



Elemental **GI** Ltd

REPORT: REMEDIAL METHOD STATEMENT FOR SITE
OFF BARRIER BANK, COWBIT, SPALDING

CLIENT: EAST ANGLIAN CIVILS LTD

Project No: E22131
Ref No: E22131/3/0

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REMEDIAL METHOD STATEMENT: SITE OFF BARRIER BANK, COWBIT, SPALDING

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Semi-Technical Summary

The reader is referred to the terms and conditions which accompany this report, and which are presented at the end of this document.

This semi-technical summary provides a brief overview of the main conditions which have been noted on site. These features / factors (alongside others) are explained fully in the following report and the following should therefore not be referred to in isolation. **No reliance should be placed on the summary until the whole report and related documents have been read in full.**

Contamination	Elevated PAHs have been recorded in made ground in one area. Elevated concentrations of ground gas have been recorded at the site.
Conceptual Site Model	Potential pollutant linkages exist which relate to the contamination and to ground gas in the context of the future residential end users. These need to be broken in order to ensure that risks to future site users are negated.
Remediation Specification	Drawings supplied to Elemental GI Ltd by the Client indicate that all garden areas around and beyond the identified PAH hotspot will be covered by at least 1000mm of 'clean' soils. This is considered sufficient to break the identified pollutant linkages. Validation of these areas will be required to verify the success of these remedial works. Future buildings at the site will need to have ground gas protection measures installed as part of their construction.

1.0 INTRODUCTION

1.1 Report Status

Elemental GI Ltd were appointed by East Anglian Civils Ltd (hereafter referred to as 'the Client') to prepare a Remedial Method Statement ("RMS") for the site off Barrier Bank, Cowbit, Spalding (hereafter referred to as 'the site').

This report has been prepared on the understanding that the site is undergoing redevelopment to support residential housing. We have been supplied with a copy of the proposed layout, and extracts of this plan are presented in the Proposed Site Layout Plan (Drawing 001) in Appendix I.

This report has been prepared in accordance with our notes concerning the terms and conditions of these works and of our engagement, which are presented at the end of this report.

Should the development proposals alter, then the recommendations in this report may be subject to change. Whilst it may be utilised by others for reference purposes at the Client's discretion, it has not been prepared for any other purposes (e.g. waste classification etc.) and therefore additional works may be required by third parties dependent upon their own requirements / works. Users of any / all of our reports, letters etc. must always ensure that they are reading the latest version / revision before undertaking any works and / or making any assessments, designs, decisions or related ventures. Please stop and check that this is the latest version for this site / project before proceeding any further.

All recommendations are subject to the approval of the relevant Regulatory Authorities, and copies of this document should be submitted for approval by the Client before the start of any works on site.

It should be noted that this RMS has not been written to consider risks arising from the completion of foundation construction works (e.g. piling) and that risks from such works should be considered fully by the relevant contractor once their designs are confirmed. Approval may be required from the relevant regulators / warranty providers for such works.

The handling, remediation and assessment of asbestos is a specialist area requiring appropriate experience and associated insurance. Elemental GI Ltd are not specialists in the assessment and / or remediation of asbestos (including asbestos containing materials) and therefore a suitably licensed and experienced contractor should be appointed by the Client to manage and supervise all related remedial works. However, comments have been made herein relating to the detections of asbestos encountered during our recent works for information purposes and to help guide the works of such specialists.

1.2 Previous Reports

Elemental GI Ltd have prepared the following report which relates to the subject site:

- Elemental GI Ltd: Phase 1 Geo-Environmental Assessment for Site off Barrier bank, Cowbit, Spalding (Ref. E22131/1/0 dated June 2022).
- Elemental GI Ltd: Phase 2 Geo-Environmental Investigation for Site off Barrier bank, Cowbit, Spalding (Ref. E22131/2/1 dated July 2024).

The above referenced documents have not been reproduced herein, and they should be referred to in full alongside this report.

2.0 SITE SETTING

2.1 Location

The address and location of the subject site are shown in Table 2.0 below:

Table 2.0: Site Location and Dimensions

Site Address	Site off Barrier Bank, Cowbit, Spalding, PE12 6AL
National Grid Ref.	526062, 317893
Area (Approx.)	0.26 ha
Access	Site can be accessed through a gate off Barrier Bank.



2.2 Geo-Environmental Setting

No records of artificial ground are recorded beneath the site on available 1:10,000 and 1:50,000 scale geological mapping. Drift deposits are recorded beneath the site on 1:50,000 scale mapping comprising Tidal Flat Deposits (clay and silt). The solid geology beneath the site on 1:50,000 scale mapping is recorded as Oxford Clay Formation, mudstone.

The drift deposits recorded beneath the site are classified as a 'Unproductive'. The bedrock geology recorded beneath the site is classified as a 'Unproductive'. No entries relating to abstractions are recorded within a 250m radius of the site. No entries relating to potable abstractions are recorded within a 2000m radius of the site. The site is not recorded to be within a source protection zone for total catchment. 19 No. entries relating to water networks are recorded within a 250m radius of site relating to small watercourses from 1m north-east of the site and the New River from 115m south-west of the site.

2.2.1 Site Description (*Pre-Demolition*):

- The site is approximately 0.26ha in area;
- The site forms an irregular shaped parcel of land which was mainly covered by gravel and tarmac in the western area of the site and by grass in the eastern area of the site. It currently supports an area of ground which has had the previous structures removed and which now contains features associated with the proposed residential redevelopment;
- The site previously supported a workshop and several derelict and dilapidated structures with various mounds around site containing building rubble and mixed soils;
- The workshop was present in the western area of the site and contained machinery, work benches, DIY materials and a small-scale storage of fuels, paints and cleaning fluids;
- There were 4 No. dilapidated structures on site. This comprised a disused shed in the northern area of the site, an open-sided barn in the north-eastern area of the site, a dilapidated barn (possible former livestock barn) in the eastern area of the site, and a disused barn in the western area of the site;
- Various materials were observed to be stored in some of the barns, mainly comprising wooden crates, pallets, machinery, gym equipment and electrical equipment;
- The small-scale storage of fluids in small drums was noted within some of these barns;
- A number of mounds and trial pits were found across the site. The mounds were shown to contain building rubble, cement and mixed soils. Trial pits had been undertaken (by the Client's Structural Engineer) and showed disturbed / made ground at surface;
- A 'U' shaped structure was found centrally on site built from breeze blocks. It was seen to contain evidence of previous bonfires with piled wood in its centre. Building rubble from demolished buildings was found in a mound south of this structure;
- A disused kennel was found in the north-western area of the site. Alongside the kennel, concrete bases with wooden pallets and stacked breeze blocks with pipe were noted. These indicated potential suspected tank bases which appeared to have been unbunded;

- Asbestos sheeting was noted across the site. This was mainly noted outside and around the workshop. Asbestos debris was also present in the barn in the eastern area of the site;
- A manhole cover was present in the central area of the site associated with a suspected sewer / drain running south-east;
- Mature trees were present around the shed in the north-eastern area of the site and alongside the eastern and southern boundaries;
- The tarmac driveway at the site entrance sloped at a downward gradient from the road onto a gravel area;
- The site is set within a mixed residential / agricultural area;
- Land to the north of the site supports Cowbit Village Hall, St Mary's Church and a residential area;
- Land to the east of the site supports open ground and a residential area;
- Land to the south of the site supports a residential area with Cowbit Park located south-west of the site;
- Land to the west of the site supports Barrier Bank and farmland; and
- Land in the wider area surrounding the site supports a number of small businesses set within a residential area and a new river (drain) running parallel west of Barrier Bank. This is surrounded by farmland and open fields.

2.3 Ground Conditions

Reference should be made to the report(s) referenced in section 1 of this RMS for a full description of the site's ground conditions, but in summary:

Made ground was encountered in all areas of the site to a maximum total depth of 1.90m below existing ground level (begl). This generally comprised either recently placed soft landscaped topsoil materials (generally brown sandy silty topsoil), or reworked granular materials which included fragments of brick and clinker. The natural soils at the subject typically comprised brown and grey silty sand or sandy silt soils. Bands of peat were noted at most locations.

Water was encountered at depths ranging from 0.92m to 1.90m begl during the recent site works, and at similar depths during return monitoring visits.

2.4 Contamination Summary

We noted the following with regards to contamination at the site, which was assessed against screening criteria for a 'residential with plant uptake' end-use scenario:

- 3 No. exceedances of benzo(a)pyrene:
 - Samples from WS04 of made ground at 0.1m begl;
 - Samples from delineation positions (3 No.) surrounding WS04 designated HS-1 and HS-3;
- 4 No. exceedances of dibenzo(a,h)anthracene:
 - Samples from WS04 of made ground at 0.1m begl;
 - Samples from delineation positions (3 No.) surrounding WS04 designated HS-1 to HS-3.

The initial investigation identified exceedances from samples taken from location WS04 at 0.1m begl. Made ground was recorded to extend to a depth of 0.45m begl in this area of the site (based on records from WS04). Further samples (HS-1 to HS3) were taken approx. 3.0m from the location of WS04 at the same depth and were tested for PAHs. Most of these delineation positions also recorded exceedances of PAHs, indicating that a small 'hotspot' is not present and that a wider area of impacted soils / made ground is within this area of the site.

It is noted that the exceedances summarised above were within samples retrieved from made ground materials. No exceedances from samples retrieved from the any other made ground or from the underlying natural soils were encountered.

3.0 CONCEPTUAL SITE MODEL

3.1 Sources

As summarised in Section 2.4 above, exceedances have been recorded at the site comprising elevated PAHs in the general area surrounding borehole WS04 (and nearby delineation positions).

These are considered to comprise 'sources' within the site's conceptual site model (CSM).

3.2 Pathways

The following potential pathways have been identified at the site in relation to the above sources should they remain unchanged / *in situ*:

- Dermal Contact;
- Ingestion of Soil;
- Ingestion of Site-Grown Fruit / Vegetables;
- Ingestion of Soil Attached to Site-Grown Fruit / Vegetables;
- Inhalation of Dust.

The vapour and groundwater migration pathways have been omitted at this stage because of the matrix within which the PAHs have been identified, which is considered likely to make mobility / leaching / volatilisation unlikely.

3.3 Receptors

The redevelopment proposals for the site comprise the construction of new residential dwellings which will include gardens and car parking areas.

The main / primary receptors considered within this CSM comprise the future residents. However, other secondary receptors have also been considered, including ecology, groundwater, construction workers and neighbouring sites.

It is recommended that construction companies involved in any demolition / enabling / construction works should undertake their own health and safety risk assessments in relation to their own works and with due regards to the findings of the previous ground investigations.

3.4 Pollutant Linkages

Based on the above sections, sources, pathways and receptors have been identified at the site and therefore feasible pollutant linkages are considered to have been identified.

This RMS will present steps through which these pollutant linkages may be broken.

4.0 REMEDIATION SPECIFICATION

Elemental GI Ltd have discussed the site and the redevelopment proposals with our Client, and it is understood that the identified pollutant linkages have been broken through the following steps:

- Step 1 - Identification of a 'remediation zone' extending from borehole WS04 (and nearby delineation positions) to the next 'clean' test position, and encompassing all areas of soft landscaping;
- Step 2 - Excavation of all materials in all areas of soft landscaping across the 'remediation zone' to a depth of 1000mm below proposed final levels;
- Step 3 - Placement of a min. 100mm 'hard dig layer' of clean inert aggregate materials, overlain by a barrier membrane and subsequently placement of at least 1000mm of 'clean' capping layer soils (topsoil and subsoil) in all gardens and soft landscaped areas across the remediation zone.
- Step 4 - Removal of contaminated materials from site for disposal (from excavated hotspots and any construction excavations);
- Step 5 - Validation of remedial measures (e.g. placement of capping materials) following their placement.

4.1 Excavation Works

The Client has informed Elemental GI Ltd that a robust and excessive set of works was agreeable to increase the level of protection afforded to new residents (and other receptors) from the identified exceedances. It is understood that the levels of the excavations have been detailed and recorded through 'before and after' surveys and that a photographic record has been stored. A section of the photographs from these works is enclosed.

4.2 Capping Works

As outlined above, a photographic record has been taken by the Client which details the placement of fresh capping soils. We also understand that laboratory tests of the placed soils are also available and shall be presented within a verification report covering the works. A section of the photographs from these works is enclosed.

5.0 VALIDATION REQUIREMENTS

5.1 General Procedures

At this stage the validation of works relating to the remediation zone is not considered necessary as the works have been undertaken and recorded in detail by the Client. However, it is considered likely that a verification report relating to this remediation will be required as a separate final letter for the Council and warranty providers, which shall be issued under separate cover.

5.2 Ground Gas Validation Works

As discussed earlier in this report, we recommended that ground gas protection will be required for all new structures at the site. We have been informed that the Client has appointed a specialist ground gas installer and a specialist ground gas protection measures verification consultant. These parties will update the Client directly with regards to their works, and this should be submitted directly to SHDC by them.

6.0 RECOMMENDATIONS AND OTHER CONSIDERATIONS

6.1 General Considerations / Assumptions: The following assumptions have been made concerning the site and the remedial works described herein:

- It always remains possible that ground and groundwater conditions may change between each exploratory hole and therefore such variations cannot be discounted. Seasonal variations may also be expected in relation to groundwater observations etc.
- We have assumed that the Client and their appointed contractors will follow all relevant regulatory requirements including health and safety and demolition works (e.g. Construction (Design and Management) Regulations 2015).
- A suitable environmental advisor (i.e. Elemental GI Ltd) should be appointed to supervise and validate all works described herein. However, representatives of Elemental GI Ltd may not always be on site and cannot verify / approve works which they have not seen or been informed of. Other advisors / contractors may be involved with the site (e.g. remedial contractors) and they would be wholly responsible for their own works as agreed with the Client.
- The importation and re-location of all soils (site-won or otherwise) must be undertaken in full accordance with the relevant permits / exemptions / regulations. The Client / developer should ensure that these are all in place in advance of relevant works. Where soils are re-used on site, or are imported onto site, it is assumed that they will be tested for suitable determinands prior to their re-use / importation. Please contact us for further advice in advance of all such works.
- Any previously unexpected / unidentified contamination should be reported to Elemental GI Ltd immediately, and works may need to stop until we can review and discuss the associated risks with you. The regulatory authorities should also be informed.
- The Client / developer should discuss utility construction requirements with the appropriate providers prior to the start of works.
- All soil samples must be retrieved by an Engineer from Elemental GI Ltd, and should be scheduled for analysis at a suitably accredited laboratory.
- The excavation, movement or any other disturbance of contaminated soils could result in the spreading of contamination to other areas of the site. Suitable management procedures should be put in place prior to all such works (e.g. dust suppression) to manage this at all times.
- Site staff are responsible for ensuring that all relevant environmental management procedures are in place throughout the works. This includes the safe and appropriate storage of contaminated soils (e.g. on suitable membranes) to ensure that cross-

contamination and off-site contamination (e.g. through dust migration) are not possible.

- The Client is responsible for ensuring that their site staff are sufficiently protected from health and safety risks associated with the works outlined herein.

Terms and Conditions

Consideration of factors such as concrete design class, desiccation, settlement and related matters may need to be undertaken separately once this information is known / provided and this has not been assessed unless stated otherwise as it is assumed that your appointed Structural Engineers have made sufficient allowances etc. and / or have assessed such factors directly. Specific details relating to construction (e.g. concrete design class) MUST be assessed conservatively and directly by the parties finalising those aspects of the project as part of their own works once the project details can be considered holistically by them.

We have obtained and reviewed information relating to the site, but this may not be complete, and liability cannot be accepted for information not available to Elemental GI Ltd at the time of writing this report. This report has been written in consideration of construction / development proposals (or similar) as described in Section 1.0 of this report. If any of these proposals change (e.g. layout), then this report may be subject to change. Environmental factors may change over time (including climate change, water / rainfall conditions etc) which may present conditions not experienced during the works described herein. We cannot accept liability for any conditions not identified / experienced during the works described herein, and it is assumed that suitable contingencies are therefore included within site designs by your other appointed Engineers (and similar professionals) in accordance with best practice and appropriate precautions.

The actual measurable area of the site which has been physically inspected (e.g. through drilling / excavations etc.) as part of the works discussed in this report is very small when compared to the total area of the site, and therefore our findings should not be seen as being complete, thorough or comprehensive in relation to the ground / water conditions at this stage. Whilst we have endeavoured to assess and investigate the site in accordance with the scope of these works, it always remains possible that ground conditions will vary between and beneath locations. This may include ground type, strength and groundwater conditions. There may therefore be conditions prevailing on site which have not been revealed by this assessment and which have not been taken into account by this report. The best way to ensure that recommendations (including foundation recommendations) are appropriate is to appoint a suitably experienced and qualified Engineer to inspect all formations (foundation excavations) prior to construction. It is therefore always recommended that the Client undertakes this for all sites, **and this advice applies to the site discussed in this report.** Responsibility cannot be accepted for any works undertaken which deviate from the recommendations presented herein and for all / any conditions not revealed by this investigation and assessment. It should be noted that groundwater levels etc. may vary due to seasonal and other effects. Whilst it may be utilised by others for reference purposes at the Client's discretion, it has not been prepared for any other purposes (e.g. waste classification, drainage excavations etc.) and therefore additional works may be required by third parties dependent upon their own requirements / works. Any works which are proposed at greater depths than reported herein may require confirmatory investigation works as necessary.

This report has been prepared for the sole use and reliance of the Client. No other third party may rely upon or reproduce the content of this report without our prior written approval. If any unauthorised third party comes into possession of this report, they rely upon it entirely at their own risk and the authors do not owe them any warranty, duty of care or skill.

Our report, including the conclusions and recommendations, are considered reasonable based on the findings of the various assessments. However, these cannot be guaranteed to gain regulatory approval and therefore the

Client should submit it to them (as necessary) for their comments and approval prior to undertaking any irrecoverable works associated with the subject site.

The findings and recommendations made in this report are based on published information (as presented in the accompanying appendices). Elemental GI Ltd cannot accept responsibility for the reliability and authenticity of published information or reports prepared by third parties.

The conclusions and recommendations presented herein are considered reasonable based on the assessments of the site undertaken by Elemental GI Ltd. However, these cannot be guaranteed to gain regulatory approval and therefore copies of this report should be sent to the appropriate regulatory authorities and / or other organisations (as appropriate) by the Client for their comments and approval prior to undertaking any irrecoverable works associated with the site.

The possibility of significant variation in ground conditions existing between / beneath test locations / depths cannot be discounted and must be considered within the design proposals for the subject site. All soakaway designs should be approved by the relevant statutory authority prior to implementation and must adhere to the standard design and ground setting requirements, upon which your appointed drainage design engineers should advise you. Where comments / recommendations have been made relating to specific depths it cannot be guaranteed that ground conditions shall be similar at surrounding / underlying depths, which should be taken into consideration as necessary by others.

With respect to the document to which this sheet is appended, the warranty provided with our works / reports etc. shall only apply once all invoices that we have sent in relation to the same site / project discussed herein (i.e. the site discussed within this document) have been paid by the Client within the payment period specified on each invoice. The warranty and all reliance upon / use of this report (in part or in full, including all text, drawings, logs, associated correspondence etc.) is both voided and prohibited unless all invoices relating to it are settled in full within the period (i.e. 'Terms' e.g. 'Net 20') specified on such invoices.

Standard Risk Assessment - Considerations and Methodology

Elemental GI Ltd have based our standard risk assessment methodology upon current legislation and prevailing best practice and available guidance. This includes the following:

- DEFRA / EA document 'Contaminated Land Report 11 (CLR11) Model Procedures for the Management of Land Contamination' (2004) [*withdrawn but used for general reference purposes*];
- NHBC / EA / CIEH document 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008);
- DEFRA 'Environmental Protection Act 1990: Part 2A - Contaminated Land Statutory Guidance (2012); and
- Environment Agency 'Collection: Land Contamination Technical Guidance (2014) held at:
 - <https://www.gov.uk/government/collections/land-contamination-technical-guidance>

Construction of Conceptual Site Model

Elemental GI Ltd have based our standard risk assessment methodology upon current legislation and prevailing best practice and available guidance. This includes the assessment of potentially contaminated land in terms of 'significant pollutants' and 'pollutant linkages', using SOURCE-PATHWAY-RECEPTOR scenarios for the site. For a pollutant linkage to exist all three of these elements must be present. These have been clearly defined in the guidance as follows:

-potential source as 'a contaminant which is in, or under the land and which has the potential to cause significant harm or to cause pollution of controlled waters'.
-potential pathway as 'one or more routes or means by, or through, which a receptor is being exposed to, or affected by a contaminant, or could be so exposed or affected'.
-potential receptor as 'a living organism, a group of living organisms, an ecological system or a piece of property which is being or could be, harmed by a contaminant or controlled waters which are being, or could be, polluted by a contaminant'.

Within this report, pathways including the following have been considered:

- Ingestion of soil;
- Ingestion of site-grown vegetables;
- Ingestion of site-reared livestock / fish;
- Dermal contact with soils;
- Inhalation of vapours;
- Inhalation of soil-derived dust.

The receptors which we have considered are described in Section 1.0 of this report.

Risk Assessment Methodology

Our risk assessment methodology is based upon a phased approach, which takes the following steps:

1. Hazard Identification and Assessment:
 - a. Establishing potential contaminant sources through the derivation of initial conceptual site model (CSM); and
 - b. Analysing the potential for unacceptable risks (what pathways and receptors could be present, what pollutant linkages could result and what could the effects be).
2. Risk Estimation and Evaluation:
 - a. Prediction of the magnitude and probability of the possible consequences;
 - b. Investigation of the potential risks;
 - c. Completion of Generic Quantitative Risk Assessment (GQRA); and
 - d. Evaluation of risks / confirmation of pollutant linkages (leading onto step '3' if identified).
3. Remediation Design / Implementation / Verification:
 - a. Completion of Detailed Quantitative Risk Assessment (DQRA) if necessary;
 - b. Collation of remedial strategy;
 - c. Implementation of remedial strategy / validation; and
 - d. Final reporting.

Risk terminology and classification is defined through standard wording and descriptions, as contained in the documents referenced above. This includes the balance, comparison and assessment of risk as a dynamic categorisation / classification of probability vs. possible consequence(s), as shown in the table A1 below:

Table A1: Risk Categorisation

Probability (Likelihood)		Consequence			
		Severe	Medium	Mild	Minor
	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / Low Risk
	Likely	High Risk	Moderate Risk	Moderate / Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate / Low Risk	Low Risk	Very Low Risk
	Not likely	Moderate / Low Risk	Low Risk	Very Low Risk	Very Low Risk

Risk levels are described as follows:

Table A2: Risk Level Descriptions

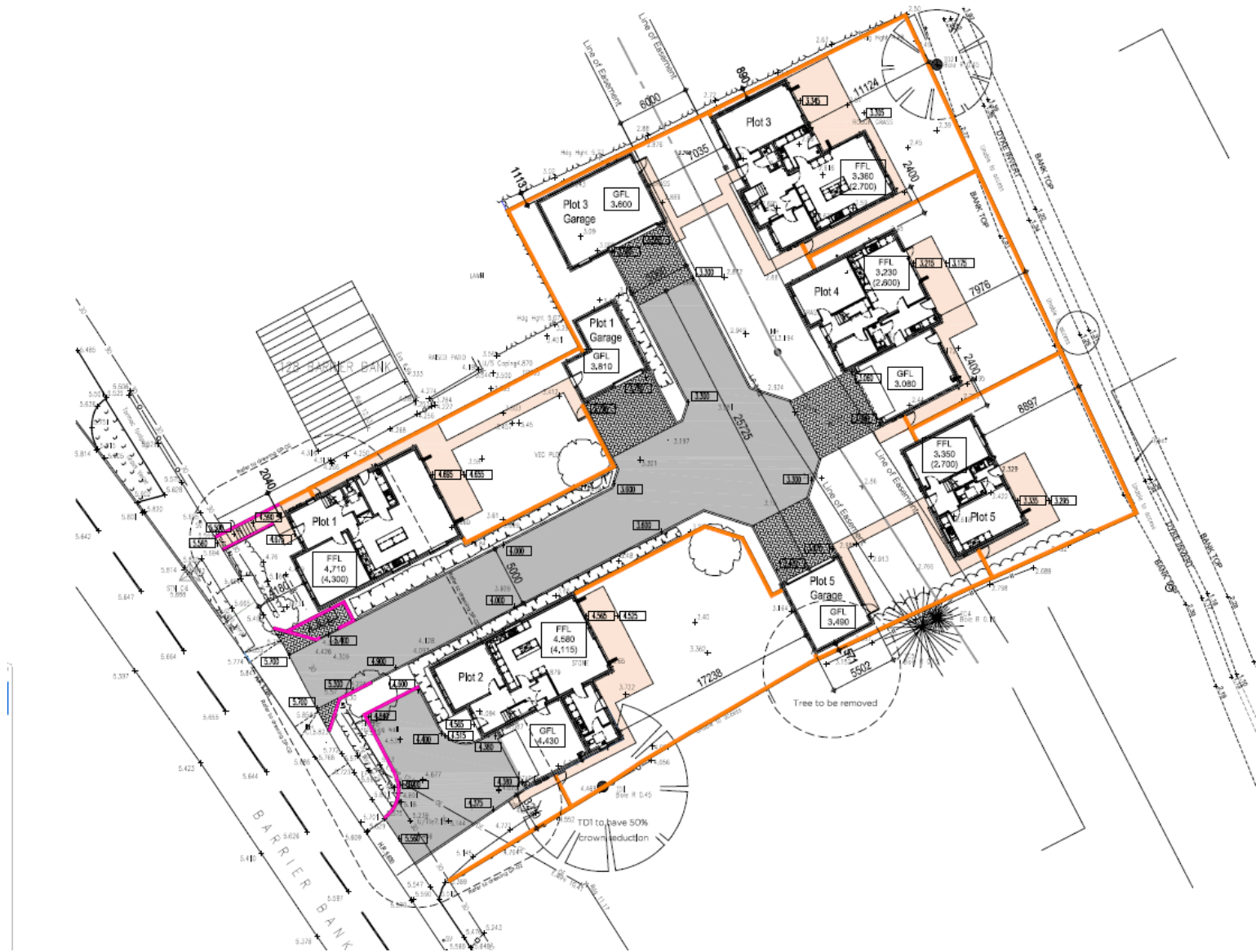
Term	Description
Very High Risk	A high probability exists that severe / significant harm could arise to someone or something from the hazard which has been identified. Remedial action is required.
High Risk	Harm is likely to arise to someone or something from the hazard which has been identified. Remedial action is usually required.
Moderate Risk	Harm could potentially arise to someone or something from the hazard which has been identified without remedial action, although it is considered to be relatively <u>unlikely</u> that such harm would be severe.
Low Risk	Harm could theoretically arise to someone or something from the hazard which has been identified without remedial action, although it is considered that any effects would be mild.
Very Low Risk	Harm is not likely to arise to someone or something from the hazard which has been identified.

The NHBC / EA / CIEH document 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008) defines the following (reproduced verbatim):

“Severity (consequence) can be defined as the adverse effects (or harm) arising from a defined hazard, which impairs the quality of human health or the environment in the short or longer term. For example a consequence defined as “Severe” could be defined as “Highly elevated concentrations likely to result in ‘significant harm’ to human health as defined by the EPA 1990, Part 2A, if exposure occurs”. The type and form of the contaminant needs to be known in order to understand the effect on humans and therefore severity of potential harm. For instance different forms of cyanide behave differently. Complex cyanide (“blue billy”) is relatively “non toxic” whereas free cyanide is “highly toxic” (Environment Agency 2002b).

Probability can be defined as the chance of a particular event occurring in a given period of time. For example, a “High Likelihood” could be defined as “where an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution”.

APPENDIX I
DRAWINGS



CLIENT:

EAC **EAST ANGLIAN**
CIVILS LTD
Commercial & Domestic Building & Groundworks

TITLE:

Proposed Site Layout Plan

DATE:

Sep. 2022

DRAWING No:

E22131_001

SCALE@SIZE:

NOT TO SCALE

DESIGN/DRAWN:

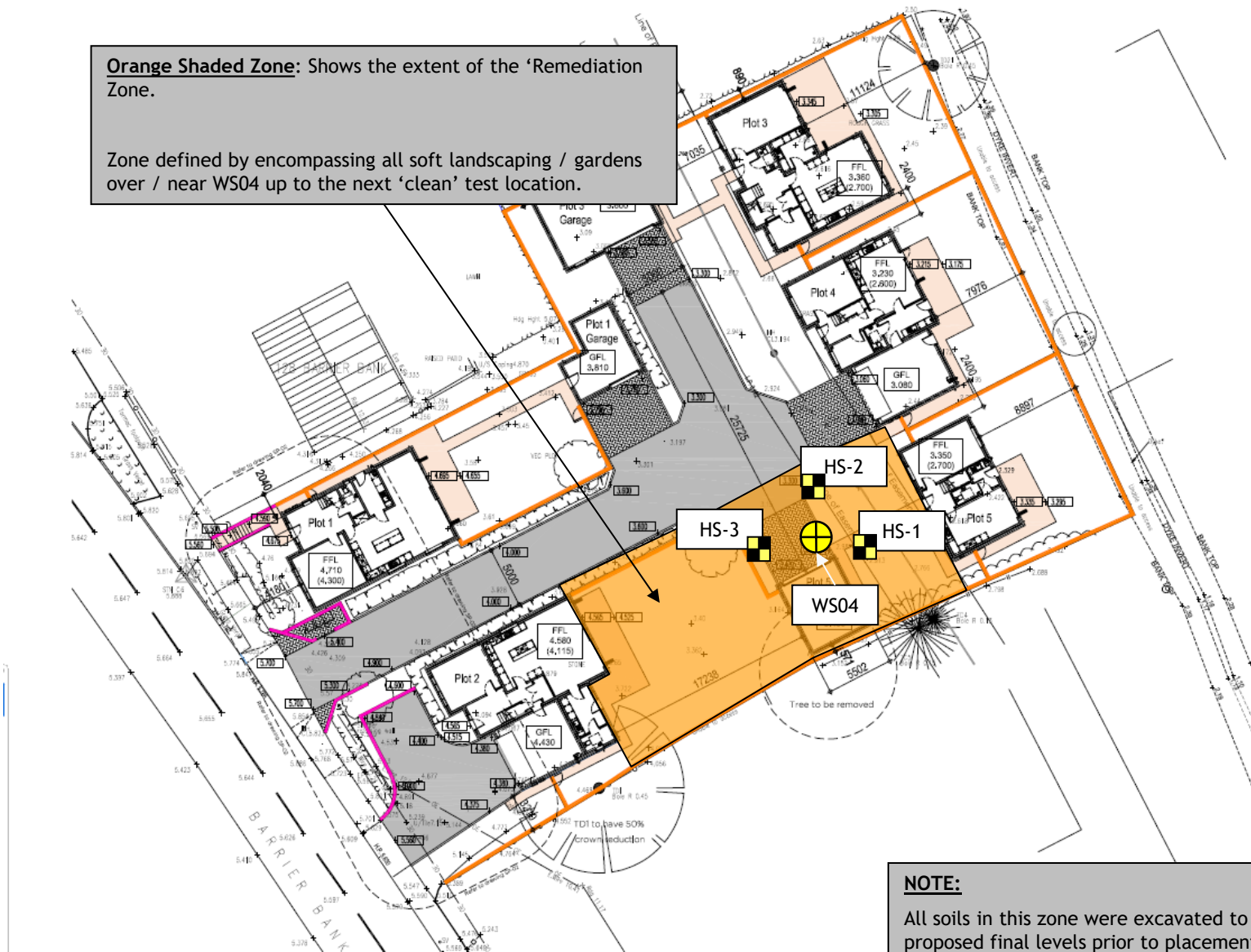
JR

Elemental GI Ltd



Orange Shaded Zone: Shows the extent of the 'Remediation Zone'.

Zone defined by encompassing all soft landscaping / gardens over / near WS04 up to the next 'clean' test location.



NOTE:

All soils in this zone were excavated to >1000mm below the proposed final levels prior to placement of granular 'hard dig' layer, membrane and at least 1000mm of 'clean' capping soils.

CLIENT:

EAC **EAST ANGLIAN**
CIVILS LTD
Commercial & Domestic Building & Groundworks

TITLE:

Remediation Zone

DATE:

Sep. 2022

DRAWING No:

E22131_002

SCALE@SIZE:

NOT TO SCALE

DESIGN/DRAWN:

JR

Elemental GI Ltd



Photo 1 - Placement of 'Stone Layer' Following Excavation.



Photo 2 - Placement of 'Membrane Layer'



Photo 3 - Placement of Barrier Membrane for Storage.



Photo 4 - Storage of Excavated Soils (Pre-Disposal).

CLIENT:

EAC
EAST ANGLIAN
CIVILS LTD
Commercial & Domestic Building & Groundworks

TITLE:

Remediation Photographic
Record

DATE:

Sep. 2022

DRAWING No:

E22131_003

SCALE@SIZE:

NOT TO SCALE

DESIGN/DRAWN:

JR

Elemental GI Ltd