIAL WITH ACCESSIBLE SOIL						
Sample Reference	Sample Depth	Sample Description	Depth Category	Soil Category							
BH1	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH2	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH2	0.5-0.95	Sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH3	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH4	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH5	0.2-0.3	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH6	0.1-0.2	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH6	0.5-0.95	Sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
DUPA	-		0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH7	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH7	0.5-0.95	Silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH8	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH8	0.5-0.95	Silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH9	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH10	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH10	1.7-1.95	Clayey sand	1m to <2m	Sand	70	240	0.5	220	NL	60	NL
BH11	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH11	0.5-0.95	Silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH12	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH13	0.0-0.1	Fill: silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3
BH13	0.5-0.95	Silty sand	0m to < 1m	Sand	45	110	0.5	160	55	40	3

TABLE C SOIL LABORATORY RESULTS COMPARED TO WASTE CLASSIFICATION GUIDELINES (2014) All data in mg/kg unless stated otherwise																											
			HEAVY METALS							PAHs		OC/OP PESTICIDES				Total PCBs	TRH					BTEX COMPOUNDS				ASBESTOS FIBRES	
			Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Total PAHs	B(a)P	Total Endosulfans	Chloropyrifos	Total Moderately Harmful ²		Total Scheduled ³	C ₆ -C ₉	C ₁₀ -C ₁₄	C ₁₅ -C ₂₈	C ₂₉ -C ₃₆	Total C ₁₀ -C ₃₆	Benzene	Toluene	Ethyl benzene		Total Xylenes
PQL - Envirolab Services			4	0.4	1	1	1	0.1	1	1	-	0.05	0.1	0.1	0.1	0.1	0.1	25	50	100	100	250	0.2	0.5	1	3	100
General Solid Waste CT1 ¹			100	20	100	NSL	100	4	40	NSL	200	0.8	60	4	250	<50	<50	650	NSL		10,000	10	288	600	1,000	-	
General Solid Waste SCC1 ¹			500	100	1900	NSL	1500	50	1050	NSL	200	10	108	7.5	250	<50	<50	650	NSL		10,000	18	518	1,080	1,800	-	
Restricted Solid Waste CT2 ¹			400	80	400	NSL	400	16	160	NSL	800	3.2	240	16	1000	<50	<50	2600	NSL		40,000	40	1,152	2,400	4,000	-	
Restricted Solid Waste SCC2 ¹			2000	400	7600	NSL	6000	200	4200	NSL	800	23	432	30	1000	<50	<50	2600	NSL		40,000	72	2,073	4,320	7,200	-	
Sample Reference	Sample Depth	Sample Description																									
BH1	0.1-0.2	Fill: silty sand	LPQL	LPQL	6	9	30	LPQL	1	36	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	160	160	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH2	0.1-0.2	Fill: silty sand	LPQL	LPQL	3	3	18	LPQL	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH2	0.5-0.95	Sand	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH3	0.1-0.2	Fill: silty sand	LPQL	LPQL	2	5	130	LPQL	1	60	0.48	0.08	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	110	110	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH4	0.1-0.2	Fill: silty sand	LPQL	LPQL	4	28	230	0.4	3	120	0.26	0.06	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH5	0.2-0.3	Fill: silty sand	30	LPQL	2	14	420	0.3	2	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH6	0.1-0.2	Fill: silty sand	LPQL	LPQL	3	12	110	0.1	2	110	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH6	0.5-0.95	Sand	LPQL	LPQL	1	7	3	LPQL	LPQL	26	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
DUPA	-		29	LPQL	2	13	320	0.3	1	52	0.06	0.06	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH7	0.0-0.1	Fill: silty sand	LPQL	LPQL	3	8	34	0.2	1	90	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	300	300	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH7	0.5-0.95	Silty sand	LPQL	LPQL	6	3	5	LPQL	2	63	LPQL	LPQL	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH8	0.0-0.1	Fill: silty sand	LPQL	LPQL	LPQL	1	15	LPQL	LPQL	6	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH8	0.5-0.95	Silty sand	LPQL	LPQL	21	LPQL	6	LPQL	4	2	LPQL	LPQL	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH9	0.0-0.1	Fill: silty sand	LPQL	LPQL	1	5	15	LPQL	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH10	0.0-0.1	Fill: silty sand	LPQL	LPQL	5	6	12	LPQL	3	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH10	1.7-1.95	Clayey sand	LPQL	LPQL	8	LPQL	5	LPQL	1	2	LPQL	LPQL	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH11	0.0-0.1	Fill: silty sand	LPQL	LPQL	5	6	15	LPQL	3	19	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH11	0.5-0.95	Silty sand	LPQL	LPQL	2	LPQL	3	LPQL	LPQL	LPQL	LPQL	LPQL	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
BH12	0.0-0.1	Fill: silty sand	LPQL	LPQL	2	4	16	LPQL	1	19	0.74	0.07	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH13	0.0-0.1	Fill: silty sand	LPQL	LPQL	4	4	13	LPQL	1	49	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	No asbestos detected	
BH13	0.5-0.95	Silty sand	LPQL	LPQL	LPQL	LPQL	2	LPQL	LPQL	LPQL	LPQL	LPQL	NA	NA	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	NA	
SS1	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected	
SS2	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected	
SS3	0.0-0.05	Fill: silty sand	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No asbestos detected	
MDF1	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected	
MDF2	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected	
MDF3	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected	
MDF4	Surface	Material	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	asbestos detected	
Total Number of samples			21	21	21	21	21	21	21	21	21	21	16	16	16	16	16	21	21	21	21	22	21	21	21	21	20
Maximum Value			30	LPQL	21	28	420	0.4	4	120	0.74	0.08	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	300	300	LPQL	LPQL	LPQL	LPQL	NC	
Explanation: ¹ - NSW EPA Waste Classification Guidelines (2014) ² - Assessment of Total Moderately Harmful pesticides includes: Dichlorovos, Dimethoate, Fenitrothion, Ethion, Malathion and Parathion ³ - Assessment of Total Scheduled pesticides include: HBC, alpha-BHC, gamma-BHC, beta-BHC, Heptachlor, Aldrin, Heptachlor Epoxide, gamma-Chlordane, alpha-chlordane, pp-DDE, Dieldrin, Endrin, pp-DDD, pp-DDT, Endrin Aldehyde Concentration above the CT1 Concentration above SCC1 Concentration above the SCC2 Abbreviations: PAHs: Polycyclic Aromatic Hydrocarbons UCL: Upper Level Confidence Limit on Mean Value CT: Contaminant Threshold B(a)P: Benzo(a)pyrene NC: Not Calculated SCC: Specific Contaminant Concentration PQL: Practical Quantitation Limit HILs: Health Investigation Levels LPQL: Less than PQL NEPM: National Environmental Protection Measure PID: Photoionisation Detector SAC: Site Assessment Criteria BTEX: Monocyclic Aromatic Hydrocarbons PCBs: Polychlorinated Biphenyls TRH: Total Recoverable Hydrocarbons																											

TABLE D									
SOIL LABORATORY TCLP RESULTS									
All data in mg/L unless stated otherwise									
			Arsenic	Cadmium	Chromium	Lead	Mercury	Nickel	B(a)P
PQL - Envirolab Services			0.05	0.01	0.01	0.03	0.0005	0.02	0.001
TCLP1 - General Solid Waste ¹			5	1	5	5	0.2	2	0.04
TCLP2 - Restricted Solid Waste ¹			20	4	20	20	0.8	8	0.16
TCLP3 - Hazardous Waste ¹			>20	>4	>20	>20	>0.8	>8	>0.16
Sample Reference	Sample Depth	Sample Description							
BH3	0.1-0.2	Fill: sility sand	NA	NA	NA	0.09	NA	NA	NA
BH4	0.1-0.2	Fill: sility sand	NA	NA	NA	0.1	NA	NA	NA
BH5	0.2-0.3	Fill: sility sand	NA	NA	NA	0.74	NA	NA	NA
BH6	0.1-0.2	Fill: sility sand	NA	NA	NA	0.07	NA	NA	NA
Total Number of samples			0	0	0	4	0	0	0
Maximum Value			LPQL	LPQL	LPQL	0.74	LPQL	LPQL	LPQL
Explanation:									
1 - NSW EPA Waste Classification Guidelines (2014)									
General Solid Waste			VALUE						
Restricted Solid Waste			VALUE						
Hazardous Waste			VALUE						
Abbreviations:									
PQL: Practical Quantitation Limit									
LPQL: Less than PQL									
B(a)P: Benzo(a)pyrene									
NC: Not Calculated									
NA: Not Analysed									
TCLP: Toxicity Characteristics Leaching Procedure									

TABLE E SOIL LABORATORY RESULTS COMPARED TO EILs AND ESLs All data in mg/kg unless stated otherwise																							
Land Use Category ¹				URBAN RESIDENTIAL AND PUBLIC OPEN SPACE																			
				pH	CEC (cmol _e /kg)	Clay Content (% clay)	AGED HEAVY METALS-EILs						EILs		ESLs						B(a)P		
							Arsenic	Chromium	Copper	Lead	Nickel	Zinc	Naphthalene	DDT	C ₆ -C ₁₀ (F1)	>C ₁₀ -C ₁₆ (F2)	>C ₁₆ -C ₃₄ (F3)	>C ₃₄ -C ₄₀ (F4)	Benzene	Toluene		Ethylbenzene	Total Xylenes
PQL - Envirolab Services				-	1	-	4	1	1	1	1	1	0.1	0.1	25	50	100	100	0.2	0.5	1	3	0.05
Ambient Background Concentration (ABC) ²				-	-	-	NSL	13	28	163	5	122	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	
Sample Reference	Sample Depth	Sample Description	Soil Texture																				
BH1	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	LPQL	6	9	30	1	36	LPQL	LPQL	LPQL	LPQL	170	LPQL	LPQL	LPQL	LPQL	LPQL	
BH2	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	LPQL	3	3	18	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH2	0.5-0.95	Sand	Coarse	NA	NA	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH3	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	LPQL	2	5	130	1	60	LPQL	LPQL	LPQL	LPQL	130	LPQL	LPQL	LPQL	LPQL	0.08	
BH4	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	LPQL	4	28	230	3	120	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0.06	
BH5	0.2-0.3	Fill: silty sand	Coarse	NA	NA	NA	30	2	14	420	2	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH6	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	LPQL	3	12	110	2	110	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH6	0.5-0.95	Sand	Coarse	NA	NA	NA	LPQL	1	7	3	LPQL	26	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
DUPA	-		Coarse	NA	NA	NA	29	2	13	320	1	52	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0.06	
BH7	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	3	8	34	1	90	LPQL	LPQL	LPQL	LPQL	220	LPQL	LPQL	LPQL	LPQL	LPQL	
BH7	0.5-0.95	Silty sand	Coarse	NA	NA	NA	LPQL	6	3	5	2	63	LPQL	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH8	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	LPQL	1	15	LPQL	6	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH8	0.5-0.95	Silty sand	Coarse	NA	NA	NA	LPQL	21	LPQL	6	4	2	LPQL	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH9	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	1	5	15	LPQL	16	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH10	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	5	6	12	3	46	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH10	1.7-1.95	Clayey sand	Coarse	NA	NA	NA	LPQL	8	LPQL	5	1	2	LPQL	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH11	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	5	6	15	3	19	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH11	0.5-0.95	Silty sand	Coarse	NA	NA	NA	LPQL	2	LPQL	3	LPQL	LPQL	LPQL	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH12	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	2	4	16	1	19	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	0.07	
BH13	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	LPQL	4	4	13	1	49	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
BH13	0.5-0.95	Silty sand	Coarse	NA	NA	NA	LPQL	LPQL	LPQL	2	LPQL	LPQL	LPQL	NA	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	LPQL	
Total Number of Samples				0	0	0	21	21	21	21	21	21	21	16	21	21	21	21	21	21	21	21	
Maximum Value				LPQL	LPQL	LPQL	30	21	28	420	4	120	LPQL	LPQL	LPQL	LPQL	220	LPQL	LPQL	LPQL	LPQL	0.08	
Explanation: 1 - Site Assessment Criteria (SAC): NEPM 2013 2 - ABC Values for selected metals has been adopted from the published background concentrations presented in Olszowy et. al., (1995), Trace Element Concentrations in Soils from Rural and Urban New South Wales (the 25th percentile values for old suburbs with high traffic have been quoted) Concentration above the SAC The guideline corresponding to the elevated value is highlighted in grey in the EIL and ESL Assessment Criteria Table below Abbreviations: EILs: Ecological Investigation Levels B(a)P: Benzo(a)pyrene PQL: Practical Quantitation Limit UCL: Upper Level Confidence Limit on Mean Value ESLs: Ecological Screening Levels NA: Not Analysed LPQL: Less than PQL SAC: Site Assessment Criteria NEPM: National Environmental Protection Measure NC: Not Calculated NSL: No Set Limit ABC: Ambient Background Concentration																							

EIL AND ESL ASSESSMENT CRITERIA

Land Use Category ¹				URBAN RESIDENTIAL AND PUBLIC OPEN SPACE																			
				pH	CEC (cmol/kg)	Clay Content (% clay)	AGED HEAVY METALS-EILs					EILs		ESLs									
							Arsenic	Chromium	Copper	Lead	Nickel	Zinc	Naphthalene	DDT	C ₆ -C ₁₀ (F1)	>C ₁₀ -C ₁₆ (F2)	>C ₁₆ -C ₃₄ (F3)	>C ₃₄ -C ₄₀ (F4)	Benzene	Toluene	Ethylbenzene	Total Xylenes	B(a)P
PQL - Envirolab Services				-	1	-	4	1	1	1	1	1	0.1	0.1	25	50	100	100	0.2	0.5	1	3	0.05
Ambient Background Concentration (ABC) ²				-	-	-	NSL	13	28	163	5	122	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL	NSL
Sample Reference	Sample Depth	Sample Description	Soil Texture																				
BH1	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH2	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH2	0.5-0.95	Sand	Coarse	NA	NA	NA	100	203	88	1263	35	70	170	180	180	120	300	2800	50	85	70	105	0.7
BH3	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH4	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH5	0.2-0.3	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH6	0.1-0.2	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH6	0.5-0.95	Sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
DUPA	-		Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH7	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH7	0.5-0.95	Silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	--	180	120	300	2800	50	85	70	105	0.7
BH8	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH8	0.5-0.95	Silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	--	180	120	300	2800	50	85	70	105	0.7
BH9	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH10	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH10	1.7-1.95	Clayey sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	--	180	120	300	2800	50	85	70	105	0.7
BH11	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH11	0.5-0.95	Silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	70	170	--	180	120	300	2800	50	85	70	105	0.7
BH12	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH13	0.0-0.1	Fill: silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	192	170	180	180	120	300	2800	50	85	70	105	0.7
BH13	0.5-0.95	Silty sand	Coarse	NA	NA	NA	100	203	88	1263	35	70	170	--	180	120	300	2800	50	85	70	105	0.7

TABLE F
SOIL INTRA-LABORATORY DUPLICATE RESULTS & RPD CALCULATIONS
All results in mg/kg unless stated otherwise

SAMPLE	ANALYSIS	Envirolab PQL	INITIAL	REPEAT	MEAN	RPD %
Sample Ref = BH5 (0.2-0.3m) Dup Ref = Dup A Envirolab Report: 155059	Arsenic	4	30	29	29.5	3
	Cadmium	0.4	LPQL	LPQL	NC	NC
	Chromium	1	2	2	2.0	0
	Copper	1	14	13	13.5	7
	Lead	1	420	320	370.0	27
	Mercury	0.1	0.3	0.3	0.3	0
	Nickel	1	2	1	1.5	67
	Zinc	1	46	52	49.0	12
	Naphthalene	0.1	LPQL	LPQL	NC	NC
	Acenaphthylene	0.1	LPQL	LPQL	NC	NC
	Acenaphthene	0.1	LPQL	LPQL	NC	NC
	Fluorene	0.1	LPQL	LPQL	NC	NC
	Phenanthrene	0.1	LPQL	LPQL	NC	NC
	Anthracene	0.1	LPQL	LPQL	NC	NC
	Fluoranthene	0.1	LPQL	LPQL	NC	NC
	Pyrene	0.1	LPQL	LPQL	NC	NC
	Benzo(a)anthracene	0.1	LPQL	LPQL	NC	NC
	Chrysene	0.1	LPQL	LPQL	NC	NC
	Benzo(b,j+k)fluoranthene	0.2	LPQL	LPQL	NC	NC
	Benzo(a)pyrene	0.05	LPQL	0.06	0.0	82
	Indeno(123-cd)pyrene	0.1	LPQL	LPQL	NC	NC
	Dibenzo(ah)anthracene	0.1	LPQL	LPQL	NC	NC
	Benzo(ghi)perylene	0.1	LPQL	LPQL	NC	NC
	Total OCPs	0.1	LPQL	LPQL	NC	NC
	Total OPPs	0.1	LPQL	LPQL	NC	NC
	Total PCBs	0.1	LPQL	LPQL	NC	NC
	TRH C ₆ -C ₁₀ (F1)	25	LPQL	LPQL	NC	NC
	TRH >C ₁₀ -C ₁₆ (F2)	50	LPQL	LPQL	NC	NC
	TRH >C ₁₆ -C ₃₄ (F3)	100	LPQL	LPQL	NC	NC
	TRH >C ₃₄ -C ₄₀ (F4)	100	LPQL	LPQL	NC	NC
	Benzene	0.5	LPQL	LPQL	NC	NC
	Toluene	0.5	LPQL	LPQL	NC	NC
	Ethylbenzene	1	LPQL	LPQL	NC	NC
	m+p-xylene	2	LPQL	LPQL	NC	NC
	o-xylene	1	LPQL	LPQL	NC	NC

Explanation:

The RPD value is calculated as the absolute value of the difference between the initial and repeat results divided by the average value expressed as a percentage. The following acceptance criteria will be used to assess the RPD results:

Results > 10 times PQL = RPD value <= 50% are acceptable

Results between 5 & 10 times PQL = RPD value <= 75% are acceptable

Results < 5 times PQL = RPD value <= 100% are acceptable

If result is LPQL then 50% of the PQL is used for the calculation

RPD Results Above the Acceptance Criteria

VALUE

Abbreviations:

PQL: Practical Quantitation Limit

LPQL: Less than PQL

NA: Not Analysed

NC: Not Calculated

OCP: Organochlorine Pesticides

OPP: Organophosphorus Pesticides

PCBs: Polychlorinated Biphenyls

TRH: Total Recoverable Hydrocarbons

REPORT APPENDICES

Appendix A: Site Information including Site History

Proposed Development Plans