PHASE II GEO-ENVIRONMENTAL ASSESSMENT REPORT

Proposed Corneli Primary School, North Cornelly, Bridgend

October 2020





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Proposed Corneli Primary School, Greenfield Terrace, North Cornelly

Phase II Geo-Environmental Assessment Report

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Executive Summary

HSP Consulting has been commissioned by Gleeds Management Services Ltd to undertake an intrusive ground investigation at the site to confirm the existing ground conditions within a specific boundary and to provide information on likely constraints to the development, parameters for preliminary design and recommendations for any mitigation measures should they be required to inform a feasibility study.

The site is located centrally within North Cornelly Village, approximately 9km north east of Bridgend. The approximate National Grid Reference for the centre of the site is (NGR) 281929, 181653

The exploratory methods of investigation were 6No. windowless sample boreholes, 2No. Cable percussive boreholes and a single soakaway test. The ground conditions encountered were generally Hardstanding or Made Ground Topsoil to a maximum depth of 0.70m begl, overlying superficial Head and Till deposits to a maximum depth of 10.30m begl.

Traditional strip footings may be appropriate within the preferred location 3 and should be at a minimum depth of 0.75m. However, soft spots were encountered within the proposed development area and coarse strata was encountered. Therefore, it is likely that deepening of foundations will be required to ensure they bear upon competent strata. Where straddling of both fine and coarse soils is unavoidable nominal mesh reinforcement may be required to limit differential settlement.

It is considered appropriate to adopt a basic Design Sulphate Class of DS-1 together with and Aggressive Chemical Environment for Concrete (ACEC) of AC-1 within the fine and coarse materials across the site. However, the very soft grey organic encountered within WS03 may be aggressive to concrete therefore it is considered appropriate to adopt a basic Design Sulphate Class of DS-4 together with an Aggressive Chemical Environment for Concrete (ACEC) of AC-4 within this material.

Comparison of infiltration data with table 7.1 Permeability and Drainage Characteristics of Soils Terzaghi and Peck indicates the soils generally to be of good drainage. Therefore, infiltration drainage may be feasible on site.

The screening process for on-site human health receptors show that the GACs, representative of minimal risk for a residential without plant uptake setting were not exceeded.

Ground gas concentrations have been monitored on four occasions in order to obtain an indication of the ground gas regime at the site. Comparison of the steady state gas screening value with Table 8.5 of the CIRIA document indicates the site falls in a Characteristic Situation 1 and therefore gas protection measures will not be required for the proposed development.

The executive summary contains an overview of key findings and conclusions. However, no reliance should be placed on the executive summary until the whole of the report has been read. Other sections of the report may contain information which puts into context the findings noted within the executive summary.





1. Introduction

1.1 Background

This report has been prepared to support a feasibility study and no detailed development plans have been provided. However, it is understood that the intention is to provide a new school with car parking and associated hard and soft landscaping.

1.2 Client Brief & Scope

HSP Consulting has been commissioned by Gleeds Management Services Ltd on behalf of the DfE to undertake an intrusive ground investigation at the site to investigate the existing ground conditions and provide information on likely constraints to the development, preliminary parameters for design and recommendations for any mitigation measures.

The report presents the following information:

- a summary of the previous Geo-environmental Reports (Section 1.5 below).
- details of the ground investigation undertaken and the ground conditions encountered.
- details and results of the geotechnical testing and contamination analysis.
- recommendations for mitigating constraints to the proposed redevelopment where appropriate and providing parameters for foundation design.

Where applicable, the fieldwork was undertaken in accordance with BS5930:2015 Code of Practice for Site Investigations and BS10175:2011+A1:2013 Investigation of Potentially Contaminated Sites.

1.3 Report Objectives

The objectives of this report are to:

- establish the geological and hydrogeological conditions using existing available/published information.
- summarise available information and identify site specific geotechnical and environmental hazards which may place a constraint upon the proposed site use.
- produce an updated Conceptual Site Model identifying potential pollution linkages between sources of contamination, pathways and receptors.

1.4 Limitations

The recommendations made in this report are based on the findings of the intrusive ground investigation undertaken by HSP Consulting Ltd on the 6th and 24th to 25th August 2020.

1.5 Previous Reports

HSP Consulting Engineers Ltd has previously produced a Phase I Desk Study report for the site, details of which can be found below:

• HSP Consulting Engineers Limited, Corneli Primary School, Bridgend - Phase I Geo-Environmental Desk Study Report, September 2020, Ref: C3342/PI.



2. Review of Existing Information & Geoenvironmental Setting

2.1 The Site

2.1.1 Location

The site is located centrally within North Cornelly Village, approximately 9km north east of Bridgend. The approximate National Grid Reference for the centre of the site is (NGR) 281929, 181653. A Site Location Plan is included in Appendix I.

2.1.2 Description

The site is irregular in shape and approximately 3.08ha in area. The site is occupied by a Children's Centre located centrally, and two primary schools, Corneli Primary in the west and Ysgol Y Ferch O'r Sger in the north of the site. The buildings vary in age, construction and are a mix of single and two storeys.

Hard surfacing including car parking, footpaths and play areas are in close proximity to each of the buildings. Grassed playing fields set out for rugby are located in the south east of the site.

The site is bound by a mix of low level fencing, including metal railings and post and wire with vehicle and pedestrian access gates on the southern and north western boundaries. A belt of mature trees bounds the south eastern boundary.

The site is reasonably level with gentle falls in elevation from north east to south west across the site. There are small slopes (of approximately 1m in height) and some terracing in the south east of the site to provide a level surface for the rugby pitch.

2.1.3 Surrounding Land Use

The main features of interest identified are:

- North: Greenfield Terrace (highway) and Heol-Y-Parc (highway) with residential properties and gardens beyond.
- East: Gardens and residential properties with Heol-Y-Parc (highway) beyond.
- South: Gardens, residential properties and a small supermarket with Hall Drive (highway) beyond.
- West: Gardens and residential properties with Heol Fach (highway) beyond.

2.1.4 Proposed End Use

The proposed development will include a new school building, the existing car parking and associated soft and hard landscaping will be retained. The location of the school is currently undecided. There are three option locations and it is understood that No. 3 is preferred. The Locations Review plan is provided within Appendix I..



2.2 Geology

2.2.1 Made Ground

The BGS mapping does not indicate any made ground on the site. However, given the historical development on the site some made ground should be expected.

2.2.2 Superficial Deposits

The BGS mapping indicates the majority of the site to be underlain by superficial Till deposits.

A band of Head deposits is expected to be encountered in the centre east of the site orientated in a north to south direction. The BGS describes these deposits as 'poorly sorted and poorly stratified, angular rock debris and/or clayey hillwash and soil creep, mantling a hillslope and deposited by solifluction and gelifluction processes. The flow is initiated by meltwater from thawing ice lenses. Polymict deposit: comprises gravel, sand and clay depending on upslope source and distance from source. Locally with lenses of silt, clay or peat and organic material.

2.2.3 Bedrock Geology

BGS bedrock mapping indicates the majority of the site is underlain by the Mercia Mudstone Group (Marginal Facies) – Conglomerate of the Triassic Period, with Mercia Mudstone Group - Mudstone of the Triassic Period in the east of the site. Respectively described by the BGS as 'Variable, typically consisting of conglomerate and/or breccia with clasts derived locally from rocks lying immediately below the unconformable base of these deposits. The matrix generally consists of finer-grained rock fragments or, less commonly, siltstone, sandstone or micritic limestone.' and 'Dominantly red, less commonly green-grey, mudstones and subordinate siltstones with thick halite-bearing units in some basinal areas. Thin beds of gypsum/anhydrite widespread; sandstones are also present.

2.2 Pertinent Site Sensitivity Information

Based on the information collated for the desk study, the geo-environmental setting of the site is summarised as follows:

- The site is recorded as part of five fields on the 1st Edition mapping (1881). Marias Infants and Corneli Junior School were constructed upon the site by 1969. An additional building (A Children's Centre) is shown in the centre of the site from 2010.
- Historically, the surrounding land use has been predominantly agricultural with limited development until the mid 1960's where the village of North Cornelly expands and the land uses becomes mainly residential.
- The BGS mapping does not indicate any made ground on the site. However, limited made ground may be present associated with the historical development of the site. Any Made Ground encountered would be of an unknown composition.
- The majority of the site is underlain by superficial Till deposits. A band of Head deposits is expected to be encountered in the centre east of the site orientated in a north to south direction



- Bedrock geology belonging to the Mercia Mudstone Group (Marginal Facies) Conglomerate is expected to be encountered across the majority of the site with Mercia Mudstone Group - Mudstone expected in the east of the site.
- The superficial deposits are both designated as Secondary Undifferentiated Aquifers. The bedrock Mercia Mudstone Group (Marginal Facies) – Conglomerate deposits is designated Principle Aquifer and the Mercia Mudstone Group – Mudstone is a Secondary B Aquifer.

Based on the above, the environmental sensitivity of the site can be considered to be Low to Moderate at this stage.



3. Fieldwork & Factual Information

Site work was carried out during the 20th to 21st July and 6 to 11th August 2020 with soakaway testing undertaken between the 24th to 25th August 2020. Where applicable, the fieldwork was undertaken in accordance with BS5930:2015 Code of Practice for Site Investigations (Ref. 6) and BS10175:2011+A1:2013 Investigation of Potentially Contaminated Sites (Ref. 8).

The exploratory holes were positioned to provide spatial coverage across the site to provide information for foundation design and obtain representative soil samples for geotechnical and geo-environmental analysis.

3.1 Exploratory Methods

Table 1 - Exploratory Methods Quantity Maximum Depth (m) Details Туре Windowless Sampling Borehole 6 3.00 WS01 to WS07 10.30 BH01 - BH02 **Cable Percussive Boreholes** 2 In-Situ Infiltration Tests (Soakaways) 1 1.30 SK01 Mexecone Probe Tests 5 0.60 MEXE01 to MEXE05

The exploratory methods are detailed in the table below.

The exploratory holes were logged and sampled by an Engineer from HSP Consulting Ltd and the logs are presented in Appendix II. The exploratory hole locations are shown on the Ground Investigation Layout Plan presented in Appendix III.

Fragmentary bulk and disturbed samples were recovered from materials revealed within all the exploratory holes. Geo-environmental samples, placed in plastic tubs and glass jars supplied by the laboratory, were also obtained specifically for chemical analysis. The samples were taken to UKAS accredited laboratories for further examination and testing.

3.2 In-situ Testing

3.2.1 Standard Penetration Tests

Standard Penetration Tests (SPTs) were carried out at 1.00m intervals in the boreholes to 5m and every 1.5m thereafter. The SPTs were undertaken in accordance with BS 1377:1990 and the results are included on the appended borehole logs (Appendix II).

3.2.2 Mexecone Probe Tests

Mexecone Probe Tests were positioned across the area of the proposed option location 3 to obtain an indication of the likely California Bearing Ratio within these areas. The results are included within Appendix VIII.

3.3 Laboratory Testing

The laboratory testing schedules were prepared by HSP Consulting Ltd.



3.3.1 Geotechnical Testing

Geotechnical testing has been undertaken by a UKAS accredited laboratory as part of the works at the site:

- Plasticity Index
- Particle Size Distribution
- Natural Moisture Contents

The laboratory testing was carried out by Professional Soils Laboratory (UKAS accredited, laboratory No.4043) in accordance with BS1377:1990 using calibrated equipment specifically for the British Standard.

3.3.2 Chemical Analysis

The geo-environmental samples retained specifically for chemical analysis were stored in cooled containers until delivery to the laboratory by courier.

Chemical analysis was scheduled on twelve samples for the presence of a selected suite of potential contaminants as outlined in the tables below:

le 2a – Chemical Analysis	
Exploratory Hole Location & Depth	Sample Description
WS01 0.40m	MADE GROUND ^{1,2,4}
WS01 2.50m	GRAVEL ³
WS03 0.30m	SAND 1,2,4
WS03 0.80m	CLAY ¹
WS03 2.40m	CLAY ⁴
WS04 0.10m	MADE GROUND ^{1,2,4}
WS05 0.10m	MADE GROUND ^{1,4}
WS06 0.20m	MADE GROUND ^{1,4}
WS06 0.60m	GRAVEL ^{1,2,4}
BH01 1.50m	CLAY ³
BH02 7.00m	GRAVEL ³
BH02 9.80m – 10.00m	GRAVEL ³
	GRAVEL ³

¹ HSP Standard Suite, ² Organic Matter, ³ BRE Sulphate Suite, ⁴Asbestos Screen and ID

Table 2b – Chemical Analysis

Metals	Cadmium	Chromium (III & VI)	Copper	
	Lead	Mercury	Nickel	
	Zinc			
Semi Metals and Non-metals	Arsenic	Boron	Selenium	
Others	рН			
Inorganic Chemicals	Cyanide	Sulphate	Sulphide	
Organic Chemicals	PAH (US EPA 16)	TPH (CWG)	phenol	

The contamination analysis was carried out by Chemtest Ltd (UKAS accredited, laboratory No. 2183) during the period 13th to 19th August 2020. The results are presented in Appendix IV.



3.4 Ground Conditions

3.4.1 Published Geology

The published geology indicates the site is underlain by superficial deposits of Head and Devensian Till, with bedrock geology of Mercian Mudstone Formation, as described in Sections 2.2.2 and 2.2.3 respectively.

3.4.2 Ground Conditions on site or General Geology & Revealed Strata

The exploratory hole data confirms the published information. The strata generally comprises:

Table 3	Table 3 – Encountered Ground Conditions								
	Strata	Depth Range (mbegl)	Max. Thickness (m)	Description					
		G.L - 0.10	0.10	MADE GROUND comprising grey weathered concrete asphalt.					
ogenic		0.05 – 0.40	0.30	MADE GROUND comprising dark grey sandy gravel. (Sub-base material).					
Anthropogenic	MADE GROUND	G.L – 0.30	0.30	MADE GROUND comprising dark brown sandy gravelly clayey topsoil.					
A		0.25 – 0.80	0.45	MADE GROUND comprising brown sandy gravelly clay.					
		0.70 – 3.00	2.30	Medium dense to very dense brown occasionally clayey sandy GRAVEL.					
	TILL & HEAD DEPOSITS	0.60 – 2.65	2.30	Firm to stiff brown and occasionally orange mottled sandy gravelly CLAY.					
Superficial		2.30 – 2.50	0.20	Very soft organic CLAY.					
Sup			2.00	Medium dense reddish brown slightly gravelly clayey SAND.					
		7.00 – 10.30	1.20	Medium dense to very dense brown clayey sandy GRAVEL.					
			2.80	Firm to very stiff dark brown sandy gravelly CLAY.					

3.5 Groundwater Levels

Groundwater was encountered within WS03 at 2.00m depth during the intrusive works.

Groundwater levels have been monitored on four occasions during the ground gas monitoring visits. Groundwater levels were encountered at 1.46m and 1.94m begl within WS03 during all visits.

3.6 Ground Gas Monitoring

Dual use gas and groundwater monitoring installations were constructed within three of the boreholes at the site (WS03, WS04 and WS05). Each well has been constructed using 50mm diameter HDPE pipe with the top one metre being plain and the remainder slotted. All of the borehole installations have a 6mm pea gravel surround to the slotted pipe with a bentonite



seal above and a gas tap. The covers are cemented flush with ground level and are round lockable stopcock covers.

HSP Consulting uses a GFM 430 Gas Analyser. Prior to its use a calibration check can be performed against gas readings in air. It is recommended that this check is undertaken once on each day the analyser is used. Annual calibration is undertaken on the unit and a copy of this certificate has been included within Appendix VII with the results of the ground gas and water level monitoring.

The results of the ground gas monitoring are discussed in Section 5.3 below.

3.7 Visual and Olfactory Evidence of Contamination

No visual evidence of contamination was encountered during the investigation. However, a slight hydrocarbon odour was encountered within WS01 at 0.40m depth.



4. Geotechnical Assessment

4.1 **Detailed Ground Model**

For the purpose of this foundation assessment the information gained from the window sample boreholes and Cable Percussive Boreholes has been included. The exploratory logs are presented in Appendix II.

4.1.1 Made Ground

Made ground materials were encountered within all locations across the site and generally comprised Topsoil like material described as brown sandy gravelly clayey topsoil to a maximum depth of 0.30m depth. Three locations (WS01, WS02 and WS06) were advanced through the asphalt concrete hardstanding in the centre of site. Underlying the Hardstanding, Sub-base like materials were encountered generally comprised Dark grey sandy gravel to a maximum depth of 0.40m begl. The Made Ground underlying the Topsoil and sub-base generally comprised Brown and black mottled sandy slightly gravelly clay, encountered to a maximum depth of 0.80m begl. The Made Ground was penetrated in all locations.

4.1.2 Superficial Deposits

Superficial deposits of Till and Head were encountered within all locations across the site. The deposits were variable in composition with both fine and coarse soils recorded. The fine deposits generally comprised firm to stiff (very stiff at depth in the cable percussive boreholes) brown and occasionally orange mottled sandy gravelly CLAY with coarse deposits generally comprising medium dense to very dense brown occasionally clayey sandy GRAVEL and medium dense reddish brown slightly gravelly clayey SAND. The base of the deposits were not penetrated

4.1.3 In-situ Testing and Assessment

Table 4 SPT N Values

A series of Standard Penetration Tests (SPT's) have been undertaken within all the boreholes.

Table 4 – SPT IN Values			
Depth (m)	Range of 'N' Values	Mean 'N' Value	Description
1.00	10 – 50	23	CLAY / GRAVEL
2.00	9 - 43	30	CLAY / GRAVEL
3.00	22 - 31	27	CLAY / GRAVEL
4.00	27 - 35	31	CLAY / GRAVEL
5.00 – 7.00	9 - 48	35	CLAY / GRAVEL / SAND
8.00 - 10.00	16 - 50	31	CLAY / GRAVEL

The following table summarises the N values at depth across the site.

Two Particle Size Distribution and two Plasticity Index tests have been undertaken to confirm the visual description and engineering behaviour of the soils. The results are presented within Appendix V.

The results indicate compliance with the definition of soils of low plasticity (CL) after the classification system of BS5930: 2015. Fine soils across the site are considered to be of a Low



Volume Change potential in accordance with the National House Building Council (NHBC) Standards, Chapter 4.2: 2007.

Table 5 - Plasticity and Volume Change Potential								
Sample Ref:	Laboratory Material Descriptions	LL (%)	PL (%)	PI (%)	% passing 425µm	Modified PI (%)*	Soil Class	MC (%)
WS03 @ 1.60m	Brown very gravelly very sandy very silty CLAY.	27	15	12	62	8.2	CL	13
WS05 @ 1.30m	Brown very sandy silty GRAVEL		<u>.</u>	N	Ion - Plastic			7.9

* Rounded up

4.2 Earthworks

The site is relatively flat, with the exception of slopes which provide access to the playing field in the south east of the site, which is lower in elevation. Limited earthworks may be required within this area to allow access.

Should any earthworks be required, further investigation and materials testing of site soils would be required to classify and make an assessment of the suitability for re-use as engineered fill.

4.3 Excavations

Excavations to proposed formation level for new foundations and infrastructure may be readily achievable using standard plant due. Random and potentially severe falls are anticipated from the faces of near vertically sided unsupported excavations carried out at the site. Therefore, where personnel are required to enter near vertically sided excavations, it is considered that support should be provided to the full depth of all excavations.

It is recommended that all support systems are continually assessed by fully trained or experienced personnel.

Groundwater entries were encountered within WS03 at 2.00m depth during the intrusive works, with levels of between 1.46m and 1.94m within WS03 during subsequent monitoring. Should shallow groundwater entries be encountered at the site during groundwork operations traditional sump and pump dewatering should be sufficient if required.

4.4 Foundations

Test to fit options plan (Appendix I) indicate three potential locations for a school building across the site.

Preferred Option – Location 3

For the purpose of this foundation assessment the information gained from WS03, WS04, SK01, BH01 and BH02 have been used for this foundation assessment.



The table below shows the indicative allowable bearing pressure (ABP) that could be achieved using strip or pad foundations across the building footprint. The ground conditions are consistent across the building footprint and therefore an ABP has been calculated using and average SPT of 15 at 1.00m begl.

Table 5 – Allowable E	Bearing Capacity				
Depth (m)	SPT (N ₁) ₆₀ Value	Eurocode 7 Soil Strength Description	Consistency (BS5930) Description	Approximate ABP (k/Nm ²) – 0.60m wide strip footing	Approximate ABP (kN/m²) – 2x2m pad footing
1.00	16	Medium Strength	Firm / Medium Dense	125	135
2.00	35	High Strength	Stiff	200*	200*

*A greater ABP could be achieved subject to the likely loadings at the proposed school

From the above table HSP would recommend that an ABP of 125kN/m² could be utilised for design for traditional foundations at a minimum of 0.75m depth.

However, within WS03 a very soft grey CLAY was encountered from 2.00m depth, therefore it is likely that localised deepening of foundations will be required within the area of WS03 to bear upon the competent firm to stiff fine deposits below, encountered at 2.50m begl.

Coarse soils were encountered within SK01 from 0.30m begl, where straddling of both fine and coarse soils at founding depth is unavoidable nominal mesh reinforcement may be required to limit differential settlement. An alternative would be to step foundations, so they bear within one soil type where possible.

For the coarse soils, the allowable bearing capacity value incorporates a factor of safety of 3 and total settlements are not expected to exceed approximately 25mm.

The shallow fine soils on site are of low volume change potential. Foundations should be deepened and designed in accordance with NHBC Chapter 4.2 Building near trees (Ref. 10) where appropriate.

From the above table HSP would recommend that an ABP of 125kN/m² could be utilised for design for traditional foundations within coarse deposits encountered at a minimum of 0.60m depth.

Loose coarse deposits were encountered within localised locations across the remainder of the site. If the preferred option plans change, a Geotechnical Engineer from HSP should be consulted and proposals reviewed.

4.5 Ground Floor Slab

A ground bearing slab may be appropriate for the school building due to the likely light loadings and location of the proposed building on site.



In addition to the above, the use of ground bearing floor slabs would also be dependent on any associated ground gas protection measures, see section 5.6 below. Reference should also be made to NHBC Standards Chapter 4.2 to confirm the floor slab type.

4.6 Concrete Classification

The results of sulphate and pH testing carried out on selected soil samples taken during this investigation have been compared with the recommendations outlined in BRE Special Digest 1, Part 1: 2005. (Ref 12)

The guidelines given in BRE Special Digest 1 are based upon a site classification relating to its previous usage. It is considered appropriate to define this site as a 'Brownfield Site' location for the purposes of concrete classification.

On the basis of the above, it is considered appropriate to adopt a basic Design Sulphate Class of DS-1 together with an Aggressive Chemical Environment for Concrete (ACEC) of AC-1 generally for coarse and fine deposits across the site.

However, the very soft grey organic encountered within WS03 at 2.00m - 2.50m depth may be aggressive to concrete with the chemical analysis indicating a basic Design Sulphate Class of DS-4 together with an Aggressive Chemical Environment for Concrete (ACEC) of AC-4 within this material. As this is based on one sample it would be prudent, once layouts are confirmed, to undertake further sampling to confirm the design sulphate class for this soil type.

4.7 Pavement Design

MEXE probe tests were undertaken at five locations across the site. From this an indicative California Bearing Ratio (CBR) can be provided. The results are included in Appendix VI

Made Ground was encountered across the proposed building and generally comprising of slightly sandy gravelly clay, with gravels of brick fragments and concrete. The MEXE Probe tests recorded results ranging between 2% and 14% at depths between 150mm and 600mm. The maximum results could be overstated due to the presence of brick and concrete within the made ground encountered.

Following guidance provided within 'Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 2' the CBR value chosen for design should be the minimum measured value, not the average. Due to the variability in the test results on relatively similar materials it is recommended that further testing is undertaken once the development is at formation level to confirm the design CBR value for the site. Until further testing is undertaken a CBR value of 2% should be adopted for the site area.

4.8 Soakaway Testing

Soakaway testing was undertaken at the site between the 24th and 25th August 2020 in a single location at a depth between 0.30m and 1.30m begl. The test pit was positioned within



the preferred area of Location 3 within natural coarse soils, outside of the proposed building footprint.

SK01 returned an infiltration rate of 1.44 x 10⁻⁴ m/s.

It must be noted that the above infiltration rate has been extrapolated from the available data, as during testing water that enter the pit infiltrated into the surrounding coarse materials faster than it could be filled. Therefore, the basis of the calculation has been calculated off a conservative movement of 0.06m every 1 minute.

Comparison of this data with table 7.1 Permeability and Drainage Characteristics of Soils Terzaghi and Peck indicates the ground to be of good drainage and it is therefore considered that the natural coarse soils in the area of SK01 are suitable for soakaway drainage.



5. Environmental Assessment

5.1 Introduction

The approach to the human health risk assessment reported here follows the principals given in CLR 11, i.e. application of the following assessment hierarchy:

- Tier 1 risk screening by establishment of potential pollutant linkages, i.e. the preliminary conceptual site model (PCSM), or
- Tier 2 generic quantitative assessment using generic assessment criteria (GACs) that represent 'acceptably low' risk, or
- Tier 3 quantitative risk assessment using site specific assessment criteria (SSACs) that represent 'unacceptable risk', or where generic assessment criteria are not available or they are not applicable to the CSM.

The results of laboratory analysis have been screened against GACs including the Defra Category 4 Screening Levels (C4SL) and LQM and CIEH S4ULs for Human Health Risk Assessment (Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3180. All rights reserved). (Refs 10 and 11 respectively).

In the absence of a standard scenario for a school environment the standard exposure scenario of residential without home grown produce has been used to identify potential exposure pathways for human health receptors. Controlled water, flora and fauna and property receptors have also been included within the CSM. Our Tier 2 HHRAs for school sites are screened against the GACs representative of minimal risk for residential without home grown produce end use, we believe this to be appropriate based on the precautionary principle the CLR guidance advocates.

It should be noted that organic contamination (PAH, TPH and BTEX) have been screened against the GAC for 1% Soil Organic Matter (SOM).

The assessment of PAHs is undertaken using the surrogate marker approach; recommended by Health Protection Agency (2010) guidance (Ref 17), providing the PAH profile is sufficiently similar to the coal tars tested by Culp et al (1998). Where PAH profile is not sufficiently coal tar like the TEF method is adopted using the LQM and CIEH S4ULs. Prior to assessment a PAH profile is generated for all samples analysed for PAH using the LQM PAH Profiling Tool v1.3, the graphical output is presented in Appendix IV.

5.2 Assessment of Soil Analysis Results

Seven samples, as detailed in section 3.3.2, were scheduled for analysis from the development area. These provide a basis for characterising the soils to outline the potential impacts on human health and any environmental receptors from any contamination found.

The screening process for on-site human health receptors show that the GACs, representative of minimal risk for a residential without plant uptake setting were not exceeded.



5.3 Human Health Mitigation

The concentrations of potential contaminants recorded at the site indicates an acceptably low risk and therefore mitigation measures are not required as part of the development.

Should any obvious evidence of unexpected contamination be encountered during the redevelopment works it should be reported to HSP so that an inspection can be made and appropriate sampling and assessment work be carried out.

Appropriate health and safety precautions should be adopted during any excavation works to avoid exposure to contaminated soils and dust. Reference to the HSE document HSG 66 'Protection of workers and the General Public during Redevelopment of Contaminated Land'.

The approval of the local Environmental Health Officer should be sought with respect to the soil contamination assessment and mitigation proposals.

5.4 Ground Gas Risk Assessment

For the purpose of this assessment, the school is classified as Building Type B; as outlined in Table 3 of BS8485:2015 Code of Practice of the design of protective measures for methane and carbon dioxide ground gas for new buildings (Ref 14). This is a conservative assessment, subject to change once the building occupancy and maintenance controls are better defined.

Ground gas concentrations have been monitored on four occasions in order to obtain an indication of the ground gas regime at the site. The results indicate that methane has not been recorded above the monitor's limit of detection (<0.1%vol). Carbon dioxide has been recorded at a maximum concentration of 4.2% vol in air in WS04. Steady state gas have not been recorded on site. From the results of above, the maximum steady state gas screening value (GSV) for the site is 0.042l/hr.

The results have been assessed in line with the guidance provided in BS8485:2015+A1:2019 Code of Practice of the design of protective measures for methane and carbon dioxide ground gas for new buildings (Ref 14) and CIRIA Document C665 'Assessing Risks Posed by Hazardous Ground Gases to Buildings' (Ref 15). Comparison of the steady state gas screening value with Table 8.5 of the CIRIA document indicates that the site falls into a Characteristic Situation 1, and therefore ground gas protection measures are not required at this stage as part of a school development.

Depleted oxygen levels were occasionally observed within WS04 during the monitoring. This poses a risk of asphyxiation to construction and maintenance workers in confined spaces such as excavations or manhole chambers. A confined spaces risk assessment should be carried out prior to working in any buried structures or excavations.

The results of the ground gas monitoring can be found within Appendix VII.



5.5 Water Supply

The environmental analysis for the site has been compared to the following document in order to assess the most appropriate pipe material that should be used upon the site for mains water supply:

'Guidance for the selection of water supply pipes to be used in Brownfield sites – UK Water Industry Research – Ref: 10/WM/03/21.' (Ref. 20)

The chemical results show no exceedances of the threshold values for PE and PVC pipes. It is therefore considered that specialist materials are unlikely to be required for water supply pipes at the site. Confirmation of supply pipes should always be sought from utility providers.

5.6 Waste Classification

The results of the chemical testing have been assessed using web-based software for classifying hazardous waste, using HazWasteOnline[™]. The materials tested are likely to be classified as non-hazardous. The results are included in Appendix VI.

5.7 Updated Conceptual Site Model

The PCSM and Summary of plausible pollutant linkages was produced by undertaking a Source-Pathway-Receptor analysis of the site and is present in the Desk Study (Ref. 1). Based on the findings of this and the previous investigation the conceptual site model has been updated and is presented in the table below.



Table 9 – Updated Conce						
Source	Pathway	Receptor	Consequence	Probability	Risk	Comments
	 P1: Human uptake pathways direct contact, ingestion of soils and dust, 	R1: End Users R2: Construction and maintenance workers	Minor	Low	Very Low	Concentrations of contaminants of concern were below the relevant GACs within the near surface deposits sampled across the site and therefore the risk is considered to be VERY LOW
	inhalation of fugitive dust. P2: Horizontal and vertical migration	R3: Controlled Water:				The Superficial deposits underlying the site are both designated
	of contaminants through potentially permeable soils and rocks. P3: Migration of contaminants along preferential pathways (man- made).	Groundwater & Surface Water	Mild	Low	Very Low	as Undifferentiated Aquifers with the bedrock geology classified as a Secondary B Aquifer and Principle Aquifer. No significant contamination was identified during the ground
On site	P4: Surface runoff.					investigation and therefore the risk to controlled water is considered to be VERY LOW.
S1: Historical and Contemporary land use: Agricultural land, Historical Sandstone Quarry	P5: Vertical and lateral migration of ground gases and/or vapour	R1: End Users R5: Adjacent Residential Properties	Mild	Unlikely	Very Low	Ground gas concentrations have been monitored on four occasions, in order to obtain an indication of the ground gas regime at the site. The results indicate the site is characterised as CS1. Gas protection measures are therefore not considered necessary and the risk is considered to be VERY LOW.
Off Site (within 250m) S2: Historical and Contemporary land use: Agricultural land, industrial processes relating to furniture production.	 P2: Horizontal and vertical migration of contaminants through potentially permeable soils and rocks. P3: Migration of contaminants along preferential pathways (man-made). P4: Surface runoff. 	R4: Property, services and substructures	Mild	Likely	Low to Moderate	The natural soils may contain sulphates that present a risk to buried concrete. Testing indicates Design Sulphate Class of DS- 1 together with an Aggressive Chemical Environment for Concrete (ACEC) of AC-1 generally for coarse and fine deposits across the site. However, the very soft grey organic encountered within WS03 at 2.00m – 2.50m depth may be aggressive to concrete with the chemical analysis indicating a basic Design Sulphate Class of DS-4 together with an Aggressive Chemical Environment for Concrete (ACEC) of AC-4 within this material. As this is based on one sample it would be prudent, once layouts are confirmed, to undertake further sampling to confirm the design sulphate class for this soil type
						The chemical analysis of the soils indicates specialist materials are unlikely to be required for water supply pipes at the site. However, confirmation of supply pipes should be sought from utility providers.



					Given the above, it is considered that the risk to property, services and substructures is LOW to MODERATE.
P6: Root uptake.	R6: Proposed Flora and fauna	Minor	Low	Very Low	Extensive planting is unlikely therefore the risk of uptake to proposed flora and fauna is VERY LOW.



6. References

- HSP Consulting Engineers Limited, Corneli Primary School, 9 Heol Fach, Bridgend, Cf33 4LB - Phase I Geo-Environmental Desk Study Report, August 2020, Ref: C3342/PI.
- 2. BRITISH GEOLOGICAL SURVEY. 1990. Bridgend. England and Wales Sheet 261&262. Solid and Drift. 1:50 000 (Keyworth), Nottingham: British geological Survey).
- 3. British Geological Survey Lexicon Search <u>http://www.bgs.ac.uk/lexicon/</u>
- 4. Department of the Environment Industry Profiles.
- 5. Site Investigation in Construction, Volume 3, Specification for Ground Investigation 2nd Edition.
- 6. BS 5930:2015 Code of Practice for Ground Investigations.
- 7. BS 8576:2013 Guidance on investigations for ground gas. Permanent gases and Volatile Organic Compounds (VOCs)
- 8. BS10175:2011 +A1:2013 Investigation of Potentially Contaminated Sites Code of Practice.
- 9. NHBC Standards, Chapter 4.2, Building near trees.
- 10. Department for Environment, Food and Rural Affairs and Contaminated Land: Applications in Real Environments (CL:AIRE) (December 2013). SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination.
- 11. Nathanail, C.P., McCaffrey, C., Gillett, A.G., Ogden, R.C. and Nathanail, J.F. 2015. The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, Nottingham.
- 12. BRE Special Digest 1:Concrete in Aggressive Ground, 2005, Building Research Establishment.
- 13. CL:AIRE The definition of Waste: Development Industry Code of Practice, 2008.
- 14. BS8485:2015 + A1:2019 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.
- 15. CIRIA C665 'Assessing Risks Posed by Hazardous Ground Gases to Buildings'
- 16. NHBC & RSK Group Plc, March 2007. Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present. Ed 4.
- 17. Department for Environment, Food and Rural Affairs and Contaminated Land: Applications in Real Environments (CL:AIRE) (December 2013). SP1010: Appendix E Provisional C4SLs for Benzo(a)pyrene as a surrogate marker for PAHs.
- 18. www.environment-agency.gov.uk
- 19. Environment Agency, Freshwater Environmental Quality Standards (EQS) contained in the Hydrogeological Risk Assessment for Landfills and the Derivation of Groundwater Control and Trigger Levels, 2015.
- 20. HMSO, Water Supply (Water Quality) Regulations, 2002.
- 21. Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 2
- 22. UK Water Industry Research, Guidance for the selection of water supply pipes to be used in Brownfield sites, Ref:10/WM/03/21.
- 23. BS3882:2015. Specification for Topsoil.
- 24. Terzaghi, K., Peck, R.B., Mesri, G. 1996. Soil Mechanics in Engineering Practices.



Appendix I



Cornelly School, Pyle, Bridgend.

Site: Alternative Locations

Subterranean service



Red line boundary

Pedestrian Access



Current Access Points

_ _ _ _ _ Main Vehicular Route

_ -Drainage Ditches

Existing Trees

Existing Hedgerow

 \sim Noise

Overhead Cables

_ _ _ _ _ _ _ _ _ _

Foot Bridge

-----Existing Right of Way

Building for Demolition

Photo View

Gradient / Embankment

+39.0m Level





Siting Locations - Alternative positions for the new school.

Location 1 - Current Position

- Significant amount of space surrounding the school. ٠
- Significant space between the school and the children's centre.
- Existing bus drop off point retained.
- This location provides greatest distancing from the Children's Centre.
- Some degree of street presence to Hall Drive. Does require the existing English medium school to be vacated and demolished.

Location 2 - Adjacent to Greenfield Terrace

- Greatest street presence of all of the locations. .
 - School footprint curtailed by
 - Site access road.
 - Coach turning circle.
 - Children's centre. ٠
- . Single aspect to external play areas to the east.
- Directly accessible external play areas would be limited
- Access to the rest of the site obstructed by the children's centre and the access road.
- Monitoring of external play areas is difficult due to them being dissipated across the site.
- Can be built once the existing Welsh medium school is vacated and demolished.

Location 3 - Playing Field

- Footprint just fits between subterranean service routes.
- Location allows reasonable clearance from the boundary of the adjacent properties.
- New location will require significant service routes (Water, electricity, gas) to be extended. School would have no street presence.
- Limited external space to the north for classroom breakout due to the proximity of the Children's Centre.
- Location is identified as most susceptible area on the site to flood.
- School playing fields would need to be relocated -likely that a new 50x80m pitch would be in Location 1, requiring extensive ground works to regrade that part of the site.

Conclusions.

- Location 3 is the only position that is not reliant on vacating and demolishing one of the existing schools.
- Consequently it is the only location that would allow two schools to be built simultaneously without temporary accommodation.
- The best location for functionality is Location 1 as it has the most space immediately surrounding it, allowing external amenities to be very accessible for the pupils.

Scale: 1:1000 @ A3

50m



Appendix II

								Borehole N	10
					Bo	reho	ole Log	WS01	1
onsu	ulting					1	•	Sheet 1 of	
oject Na	me: Cornelli P	rimary		roject No. 3342		Co-ords:	-	Hole Type WS	е
cation:	North Corr	nelly				Level:		Scale 1:50	
ent:	Gleeds Ma	anager	nent Services Ltd			Dates:	07/08/2020 -	Logged B	y
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ell Stril		Туре	Results	(m)	(m)	Legend	Stratum Descriptior	1	
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marks									

	6								Borehole N	0.
	S	ρ				Bo	reho	ole Log	WS02	
con	sult	ing						0	Sheet 1 of	1
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		was not enco	untered	d during the adva	incement of t	he explora	tory hole.		AGS	

									Borehole N	lo.	
n	S	р				Bo	reho	ole Log	WS03		
con	sult	ing						209	Sheet 1 of 1		
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Locatio	on:	North Corr	nelly		I		Level:		Scale 1:50		
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Well	Water	Samples	s and li	n Situ Testing	Depth	Level	Logond	Stratum Docorintian			
	Strikes	Depth (m)	Туре	Results	(m)	(m)	Legend	Stratum Description			
		0.30	TJ		0.60			MADE GROUND - Grass overlying gravelly clayey topsoil. Sand is fine Gravel is angular to sub rounded of lithologies, brick and concrete. Firm to stiff brown sandy gravelly C	to coarse. mixed		
		0.80	TJ					fine to coarse. Gravel is angular to a of mixed lithologies.	sub rounded	1 -	
		1.60	В		2.00					2 -	
	_	2.40	т		2.30			No recovery. Very soft grey organic CLAY.			
		2.40			2.50 2.65 2.70			Stiff brown sandy gravelly CLAY. Sa coarse. Gravel is angular to sub rou mixed lithologies. Very dense brown slightly clayey sa GRAVEL. Sand is fine to coarse. G coarse, sub rounded to angular of li	Inded of Indy ravel is fine to	3	
								End of borehole at 2.70 m		4	
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	2.00 2.00 - 2.50	В	N=32 (1,1/5,9,8,10)	2.00			Dense brown slightly clayey sandy		-
							Sand is fine to coarse. Gravel is sub sub rounded of mixed lithologies inc	o angular to cluding	
						· · · · · ·	limestone.		
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	6.00		N=11 (1,1/2,2,3,4)						
	6.00 - 6.50	В	N -11 (1, 1/2,2,0, 1)			· · · · · ·			
	7.00		N=9 (2,2/2,1,2,4)	7.00			Medium dense reddish brown slight	ly gravelly	_
	7.00 - 7.50	В					clayey SAND. Sand is fine to coarse angular of mixed lithologies.	e. Gravel is	
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	7.80 - 8.00	D							
	8.00 8.00 - 9.00	в	N=16 (3,3/3,4,5,4)						
	9.00		N=16 (3,4/4,5,4,3)	9.00			Medium dense to vory dense brown	clavey	_
	9.00 - 9.50	В					Medium dense to very dense brown sandy GRAVEL. Sand is fine to coa	rse. Gravel is	
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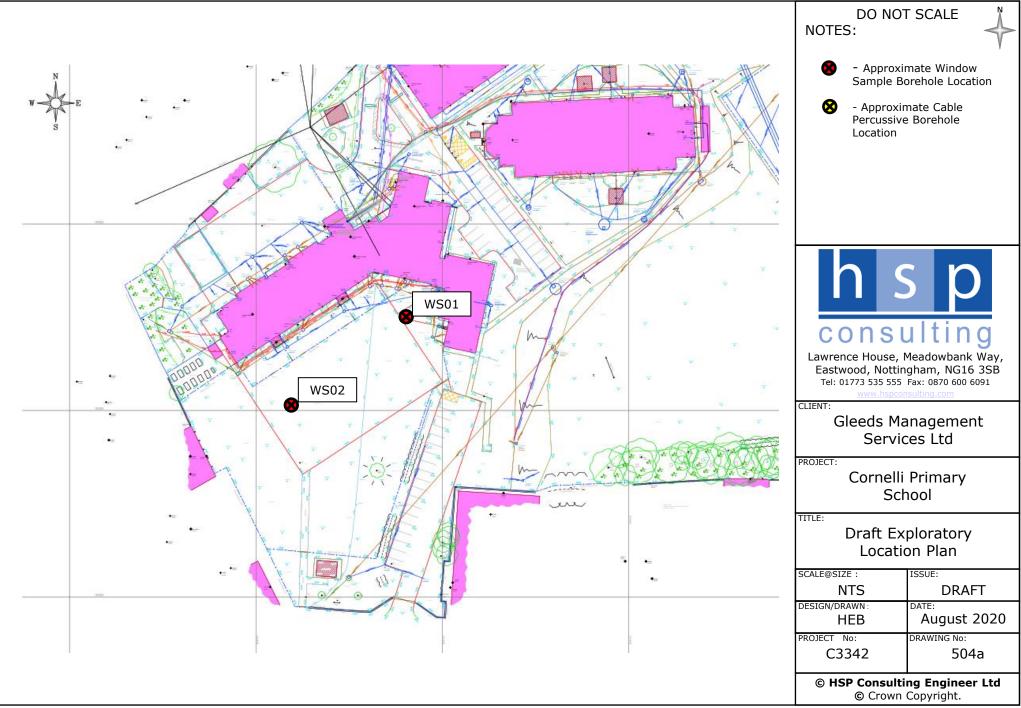
h	S sult	p ing				Borehole Log						
Project	t Name:	Cornelli Pr	imary	School	Project No. C3342		Co-ords:	-	Hole Type CP			
ocatio	on:	North Cornelly					Level:		Scale 1:50			
Client:		Gleeds Ma	anager	nent Services Lto	I		Dates:	20/07/2020 - 21/07/2020	Logged By HB			
Well	Water Strikes		1	n Situ Testing	Depth (m)	Level (m)	Legend	Stratum Description				
	ounco	Depth (m) 10.00	Туре	Results 50 (5,4/50 for 180mm)	10.20	()		End of borehole at 10.20 m				
									11			
									12			
									13			
									14			
									15			
									16			
									17			
									18			
									19			
Remar	ko								20			
		vas not encou	untered	d during the adva	ncement of t	he explora	atory hole.		AGS			

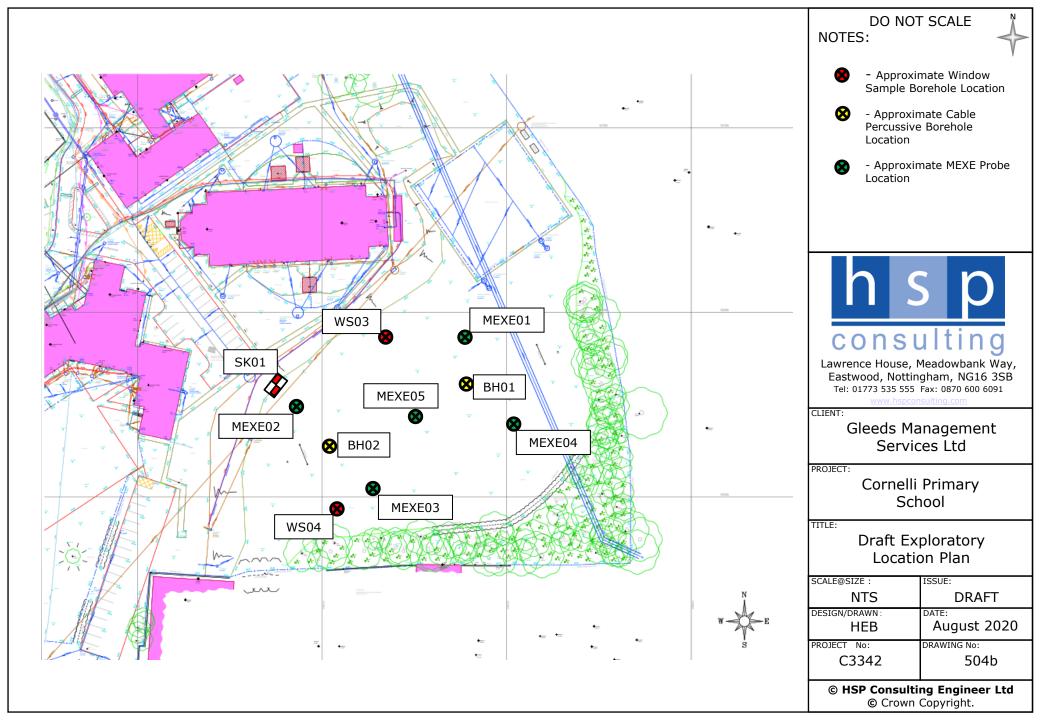
Samples	nelly		roject No. 3342	Bo	Co-ords:	ole Log	BH02 Sheet 1 of Hole Type CP Scale
Cornelli Pri North Corn Gleeds Ma Samples Depth (m) 0.10 - 1.00	nelly inager and Type	nent Services Ltd			-	-	Hole Type CP
North Corn Gleeds Ma Samples Depth (m) 0.10 - 1.00	nelly inager and Type	nent Services Ltd			-	-	CP
Gleeds Ma Samples Depth (m) 0.10 - 1.00	inager and Type				Loudi		Soola
Samples Depth (m) 0.10 - 1.00	and Type				Level:		1:50
Samples Depth (m) 0.10 - 1.00	and Type				Dates:	21/07/2020 22/07/2020	Logged B
Depth (m) 0.10 - 1.00 1.00	Туре	n Situ Testina	<u> </u>	<u> </u>	Dates.	21/07/2020 - 22/07/2020	HB
0.10 - 1.00		_	Depth (m)	Level (m)	Legend	Stratum Description	l
		Results				Dark brown sandy slightly gravelly c	layey
			0.30			TOPSOIL. Firm to stiff brown sandy slightly gra	avelly CLAY.
						Sand is fine to coarse. Gravel is and rounded of mixed lithologies.	jular to sub
		N=17 (2,2/4,4,4,5)					
.00 - 1.00	В						
2.00 2.00 - 2.50	В	N=36 (6,7/10,12,8,6)					
3.00		N=29 (7,9/9,9,5,6)	3.00			Medium dense to dense brown sligh	ntly clayey
3.00 - 3.50	В					sandy GRAVEL. Sand is fine to coal sub angular to sub rounded of mixed	rse. Gravel is
						including limestone.	u illiologies
					· · · · · · · · · · · · · · · · · · ·		
4.00 4.00 - 4.50	В	N=27 (6,6/6,7,6,8)				With a clayey band from 4.00m to 4.50m c	depth.
5.00	_	N=32 (9,7/7,7,9,9)			· · · · · ·		
.00 - 5.50	В						
					· · · · · ·		
6.00		N-35 (6 7/7 9 9 10)					
6.00 - 6.50	В						
7.00 7.00 - 7.50	В	N=48 (3,7/9,16,14,9)					
			7 50				
			7.50			Very stiff dark brown sandy gravelly is fine to coarse. Gravel is angular to	o sub
8.00		N=27 (5,7/7,6,7,7)				rounded of limestone and mudstone) .
3.00 - 9.00	В						
0.00							
9.00 9.00 - 9.80	В	N=28 (3,3/6,6,7,9)					
1	В						
.80 - 10.00			1	1			
5.0 7.0	7.00 00 - 7.50 8.00 00 - 9.00 9.00 00 - 9.80	6.00 00 - 6.50 B 7.00 00 - 7.50 B 8.00 00 - 9.00 B 9.00 00 - 9.80 B	6.00 00 - 6.50 B N=35 (6,7/7,9,9,10) 7.00 00 - 7.50 B N=48 (3,7/9,16,14,9) 8.00 00 - 9.00 B N=27 (5,7/7,6,7,7) 9.00 00 - 9.80 B N=28 (3,3/6,6,7,9)	$6.00\\00-6.50$ BN=35 (6,7/7,9,9,10) $7.00\\00-7.50$ BN=48 (3,7/9,16,14,9) $8.00\\00-9.00$ BN=27 (5,7/7,6,7,7) $9.00\\00-9.80$ BN=28 (3,3/6,6,7,9)	$6.00\\00-6.50$ B N=35 (6,7/7,9,9,10) $7.00\\00-7.50$ B N=48 (3,7/9,16,14,9) $7.00\\00-7.50$ B N=27 (5,7/7,6,7,7) $8.00\\00-9.80$ B N=28 (3,3/6,6,7,9)	6.00 $00 - 6.50$ B N=35 (6,7/7,9,9,10) 7.00 $00 - 7.50$ B N=48 (3,7/9,16,14,9) 7.50 B 8.00 $00 - 9.00$ B 9.00 $00 - 9.80$ B N=28 (3,3/6,6,7,9)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

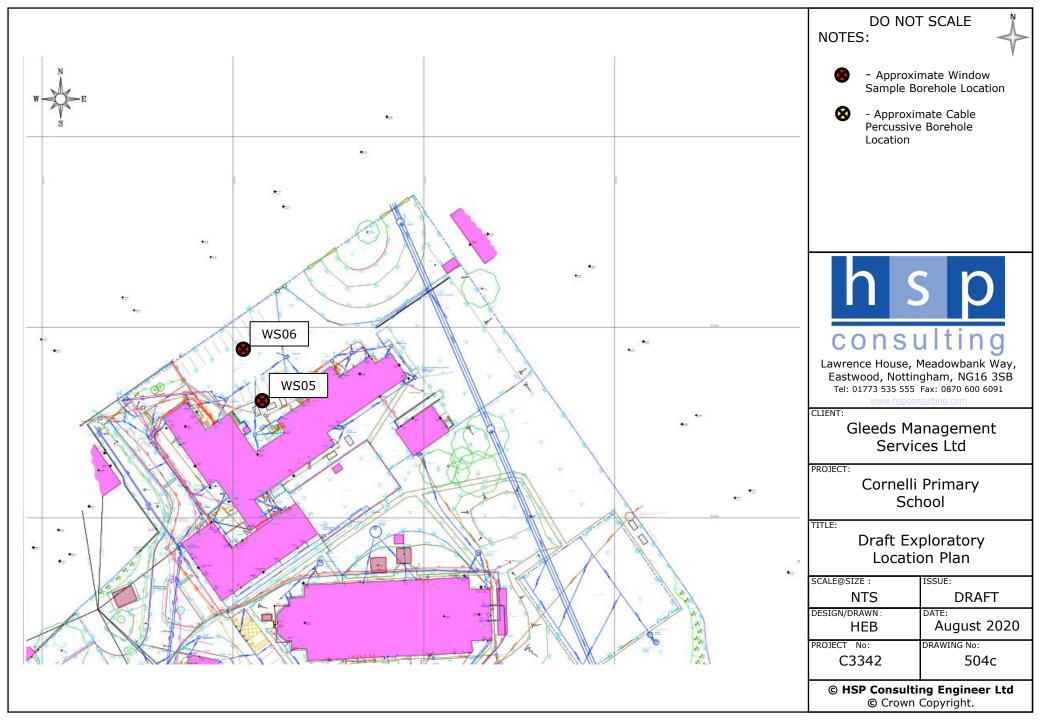
h :	S ulti	D ng				Bo	reho	ole Log	Borehole No. BH02 Sheet 2 of 2
Project N	lame:	Cornelli Pr	imary	School	Project No. C3342		Co-ords:	-	Hole Type CP
_ocation:	:	North Corr	nelly		L		Level:		Scale 1:50
Client:		Gleeds Ma	nager	nent Services Lto	l		Dates:	21/07/2020 - 22/07/2020	Logged By HB
Well St	Vater trikes			n Situ Testing Results	Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m) 10.00	Туре	50 (7,7/50 for 150mm)	10.30			End of borehole at 10.30 m	
									11 -
									12 -
									13
									14 -
									15
									16
									17
									18
									19
Remarks Groundw		/as not encou	untered	d during the adva	ncement of th	ne explora	tory hole.		20 AGS



Appendix III









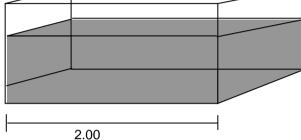
Appendix IV

INSITU SOAKAWAY TEST RESULTS

Page 1 of 3

S

Trialpit No.: SK01 Soil Profile: Depth (m) Description From: To: 0.00 0.30 TOPSOIL - Brown sandy slightly clayey sandy gravelly topsoil. 0.30 1.30 Loose brown slightly clayey sandy GRAVEL. High cobble content. Sketch plan of test zone Not to scale 0.65 All dimensions in metres. porosity (N) = 0.42(measured in laboratory) S= Storage depth (m) 1.30 Water level from 0.30m to 1.30m No Groundwater was

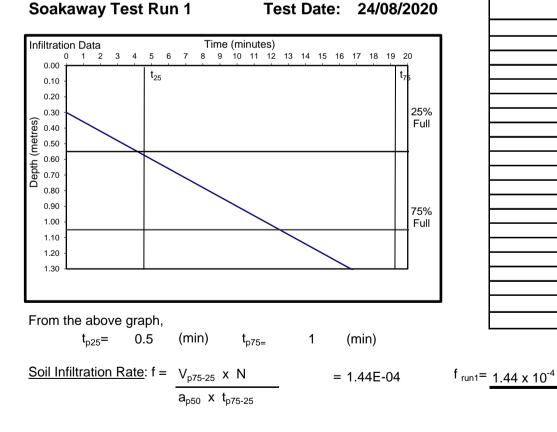


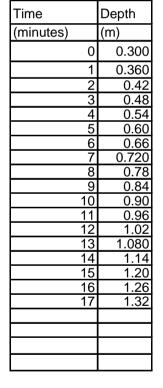
Gives the Figures

encountered

S=	1.00	m
a _{p50} =	3.95	m²
V _{p75-25} =	0.65	m³

24/08/2020 Test Date:





Test and analysis carried out in general accordance with BRE Digest 365 : 2003

Job No.: C3341 Site: **Corneli Primary School Client: Gleeds Management Services Ltd**



m/s

INSITU SOAKAWAY TEST RESULTS

Page 2 of 3

Trialpit No.: SK01 Soil Profile: Depth (m) Description From: To: 0.00 0.30 TOPSOIL - Brown sandy slightly clayey sandy gravelly topsoil. 0.30 1.30 Loose brown slightly clayey sandy GRAVEL. High cobble content. Sketch plan of test zone Not to scale 0.65 All dimensions in metres. porosity (N) = 0.42(measured in laboratory) S= Storage depth (m) 1.30 S Water level from 0.30m to 1.30m No Groundwater was encountered **Gives the Figures** S= 1.00 2.00 m m² 3.95 a_{p50}= m³ 0.65 Time Depth V_{p75-25}= (minutes) (m) Soakaway Test Run 1 24/08/2020 Test Date: 0 0.300 2 0.450 4 0.60 Infiltration Data Time (minutes) 2 3 4 5 ģ 10 11 12 13 14 15 6 7 8 6 0.75 1 0.00 8 0.90 t₇₅ t₂₅ 0.10 1.05 10 0.20 12 1.20 25% 0.30 14 1.350 Full (metres) 0.40 0.50 0.60 Depth 0.70 0.80 0.90 75% 1.00 Full 1.10 1.20 1.30 From the above graph, (min) $t_{p25} =$ 3 t_{p75=} 10 (min) <u>Soil Infiltration Rate</u>: $f = V_{p75-25} \times N$ f _{run1}= 1.65 x 10⁻⁴ = 1.65E-04 m/s a_{p50} x t_{p75-25} Test and analysis carried out in general accordance with BRE Digest 365 : 2003 Job No.: C3341 Site: **Corneli Primary School Client: Gleeds Management Services Ltd** consul L

INSITU SOAKAWAY TEST RESULTS

Page 3 of 3

Trialpit No.: SK01 Soil Profile: Depth (m) Description From: To: 0.00 0.30 TOPSOIL - Brown sandy slightly clayey sandy gravelly topsoil. 0.30 1.30 Loose brown slightly clayey sandy GRAVEL. High cobble content. Sketch plan of test zone Not to scale 0.65 All dimensions in metres. porosity (N) = 0.42(measured in laboratory) S= Storage depth (m) 1.30 S Water level from 0.30m to 1.30m No Groundwater was encountered **Gives the Figures** S= 1.00 2.00 m m² 3.95 a_{p50}= m³ 0.65 Time Depth V_{p75-25}= (minutes) (m) Soakaway Test Run 1 24/08/2020 Test Date: 0 0.300 3 0.500 5 0.70 Infiltration Data Time (minutes) 2 3 4 5 ģ 10 11 12 13 14 15 6 7 8 8 0.90 1 0.00 1.10 10 t₇₅ t₂₅ 0.10 13 1.30 0.20 25% 0.30 Full (metres) 0.40 0.50 0.60 Depth 0.70 0.80 0.90 75% 1.00 Full 1.10 1.20 1.30 From the above graph, (min) $t_{p25} =$ 3 t_{p75=} 9.5 (min) <u>Soil Infiltration Rate</u>: $f = V_{p75-25} \times N$ $f_{run1} = 1.77 \times 10^{-4}$ = 1.77E-04 m/s a_{p50} x t_{p75-25} Test and analysis carried out in general accordance with BRE Digest 365 : 2003 Job No.: C3341 Site: **Corneli Primary School Client: Gleeds Management Services Ltd** consul L



LABORATORY REPORT



4043

Contract Number: PSL20/4512

Report Date: 17 September 2020

- Client's Reference: C3342
- Client Name: HSP Consulting Lawrence House 4 Meadowbank Way Eastwood Nottingham NG16 3SB

For the attention of: Hallam Brown

Contract Title:	Cornelli Primary School
Date Received:	28/8/2020
Date Commenced:	28/8/2020
Date Completed:	17/9/2020

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

R Gunson (Director) A Watkins (Director) R Berriman (Quality Manager)

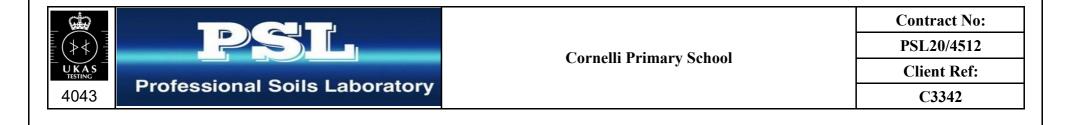
£K#

L Knight (Senior Technician) S Eyre (Senior Technician) S Royle (Laboratory Manager)

5 – 7 Hexthorpe Road, Hexthorpe, Doncaster DN4 0AR tel: +44 (0)844 815 6641 fax: +44 (0)844 815 6642 e-mail: rgunson@prosoils.co.uk awatkins@prosoils.co.uk Page 1 of

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
WS03		В	1.60		Brown very gravelly very sandy very silty CLAY.
WS05		В	1.30		Brown very sandy silty GRAVEL.
BH01		В	1.00	2.00	Brown gravelly very sandy CLAY.
BH02		В	3.00		Brown very sandy slightly clayey silty GRAVEL.



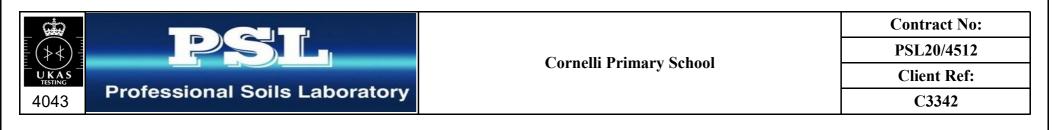
SUMMARY OF SOIL CLASSIFICATION TESTS

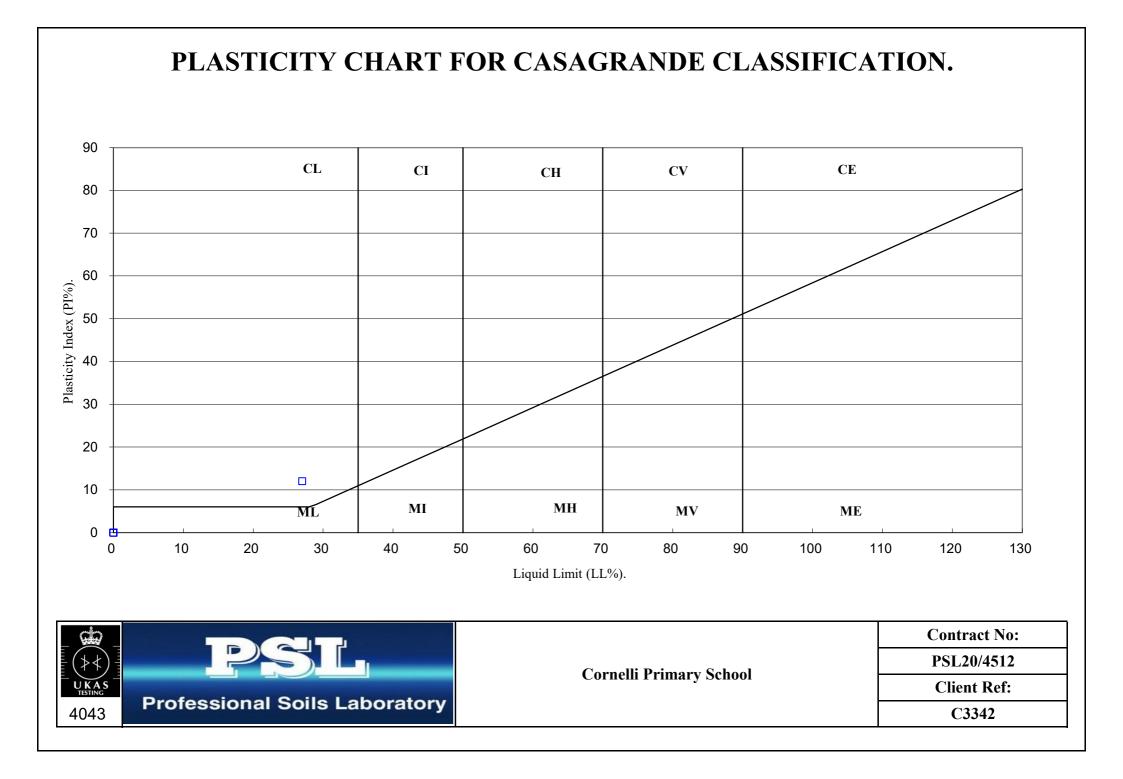
(BS1377 : PART 2 : 1990)

Hole	Sample	Sample	Тор	Base	Moisture Content	Linear Shrinkage	Particle Density	Liquid Limit	Plastic Limit	Plasticity Index	Passing .425mm	Remarks
Number	Number	Туре	Depth	Depth	%	%	Mg/m ³	%	%	%	%	Kemar Ky
		JT	m	m	Clause 3.2	Clause 6.5	Clause 8.2	Clause 4.3/4	Clause 5.3	Clause 5.4		
WS03		В	1.60		13			27	15	12	62	Low plasticity CL.
WS05		В	1.30		7.9				NP			
BH01		В	1.00	2.00	16							
BH02		В	3.00		6.5							

SYMBOLS : NP : Non Plastic

* : Liquid Limit and Plastic Limit Wet Sieved.

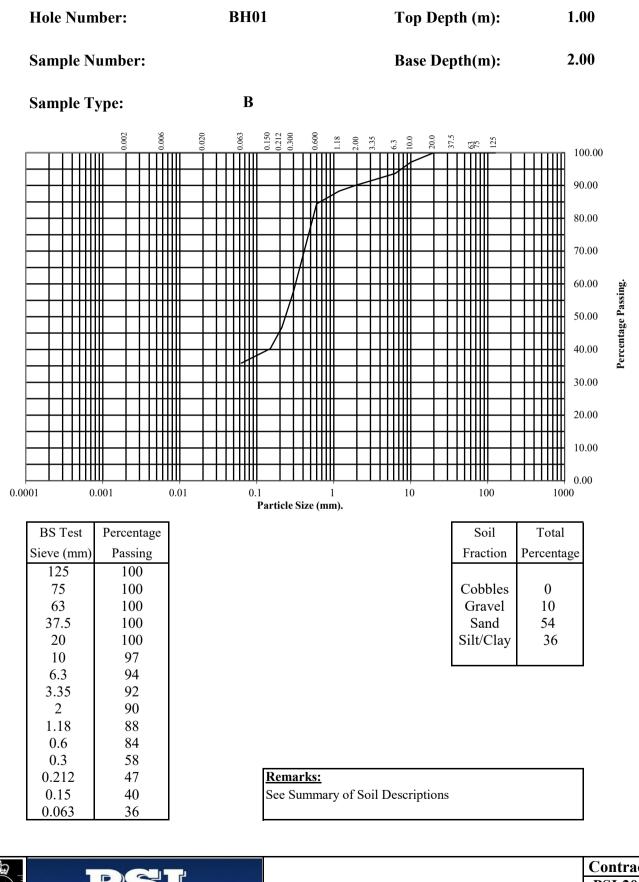




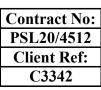
PARTICLE SIZE DISTRIBUTION TEST

BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2



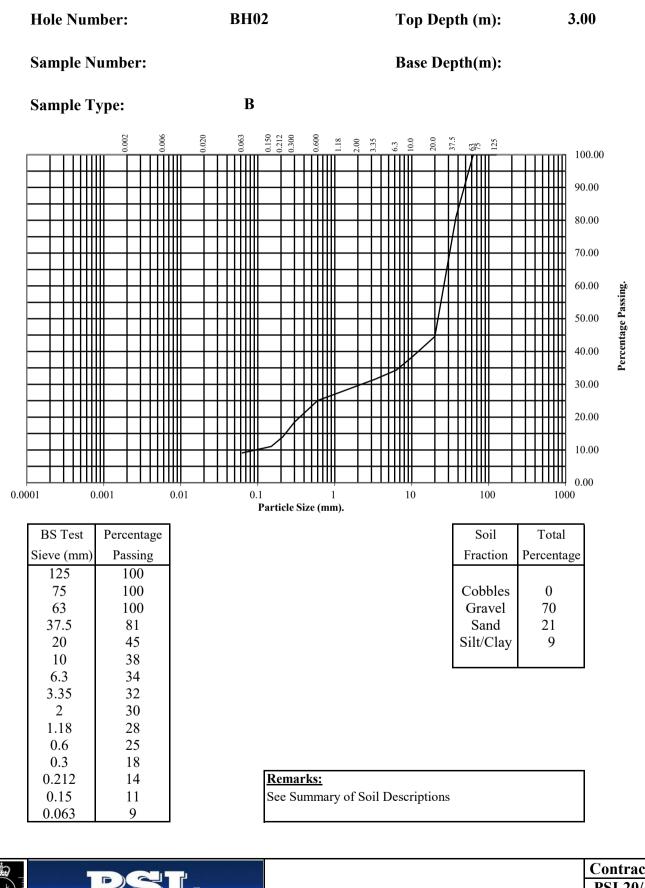




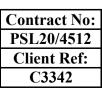
PARTICLE SIZE DISTRIBUTION TEST

BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2









Appendix V

🔅 eurofins



Chemtest Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070 Email: info@chemtest.com

Report No.:	20-21265-1		
Initial Date of Issue:	22-Aug-2020		
Client	HSP Consulting Engineers Limited		
Client Address:	Lawrence House Meadowbank Way Eastwood Nottinghamshire NG16 3SB		
Contact(s):	Hallam Brown		
Project	C3342 Cornelli Primary School / Ysgol Y Ferch o'r Sger		
Quotation No.:		Date Received:	13-Aug-2020
Order No.:		Date Instructed:	13-Aug-2020
No. of Samples:	10		
Turnaround (Wkdays):	5	Results Due:	19-Aug-2020
Date Approved:	22-Aug-2020		
Approved By:			
Manney	T		

Details:

1

Glynn Harvey, Technical Manager

<u>Results - Soil</u>

Client: HSP Consulting Engineers												
Limited		Che	mtest J	ob No.:	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265
Quotation No.:	(Chemte	est Sam	ple ID.:	1047621	1047623	1047625	1047626	1047627	1047628	1047630	1047631
		Sa	ample L	ocation:	WS01	WS01	WS03	WS03	WS03	WS04	WS05	WS06
			Sampl	e Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top De		0.40	2.50	0.30	0.80	2.40	0.10	0.10	0.20
			Date Sa	ampled:	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020	06-Aug-2020
			Asbest		DURHAM	Ŭ	DURHAM	Ŭ		DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
АСМ Туре	U	2192		N/A	-		-			-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected		No Asbestos Detected			No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-		-			-	-	-
Moisture	N	2030	%	0.020	22	4.8	15	15	61	35	11	5.5
рН	U	2010		4.0	8.1	8.9	6.7	7.2	6.9	6.7	7.6	8.2
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	1.7		0.50	< 0.40		0.52	0.52	0.70
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	0.048	< 0.010	< 0.010	< 0.010	0.22	0.017	< 0.010	0.022
Total Sulphur	U	2175	%	0.010		0.027			0.57			
Sulphur (Elemental)	U	2180	mg/kg	1.0	26		< 1.0	3.7		4.8	< 1.0	7.1
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	5.5		45	1.8		3.2	26	15
Sulphate (Acid Soluble)	U	2430	%	0.010		< 0.010			0.14			
Arsenic	U	2450	mg/kg	1.0	17		10	11		10	16	17
Cadmium	U	2450	mg/kg	0.10	0.68		0.21	< 0.10		0.47	0.48	0.34
Chromium	U	2450	mg/kg	1.0	19		16	25		14	23	12
Copper	U	2450	mg/kg	0.50	25		16	18		21	34	13
Mercury	U	2450	mg/kg	0.10	< 0.10		< 0.10	< 0.10		0.10	0.10	< 0.10
Nickel	U	2450	mg/kg	0.50	26		20	32		16	27	16
Lead	U	2450	mg/kg	0.50	45		32	31		45	48	23
Selenium	U	2450	mg/kg	0.20	0.61		0.48	0.41		0.39	0.64	< 0.20
Zinc	U	2450	mg/kg	0.50	120		68	83		120	140	55
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50	< 0.50		< 0.50	< 0.50	< 0.50
Organic Matter	U	2625	%	0.40	4.5		2.4			9.0		
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	Ν	2680	mg/kg	5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	Ν	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	Ν	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0

<u>Results - Soil</u>

Client: HSP Consulting Engineers		ai										
Limited		Che	mtest J	OD NO.:	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265	20-21265
Quotation No.:		Chemte	est Sam	ple ID.:	1047621	1047623	1047625	1047626	1047627	1047628	1047630	1047631
		Sa	ample L	ocation:	WS01	WS01	WS03	WS03	WS03	WS04	WS05	WS06
				e Type:	SOIL							
		Top Depth (m):		0.40	2.50	0.30	0.80	2.40	0.10	0.10	0.20	
			Date Sa		06-Aug-2020							
			Asbest		DURHAM		DURHAM			DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	Ν	2680	mg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0		< 5.0	< 5.0		< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10		< 10	< 10		< 10	< 10	< 10
Naphthalene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Acenaphthene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Fluorene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Phenanthrene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	0.17
Anthracene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	0.14
Fluoranthene	U	2700	mg/kg	0.10	< 0.10		< 0.10	1.2		0.68	< 0.10	0.25
Pyrene	U	2700	mg/kg	0.10	< 0.10		< 0.10	1.4		0.77	< 0.10	0.30
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Chrysene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10		< 0.10	< 0.10		< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0		< 2.0	2.6		< 2.0	< 2.0	< 2.0
Benzene	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Toluene	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
o-Xylene	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0		< 1.0	< 1.0		< 1.0	< 1.0	< 1.0
Total Phenols	U	2920	mg/kg	0.30	< 0.30		< 0.30	< 0.30		< 0.30	< 0.30	< 0.30

Results - Soil

Project: C3342 Cornelli Primary School		erchio	i <u>oyei</u>			
Client: HSP Consulting Engineers Limited			ntest Jo		20-21265	20-21265
Quotation No.:	(st Sam		1047632	1047633
		Sa	ample Lo		WS06	BH01
		Sample Type:			SOIL	SOIL
			Тор Dep	oth (m):	0.60	1.50
			Date Sa	ampled:	06-Aug-2020	11-Aug-2020
			Asbest	os Lab:	COVENTRY	
Determinand	Accred.	SOP	Units	LOD		
АСМ Туре	U	2192		N/A	-	
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	
ACM Detection Stage	U	2192		N/A	-	
Moisture	N	2030	%	0.020	6.0	14
рН	U	2010		4.0	8.3	7.6
Boron (Hot Water Soluble)	U	2120	mg/kg	0.40	< 0.40	
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010	< 0.010
Total Sulphur	U	2175	%	0.010		0.015
Sulphur (Elemental)	U	2180	mg/kg	1.0	< 1.0	
Cyanide (Free)	U	2300	mg/kg	0.50	< 0.50	
Cyanide (Total)	U	2300	mg/kg	0.50	< 0.50	
Sulphide (Easily Liberatable)	Ν	2325	mg/kg	0.50	2.9	
Sulphate (Acid Soluble)	U	2430	%	0.010		0.017
Arsenic	U	2450	mg/kg	1.0	17	
Cadmium	U	2450	mg/kg	0.10	0.12	
Chromium	U	2450	mg/kg	1.0	20	
Copper	U	2450	mg/kg	0.50	18	
Mercury	U	2450	mg/kg	0.10	< 0.10	
Nickel	U	2450	mg/kg	0.50	38	
Lead	U	2450	mg/kg	0.50	18	
Selenium	U	2450	mg/kg	0.20	0.71	
Zinc	U	2450	mg/kg	0.50	110	
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	
Organic Matter	U	2625	%	0.40	1.1	
Aliphatic TPH >C5-C6	Ν	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	
Aromatic TPH >C5-C7	Ν	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C8-C10	U	2680	mg/kg	1.0	< 1.0	

Client: HSP Consulting Engineers		Che	mtest Jo	ob No.:	20-21265	20-21265
Quotation No.:	(Chemte	st Sam	ole ID.:	1047632	1047633
			ample Lo		WS06	BH01
			Sample		SOIL	SOIL
			Top Dep		0.60	1.50
			Date Sa	mpled:	06-Aug-2020	11-Aug-2020
			Asbest	os Lab:	COVENTRY	<u> </u>
Determinand	Accred.	SOP	Units	LOD		
Aromatic TPH >C10-C12	U	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C12-C16	U	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C21-C35	U	2680	mg/kg	1.0	< 1.0	
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	
Naphthalene	U	2700	mg/kg	0.10	< 0.10	
Acenaphthylene	U	2700	mg/kg	0.10	< 0.10	
Acenaphthene	U	2700	mg/kg	0.10	< 0.10	
Fluorene	U	2700	mg/kg	0.10	< 0.10	
Phenanthrene	U	2700	mg/kg	0.10	< 0.10	
Anthracene	U	2700	mg/kg	0.10	< 0.10	
Fluoranthene	U	2700		0.10	0.12	
Pyrene	U	2700	mg/kg	0.10	0.14	
Benzo[a]anthracene	U	2700	mg/kg	0.10	< 0.10	
Chrysene	U	2700	mg/kg	0.10	< 0.10	
Benzo[b]fluoranthene	U	2700	mg/kg	0.10	< 0.10	
Benzo[k]fluoranthene	U	2700	mg/kg	0.10	< 0.10	
Benzo[a]pyrene	U	2700	mg/kg	0.10	< 0.10	
Indeno(1,2,3-c,d)Pyrene	U	2700	mg/kg	0.10	< 0.10	
Dibenz(a,h)Anthracene	U	2700	mg/kg	0.10	< 0.10	
Benzo[g,h,i]perylene	U	2700	mg/kg	0.10	< 0.10	
Total Of 16 PAH's	U	2700	mg/kg	2.0	< 2.0	
Benzene	U	2760	µg/kg	1.0	< 1.0	
Toluene	U	2760	µg/kg	1.0	< 1.0	
Ethylbenzene	U	2760	µg/kg	1.0	< 1.0	
m & p-Xylene	U	2760	µg/kg	1.0	< 1.0	
o-Xylene	U	2760	µg/kg	1.0	< 1.0	
Methyl Tert-Butyl Ether	U	2760	µg/kg	1.0	< 1.0	
Total Phenols	U	2920	mg/kg	0.30	< 0.30	

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	рН	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2180	Sulphur (Elemental) in Soils by HPLC	Sulphur	Dichloromethane extraction / HPLC with UV detection
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21– C35, >C35–C44Aromatics: >C5–C7, >C7–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1- Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key

U	UKAS accredited
Μ	MCERTS and UKAS accredited
Ν	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
	Comments or interpretations are beyond the scope of UKAS accreditation
	The results relate only to the items tested
	Uncertainty of measurement for the determinands tested are available upon request
	None of the results in this report have been recovery corrected
	All results are expressed on a dry weight basis
	The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis All Asbestos testing is performed at the indicated laboratory Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: <u>customerservices@chemtest.com</u>

🔅 eurofins



Chemtest Eurofins Chemtest Ltd Depot Road Newmarket CB8 0AL Tel: 01638 606070 Email: info@chemtest.com

Report No.:	20-21664-1		
Initial Date of Issue:	20-Aug-2020		
Client	HSP Consulting Engineers Limited		
Client Address:	Lawrence House Meadowbank Way Eastwood Nottinghamshire NG16 3SB		
Contact(s):	Hallam Brown		
Project	C3342 Cornelli Primary School		
Quotation No.:	Q14-00343	Date Received:	17-Aug-2020
Order No.:		Date Instructed:	17-Aug-2020
No. of Samples:	2		
Turnaround (Wkdays):	5	Results Due:	21-Aug-2020
Date Approved:	20-Aug-2020		
Approved By:			
My May			

Details:

Glynn Harvey, Technical Manager

Project: C3342 Cornelli Primary School

Client: HSP Consulting Engineers Limited	Chemtest Job No.:		20-21664	20-21664		
Quotation No.: Q14-00343	(Chemte	st Sam	ple ID.:	1049477	1049479
		Sa	ample Lo	ocation:	BH01	BH02
			Sampl	e Type:	SOIL	SOIL
	Top Depth (m): Bottom Depth (m): Date Sampled:		7	9.80		
				10.00		
			11-Aug-2020	11-Aug-2020		
Determinand	Accred. SOP Units LOD					
Moisture	N	2030	%	0.020	13	13
рН	U	2010		4.0	8.4	8.7
Sulphate (2:1 Water Soluble) as SO4	U	2120	g/l	0.010	< 0.010	< 0.010
Total Sulphur	U 2175 % 0.010		0.028	0.018		
Sulphate (Acid Soluble)	U	2430	%	0.010	< 0.010	< 0.010

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	рН	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.

Report Information

Key
,

U	UKAS accredited
Μ	MCERTS and UKAS accredited
Ν	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
Т	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
	Comments or interpretations are beyond the scope of UKAS accreditation
	The results relate only to the items tested
	Uncertainty of measurement for the determinands tested are available upon request
	None of the results in this report have been recovery corrected
	All results are expressed on a dry weight basis
	The following tests were analysed on samples as received and the results subsequently

corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A Date of sampling not supplied
- B Sample age exceeds stability time (sampling to extraction)
- C Sample not received in appropriate containers
- D Broken Container
- E Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt All water samples will be retained for 14 days from the date of receipt Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to: <u>customerservices@chemtest.com</u>



Appendix VI





Waste Classification Report



C3342 Cornelli Primary S	chool - Concrete Classification Sample	S	
Description/Comme	ents		
Project			
3342 Cornelli Primary S	chool		
Site			
Cornelli Primary School			
Related Documents			
# Name		Description hwol file used to create the Job	
1 HWOL_20-21004	.20200620 090330.11w0l		
Waste Stream Temp	plate		
-	nplate for contaminated soils		
Classified by			
Name:	Company:	HazWasteOnline™ Training Record:	
Howard Daley	HSP Consulting Engineers Limited		Data
Date: I1 Sep 2020 09:47 GMT	Lawrence House 4 Meadowbank W Eastwood	ay Course Hazardous Waste Classification	Date 11 Feb 2020
Telephone:	4 Meadowbank Way, Eastwood	Advanced Hazardous Waste Classification	12 Feb 2020
01773 535555 Nottingham			121052020
	NG16 3SB		
Report			
vehour			
Created by: Howard Daley Created date: 11 Sep 202			

Job summary

# Sa	ample Name	Depth [m]	Classification Result	Hazard properties	Page
1 BI	H01 7.00m	7	Non Hazardous		2
2 <mark>B</mark> I	H02 9.80m	9.80-10.00	Non Hazardous		3

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	4
Appendix B: Rationale for selection of metal species	4
Appendix C: Version	4



Classification of sample: BH01 7.00m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
---	--

Sample details

Sample Name: BH01 7.00m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil
Sample Depth:		from contaminated sites)
7 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
13%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	۵	рН		PH		8.4 pH		8.4	рН	8.4 pH		
									Total:	0%		

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Classification of sample: BH02 9.80m



Sample details

Sample Name:	LoW Code:	
BH02 9.80m	Chapter:	17: Construction and Demolition Wastes (including excavated so
Sample Depth:		from contaminated sites)
9.80-10.00 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
13%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User ente	ered data	Conv. Factor	Compound	d conc.	Classification value	AC Applied	Conc. Not Used
1	8	рН		PH		8.7	pН		8.7	рН	8.7 pH		
										Total:	0%		<u> </u>

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Report created by Howard Daley on 11 Sep 2020

Appendix A: Classifier defined and non CLP determinands

• pH (CAS Number: PH)

Description/Comments: Appendix C4 Data source: WM3 1st Edition 2015 Data source date: 25 May 2015 Hazard Statements: None.

Appendix B: Rationale for selection of metal species

None used in this classification

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018 HazWasteOnline Classification Engine Version: 2020.241.4455.8692 (28 Aug 2020) HazWasteOnline Database: 2020.241.4455.8692 (28 Aug 2020)

This classification utilises the following guidance and legislation: WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018 CLP Regulation - Regulation 1272/2008/EC of 16 December 2008 1st ATP - Regulation 790/2009/EC of 10 August 2009 2nd ATP - Regulation 286/2011/EC of 10 March 2011 3rd ATP - Regulation 618/2012/EU of 10 July 2012 4th ATP - Regulation 487/2013/EU of 8 May 2013 Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013 5th ATP - Regulation 944/2013/EU of 2 October 2013 6th ATP - Regulation 605/2014/EU of 5 June 2014 WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014 Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014 7th ATP - Regulation 2015/1221/EU of 24 July 2015 8th ATP - Regulation (EU) 2016/918 of 19 May 2016 9th ATP - Regulation (EU) 2016/1179 of 19 July 2016 10th ATP - Regulation (EU) 2017/776 of 4 May 2017 HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017 13th ATP - Regulation (EU) 2018/1480 of 4 October 2018 14th ATP - Regulation (EU) 2020/217 of 4 October 2019 POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004 1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010 2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010





Waste Classification Report



Job name			
C3342 Cornelli Prima	ary School		
Description/Cor	nments		
Project			
C3342 Cornelli Prima	ary School		
Site			
Cornelli Primary Scho	ool		
Related Docume	ents		
# Name		Description	
1 HWOL_20-21	1265-20200822 173259.hwol	hwol file used to create the Job	
Waste Stream T	emplate		
Example waste strea	m template for contaminated soils		
Classified by			
Name: Howard Daley	Company: HSP Consulting Engineers Limited	HazWasteOnline™ Training Record:	

Howard Daley	HSP Consulting Engineers Limited		
Date:	Lawrence House 4 Meadowbank Way	Course	Date
11 Sep 2020 09:52 GMT	Eastwood	Hazardous Waste Classification	11 Feb 2020
Telephone:	4 Meadowbank Way, Eastwood	Advanced Hazardous Waste Classification	12 Feb 2020
01773 535555	Nottingham		
	NG16 3SB		

Report

Created by: Howard Daley Created date: 11 Sep 2020 09:52 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01 0.40m	0.40	Non Hazardous		3
2	WS01 2.50m	2.50	Non Hazardous		6
3	WS03 0.30m	0.30	Non Hazardous		7
4	WS03 0.80m	0.80	Non Hazardous		10
5	WS03 2.40m	2.40	Non Hazardous		13
6	WS04 0.10m	0.10	Non Hazardous		14
7	WS05 0.10m	0.10	Non Hazardous		17
8	WS06 0.20m	0.20	Non Hazardous		20
9	WS06 0.60m	0.60	Non Hazardous		23
10	BH01 1.50m	1.50	Non Hazardous		26



Appendices	Page
Appendix A: Classifier defined and non CLP determinands	27
Appendix B: Rationale for selection of metal species	28
Appendix C: Version	29



Classification of sample: WS01 0.40m



Sample details

LoW Code:	
Chapter:	17: Construction and Demolition Wastes (including excavated soil
	from contaminated sites)
Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
	03)
	Chapter:

Hazard properties

None identified

Determinands

Moisture content: 22% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User entered	l data	Conv. Factor	Compound con	c.	Classification value	MC Applied	Conc. Not Used
1	4		,	1327-53-3		17	mg/kg	1.32	17.508 m	g/kg	0.00175 %	<	
2	4	boron { diboron triox		1303-86-2	_	1.7	mg/kg	3.22	4.27 m	g/kg	0.000427 %	\checkmark	
3	4	cadmium { cadmiun 048-002-00-0	<mark>n oxide</mark> } 215-146-2	1306-19-0		0.68	mg/kg	1.142	0.606 m	g/kg	0.0000606 %	\checkmark	
4	4	chromium in chromi oxide (worst case) }		{ • chromium(III)		19	mg/kg	1.462	21.66 m	g/kg	0.00217 %	~	
5	4	chromium in chromi oxide } 024-001-00-0	ium(VI) compounds	{ chromium(VI)		<0.5	mg/kg	1.923	<0.962 m	g/kg	<0.0000962 %		<lod< td=""></lod<>
6	~	copper { dicopper o		<mark>de</mark> } 1317-39-1		25	mg/kg	1.126	21.955 m	g/kg	0.0022 %	~	
7	4	lead { lead chromate 082-004-00-2	<mark>e</mark> } 231-846-0	7758-97-6	1	45	mg/kg	1.56	54.75 m	g/kg	0.00351 %	\checkmark	
8	4	mercury { mercury (080-010-00-X		7487-94-7		<0.1	mg/kg	1.353	<0.135 m	g/kg	<0.0000135 %		<lod< td=""></lod<>
9	4		nate } 238-766-5	14721-18-7		26	mg/kg	2.976	60.359 m	g/kg	0.00604 %	\checkmark	
10	4	cadmium sulphosel in this Annex }				0.61	mg/kg	2.554	1.215 m	g/kg	0.000122 %	~	
11) 236-878-9	13530-65-9		120	mg/kg	2.774	259.66 m	g/kg	0.026 %	√	
12	0	TPH (C6 to C40) pe	• •	ТРН		<10	mg/kg		<10 m	g/kg	<0.001 %		<lod< td=""></lod<>
13		tert-butyl methyl eth 2-methoxy-2-methyl 603-181-00-X	Ipropane	1634-04-4	-	<0.001	mg/kg		<0.001 m	g/kg	<0.0000001 %		<lod< td=""></lod<>



$14 \qquad \frac{be}{601}$ $15 \qquad tol \\ 601$ $16 \qquad ett \\ 601$ $17 \qquad xyl \\ 601$ $17 \qquad xyl \\ 601$ $17 \qquad xyl \\ 601$ $10 \qquad yyl \\ 10 \qquad yyl \\ 10 \qquad yyl $ $10 \qquad yyl \\ 10 \qquad yyl $ $10 \qquad yyl \\ 10 \qquad yyl $ $10 \qquad yyl $	enzene 1-020-00-8 200-753 luene 1-021-00-3 203-625 hylbenzene 1-023-00-4 202-845 /lene 1-022-00-9 202-422 203-396 203-576 215-535 vanides { salts of hydro cception of complex cyani rricyanides and mercuric becified elsewhere in this 6-007-00-5	5-9 9-4 2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	s ferrocyanides,		<0.001 <0.001 <0.002 <0.5	mg/kg mg/kg mg/kg mg/kg	Factor	<0.001	mg/kg		MC Applied	Used <lod <lod <lod< th=""></lod<></lod </lod
$\begin{array}{c c} 14 & \overline{60^{\circ}} \\ 15 & \overline{60^{\circ}} \\ 16 & ett \\ \overline{60^{\circ}} \\ 17 & \overline{60^{\circ}} \\ 17 & \overline{60^{\circ}} \\ 17 & \overline{60^{\circ}} \\ 18 & ett \\ 60^{\circ} \\ 19 & ett \\ 10^{\circ} \\$	1-020-00-8 200-753 luene 203-625 hylbenzene 202-845 1-023-00-4 202-845 /lene 203-576 1-022-00-9 202-422 203-376 215-535 ranides { salts of hydro recified elsewhere in this 6-007-00-5 1	5-9 9-4 2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	108-88-3 100-41-4 95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those		<0.001 <0.001 <0.002	mg/kg mg/kg mg/kg	1.884	<0.001	mg/kg mg/kg	<0.0000001 % <0.0000001 % <0.0000002 %		<lod <lod <lod< td=""></lod<></lod </lod
$ \begin{array}{c} & 601 \\ \hline & 15 \\ \hline & 16 \\ \hline & 601 \\ \hline & 601 \\ \hline & 601 \\ \hline & & & & \\ \hline & & & & \\ \hline & & & & \\ \hline & & & &$	luene 203-625 hylbenzene 202-845 1-023-00-4 202-845 /dene 203-395 1-022-00-9 202-422 203-396 203-576 215-535 215-535 vanides { salts of hydro cception of complex cyani rricyanides and mercuric becified elsewhere in this 6-007-00-5 1	5-9 9-4 2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	108-88-3 100-41-4 95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those		<0.001 <0.001 <0.002	mg/kg mg/kg mg/kg	1.884	<0.001	mg/kg mg/kg	<0.0000001 % <0.0000001 % <0.0000002 %		<lod <lod <lod< td=""></lod<></lod </lod
$ \begin{array}{c} 15 \\ \hline & \hline & \hline \\ 60 \\ \hline \\ 16 \\ \hline \\ \hline \\ 60 \\ \hline \\ 8 \\ \hline $	1-021-00-3 203-625 hylbenzene 1-023-00-4 202-845 //ene 203-396 203-396 1-022-00-9 202-422 203-396 203-576 215-535 215-535 vanides { salts of hydro sception of complex cyanitricyanides and mercuric opecified elsewhere in this 6-007-00-5	9-4 2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	100-41-4 95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those		<0.001	mg/kg	1.884	<0.001	mg/kg	<0.0000001 % <0.0000002 %		<lod <lod< td=""></lod<></lod
601 6 ett 601 601 7 601 8 xyl 8 cyc 9 PH 20 na 601 006 22 ac	hylbenzene 1-023-00-4 202-845 /lene 203-396 1-022-00-9 202-422 203-396 203-396 203-576 215-535 vanides { salts of hydro vanides and mercuric vanides and mercuric sectified elsewhere in this 6-007-00-5 1 aphthalene 1-052-00-2 202-045 xenaphthylene 202-045	9-4 2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	100-41-4 95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those		<0.001	mg/kg	1.884	<0.001	mg/kg	<0.0000001 % <0.0000002 %		<lod <lod< td=""></lod<></lod
16 601 17 601 18 601 18 20 19 9 20 na 21 9 22 9	1-023-00-4 202-845 /lene 203-396 1-022-00-9 202-422 203-396 203-576 215-538 215-538 vanides { salts of hydro vcception of complex cyanitic cyanides and mercuric becified elsewhere in this 6-007-00-5 1	2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those		<0.002	mg/kg	1.884	<0.002	mg/kg	<0.000002 %		<lod< td=""></lod<>
17 xyl 601 601 18 xyl 18 xyl 19 PH 20 na 601 601 21 ac 22 ac	Vene 1-022-00-9 202-422 203-396 203-576 215-536 vanides { salts of hydro coeption of complex cyani rricyanides and mercuric becified elsewhere in this 6-007-00-5 1 aphthalene 1-052-00-2 202-045 benaphthylene	2-2 [1] 6-5 [2] 6-3 [3] 5-7 [4] gen cyanide ides such as oxycyanide Annex }	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those				1.884					
17 601 8 cya 18 cya 18 cya 18 cya 18 cya 19 000 19 000 20 na 20 ac 21 ac 22 ac	1-022-00-9 202-422 203-396 203-576 215-538 215-538 vanides { salts of hydro cception of complex cyani rricyanides and mercuric becified elsewhere in this 6-007-00-5 -1	6-5 [2] 6-3 [3] 5-7 [4] ogen cyanide ides such as oxycyanide Annex }	106-42-3 [2] 108-38-3 [3] 1330-20-7 [4] e with the s ferrocyanides, and those				1.884					
$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} $	cception of complex cyanic rricyanides and mercuric becified elsewhere in this 6-007-00-5 I aphthalene 1-052-00-2 202-045 cenaphthylene	ides such as oxycyanide Annex }	s ferrocyanides, and those		<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<lod< td=""></lod<>
$\begin{array}{c} 19 \\ 20 \\ 21 \\ 22 \\ 21 \\ 22 \\ 22 \\ 22 \\ 22$	Happhthalene 1-052-00-2 202-045 cenaphthylene	9-5	PH									
$\begin{array}{c} 20 \\ \hline 601 \\ 21 \\ 21 \\ \hline 22 \\ \hline 22 \\ \hline 0 \\ \hline ac \\ ac \\ \hline ac \\ ac \\ \hline ac \\ ac \\ \hline ac \\ ac \\$	1-052-00-2 202-049 cenaphthylene	9-5	РП		8.1	pН		8.1	pН	8.1 pH		
$\begin{array}{c} 20 \\ \hline 601 \\ 21 \\ 21 \\ \hline 22 \\ \hline 22 \\ \hline 0 \\ \hline ac \\ ac \\ \hline ac \\ ac \\ \hline ac \\ ac \\ \hline ac \\ ac \\$	1-052-00-2 202-049 cenaphthylene	9-5		+							\square	
21 22 ac			91-20-3	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
22 <u>ac</u>	205-917				-0.1			-0.1		-0.00001.0/		
22	200 011	7-1	208-96-8		<0.1	mg/kg		<0.1	тід/кд	<0.00001 %		<lod< td=""></lod<>
0	cenaphthene 201-469	9-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23	Jorene		1		<0.1	mg/kg		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
	201-695	5-5	86-73-7		<0.1	шу/ку		<0.1	шу/ку	<0.00001 /8		<lod< td=""></lod<>
24 • ph	nenanthrene 201-581	1-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
25 <mark>an</mark>	nthracene 204-371	1-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
26 <mark>a flu</mark>	uoranthene 205-912	2-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
27 💿 py	rene		1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
	204-927	7-3	129-00-0			ing/itg			ing/kg			.202
28	enzo[a]anthracene 1-033-00-9 200-280	0.6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
ch	1-033-00-9 200-280		po-00-0	+	0.4			0.4	m c //	.0.00004.0/	┢┤	1.02
291 1	1-048-00-0 205-923	3-4	218-01-9		<0.1	mg/kg		<0.1	пу/кд	<0.00001 %		<lod< td=""></lod<>
50	enzo[b]fluoranthene 1-034-00-4 205-911		205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
31 be	enzo[k]fluoranthene 1-036-00-5 205-916		207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
32 be	enzo[a]pyrene; benzo[def]chrysene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
_ inc	1-032-00-3 200-028 deno[123-cd]pyrene	C-0	50-32-8	+							\vdash	
33	205-893	3-2	193-39-5	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
34 dib	benz[a,h]anthracene				<0.1	mg/kg		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
601	1-041-00-2 200-181	1-8	53-70-3	1_		ing/kg						
35 • be	enzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/ka	<0.00001 %		<lod< td=""></lod<>
	205-883	3-8	191-24-2	+							$\left \right $	
36 🤏 su 016	ulfur {	2-6	7704-34-9		26	mg/kg		20.28	mg/kg Total:		\checkmark	



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS01 2.50m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
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Sample details

Sample Name:	LoW Code:	
WS01 2.50m	Chapter:	17: Construction and Demolition Wastes (including excavated soil
Sample Depth:		from contaminated sites)
2.50 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
4.8%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 4.8% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CLP Note	User entered data	Conv. Factor	Compound	conc.	Classification value	C Applied	Conc. Not Used
1	8	рН		U U	8.9 pH		8.9	pH Total:	8.9 pH 0%	Σ	

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Classification of sample: WS03 0.30m



Sample details

LoW Code:	
Chapter:	17: Construction and Demolition Wastes (including excavated soil
	from contaminated sites)
Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
	03)
	Chapter:

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

	CLP index number	Determinand EC Number	CAS Number	CLP Note	User entered	data	Conv. Factor	Compound co	nc.	Classification value	MC Applied	Conc. Not Used
~		,	1327 53 3		10	mg/kg	1.32	11.223	mg/kg	0.00112 %	∠	
4	boron { diboron trio	xide; boric oxide }			0.5	mg/kg	3.22	1.368	mg/kg	0.000137 %	√	
4	cadmium { cadmiur	<mark>n oxide</mark> }			0.21	mg/kg	1.142	0.204	mg/kg	0.0000204 %	\checkmark	
•	chromium in chrom <mark>oxide (worst case)</mark>	ium(III) compounds }	{ [•] chromium(III)		16	mg/kg	1.462	19.877	mg/kg	0.00199 %	~	
~	chromium in chrom <mark>oxide</mark> }	ium(VI) compounds	; { chromium(VI)		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<lod< th=""></lod<>
-					16	mg/kg	1.126	15.312	mg/kg	0.00153 %	~	
•	•	•	7758-97-6	1	32	mg/kg	1.56	42.427	mg/kg	0.00272 %	\checkmark	
-			7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<lod< td=""></lod<>
-	•		14721-18-7	_	20	mg/kg	2.976	50.597	mg/kg	0.00506 %	\checkmark	
~	cadmium sulphosel in this Annex }			_	0.48	mg/kg	2.554	1.042	mg/kg	0.000104 %	~	
4	zinc { zinc chromat	-	13530-65-9		68	mg/kg	2.774	160.346	mg/kg	0.016 %	~	
•	TPH (C6 to C40) pe	• •	ТРН		<10	mg/kg		<10	mg/kg	<0.001 %		<lod< th=""></lod<>
ļ	2-methoxy-2-methy	Ipropane	1634-04-4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<lod< th=""></lod<>
		033-003-00-0 boron { diboron trio 005-008-00-8 cadmium { cadmiur 048-002-00-0 chromium in chrom oxide (worst case) chromium in chrom oxide (worst case) chromium in chrom oxide } 024-001-00-0 copper { dicopper c 029-002-00-X lead { lead chromat 082-004-00-2 mercury { mercury 080-010-00-X nickel { nickel chromat 028-035-00-7 selenium { seleniur cadmium sulphose in this Annex } 034-002-00-8 zinc { zinc chromat 024-007-00-3 TPH (C6 to C40) put tert-butyl methyl eth z-methoxy-2-methy	033-003-00-0 215-481-4 boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 cadmium { cadmium oxide } 048-002-00-0 215-146-2 chromium in chromium(III) compounds oxide (worst case) } 215-160-9 chromium in chromium(VI) compounds oxide } 024-001-00-0 215-607-8 copper { dicopper oxide; copper (I) oxid 029-002-00-X 025-002-00-X 215-270-7 lead { lead chromate } 082-004-00-2 231-846-0 mercury { mercury dichloride } 080-010-00-X 231-299-8 nickel { nickel chromate } 028-035-00-7 238-766-5 selenium { selenium compounds with t cadmium sulphoselenide and those sp in this Annex } 034-002-00-8	033-00-0 215-481-4 [1327-53-3] boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 [1303-86-2] cadmium { cadmium oxide } 048-002-00-0 215-146-2 [1306-19-0] oxide (worst case) }	033-003-00-0 215-481-4 1327-53-3 boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2 cadmium { cadmium oxide }	033-003-00-0 215-481-4 1327-53-3 10 boron { diboron trioxide; boric oxide } 0.5 0.5 005-008-00-8 215-125-8 1303-86-2 0.21 cadmium { cadmium oxide } 0.21 0.21 0.21 oka-002-00-0 215-146-2 1306-19-0 0.21 chromium in chromium(III) compounds { © chromium(III) oxide (worst case) } 16 16 chromium in chromium(VI) compounds { chromium(VI) oxide { worst case) } <0.5 0.5 024-001-00-0 215-607-8 1333-82-0 <0.5 024-001-00-0 215-70-7 1317-39-1 16 029-002-00-X 215-270-7 1317-39-1 16 029-002-00-X 215-270-7 1317-39-1 16 029-002-00-X 215-270-7 1317-39-1 20 082-004-00-2 231-846-0 7758-97-6 1 32 082-004-00-2 231-846-0 7758-97-6 <0.1 20 080-010-00-X 231-299-8 7487-94-7 <0.1 20 028-035-00-7 238-766-5 <	033-003-00-0 215-481-4 [1327-53-3] 10 mg/kg 033-003-00-0 215-481-4 [1327-53-3] 0.5 mg/kg 005-008-00-8 215-125-8 [1303-86-2] 0.5 mg/kg 025-008-00-8 215-125-8 [1303-86-2] 0.21 mg/kg 048-002-00-0 215-146-2 [1306-19-0] 0.21 mg/kg 048-002-00-0 215-160-9 [1308-38-9] 16 mg/kg 0xide (worst case) } [15-160-9 [1308-38-9] -0.5 mg/kg 024-001-00-0 215-607-8 [1333-82-0] <0.5 mg/kg 029-002-00-X 215-270-7 [1317-39-1] 16 mg/kg 029-002-00-X 215-270-7 [1317-39-1] 16 mg/kg 082-004-00-2 231-846-0 [7758-97-6] 1 32 mg/kg 080-010-00-X 231-299-8 [7487-94-7] <0.1 mg/kg 080-010-00-X 231-299-8 [7487-94-7] 20 mg/kg 028-0035-00-7 238-766-5 [1	033-003-00-0 215-481-4 1327-53-3 10 mg/kg 1.32 033-003-00-0 215-481-4 1327-53-3 0.5 mg/kg 3.22 05-008-00-8 215-125-8 1303-86-2 0.21 mg/kg 1.142 048-002-00-0 215-146-2 1306-19-0 0.21 mg/kg 1.142 048-002-00-0 215-146-2 1308-38-9 16 mg/kg 1.462 chromium in chromium(III) compounds { chromium(III) compression mg/kg 1.462 024-001-00-0 215-607-8 1333-82-0 -0.5 mg/kg 1.923 024-001-00-0 215-607-8 1333-82-0 -0.5 mg/kg 1.923 024-001-00-0 215-607-8 1333-82-0 16 mg/kg 1.126 029-002-00-X 215-270-7 1317-39-1 -0.5 mg/kg 1.126 032-004-00-2 231-846-0 7758-97-6 1 32 mg/kg 1.353 030-010-00-X 231-299-8 7487-94-7 20 mg/kg <td< th=""><th>10 mg/kg 1.32 11.223 33-003-00-0 [215-481-4] [1327-53-3] 0.5 mg/kg 3.22 1.368 05-008-00-8 [215-125-8] [1308-86-2] 0.5 mg/kg 3.22 1.368 cadmium { cadmium oxide } 0.21 mg/kg 1.142 0.204 048-002-00-0 [215-146-2] [1306-19-0] 0.21 mg/kg 1.462 19.877 cadmium in chromium(III) compounds { ° chromium(III) chromium in chromium(VI) compounds { chromium(VI) -0.5 mg/kg 1.462 19.877 oxide { worst case } [1308-38-9 -0.5 mg/kg 1.462 19.877 chromium in chromium(VI) compounds { chromium(VI) -0.5 mg/kg 1.462 19.877 oxide } 024-001-00-0 [215-607-8] [1333-82-0] -0.5 mg/kg 1.923 <0.962 024-001-00-2 [215-270-7] [1317-39-1] -16 mg/kg 1.126 15.312 032-002-00-X [215-270-7] [137-39-7] 1 32 mg/kg <td< th=""><th>10 mg/kg 1.32 11.223 mg/kg 33-003-00-0 215-481-4 [1327-53-3] 0.5 mg/kg 1.32 11.223 mg/kg 205-008-00-8 215-125-8 [1303-86-2] 0.5 mg/kg 3.22 1.368 mg/kg 048-002-00-0 215-125-8 [1303-86-2] 0.21 mg/kg 1.142 0.204 mg/kg 048-002-00-0 215-146-2 [1306-19-0] 0.21 mg/kg 1.142 0.204 mg/kg 048-002-00-0 215-146-2 [1306-19-0] 16 mg/kg 1.462 19.877 mg/kg 0xide (worst case) } [1308-38-9] -0.5 mg/kg 1.462 19.877 mg/kg 024-001-00-0 [215-607-8 [1333-82-0] -0.5 mg/kg 1.923 -0.962 mg/kg 029-002-0-X [215-270-7 [1317-39-1] 16 mg/kg 1.126 15.312 mg/kg 080-010-00-X [231-289-8 [7487-94-7] -0.1 mg/kg 1.353 -0.135<</th><th>10 mg/kg 1.32 11.223 mg/kg 0.00112 % g boron { diboron trioxide; 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Image: Control in the CAN number CAN Number Control in marks Control	#			Determinand		CLP Note	User entered	data	Conv. Factor	Compound c	onc.	Classification value	Applied	Conc. Not Used	
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17 17 10 200-366.5 [2] 215-535-7 [4] 106-42.3 [2] 215-535-7 [4] -0.002 mgkg <0.002 mgkg <0.00002% <100 40 40 consiste (1) satte of hydrogen cyanide with the exception of complex cyanide with the exception of															
R cyanides (* salts of hydrogen cyanide with the secretion of complex cyanides and mercure oxycanide and those secretion of complex cyanides and mercure oxycanide and those secretion of complex cyanides and mercure oxycanide and those secretion in this Annex) c-0.5 mg/kg 1.884 <0.942 mg/kg <0.0000942 % <1.00 9 PH PH 6.7 PH 6.7 </td <td>17</td> <td></td> <td></td> <td>203-396-5 [2] 203-576-3 [3]</td> <td>106-42-3 [2] 108-38-3 [3]</td> <td></td> <td><0.002</td> <td>mg/kg</td> <td></td> <td><0.002</td> <td>mg/kg</td> <td><0.0000002 %</td> <td></td> <td><lod< td=""></lod<></td>	17			203-396-5 [2] 203-576-3 [3]	106-42-3 [2] 108-38-3 [3]		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>	
19 PH FH FH FH FH FH FT FT<			exception of completerricyanides and means and me	ex cyanides such as hercuric oxycyanide	s ferrocyanides,		<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<lod< td=""></lod<>	
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28 benzo[a]anthracene <0.1 mg/kg <0.1 mg/kg <0.00001 % <lod< th=""> 29 chrysene 601-033-00-9 200-280-6 56-55-3 <0.1</lod<>	27			204 027 2	120.00.0	4	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
28 01-033-00-9 200-280-6 56-55-3 <0.1					129-00-0										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	28		• •		56-55-3	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				200 200 0											
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	29		-	205-923-4	218-01-9	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
30 01-034-00-4 205-911-9 205-99-2 <1	20					1	-0.1	maller		-0.1	maller	<0.00001.0/		-1.00	
31 01-036-00-5 205-916-6 207-08-9 <0.1	30		601-034-00-4	205-911-9	205-99-2	1	<0.1	ту/кд		<0.1	пу/кд	<0.00001 %			
601-036-00-5 205-916-6 207-08-9 Image: Constraint of the const	31		benzo[k]fluoranther	ne			<0.1	ma/ka		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>	
32 01-032-00-3 200-028-5 50-32-8 <1			601-036-00-5	205-916-6	207-08-9	1_									
601-032-00-3 200-028-5 50-32-8 601-032-00-3 200-028-5 50-32-8 601-032-00-3 reference </td <td>32</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><0.1</td> <td>mg/ka</td> <td></td> <td><0.1</td> <td>mg/kg</td> <td><0.00001 %</td> <td></td> <td><lod< td=""></lod<></td>	32						<0.1	mg/ka		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
33 205-893-2 193-39-5 <0.1					50-32-8	-									
34 dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3 <0.1	33	0			102 20 5	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
34					199-98-9	+							\vdash		
35 benzo[ghi]perylene <0.1 mg/kg <0.1 mg/kg <0.00001 % <lod< th=""> 36 sulfur { sulfur } 016-094-00-1 231-722-6 7704-34-9 <1</lod<>	34	_ L	• • •		53-70-3	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
35 10 205-883-8 191-24-2 <1 mg/kg <0.1 mg/kg <0.0001 % <lod< th=""> 36 sulfur { sulfur } 016-094-00-1 231-722-6 7704-34-9 <1</lod<>					po-10-0	+							\vdash		
36 sulfur { sulfur } 016-094-00-1 231-722-6 7704-34-9 <1	35		10 11 3		191-24-2	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>	
016-094-00-1 231-722-6 7704-34-9	36 🛋	2	sulfur { <mark>sulfur</mark> }				<1	mg/ka		<1	mg/ka	<0.0001 %		<lod< td=""></lod<>	
Total: 0.0302 %			016-094-00-1	231-722-6	7704-34-9	1		39					\square		



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
0	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS03 0.80m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
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Sample details

Sample Name: WS03 0.80m Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.80 m	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:	03)
15% (wet weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#		Determinand CLP index number EC Number CAS Number	CLP Note	User entered	d data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3		11	mg/kg	1.32	12.345 mg/kg	0.00123 %	\checkmark	
2	4	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2	_	<0.4	mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<lod< th=""></lod<>
3	~	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0	_	<0.1	mg/kg	1.142	<0.114 mg/kg	<0.0000114 %		<lod< td=""></lod<>
4	4	chromium in chromium(III) compounds { Chromium(III) oxide (worst case) } 215-160-9 1308-38-9		25	mg/kg	1.462	31.058 mg/kg	0.00311 %	~	
5	4	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0		<0.5	mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<lod< th=""></lod<>
6	4	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1		18	mg/kg	1.126	17.226 mg/kg	0.00172 %	\checkmark	
7	4	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6	_ 1	31	mg/kg	1.56	41.101 mg/kg	0.00264 %	\checkmark	
8	4	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7		<0.1	mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<lod< td=""></lod<>
9	4	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7	_	32	mg/kg	2.976	80.954 mg/kg	0.0081 %	\checkmark	
10	4	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.41	mg/kg	2.554	0.89 mg/kg	0.000089 %	~	
11		zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9	_	83	mg/kg	2.774	195.716 mg/kg	0.0196 %	\checkmark	
12	٥	TPH (C6 to C40) petroleum group	-	<10	mg/kg		<10 mg/kg	<0.001 %		<lod< th=""></lod<>
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4		<0.001	mg/kg		<0.001 mg/kg	<0.0000001 %		<lod< td=""></lod<>



			Determinand		a							ed	
#		CLP index number	EC Number	CAS Number	CLP Note	User entered	data	Conv. Factor	Compound c	onc.	Classification value	C Applied	Conc. Not Used
_	_		Lo Hambol		<u>ರ</u>							MC	
14		benzene 601-020-00-8	200 752 7	71-43-2	_	<0.001	mg/kg		<0.001	mg/kg	<0.000001 %		<lod< td=""></lod<>
-	_	toluene	200-753-7	71-43-2	-								
15			203-625-9	108-88-3	_	<0.001	mg/kg		<0.001	mg/kg	<0.000001 %		<lod< td=""></lod<>
	_	ethylbenzene	203-023-3	100-00-3									
16		,	202-849-4	100-41-4	-	<0.001	mg/kg		<0.001	mg/kg	<0.000001 %		<lod< td=""></lod<>
		xylene											
17		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
18	*	cyanides { salts of exception of complete ferricyanides and magnetic specified elsewhere specified elsewhe	ex cyanides such as ercuric oxycyanide	s ferrocyanides,		<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<lod< td=""></lod<>
		006-007-00-5											
19	0	рН		PH		7.2	pН		7.2	рН	7.2 pH		
20		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
20		601-052-00-2	202-049-5	91-20-3			ing/kg			ing/itg			
21	•	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
			205-917-1	208-96-8									
22	8	acenaphthene	201-469-6	83-32-9	_	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		phenanthrene	201-695-5	86-73-7	_								
24			201-581-5	85-01-8	_	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
25	8	anthracene	204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
26	8	fluoranthene	205-912-4	206-44-0	_	1.2	mg/kg		1.02	mg/kg	0.000102 %	\checkmark	
27	•	pyrene	204-927-3	129-00-0		1.4	mg/kg		1.19	mg/kg	0.000119 %	\checkmark	
28		benzo[a]anthracene		56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
29		chrysene		218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
30		benzo[b]fluoranther	ne	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
31		benzo[k]fluoranther				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
32		benzo[a]pyrene; be	205-916-6 nzo[def]chrysene	207-08-9	+	<0.1	mg/kg		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
	-		200-028-5	50-32-8	1								
33	•	indeno[123-cd]pyre	ne 205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
34		dibenz[a,h]anthrace	ene 200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
35	-	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
36	4	sulfur { <mark>sulfur</mark> }	205-883-8	191-24-2		3.7	mg/kg		3.145	mg/kg	0.000315 %	✓	
		040 004 00 4	231-722-6	7704-34-9	1		5 0		1			1.1	



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS03 2.40m



Sample details

Sample Name:	LoW Code:	
WS03 2.40m	Chapter:	17: Construction and Demolition Wastes (including excavated soi
Sample Depth:		from contaminated sites)
2.40 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
61%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 61% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User ente	red data	Conv. Factor	Compound	d conc.	Classification value	AC Applied	Conc. Not Used
1	٥	рН		PH		6.9	рН		6.9	рН	6.9 pH		
	1			<u>[</u>						Total:	0%		

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Classification of sample: WS04 0.10m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
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Sample details

Sample Name: WS04 0.10m Sample Depth:		17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.10 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
35% (wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 35% Wet Weight Moisture Correction applied (MC)

#		Determinand CLP index number EC Number CAS Number	CLP Note	User entere	d data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic trioxide }	-	10	mg/kg	1.32	8.582 mg/kg	0.000858 %	\checkmark	
2	4	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2		0.52	mg/kg	3.22	1.088 mg/kg	0.000109 %	\checkmark	
3	~			0.47	mg/kg	1.142	0.349 mg/kg	0.0000349 %	\checkmark	
4	4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9		14	mg/kg	1.462	13.3 mg/kg	0.00133 %	~	
5	4	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0		<0.5	mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<lod< th=""></lod<>
6	4	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1		21	mg/kg	1.126	15.368 mg/kg	0.00154 %	~	
7	4	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6	_ 1	45	mg/kg	1.56	45.625 mg/kg	0.00293 %	\checkmark	
8	4	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7	-	0.1	mg/kg	1.353	0.088 mg/kg	0.0000088 %	~	
9	4	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7	_	16	mg/kg	2.976	30.953 mg/kg	0.0031 %	\checkmark	
10	4	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		0.39	mg/kg	2.554	0.647 mg/kg	0.0000647 %	~	
11	4	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9	-	120	mg/kg	2.774	216.383 mg/kg	0.0216 %	\checkmark	
12	٥	TPH (C6 to C40) petroleum group		<10	mg/kg		<10 mg/kg	<0.001 %		<lod< th=""></lod<>
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4		<0.001	mg/kg		<0.001 mg/kg	<0.0000001 %		<lod< th=""></lod<>



			Determinand		e			Corri			Classification	lied	Cono Not
#		CLP index number	EC Number	CAS Number	CLP Note	User entered	data	Conv. Factor	Compound co	onc.	Classification value	MC Applied	Conc. Not Used
14		benzene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %	≥	<lod< td=""></lod<>
14		601-020-00-8	200-753-7	71-43-2		<0.001	шу/ку		<0.001	пулку	<0.0000001 /8		LOD
15		toluene				<0.001	ma/ka		<0.001	ma/ka	<0.0000001 %		<lod< td=""></lod<>
15		601-021-00-3	203-625-9	108-88-3		<0.001	mg/kg		<0.001	mg/kg	<0.000001 %		<lod< td=""></lod<>
16		ethylbenzene				-0.001	malka		-0.001	ma/ka	<0.0000001 %		<lod< td=""></lod<>
10		601-023-00-4	202-849-4	100-41-4		<0.001	mg/kg		<0.001	mg/kg	<0.000001 %		<lod< td=""></lod<>
		xylene		.,									
17			202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
18	~	cyanides { [•] salts of exception of completion of completion of completion of completion of completion of the specified elsewhere of the specified elsewher	ex cyanides such as hercuric oxycyanide	s ferrocyanides,		<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<lod< td=""></lod<>
		006-007-00-5											
19	۵	pН		PH		6.7	pН		6.7	pН	6.7 pH		
20		naphthalene				.0.4	m~//-		-0.1	mc/l	-0.00001.0/		4.05
20		601-052-00-2	202-049-5	91-20-3	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
21		acenaphthylene				.0.1			-0.1		-0.00001.0/		
21			205-917-1	208-96-8	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
22		acenaphthene				-0.1	malka		-0.1	ma/ka	-0.00001.9/		
22			201-469-6	83-32-9	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
23			201-695-5	86-73-7		<0.1	шу/ку		<0.1	пулу	<0.00001 /8		LOD
24		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
2.			201-581-5	85-01-8			iiig/iig			ing/ng			
25	0	anthracene	204-371-1	120-12-7	_	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
26	۰	fluoranthene				0.68	mg/kg		0.442	mg/kg	0.0000442 %	\checkmark	
			205-912-4	206-44-0								-	
27	۵	pyrene				0.77	mg/kg		0.501	mg/kg	0.0000501 %	\checkmark	
			204-927-3	129-00-0	_								
28		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
			200-280-6	56-55-3	_								
29		chrysene		1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
				218-01-9	_								
30		benzo[b]fluoranther	ne 205-911-9	205-99-2	_	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
_		benzo[k]fluoranther		200 00 2	+								
31			205-916-6	207-08-9	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		benzo[a]pyrene; be		201 00 0									
32			200-028-5	50-32-8	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
~~		indeno[123-cd]pyre	ne			0.4			0.1		0.00004.0/		1.00
33			205-893-2	193-39-5	-	<0.1	mg/kg		<0.1	пу/кд	<0.00001 %		<lod< td=""></lod<>
34		dibenz[a,h]anthrace	ene			<0.1	ma/ka		-0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
54		601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	пу/кд	<0.00001 %		
35	۰	benzo[ghi]perylene			Τ	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
55			205-883-8	191-24-2		NO.1	ing/kg			g/kg			~200
36	4	sulfur { <mark>sulfur</mark> } 016-094-00-1	231-722-6	7704-34-9		4.8	mg/kg		3.12	mg/kg	0.000312 %	\checkmark	
		010-094-00-1	231-122-0	1104-34-9							0.0333 %		



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS05 0.10m



Sample details

Sample Name:	LoW Code:	
WS05 0.10m	Chapter:	17: Construction and Demolition Wastes (including excavated soil
Sample Depth:		from contaminated sites)
0.10 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
11%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User entered	d data	Conv. Factor	Compound	conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic tri 033-003-00-0	<mark>ioxide</mark> } 215-481-4	1327-53-3		16	mg/kg	1.32	18.801	mg/kg	0.00188 %	~	
2	4	boron { diboron trio		1303-86-2		0.52	mg/kg	3.22	1.49	mg/kg	0.000149 %	\checkmark	
3	4	cadmium {	1	1306-19-0		0.48	mg/kg	1.142	0.488	mg/kg	0.0000488 %	\checkmark	
4	4	chromium in chrom oxide (worst case)		s { Chromium(III)	_	23	mg/kg	1.462	29.918	mg/kg	0.00299 %	~	
5	4	chromium in chrom oxide } 024-001-00-0	hium(VI) compound	s { chromium(VI)		<0.5	mg/kg	1.923	<0.962	mg/kg	<0.0000962 %		<lod< th=""></lod<>
6	4	copper { dicopper c				34	mg/kg	1.126	34.069	mg/kg	0.00341 %	~	
7	4	lead { <mark>lead chromat</mark> 082-004-00-2	<mark>te</mark> } 231-846-0	7758-97-6	1	48	mg/kg	1.56	66.635	mg/kg	0.00427 %	\checkmark	
8	4	mercury { mercury 080-010-00-X	<mark>dichloride</mark> } 231-299-8	7487-94-7	-	0.1	mg/kg	1.353	0.12	mg/kg	0.000012 %	\checkmark	
9	4		<mark>mate</mark> } 238-766-5	14721-18-7	-	27	mg/kg	2.976	71.52	mg/kg	0.00715 %	\checkmark	
10	4	selenium { seleniur cadmium sulphose in this Annex 034-002-00-8			_	0.64	mg/kg	2.554	1.455	mg/kg	0.000145 %	~	
11	4	zinc { zinc chromat	<mark>e</mark> } 236-878-9	13530-65-9		140	mg/kg	2.774	345.659	mg/kg	0.0346 %	\checkmark	
12	0	TPH (C6 to C40) pe	etroleum group	ТРН		<10	mg/kg		<10	mg/kg	<0.001 %		<lod< th=""></lod<>
13		tert-butyl methyl eth 2-methoxy-2-methy	/lpropane	1624 04 4		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<lod< th=""></lod<>
13		2-methoxy-2-methy		1634-04-4	_	<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		



#			Determinand		CLP Note	User entered	data	Conv. Factor	Compound c	onc.	Classification value	Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number	СГР			. acto			10100	MC /	0000
14		benzene		1		<0.001	malka		<0.001	mg/kg	<0.000001 %	<	<lod< td=""></lod<>
14		601-020-00-8	200-753-7	71-43-2		<0.001	mg/kg		<0.001	під/ку	<0.0000001 %		<lod< td=""></lod<>
15		toluene				<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		<lod< td=""></lod<>
15		601-021-00-3	203-625-9	108-88-3		<0.001	шу/ку		<0.001	шу/ку	<0.0000001 /8		
16	0	ethylbenzene				<0.001	mg/kg		<0.001	ma/ka	<0.0000001 %		<lod< td=""></lod<>
		601-023-00-4	202-849-4	100-41-4									
		xylene											
17			202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002	mg/kg	<0.0000002 %		<lod< td=""></lod<>
18	4	cyanides { [•] salts of exception of completerricyanides and me specified elsewhere	ex cyanides such as hercuric oxycyanide	s ferrocyanides,		<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<lod< td=""></lod<>
		006-007-00-5 рН			-	1						Н	
19	۵			PH		7.6	рН		7.6	рН	7.6 pH		
20		naphthalene		T		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		l	202-049-5	91-20-3	-								
21	۲	acenaphthylene	205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		acenaphthene	205-917-1	208-96-8								H	
22	۵	· ·	201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		fluorene										H	
23			201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/кg	<0.00001 %		<lod< td=""></lod<>
24	8	phenanthrene				<0.1	mg/kg		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
			201-581-5	85-01-8									
25	۵	anthracene	204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		fluoranthene	2010111									H	
26	-		205-912-4	206-44-0	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
27		pyrene		1		-0.1	malka		-0.1	malka	-0.00001.9/		
21			204-927-3	129-00-0	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
28		benzo[a]anthracene	e			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
20		601-033-00-9	200-280-6	56-55-3	1		ing/itg			iiig/itg			200
29		chrysene		1		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
				218-01-9	-							\square	
30		benzo[b]fluoranther		BOE 00 2	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		601-034-00-4 benzo[k]fluoranther	205-911-9	205-99-2	+							\mathbb{H}	
31			205-916-6	207-08-9	-	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
		benzo[a]pyrene; be		-01 00 0	+							Η	
32			200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
22		indeno[123-cd]pyre			\top	-0.1	ma/ka		-0.1	maller	<0.00001.0/	П	-1.00
33			205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
34		dibenz[a,h]anthrace	ene			<0.1	mg/kg		<0.1	ma/ka	<0.00001 %		<lod< td=""></lod<>
			200-181-8	53-70-3	1_							Ц	
35	۲	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<lod< td=""></lod<>
			205-883-8	191-24-2	-		0					Ц	
36	4	sulfur { <mark>sulfur</mark> } 016-094-00-1	231-722-6	7704-34-9	-	<1	mg/kg		<1	mg/kg	<0.0001 %		<lod< td=""></lod<>
				1						Total:	0.0561 %	Γ	



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
0	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS06 0.20m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
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Sample details

Sample Depth:	17: Construction and Demolition Wastes (including excavated so from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05					
Moisture content:	03)					
5.5% (wet weight correction)						

Hazard properties

None identified

Determinands

Moisture content: 5.5% Wet Weight Moisture Correction applied (MC)

#		Determinand CLP index number EC Number CAS Number	CLP Note	User entered d	lata	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	-	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3		17 r	ng/kg	1.32	21.211 mg/kg	0.00212 %	\checkmark	
2	4	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2		0.7 r	ng/kg	3.22	2.13 mg/kg	0.000213 %	\checkmark	
3	4	cadmium {		0.34 r	ng/kg	1.142	0.367 mg/kg	0.0000367 %	\checkmark	
4	4	chromium in chromium(III) compounds { Chromium(III) oxide (worst case) } 215-160-9 1308-38-9		12 r	ng/kg	1.462	16.574 mg/kg	0.00166 %	\checkmark	
5	~	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0		<0.5 r	ng/kg	1.923	<0.962 mg/kg	<0.0000962 %		<lod< td=""></lod<>
6	~	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1		13 r	ng/kg	1.126	13.832 mg/kg	0.00138 %	~	
7	4	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6	1	23 r	ng/kg	1.56	33.903 mg/kg	0.00217 %	\checkmark	
8	-	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7		<0.1 r	ng/kg	1.353	<0.135 mg/kg	<0.0000135 %		<lod< td=""></lod<>
9	-	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7		16 r	ng/kg	2.976	45.001 mg/kg	0.0045 %	\checkmark	
10	4	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<0.2 r	ng/kg	2.554	<0.511 mg/kg	<0.0000511 %		<lod< td=""></lod<>
11		zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9		55 r	ng/kg	2.774	144.186 mg/kg	0.0144 %	\checkmark	
12	۲	TPH (C6 to C40) petroleum group		<10 r	ng/kg		<10 mg/kg	<0.001 %		<lod< td=""></lod<>
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4		<0.001 n	ng/kg		<0.001 mg/kg	<0.0000001 %		<lod< td=""></lod<>



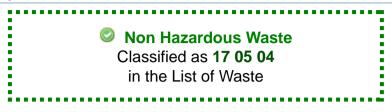
			Determinand		te			Conv.			Classification	lied	Conc. Not
#		CLP index number	EC Number	CAS Number	CLP Note	User entered	data	Factor	Compound con	IC.	value	MC Applied	Used
14		benzene		ļ		<0.001	mg/kg		<0.001 m	ng/kg	<0.0000001 %		<lod< td=""></lod<>
		601-020-00-8	200-753-7	71-43-2						33			
15		toluene				<0.001	mg/kg		<0.001 m	ng/kg	<0.0000001 %		<lod< td=""></lod<>
		601-021-00-3	203-625-9	108-88-3						33			
16		ethylbenzene				<0.001	mg/kg		<0.001 m	ng/kg	<0.0000001 %		<lod< td=""></lod<>
			202-849-4	100-41-4	_								
17			202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002 m	ng/kg	<0.0000002 %		<lod< td=""></lod<>
18	4	cyanides { salts of exception of complete ferricyanides and methods are consistent of the specified elsewhere 006-007-00-5	ex cyanides such as hercuric oxycyanide	s ferrocyanides,		<0.5	mg/kg	1.884	<0.942 m	ng/kg	<0.0000942 %		<lod< td=""></lod<>
19	0	pH			-	8.2	рН		8.2 pl	н	8.2 pH		
		naphthalene		PH								\vdash	
20		•	202-049-5	91-20-3	_	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
		acenaphthylene	202-043-3	51-20-5	+								
21	ľ		205-917-1	208-96-8	-	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
		acenaphthene	200 0	200 00 0									
22		•	201-469-6	83-32-9	-	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
23	8	fluorene				<0.1	malka		<0.1 m		-0.00001.9/		<lod< td=""></lod<>
23			201-695-5	86-73-7	-	<0.1	mg/kg		<0.1 11	ng/kg	<0.00001 %		<lod< td=""></lod<>
24	9	phenanthrene	201-581-5	85-01-8	_	0.17	mg/kg		0.161 m	ng/kg	0.0000161 %	\checkmark	
25	۵	anthracene	204-371-1	120-12-7		0.14	mg/kg		0.132 m	ng/kg	0.0000132 %	\checkmark	
26	۵	fluoranthene	205-912-4	206-44-0		0.25	mg/kg		0.236 m	ng/kg	0.0000236 %	\checkmark	
		pyrene											
27			204-927-3	129-00-0	-	0.3	mg/kg		0.284 m	ng/kg	0.0000284 %	\checkmark	
28		benzo[a]anthracene	e	<u>^</u>		<0.1	ma/ka		<0.1 m	na/ka	<0.00001 %	Π	<lod< td=""></lod<>
20		601-033-00-9	200-280-6	56-55-3		NO.1	mg/kg			ng/kg	<0.0001 //		
29		chrysene				<0.1	mg/kg		<0.1 m	na/ka	<0.00001 %		<lod< td=""></lod<>
		601-048-00-0	205-923-4	218-01-9	1					. <i></i>		Ц	
30		benzo[b]fluoranther 601-034-00-4	ne 205-911-9	205-99-2	_	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
31		benzo[k]fluoranther 601-036-00-5	ne 205-916-6	207-08-9		<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
32		benzo[a]pyrene; be		50-32-8		<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %	Π	<lod< td=""></lod<>
33	۲	indeno[123-cd]pyre		193-39-5	1	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %	Π	<lod< td=""></lod<>
		dibenz[a,h]anthrace										H	
34			200-181-8	53-70-3	-	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
07		benzo[ghi]perylene								"	0.00001.0/	H	
35	[10 11 7	205-883-8	191-24-2	-	<0.1	mg/kg		<0.1 m	ng/kg	<0.00001 %		<lod< td=""></lod<>
36	4	sulfur { <mark>sulfur</mark> }	231-722-6	7704-34-9		7.1	mg/kg		6.709 m	ng/kg	0.000671 %	~	
		0-0-0-0-1	201-122-0	104-04-3					<u>ــــــ</u>	Total:	0.0286 %	\vdash	



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
Θ	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: WS06 0.60m



Sample details

Chapter:	17: Construction and Demolition Wastes (including excavated soil
	from contaminated sites)
Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05
	03)
	Entry:

Hazard properties

None identified

Determinands

Moisture content: 6% Wet Weight Moisture Correction applied (MC)

#		Determinand CLP index number EC Number CAS Number	CLP Note	User entered	d data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	4	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3	-	17	mg/kg	1.32	21.099 mg/kg	0.00211 %	\checkmark	
2	4	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2	-	<0.4	mg/kg	3.22	<1.288 mg/kg	<0.000129 %		<lod< th=""></lod<>
3	4	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0		0.12	mg/kg	1.142	0.129 mg/kg	0.0000129 %	~	
4	4	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9 1308-38-9		20	mg/kg	1.462	27.477 mg/kg	0.00275 %	~	
5	4	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0		<0.5	mg/kg	1.923	<0.962 mg/kg	<0.0000962 %		<lod< th=""></lod<>
6	4	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1		18	mg/kg	1.126	19.05 mg/kg	0.00191 %	\checkmark	
7	4	lead { lead chromate } 082-004-00-2 231-846-0 7758-97-6	1	18	mg/kg	1.56	26.392 mg/kg	0.00169 %	\checkmark	
8	4	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7	-	<0.1	mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<lod< td=""></lod<>
9	4	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7	-	38	mg/kg	2.976	106.312 mg/kg	0.0106 %	\checkmark	
10	4	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	_	0.71	mg/kg	2.554	1.704 mg/kg	0.00017 %	~	
11	4	zinc { zinc chromate } 024-007-00-3 236-878-9 13530-65-9		110	mg/kg	2.774	286.847 mg/kg	0.0287 %	\checkmark	
12	8	TPH (C6 to C40) petroleum group		<10	mg/kg		<10 mg/kg	<0.001 %		<lod< th=""></lod<>
13		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4	_	<0.001	mg/kg		<0.001 mg/kg	<0.000001 %		<lod< th=""></lod<>



#			Determinand		CLP Note	User entered	data	Conv. Factor	Compound co	nc.	Classification value	Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number	Ч							MC /	
14		benzene		1		<0.001	mg/kg		<0.001 r	ng/kg	<0.0000001 %		<lod< td=""></lod<>
14		601-020-00-8	200-753-7	71-43-2		<0.001	iiig/kg		<0.001 1	iig/kg	<0.0000001 //		
15		toluene				<0.001	mg/kg		<0.001 r	ng/kg	<0.0000001 %		<lod< td=""></lod<>
		601-021-00-3	203-625-9	108-88-3						ing/ing			
16	۲	ethylbenzene				<0.001	mg/kg		<0.001 r	na/ka	<0.0000001 %		<lod< td=""></lod<>
-		601-023-00-4	202-849-4	100-41-4						5.5			
		xylene											
17			202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.002	mg/kg		<0.002 r	mg/kg	<0.000002 %		<lod< td=""></lod<>
18	4	cyanides { salts of exception of completion	of hydrogen cyanid ex cyanides such a hercuric oxycyanide	e with the s ferrocyanides,		<0.5	mg/kg	1.884	<0.942 r	mg/kg	<0.0000942 %		<lod< td=""></lod<>
		006-007-00-5 pH			-								
19	۲			PH		8.3	рН		8.3 p	ъH	8.3 pH		
20		naphthalene		1		<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
			202-049-5	91-20-3	_								
21	۲	acenaphthylene	005 017 1	202.06.2	_	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
		acenaphthene	205-917-1	208-96-8								\vdash	
22	8	· · ·	201-469-6	83-32-9	_	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
~~		fluorene				2.4					0.00004.0/		1.00
23			201-695-5	86-73-7		<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
24	Θ	phenanthrene				<0.1	mg/kg		<0.1 r	na/ka	<0.00001 %		<lod< td=""></lod<>
			201-581-5	85-01-8	_								
25	۲	anthracene	204-371-1	120-12-7		<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
26	0	fluoranthene				0.12	ma/ka		0.113 r	ma/ka	0.0000112.9/		
20			205-912-4	206-44-0	1	0.12	mg/kg		0.113 1	ng/kg	0.0000113 %	\checkmark	
27	0	pyrene				0.14	mg/kg		0.132 r	ng/kg	0.0000132 %	\checkmark	
			204-927-3	129-00-0		0.11	ing/kg			ing/ing		Ň	
28		benzo[a]anthracene				<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
			200-280-6	56-55-3	_								
29		chrysene	205 022 4	b10.01.0		<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
	_		205-923-4	218-01-9	_							Н	
30		benzo[b]fluoranther 601-034-00-4	1e 205-911-9	205-99-2	_	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
	_	benzo[k]fluoranther		F00 00 Z	+				<u>.</u>		0.0000 + 0/	Η	
31			205-916-6	207-08-9	-	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
32		benzo[a]pyrene; be		,		-0.1	ma/ka		-0.1	ma/ka	<0.00001 %	Π	<lod< td=""></lod<>
<u>э</u> 2		601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1 r	пу/ку	<0.00001 %		
33		indeno[123-cd]pyre				<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
	_		205-893-2	193-39-5	_							\square	
34		dibenz[a,h]anthrace		E2 70 2	_	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
	_	601-041-00-2 benzo[ghi]perylene	200-181-8	53-70-3								\vdash	
35	۲	10 11 3	205-883-8	191-24-2	-	<0.1	mg/kg		<0.1 r	ng/kg	<0.00001 %		<lod< td=""></lod<>
36	4	sulfur { <mark>sulfur</mark> }	231-722-6	7704-34-9		<1	mg/kg		<1 r	ng/kg	<0.0001 %	Π	<lod< td=""></lod<>
												e – 1	



Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
0	Determinand defined or amended by HazWasteOnline (see Appendix A)
4	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<lod< th=""><th>Below limit of detection</th></lod<>	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification



Classification of sample: BH01 1.50m

Non Hazardous Waste Classified as 17 05 04 in the List of Waste	
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Sample details

Sample Name: BH01 1.50m	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil
Sample Depth: 1.50 m	Entry:	from contaminated sites) 17 05 04 (Soil and stones other than those mentioned in 17 05
Moisture content:		03)
14%		
(wet weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% Wet Weight Moisture Correction applied (MC)

#		CLP index number	Determinand EC Number	CAS Number	CLP Note	User entered data	Conv. Factor		conc.	Classification value	MC Applied	Conc. Not Used
1	0	pН		PH		7.6 pH		7.6	pН	7.6 pH		
Total:								0%				

Key

User supplied data

Determinand defined or amended by HazWasteOnline (see Appendix A)



Appendix A: Classifier defined and non CLP determinands

• pH (CAS Number: PH)

Description/Comments: Appendix C4 Data source: WM3 1st Edition 2015 Data source date: 25 May 2015 Hazard Statements: None.

• chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462 Description/Comments: Data from C&L Inventory Database Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806 Data source date: 17 Jul 2015 Hazard Statements: Acute Tox. 4 H332, Acute Tox. 4 H302, Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315, Resp. Sens. 1 H334, Skin Sens. 1 H317, Repr. 1B H360FD, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

• TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013 Data source: WM3 1st Edition 2015 Data source date: 25 May 2015 Hazard Statements: Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT RE 2 H373, Muta. 1B H340, Carc. 1B H350, Repr. 2 H361d, Aquatic Chronic 2 H411

• ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4 Description/Comments: Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6) Additional Hazard Statement(s): Carc. 2 H351 Reason for additional Hazards Statement(s): 03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

• salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5 Description/Comments: Conversion factor based on a worst case compound: sodium cyanide Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1) Additional Hazard Statement(s): EUH032 >= 0.2 % Reason for additional Hazards Statement(s):

14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 17 Jul 2015 Hazard Statements: Acute Tox. 4 H302, Acute Tox. 1 H330, Acute Tox. 1 H310, Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 17 Jul 2015 Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 06 Aug 2015

Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410



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[•] phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database

Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Data source date: 06 Aug 2015

Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

^a anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 17 Jul 2015 Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 21 Aug 2015 Hazard Statements: Acute Tox. 4 H302, Aguatic Acute 1 H400, Aguatic Chronic 1 H410

• pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014 Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 21 Aug 2015 Hazard Statements: Skin Irrit. 2 H315, Eye Irrit. 2 H319, STOT SE 3 H335, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

• indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 06 Aug 2015 Hazard Statements: Carc. 2 H351

• benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015 Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database Data source date: 23 Jul 2015 Hazard Statements: Aquatic Acute 1 H400, Aquatic Chronic 1 H410

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

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lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium (selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex)

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

sulfur {sulfur}

Elemental sulfur most likely to be worst case scenario hazardous

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018 HazWasteOnline Classification Engine Version: 2020.241.4455.8692 (28 Aug 2020) HazWasteOnline Database: 2020.241.4455.8692 (28 Aug 2020)

This classification utilises the following guidance and legislation: WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018 CLP Regulation - Regulation 1272/2008/EC of 16 December 2008 1st ATP - Regulation 790/2009/EC of 10 August 2009 2nd ATP - Regulation 286/2011/EC of 10 March 2011 3rd ATP - Regulation 618/2012/EU of 10 July 2012 4th ATP - Regulation 487/2013/EU of 8 May 2013 Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013 5th ATP - Regulation 944/2013/EU of 2 October 2013 6th ATP - Regulation 605/2014/EU of 5 June 2014 WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014 Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014 7th ATP - Regulation 2015/1221/EU of 24 July 2015 8th ATP - Regulation (EU) 2016/918 of 19 May 2016 9th ATP - Regulation (EU) 2016/1179 of 19 July 2016 10th ATP - Regulation (EU) 2017/776 of 4 May 2017 HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017 13th ATP - Regulation (EU) 2018/1480 of 4 October 2018 14th ATP - Regulation (EU) 2020/217 of 4 October 2019 POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004 1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010 2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

CBR Test Results (MEXE Probe)

CDR TCSt RC	_		1					
Job No. C3242								
Job Name	Corneli Primary School, North Cornelly							
Date	7th August 2020							
MP1								
Position								
	150	300	450	600				
P1	2	13	<14					
P2	6	9	<14					
P3	3	<14						
P4	5	9	<14					
P5	8	<14						
Minimum CBR Value	2.0	9.0	14.0					
 MP2								
Position								
	150	Depth 300	450	600				
P1	6	<14						
P2	7	<14						
P3	5	12	<14					
P4	3	<14						
P5	4	11	<14					
Minimum CBR Value	3.0	11.0	14.0					
		MP3						
Position		Depth	(mm)					
	150	300	450	600				
P1	8	<14						
P2	6	<14						
Р3	5	<14						
P4	7	<14						
Р5	5	<14						
Minimum CBR Value	5.0	14.0						
MP4								
Position	Position Depth (mm)							
	150	300	450	600				
P1	5	9	12	<14				
P2	3	8	<14					
Р3	8	<14						
P4	6	10	<14					
Р5	6	13	<14					
Minimum CBR Value	3.0	8.0	12.0					



If Empty - Means unable to penetrate further due to strata strength

CBR Test Results (Mexecone)

Job No.	C3242							
Job Name	Corneli Primary School, North Cornelly							
Date	7th August 2020							
MP5								
Position Depth (mm)								
	150	300	450	600				
P1	2	7	<14					
P2	5	12	<14					
Р3	9	<14						
P4	4	11	<14					
P5	9	<14						
Minimum CBR Value	2.0	7.0	14.0					



If Empty - Means unable to penetrate further due to strata strength