

PROPOSED DEVELOPMENT AT THE PLAZA CINEMA, PORT TALBOT

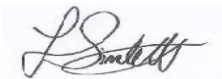
REMEDIATION STRATEGY REPORT

Report No. Q0045/RS

May 2020

DOCUMENT CONTROL

Contract Name: Plaza Cinema
Contract Reference: Q0045
Report Type: Remediation Strategy Report
Report Reference: Q0045/RS
Date of Report Production: May 2020
Client: BAM Construction

Version:	Date:	Prepared by:	Checked by:	Approved by:
Final Issue	06/05/20	L. Simlett	P. Darby	R. McDermott
				
		Engineering Geologist B.Sc. (Hons)., FGS	Senior Engineering Geologist B.Sc.(Hons).,M.Sc., C.Geol., FGS	Company Manager B.Sc.(Hons).,M.Sc., C.Geol., FGS
Disclaimer: Quantum Geotechnic Limited has prepared this report in accordance with the instructions of the above named Client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk. Quantum Geotechnic Ltd, Plas Newydd, Llanedi, Swansea, SA4 0FQ T: 01554 744880 E: enquiries@quantumgeotech.co.uk				

CONTENTS

0.0	FOREWORD	3
1.0	INTRODUCTION	4
1.1	General	4
1.2	Aims & Objectives of Report	4
2.0	BACKGROUND	5
2.1	Overview of Proposed Scheme.....	5
2.2	Site Location and Description	5
2.3	Past Studies.....	6
3.0	REMEDIATION STRATEGY	10
3.1	Derivation of Remediation Strategy	10
3.2	Summary of Risks	10
3.3	Remediation Design.....	11
3.4	Construction Workers – General Contaminated Land Risk.....	13
3.5	Unexpected Contamination – General Advice	13
3.6	Verification of Remediation Works.....	14
4.0	GENERAL CONSIDERATIONS FOR REMEDIATION WORKS.....	15
4.1	General	15
4.2	Health and Safety Requirements	15
4.3	Environmental Requirements.....	15
5.0	REFERENCES	16

APPENDICES

APPENDIX I – PROPOSED DEVELOPMENT PLANS	XVI
--	------------

0.0 FOREWORD

The following Report is based on information gained from previous studies undertaken in relation to the site, supplemented by information and data provided by the Main Contractor in support of this Remediation Strategy Report.

Quantum Geotechnic Ltd have provided the Main Contractor with Consultancy support during these works, relating to Phase II Intrusive Ground Investigation Interpretive Report. Where referenced, past studies in relation to the site should be read in conjunction with this Report.

1.0 INTRODUCTION

1.1 General

Upon the instructions of the Client, BAM Construction Limited, Quantum (QGL) has been commissioned to undertake a Remediation Strategy Report in relation to the proposed development of the disused Plaza Cinema site in Port Talbot for a proposed mixed-use re-development including renovation to the structure and external facings of the existing cinema building, commercial development internally and upgrade/renovation of the external court yard areas to the rear.

As part of the Planning Conditions set out by the Local Planning Authority, this Report is produced to satisfy Planning Condition #8 which reads;

‘Prior to the commencement of work on site a remediation scheme to bring the site to a condition suitable for the intended use by removing any unacceptable risks to human health, buildings, other property and the natural and historical environment shall be prepared and submitted to and agreed in writing with the Local Planning Authority. The scheme shall include all works to be undertaken, proposed remediation objectives, remediation criteria and site management procedures. The measures proposed within the remediation scheme shall be implemented in accordance with an agreed programme of works.’

Reason:

‘To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.’

The following Report provides an overview of any past studies undertaken, and the methods or mechanism by which to either remove or reduce these risks to acceptable levels for the end-use receptors of the premises.

1.2 Aims & Objectives of Report

This Remediation Strategy updates the conceptual site model produced in the 2019 intrusive ground investigation and outlines the proposed remedial measures to be implemented as the basis for a Remediation Method Statement.

The Strategy should be read in conjunction with the documents listed and summarised in Section 2.3 of this Report.

2.0 BACKGROUND

2.1 Overview of Proposed Scheme

At time of writing, development proposals included renovation and upgrade of the existing Cinema building both structurally and aesthetically, with the internal space to be occupied by a number of retail and leisure-related units. The small existing external courtyard area to the rear of the building are to be dedicated hardstanding areas to include parking arrangements and storage spaces. The development does not include any areas of soft landscaping. A development proposal plan is presented within Appendix I.

2.2 Site Location and Description

The development site is located to the north east of the A48 within the town centre of Port Talbot, nestled in an area of residential and commercial land use. The site is bounded to the south west by the A48, to the south east by Eagle Street and to the northeast and northwest by Eagle Mews.

The site is centred on National Grid Reference 276855,189602 and covers an area approximately 1800m². The proposed development site is approximately rectangular in plan shape with the south western and central areas of the site is occupied by the remaining Plaza Cinema brick building. The north eastern area of the site is rough vegetation and hardstanding. The area to which this Remediation Strategy relates is outlined for ease of reference in Figure 1 over page with an aerial photograph of the site (dated 2020) as Figure 2.

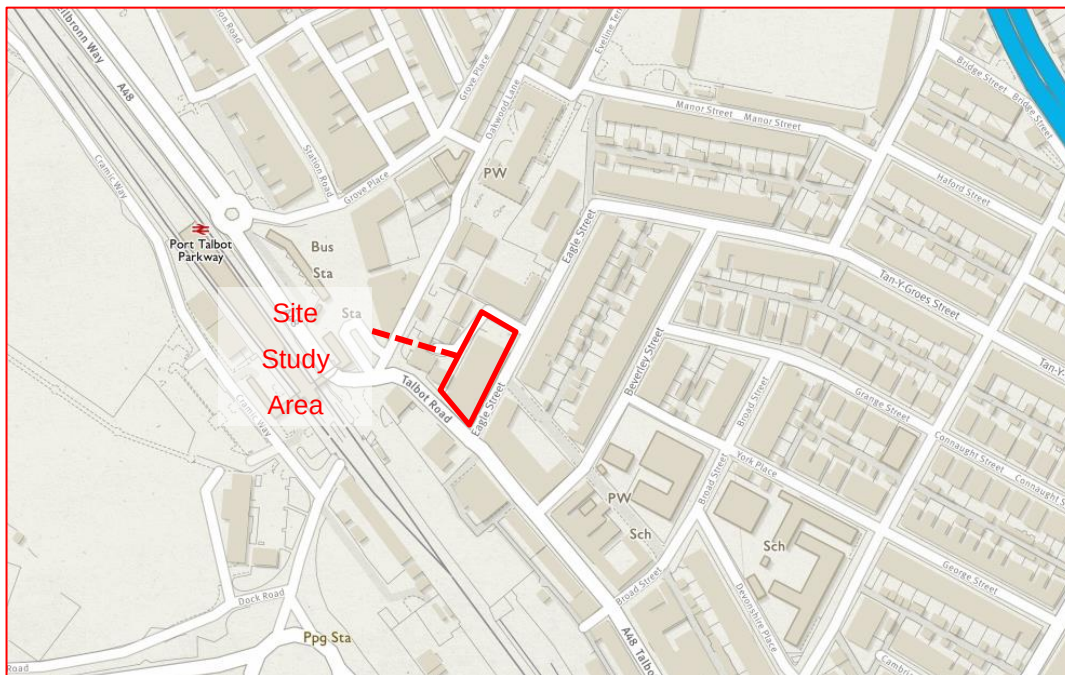


Figure 1: Site location indicating area under investigation. *Not to Scale* ©GoogleEarth



Figure 2: Aerial Ordnance Survey photograph of existing premises. *Not to Scale*

2.3 Past Studies

The site has been subject to one previous study as part of the ongoing process of contaminated land risk identification in order to derive a suitable Remediation Strategy. This past study was undertaken by Quantum and was a combined desk based Preliminary Risk Assessment (Phase I) and an Intrusive Ground Investigation (Phase II). Report Reference;

- ◆ *Proposed Development at The Plaza Cinema, Port Talbot.* Ground Investigation Interpretative Report (Ref:Q0045/IR December 2019)

Section 2.3.1 over page provides a synopsis of this previous study highlighting the pertinent findings of the ground investigation and subsequent laboratory testing and risk assessments in relation to human health and the environment (controlled waters). This summary should be read in conjunction with the above report to provide a comprehensive understanding and rationale behind the Remediation Strategy proposed within this Report;

2.3.1. Summary of Past Study Findings

The Q0045/IR Ground Investigation Interpretive Report contained both desk based research of the suspected/ published geotechnical and contaminated land parameters followed by the site-specific findings of an intrusive ground investigation. The investigation works undertaken in August 2019 included trial holes, both hand and machine excavated, in-situ soakaway testing and dynamic/ rotary cored boreholes located across the proposed development area, both internal to the existing Plaza Cinema building and in the external small courtyard area to the rear (north).

A regime of contaminated land testing of soils, soil leachates and groundwater was undertaken, the results of which were used in a human health risk assessment and environmental assessment to identify unacceptable risks.

Several potential Heavy Metal, Polycyclic Aromatic Hydrocarbons (PAH) and Total Petroleum Hydrocarbon (TPH) contaminants were recorded above the relevant Human Health Risk assessment criteria, notably published Soil Guideline Values (SGV) and Generic Assessment Criteria (GAC). Concentrations were compared against Residential without Plant Uptake scenario and against Commercial End Use scenario for completeness.

The ground investigation revealed up to 2.2m of granular Made Ground material mantling the site external to the building whilst internally, the existing reinforced concrete slab rested directly onto natural soils. The Made Ground or Reinforced Concrete Slab were underlain by cohesive or granular alluvial fan deposits with bedrock residing between 6.8-7.8m below existing ground level.

When comparing the chemical datasets against Residential End Use without plant uptake the following was determined:

- PAH derivatives Benzo(a)pyrene, Benzo(b)fluoranthene and Dibenz(a,h)anthracene were at concentrations above the relevant assessment criteria within samples of Made Ground from BH1, BH2, TP1, HP2 and HP4;
- Benzo(a)anthracene was above the relevant assessment criteria within the samples of Made Ground from BH1, TP1, HP2 and HP4;
- Chrysene, Napthalene and TPH Aromatic >EC16-21 banding were above the relevant assessment criteria within samples of Made Ground from BH2 and TP1;
- Nickel was at a concentration above the relevant assessment criteria within the sample of Made Ground from TP1

- TPH Aromatic >EC12-16 and >EC21-35 bandings were above the relevant assessment criteria within the sample of Made Ground from BH2.

Based on the above the raised contaminant concentrations were identified external to the Plaza building.

The laboratory chemical datasets were also assessed against Commercial End Use scenario criteria for completeness. The following was identified;

- Dibenz(a,h)anthracene concentrations within the Made Ground in BH2, TP1 and HP2 were above the relevant assessment criteria;
- Benzo(a)pyrene, Benzo(b)fluoranthene and Indeno(1,2,3-cd)pyrene were above the relevant assessment criteria in the Made Ground within BH2
- Nickel within the Made Ground within TP1 was above the relevant assessment criteria.

The concentrations of Semi-Volatile Organic Compounds (SVOC) and Volatile Organic Compounds (VOC) measured were all below the relevant assessment criteria for both residential and commercial land use.

Asbestos fibres were identified within samples of Made Ground obtained from BH2, TP1, HP2 and HP4. Quantification testing revealed the quantity within the samples from BH2, TP1 and HP4 to be <0.001% and therefore not considered to pose a risk to human health. The quantity measured within the sample from HP2 was 0.001% which is at the threshold level and may therefore pose a risk to human health albeit a very low risk.

No raised land gases or VOC gas vapours were recorded either during the Ground Investigation work or during post-fieldwork monitoring of installed standpipes.

Based on the comparisons between the measured potential contaminant concentrations and the relevant assessment criteria, the Made Ground present externally to the existing building across the site may pose a significant risk to human health of future proposed site users and should therefore be considered a potential contaminant source, and thereby a source-pathway-receptor linkage is realised within the Conceptual Site Model.

The risk to controlled waters including the underlying Secondary A aquifer was also assessed in the report through testing of soil leachates.

Leachate testing revealed raised concentrations of Copper and Zinc. Groundwater was revealed to reside below 2.40mbgl during the ground investigation works with subsequent water monitoring recorded water at 0.94mbgl in BH1 location. Based on these results there is a potential for leachate generation from the Made

Ground and thereby a risk to controlled waters. However, the report continues to state that given the extensile current and historical land uses in the area, it is likely that the impact of potential leachate generation containing Copper and/or raised Zinc values from the Made Ground on site on the underlying Secondary A aquifer is negligible. There are no surface water sources nearby and as such the risk to these is also considered negligible.

Based on the above, Remedial Measures are deemed necessary for the development in terms of the presence of contaminated land, the risks posed to human health and potential risks posed to the environment/ controlled waters.

3.0 REMEDIATION STRATEGY

3.1 Derivation of Remediation Strategy

The past study has revealed that remediation is required in relation to contaminated land and contaminated land related issues. The revised Conceptual Model following the intrusive ground investigation and subsequent further testing based on the comparisons between the measured potential contaminant concentrations and the relevant assessment criteria concluded that the Made Ground present externally to the existing building across the site may pose a significant health risk to future site users for both residential and commercial land use and should therefore be considered a potential contaminant source unless remedial or protective measures are undertaken.

It is important to note that the development will entail keeping the existing building and undertaking structural and aesthetic renovation/ improvements. The small hardstanding/ part gravel area to the rear of the building will be a mix of resin/ asphalt/ concrete hardstanding. No soft landscaping is proposed as part of the development. If any planting is to be undertaken this will be in raised beds.

3.2 Summary of Risks

The investigation and testing to date has identified the following risks:

- i) Several potential Heavy Metal, PAH and TPH contaminants were measured above the relevant SGV and GAC assessment values
- ii) In terms of assessment against Residential End Use without plant uptake Benzo(a)pyrene, Benzo(b)fluoranthene and Dibenzo(a,h)anthracene were at concentrations above the relevant assessment criteria within samples of Made Ground from BH1, BH2, TP1, HP2 and HP4.
- iii) The concentrations of Benzo(a)anthracene was above the relevant assessment criteria within the samples of Made Ground from BH1, TP1, HP2 and HP4; the concentrations of Chrysene, Naphthalene and TPH Aromatic >EC16-21 were above the relevant assessment criteria within samples of Made Ground from BH2 and TP1.
- iv) The concentration of Nickel was at a concentration above the relevant assessment criteria within the sample of Made Ground from TP1 and the concentrations of TPH Aromatic >EC12-16 and >EC21-35 were above the relevant assessment criteria within the sample of Made Ground from BH2.
- v) Commercial End Use Dibenzo(a,h)anthracene concentrations within the Made Ground in BH2, TP1 and HP2 were above the relevant assessment criteria.
- vi) The concentrations of Benzo(a)pyrene, Benzo(b)fluoranthene and Indeno(1,2,3-cd)pyrene were above the relevant assessment criteria in the Made Ground within BH2 and the concentration of Nickel within the Made Ground within TP1 was above the relevant assessment criteria.

- vii) Asbestos fibres were identified within samples of Made Ground obtained from BH2, TP1, HP2 and HP4. However, quantification revealed measurements of <0.001% and 0.001%.

Therefore, remedial strategies must be adopted to manage items i - vi of the aforementioned risks.

3.3 Remediation Design

3.3.1 Risk 1: Elevated Polycyclic Aromatic Hydrocarbons (PAH) in Soils

Several soil samples recorded marginally raised PAH based contaminants, all from the shallow lying Made Ground to a maximum depth of 0.50m, with Borehole BH2 consistently recording the highest raised values in comparisons to other raised values. The Made Ground was predominantly reworked natural gravels with occasional man-made inclusions of brick, glass, coal and slag. Table 1 is extracted from the December 2019 Ground Investigation Interpretative Report by Quantum (Ref: Q0045/IR) and summarises the elevated PAH test results recorded.

Analyte	Unit	SGV/ GAC Value	Site Result Value	Location of Raised Contaminant
Benzo(a)anthracene	mg/kg	11	160	Borehole – BH2 – At 0.50mbgl
			44	Trial Pit – TP1 – At 0.30mbgl
			21	Hand Pit – HP2 – At 0.50mbgl
			15	Hand Pit – HP4 – At 0.30mbgl
Benzo(a)pyrene	mg/kg	3.2	5.5	Borehole – BH1 – At 0.50mbgl
			100	Borehole – BH2 – At 0.30mbgl
			34	Trial Pit – TP1 – 0.30mbgl
			16	Hand Pit – HP2 – 0.50mbgl
Benzo(b)fluoranthene	mg/kg	3.9	9	Hand Pit – HP4 – 0.30mbgl
			7.1	Borehole – BH1 – 0.50mbgl
			130	Borehole – BH2 – 0.50mbgl
			43	Trial Pit – TP1 – 0.30mbgl
Chrysene	mg/kg	30	27	Hand Pit – HP2 – 0.50mbgl
			16	Hand Pit – HP4 – 0.30mbgl
			150	Borehole – BH2 – 0.50mbgl
Dibenz(a,h)anthracene	mg/kg	0.31	34	Trial Pit – TP1 – 0.3mbgl
			1.2	Borehole – BH1 – 0.50mbgl
			22	Borehole – BH2 – 22mbgl
			6.3	Trial Pit – TP1 – 0.30mbgl
			4.2	Hand Pit – HP2 – 0.50mbgl
Indeno(1,2,3-cd) Pyrene	mg/kg	45	2.6	Hand Pit – HP4 – 0.30mbgl
Napthalene	mg/kg	2.3	54	Borehole – BH2 – 0.50mbgl
			6	Borehole – BH2 – 0.50mbgl
			3.6	Borehole – TP1 – 0.30mbgl

Table 1: Summary of elevated soil contaminants.

The locations of the raised PAH concentration were both internally and externally. It is therefore determined that the new build and hardstanding cover would form a comprehensive capping barrier between the raised Polycyclic Aromatic Hydrocarbons revealed in the shallow Made Ground soils and the site end user.

Risk 1 Remediation Measures:

Risk to be remediated through effectively a capping system which will comprise the new build structure and hardstanding cover elsewhere. The Risk will be built out of the development through the construction process.

3.3.2 Risk 2: Elevated Heavy Metals in Soils

One soil sample recorded raised Heavy Metals based contaminants, all from the shallow lying Made Ground to a maximum depth of 0.30m, with Trial Pit TP1 recording the highest raised values in comparisons. The Made Ground was predominantly reworked natural gravels with occasional man-made inclusions of brick, glass, coal and slag. Table 2 is extracted from the December 2019 Ground Investigation Interpretative Report by Quantum (Ref; Q0045/IR) and summarises the elevated Heavy Metal test results recorded.

Analyte	Unit	SGV/ GAC Value	Site Result Value	Location of Raised Contaminant
Nickel (aqua regia extractable)	mg/kg	180	2000	Trial Pit – TP1 – At 0.30mbgl

Table 2: Summary of elevated soil contaminants.

Risk 2 Remediation Measures:

Risk to be remediated through effectively a capping system which will comprise the new build structure and hardstanding cover elsewhere. The Risk will be built out of the development through the construction process.

3.3.3 Risk 3: Total Petroleum Hydrocarbons in Soils

Four soil samples recorded raised Total Petroleum Hydrocarbons based contaminants, all from the shallow lying Made Ground to a maximum depth of 0.50m, with BH2 recording the highest raised values in comparisons. The Made Ground was predominantly reworked natural gravels with occasional man-made inclusions of brick, glass, coal and slag. Table 3 is extracted from the December 2019 Ground Investigation Interpretative Report by Quantum (Ref; Q0045/IR) and summarises the elevated Total Petroleum Hydrocarbons test results recorded.

Analyte	Unit	SGV/ GAC Value	Site Result Value	Location of Raised Contaminant
TPH – Aromatic > EC12 – 16	(mg/kg)	140	510	Borehole – BH2 – 0.50mbgl
TPH – Aromatic > EC16 – 21	(mg/kg)	1900	2000	Borehole – BH2 – 0.50mbgl Trial Pit – TP1 – 0.30mbgl
TPH – Aromatic > EC21 – 35	(mg/kg)	1900	3900	Borehole – BH2 – 0.50mbgl

Table 3: Summary of elevated soil contaminants.

Risk 3 Remediation Measures:

Risk to be remediated through effectively a capping system which will comprise the new build structure and hardstanding cover elsewhere. The Risk will be built out of the development through the construction process.

3.3.4 Risk 4: Leachate Chemical Analysis in Soils

Six samples recorded raised leachate based contaminants, all from the shallow lying Made Ground to a maximum depth of 1.00m, with BH2 and HP2 recording the highest raised values in comparison. The Made Ground was predominantly reworked natural gravels with occasional man-made inclusions of brick, glass, coal and slag. Table 4 is extracted from the December 2019 Ground Investigation Interpretative Report by Quantum (Ref; Q0045/IR) and summarises the elevated Leachate test results recorded.

Analyte	Unit	SGV/ GAC Value	Site Result Value	Location of Raised Contaminant
Copper	mg/kg	1	3.5	Borehole – BH1 -1.00mbgl
			13	Borehole – BH2 – 1.00mbgl
			15	Hand Pit – HP2 – 0.50mbgl
			7	Hand Pit – HP4 – 0.30mbgl
Zinc	mg/kg	4	13	Borehole – BH2 – 1.00mbgl
			14	Hand Pit – HP2 – 0.50mbgl

Table 4: Summary of elevated soil contaminants.

Risk 4 Remediation Measures:

Risk to be remediated through effectively a capping system which will comprise the new build structure and hardstanding cover elsewhere. The Risk will be built out of the development through the construction process.

3.4 Construction Workers – General Contaminated Land Risk

The geo-environmental laboratory testing showed only marginal exceedances of raised contamination concentrations, therefore the risks posed to construction operatives from chemical contaminants within the shallow ground is considered low.

Operatives working with, or likely to come into contact with made ground with the potential to harness raised concentrations of contaminants, should observe particular precautions concerning personal hygiene. They should be issued with the appropriate personal protective equipment and should be instructed in safe working methods.

Instructions should be issued in the recognition of potentially hazardous materials including oily and odorous soil and water and also any discoloured or fibrous substances for example. Operatives should be warned to avoid contact between hands and mouth before washing. The consumption of food must be confined to designated clean areas with suitable welfare including washing facilities should be provided.

3.5 Unexpected Contamination – General Advice

On any previously developed site there is the potential to encounter areas or types of contamination including asbestos not identified through previous site investigations. Underground structures may also be encountered e.g. storage tanks, that may contain unknown fluids which may require specialist treatment or

disposal. If unforeseen contamination in the form of suspicious odour, colour or staining is encountered during excavations, works in that area should be halted immediately. Any minor contamination will be dealt with by the Remediation Contractor. This could be excavating the material and stockpiling separately on polythene on site until a course of action has agreed. If any gross contamination is identified a rapid meeting should be held and a specific Remediation Strategy developed accordingly. Additional investigation works might be required. A suitable works programme will be devised following the discussion and additional method statements and risk assessments produced. Any additional remediation works will be recorded in the Verification Report.

3.6 Verification of Remediation Works

All remediation works completed at the site will be documented within a Verification Report. The Verification Report should detail the remediation works carried out; including any variation from the BAM Construction approved remediation method statement, and also validation evidence to prove that remediation works had been successfully completed. Typical validation evidence to be included in the report should include photos, chemical analysis, logs, as-built drawings, delivery notes and import/ export soil audit trail.

Verification on this development will principally comprise evidence that the areas where raised contaminants were recorded are indeed capped by the proposed hardstanding, thereby forming a physical barrier between the Made Ground soils (source) and site end users.

In terms of the identified risk to controlled waters in the environment, albeit low, from potential leaching of contaminants held within the Made Ground into the surrounding soils, soakaways to manage storm water should not be employed as this could contribute to focussed collection and dispersal of waters through the shallow soils and influence the rate at which any leaching of the soils could happen. The soakaway testing within the ground investigation did however reveal the shallow natural soils to have a very low permeability and as such soakaways may not be feasible.

Any additional contamination identified and remediation works carried out will be recorded in the Verification Report. The Verification Report will be required by BAM Construction in order to discharge planning conditions.

4.0 GENERAL CONSIDERATIONS FOR REMEDIATION WORKS

4.1 General

The Remediation Works shall constitute the development itself whereby the risks realised will be built out during the proposed development i.e. capping barrier being formed by way of constructing hard standing, however the following points should also be considered. During any works.

4.2 Health and Safety Requirements

Any Remediation Method Statement should consider health and safety for workers at the site, and suitable arrangements made to comply with contemporary health and safety legislation. All works will be carried out by suitably qualified and experienced staff including supervision by an Environmental Engineer / Site Manager.

4.3 Environmental Requirements

4.3.1 Soil Management

The Contractor should operate a soil audit during the works. Any waste materials generated during the works will be classified as waste and recovered/disposed at suitably licensed/declared sites. All waste classified as hazardous, leaving the site will be transported with Hazardous Waste Consignment Notes. All non-hazardous and inert waste will be transported with suitable waste transfer notes. All waste will be removed by a licensed waste carrier.

4.3.2 Pollution Control

The Contractor should consider and detail in their Remediation Method Statement the control measures for potential environmental pollution during the remediation works, including cross-contamination of soil, mud and silt, noise, dust, etc.

4.3.3 Environmental Management System

The Contractor should have an Environmental Management System in accordance with BS EN ISO14001 accreditation. The procedures and records contained should therein ensure all works are carried out in a manner that minimises impact on the environment and generates adequate and accurate records to demonstrate remediation works have been carried out to the required standard and in accordance with all applicable legislation.

5.0 REFERENCES

Past Studies:

- *Proposed development at The Plaza Cinema, Port Talbot. Ground Investigation Interpretative Report*, Reference; Q0045/IR, December 2019

APPENDIX I – PROPOSED DEVELOPMENT PLANS

This drawing is the property of GWP Architecture. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, retained, or disclosed to any unauthorised person, either wholly or in part, without the consent in writing of GWP Architecture.

All drawings and specifications should be read in conjunction with the project health and safety plan, any possible conflicts should be presented to the Planning Coordinator.

All work to be carried out in accordance with current Building Regulations.

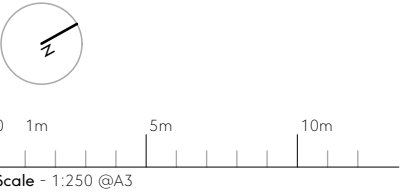
Contractors must verify all dimensions at the job before commencing any work or making shop drawings.

Written dimensions should be taken.

Do not scale off drawing.

Do not take digital dimensions from this drawing.

Any discrepancies to be reported to the Architect.



- Site Boundary Line
- Security Fence Line
- Proposed Development
- Bike stands (16 bikes)
- Bin Store (2 bins)
- Vehicle Charging Point
- Proposed On-street Loading Bay (15 m X 2,5 m)
- Retaining wall
- New tarmac structure

P07	19.07.19	update emergency escape route location	CT	RT
P06	15.07.19	General updates	DT	RT
P05	04.06.19	update RWP,SVP, landscaping proposal,	UKD	RT
P04	28.05.19	update as per planning consultant's comments	CT	RT
P03	10.05.19	Topo Survey overlay	DT	RT
P02	08.05.19	General updates	DT	RT
P01	07.05.19	First Issue	DT	RT
Rev	Date	Comment	Dr	Ch



CHARTERED ARCHITECTS
INTERIOR DESIGNERS
SPACE PLANNERS
PROJECT MANAGERS
LANDSCAPE ARCHITECTS

15th Brunel House 2 Frazarion Road Cardiff CF24 0EB
+44(0)2921 303 322 (H) (M)Contact Fax (H)
architecture@gwp-arch.com | www.gwp-arch.com

GWP Job Reference PPT

Job Title Plaza Port Talbot

Client Neath Port Talbot County Borough Council

Proposed External Works

Name	PPT-GWP-01-XX-DR-A-(PA)-0030		
Scale	1:250@A3	Revision	07
Drawn/Checked	DT/RT	First Issue	07.05.2019
Drawing Status	S - Work In Progress		

BIMcloud: BIMServer-HP - BIMcloud Basic for ARCHICAD 22/(185)1902-GWP-01-XX-W3-A-18-PortTalbot-P01

