OAKSHIRE
ENVIRONMENTAL

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Phase 1 Preliminary Risk Assessment

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West London Composting
Highview Farm, Newyears Green Lane, Harefield, UB9 6LX

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1. Introduction

The following document is a Phase 1 Preliminary Risk Assessment carried out by Oakshire Environmental, and includes details of the site, environmental setting, contaminant linkages and an evaluation of risk.

1.1 Project Overview

The client's proposed project involves the construction of a replacement waste transfer station building and associated work at Highview Farm, Newyears Green Lane, Harefield, UB9 6LX. Oakshire Environmental have carried out a Phase 1 Preliminary Risk Assessment, as described below.

1.2 Purpose of Investigation

The objectives of the Phase 1 Preliminary Risk Assessment were to:

- Develop a detailed assessment of the site.
- Identify potential contamination sources, receptors and pathways at the site.
- Assess the level of potential contamination risk.
- Determine the requirement or scope of further investigations.

1.3 Scope of Work

- Brief introductory information has been noted to provide context to the report and include an Introduction, Project Overview, Scope of Work and Limitations.
- To develop a detailed assessment of the site, desk studies have been carried out to collate information obtained from sources including the British Geological Society, Environment Agency and Ordnance Survey on planning and site history, ground conditions and environmental setting.
- This information has been used to identify potential contamination sources, receptors and pathways at the site, as part of an initial Conceptual Site Model.
- To assess the level of potential contamination risk, a Conceptual Site Model has been produced to categorise the potential severity of the impact of the contaminant linkage on the receptor and the probability of the contaminant linkage being present.
- Following the assessment of contaminant linkages, an evaluation of contamination risk has been conducted to determine the requirement and scope of further investigations.
- Supporting appendix include photographs, maps, and plans of the site.

1.4 Limitations

Quantum Intelligent Trading Ltd is previously and hereafter referred to as “Oakshire Environmental” or “the company”. Oakshire Environmental has exercised such professional skill, care and diligence as may reasonably be expected of a properly qualified and competent consultant when undertaking works of this nature. This report is only valid when used in its entirety and any information or advice contained within the report should not be relied upon until considered in the context of the whole report. Oakshire Environmental disclaims any responsibility to the client, as named on the front of this report (“the client”), and others in respect of any matters outside the scope of this work. Any comments made on the basis of information obtained from the client or other third parties are given in good faith on the assumption that the information is accurate. This report has been prepared solely for the benefit of the client and any other party using or placing reliance upon any information contained in this report does so at their own risk. Oakshire Environmental accepts no responsibility or liability for the contents of this report being used for any purpose or project for which it was not commissioned. Oakshire Environmental accepts no liability whatsoever for any loss or damage arising from the interpretation or use of this report and in no event shall the company be liable for any punitive, exemplary or other special damages, or for any indirect, incidental or consequential damages, including with respect to the performance or non-performance of any services, whether arising under breach of contract, tort or any other legal theory, and regardless of whether the company has been advised of, knew of, or should have known of the possibility of such damages. Furthermore, Oakshire Environmental does not accept any liability for the consequences of any legislative changes or the release of subsequent guidance documentation and following delivery of the report has no obligation to advise the client or any other party of such changes or their repercussions.

This report excludes consideration of potential hazards arising from any activities at the site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities. Oakshire Environmental does not warrant or guarantee that the site is free of hazardous or potentially hazardous materials or conditions. It should be noted that this report has been produced for environmental purposes only.

2. Site

The following section provides a description of the site, location and proposed development, in addition to, planning and site history, utilising information obtained from the client and publicly available sources.

2.1 Site Description and Location

The site is situated at Highview Farm on Newyears Green Lane in Newyears Green, Uxbridge, and covers a total area of 0.64ha including the proposed access road area. The site forms part of a wider in-vessel composting facility and is comprised of a waste transfer station building at the south west constructed with a steel frame, concrete block walls, steel sheet cladding, a steel sheet roof and a concrete base and contains various domestic waste materials including wood, cardboard, metal and plastic. Adjacent to the waste transfer station to the south east, there are two freshwater tanks constructed with metal sheeting and situated on a concrete platform along with a metal skip and IBCs and to the north there is a brick storage building with corrugated cement cladding and roof sheeting, potentially containing asbestos, and an attached storage building with metal walls and a metal roof.

The external areas of the site are covered entirely by concrete hardstanding.

The site is bordered by a bungalow and agricultural buildings to the north east with New Years Green Lane and additional farm buildings beyond, additional buildings associated with the composting facility including composting vessels, a waste reception building and associated tanks to the south east, soft landscaping to the with west and industrial buildings to the north west.

National Grid Reference: TQ 07094 88016

2.2 Proposed Development

The proposed development involves the demolition of the existing waste transfer station building, the freshwater tanks and the storage buildings at the north and the construction of a larger replacement waste transfer station building.

The proposed waste transfer station building will have a steel portal frame construction, clad in box profiled cladding with an impermeable concrete floor and will have a sealed drainage system. The building will be used for the tipping of imported waste, bulking up and exportation from the site in bulk loads. All waste will be stored within the proposed building in movable bays. Treatment on site will only consist of manual sorting, and separation, storage, bulking up and transfer off Site for further recovery / disposal.

Waste handled and stored at the site will include approximately 50,000 tonnes per year of commercial/ industrial/municipal and construction and demolition waste. Commercial, industrial and municipal waste will include (but not limited to) cardboard, plastics, metal, paper and wood whilst the construction and demolition waste will include rubble, and hardcore and general municipal waste streams. Food waste and dry mixed recyclables may also be stored in sealed vessels.

The site will also accept a small amount of clinical waste consisting of nappies and sharps (approximately 10,000 tonnes per year) which will be stored in designated containers within a bay inside the waste transfer station building. There will be no treatment of clinical waste undertaken on the site, only storage and bulking up prior to transfer to a suitably permitted alternative facility for further recovery or disposal and clinical waste will be stored for a maximum of 5 days.

The only waste that will be stored outside the building will be asbestos, tyres and metals which will be stored in enclosed skips in the yard area.

2.3 Relevant Planning History

West London Composting Ltd acquired the Highview Farm site in May 2021 which had an Established Use Certificate and a Certificate of Lawful Use or Development (CLUED) granted in 1991, permitting the transfer of waste and agricultural use, subject to specific operational limits on deliveries and waste quantities.

Over the years, the site has seen a series of planning permissions that have formalised and expanded its waste management operations. In 2015, temporary approval was granted for an In-Vessel Composting Facility (IVC) capable of handling up to 75,000 tonnes of organic waste annually. This permission was later extended and, in 2022, made permanent, allowing for continued composting activities and the addition of infrastructure such as leachate and freshwater tanks.

Further permissions have continued to support the site's growth. In 2024, planning consent was granted to regularise and extend green waste composting operations, introduce new facilities, and change the use of land from pasture to waste management. Additional permissions for land south of New Year's Green Lane have enabled new buildings and increased throughput, with operational restrictions in place to manage environmental impact.

2.4 Site History

A detailed assessment of historical Ordnance Survey maps and associated data has highlighted the below on-site and off-site, current and historical land uses.

Table 2: Description of the site and surrounding area over time, according to historical maps

Year	Site Description	Surrounding Area
1866	No development on the site Site forms part of an open field	Surrounding land is comprised predominantly of open fields and is named Newyears Green Collection of buildings (likely agricultural and/or residential) fronting road 90m north and 200m west
1896		Additional buildings at developments to the north and west
1914		No significant change
1934		Unlabelled buildings adjacent to the site to the north west including rows of small buildings with adjacent enclosed yards/bays Buildings 80m east and further to the east labelled as Elm Tree Farm also including rows of small buildings and enclosures Development to the north now labelled as St Leonard's Farm and additional rows of small buildings with adjacent enclosed yards/bays have been constructed
1972	North corner of the site is occupied by a yard area associated with buildings bordering the site to the north and west	Several large industrial type buildings bordering the site to the north west labelled as Pylon Farm and additional rows of small buildings with adjacent enclosed yards/bays 10m north Elm Tree Farm now labelled as High View Farm and additional industrial type buildings and small buildings with adjacent yards/bays have been constructed along with a tank 80m east Additional industrial type buildings at St Leonards Farm to the north Semi-detached dwellings 130m north west
1992	Large rectangular unlabelled building at the south west and a roughly square unlabelled building at the north corner with a smaller attached building and an adjacent tank	Small buildings with adjacent enclosed yards/bays at the High View Farm to the east have been removed and replaced by large industrial type buildings Detached dwelling 110m north east
1999	Aerial photo shows that the external areas of the site appear to be covered entirely by hardstanding and there are some waste materials adjacent to the building at the south west of the site	Aerial photo shows an additional industrial type building 20m east and large piles of waste materials in the yard areas adjacent to the site to the south and south east Multiple vehicles parked in yard areas to the east Yard areas appear to be covered by hardstanding

2005	Waste materials adjacent to the building at the south west appear to have been removed	Waste materials in yard area to the south and south east have been removed Several buildings at High View Farm to the east removed and replaced by new industrial buildings (new buildings appear to be composting vessels)
2006	Skips adjacent to building at the south west	Very large pile of aggregate or crushed material in location of former waste piles to the south and south east
2010	Missing roof sheets on the building at the south west	Piled material to the south and south east removed and a collection of composting vessels constructed in this location Industrial building 20m east replaced by larger industrial building
2013	Tank at the north of the site removed and a new building attached to the building at the north Vehicles and machinery in the external yard area Additional missing roof sheets on the building at the south west	Tanks adjacent to industrial buildings 30m south east
2019	Two tanks situated on an area of new hardstanding at the south east of the site Roof of the building at the south west has been replaced	No significant change

3. Environmental Setting

The following section provides information on the environmental setting of the site, utilising data from the British Geological Survey (BGS), Environment Agency, Department for Environment, Food and Rural Affairs (DEFRA), Mining Remediation Authority and Public Health England (PHE).

Table 3: Summary of the site's environmental setting

Environmental Factor			Details
Hydrogeology	Aquifer Designation	Superficial	No superficial aquifer underlying the site
		Bedrock	Unproductive
	Groundwater Vulnerability	Superficial	N/A
		Bedrock	Very Low
	Source Protection Zones and Abstractions		Source Protection Zone 1 (Inner Catchment) encroaches onto the south east corner of the site while the rest of the site is situated on Source Protection Zone 2 (Outer Catchment) Active groundwater abstractions for potable water supply 536m, 538m and 603m south east at Ickenham Pumping Station No surface water abstractions within 1km
Hydrology	Water Network		No surface water features within 250m of the site
Geology	Artificial Ground		None within 250m of the site
	Superficial Deposits		No superficial deposits underlying the site
	Bedrock Geology		London Clay Formation – Clay, Silt and Sand
	Superficial Permeability		N/A
	Bedrock Permeability		Very Low
	Borehole Records		Borehole record 80m north east of the site from site investigation carried out by Delta-Simons in 2020 identified made ground comprising firm sandy gravelly clay with brick to 1.1m, firm sandy gravelly clay to 1.5m, stiff to very stiff sandy gravelly clay to 3m, firm to stiff clay to 4.7m above clay layers of variable stiffness and sand/gravel content before reaching a layer of clayey silty sand at 31.9m and chalk at 33.7m (no visual or olfactory evidence of contamination was identified and groundwater was encountered at a depth of 27mbgl)
Waste and Landfill	Historical Landfill		None within 250m of the site
	Active or Recent Landfill		Skanska Construction UK inert landfill 208m north east and 214m north west
	Historical Waste Sites		Land Adjacent To Bfa Recycling – Storage & waste processing 134m north west
	Licensed Waste Sites		High View Farm – Composting Facility 35m south east (license issued October 2015) High View Farm – Household, Commercial & Industria Waste Transfer Station 36m south east (license issued February 2025) West London Composting Ltd – Composting Facility 54m north east (license issued July 2004) High View Farm – Composting Facility 89m north east (license issued September 2007) EDS Grab Hire Elm Tree Farm 137m east (license issued August 2021) High View Farm – Household, Commercial & Industria Waste Transfer Station 151m north east (license issued April 1995) West London Composting – Composting Facility 170m north west (license issued September 2007) Ace Grab Hire And Haulage Ltd – Physical Treatment Facility 203m north east (license issued December 2022)

Waste and Landfill	Waste Exemptions	High View Farm 92m east for the treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising Several exemptions at St Leonards Farm 126m north and 130m and 131m east for the treatment of waste wood and waste plant matter, sorting mixed waste, preparatory treatments, manual treatment, storage of waste in a secure place and the use of waste in construction
	Licensed Waste Sites	High View Farm – Composting Facility 35m south east (license issued October 2015) High View Farm – Household, Commercial & Industria Waste Transfer Station 36m south east (license issued February 2025) West London Composting Ltd – Composting Facility 54m north east (license issued July 2004) High View Farm – Composting Facility 89m north east (license issued September 2007) EDS Grab Hire Elm Tree Farm 137m east (license issued August 2021) High View Farm – Household, Commercial & Industria Waste Transfer Station 151m north east (license issued April 1995) West London Composting – Composting Facility 170m north west (license issued September 2007) Ace Grab Hire And Haulage Ltd – Physical Treatment Facility 203m north east (license issued December 2022)
Industrial Land Use	Historical Industrial Land Use	Unspecified tank 80m east shown in 1972
	Current Industrial Land Use	Silo and a Waste Transfer Station on the site Lami Auto Ltd – new vehicles 29m west M S Joinery – general construction supplies 37m west Superior Stone – Stone Quarrying and Preparation 49m north Electricity Sub Station 87m south east Highview Farm – waste storage, processing and disposal 92m east
	Licensed Industrial Activities	West London Composting Limited – Recovery or a mix of recovery and disposal of >75 T/D Non-Hazardous waste involving biological treatment 35m east
	Pollution Incidents	No pollution incidents impacting water or land within 200m of the site
Workings	Mining and Ground Workings	No evidence of mining activity within 500m of the site
Radon	PHE UKradon	Less than 1% chance of being above the action level

4. Initial Conceptual Site Model

The following section outlines potential contamination sources, pathways and receptors, utilising information gathered in the previous sections, to develop an initial conceptual site model.

4.1 Potential Contamination Sources

Information collated through detailed desk studies has identified the following potential sources of contamination.

Waste Transfer Station

The existing waste transfer station on the site and associated In-Vessel Composting Facility to the east have the potential to have contaminated underlying soil and groundwater through spillages of waste materials and the leaching of contaminants from waste materials stored at the site and on adjacent land.

Based on the existing operation of the site, it is unlikely that any potential spillages of waste materials or any contaminated leachates would impact underlying soil or groundwater. The site is covered entirely by hardstanding and waste materials are stored either inside the existing building or in skips in the yard area. The site also has a sealed drainage system which captures runoff and leachate from the site, therefore, soil and groundwater contamination from the existing site is unlikely.

There are several groundwater abstractions for potable water supply 536m to 603m south east of the site and the site is situated partly within Source Protection Zone 1 indicating that the underlying groundwater is highly vulnerable to contamination. Based on the ground conditions in the area, it is assumed that these abstractions are from the chalk aquifer beneath the London Clay underlying the site. A site investigation carried out by Delta-Simons shows that the London Clay comprises stiff clay extending to 33.7mbgl before reaching the underlying chalk and groundwater was encountered at a depth of 27mbgl, therefore, contamination from the existing waste transfer station is unlikely to impact underlying groundwater.

It is also noted that soil and groundwater sampling was carried out as part of the site investigation by Delta-Simons in 2020 and no elevated concentrations of heavy metals, PAHs, petroleum hydrocarbons or PCBs were identified.

The proposed development involves the construction of a replacement waste transfer station building which will have a concrete base and the freshwater tanks at the east and buildings at the north will be removed to create additional yard areas which will be covered by impermeable concrete hardstanding. The site will also maintain a sealed drainage system, therefore, spillages and leakages will continue to be contained and the proposed development is unlikely to result in significant soil or groundwater contamination.

While contamination from the site's current and proposed use is unlikely to impact underlying soil and groundwater, historical contamination prior to the construction of the existing waste transfer station building may be present and could be mobilised during construction of the site replacement building. Given the age of the existing development, historical contamination prior to its construction is not likely to be highly mobile. In addition, the impermeable clay soil underlying the site will significantly inhibit the migration of any contaminants within the shallow soil/made ground, therefore, underlying groundwater is unlikely to be impacted.

4.2 Potential Contamination Receptors

Given the proposed use of the site, the following receptors are considered:

- Site users
- Construction workers
- Underlying chalk aquifer

4.3 Potential Contamination Pathways

Based on the expected on-site receptors, relevant pathways for the above receptors include:

- Ingestion/inhalation of contaminated soil dust
- Dermal contact with contaminated soil
- Inhalation of soil vapours
- Leaching through soil

Pathways between off-site sources and off-site receptors is beyond the scope of this assessment.

4.4 Risk Assessment Methodology

The potential level of risk posed by a particular source is determined by assessing the potential severity of the impact of the contaminant linkage on the receptor, if it is assumed to be present, and the probability of the contaminant linkage being present.

Severities are categorised from Minor to Severe and probabilities are categorised from Unlikely to High Likelihood to give a potential level of risk output.

Table 4: Risk Matrix

Probability	**Severity of Consequence**			
	Severe	Medium	Mild	Minor
High Likelihood	Very High Risk	High Risk	Moderate Risk	Low / Moderate Risk
Likely	High Risk	Moderate Risk	Low / Moderate Risk	Low Risk
Low Likelihood	Moderate Risk	Low / Moderate Risk	Low Risk	Very Low Risk
Unlikely	Low / Moderate Risk	Low Risk	Very Low Risk	Very Low Risk

Very High Risk

There is a high probability that severe harm could arise to a designated receptor from an identified source; or there is evidence that severe harm to a designated receptor is currently happening.

High Risk

Harm is likely to arise to a designated receptor from an identified source.

Moderate Risk

It is possible that harm could arise to a designated receptor from an identified source. It is relatively unlikely that any such harm would be severe or if any harm were to occur it is more likely that the harm would be relatively mild.

Low Risk

It is possible that harm could arise to a designated receptor from an identified source, however, it is likely that this harm, if realised, would normally be mild.

Very Low Risk

There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

4.5 Conceptual Site Model

The information in this section has been compiled to produce an initial conceptual site model outlining the potential sources, pathways and receptors to consider at the site. The level of risk was categorised by considering the severity and probability, as outlined in the previous section.

Table 5: Conceptual site model

Sources	Pathways	Receptors	Severity	Probability	Potential Level of Risk	
Waste Transfer Station	Ingestion/inhalation of contaminated soil dust Dermal contact with contaminated soil Inhalation of soil vapours	Site users	**Mild**	**Unlikely**	**Very Low**	The existing site is covered entirely by hardstanding and waste materials are stored either inside the existing building or in skips in the yard area. The site also has a sealed drainage system which captures runoff and leachate from the site, therefore, soil and groundwater contamination from the existing site is unlikely. Spillages and leakages during the operation of the proposed replacement waste transfer station will continue to be contained and the proposed development is unlikely to result in significant soil or groundwater contamination. Given the site's proposed use, exposure to underlying soil by site users will be limited, further reducing the risk to site users.
	Ingestion/inhalation of contaminated soil dust Dermal contact with contaminated soil	Construction workers	**Mild**	**Likely**	**Low to Moderate**	Construction workers will be at risk from direct exposure to potential contaminants in shallow soil/made ground during groundworks, however, this is not likely to be significant and any residual risks can be mitigated through the use of appropriate Personal Protective Equipment.
	Leaching through soil	Underlying chalk aquifer	**Medium**	**Unlikely**	**Low**	There are several groundwater abstractions for potable water supply to the south east of the site and the site is situated partly within Source Protection Zone 1 indicating that the underlying groundwater is highly vulnerable to contamination. Based on the ground conditions in the area, it is assumed that these abstractions are from the chalk aquifer beneath the London Clay underlying the site. The London Clay in this location comprises stiff clay extending to 33.7mbgl before reaching the underlying chalk and groundwater was encountered at a depth of 27mbgl, therefore, contamination from the site unlikely to impact underlying groundwater. Contamination from the existing site and the proposed development is considered to be unlikely due to the impermeable hardstanding and sealed drainage system. Given the age of the existing development, historical contamination prior to its construction is not likely to be highly mobile and the impermeable clay soil underlying the site will significantly inhibit the migration of any contaminants within the shallow soil/made ground, therefore, underlying groundwater is unlikely to be impacted.

5. Conclusions

5.1 Risk Evaluation

The initial conceptual site model identified the following potential contaminant linkages present at the site and the following conclusions have been drawn:

- There is a **very low risk** to site users from the ingestion/inhalation of contaminated soil dust, dermal contact with contaminated soil and inhalation of soil vapours from the existing and proposed waste transfer stations.

- There is a **low to moderate risk** to construction workers from the ingestion/inhalation of contaminated soil dust and dermal contact with contaminated soil from the existing and proposed waste transfer stations.

- There is a **low risk** to the underlying chalk aquifer from the leaching of contaminants from the existing and proposed waste transfer stations.

5.2 Further Investigation

Based on the above conclusions, further investigation or remediation is not considered necessary. It is important to note that this conclusion is based on the proposed development plan.

If visible or olfactory evidence of contamination is identified during excavations at the site, work should cease in order to allow further investigation to be carried out. In addition, to ensure regulatory compliance, Waste Classification & Waste Acceptance Criteria (WAC) testing of excavated material from the site may be required prior to off-site disposal.

6. References

British Geological Society. *GeoIndex.* [online] Available at: <mapapps2.bgs.ac.uk/geoindex>.

Delta-Simons, 2020. *Short Factual Report.* Project No. 20-1063.01

Environment Agency, 2025. *Land contamination risk management (LCRM).* [online] Available at: <gov.uk/government/publications/land-contamination-risk-management-lcrm>.

GP Planning, 2025. *Planning Statement.*

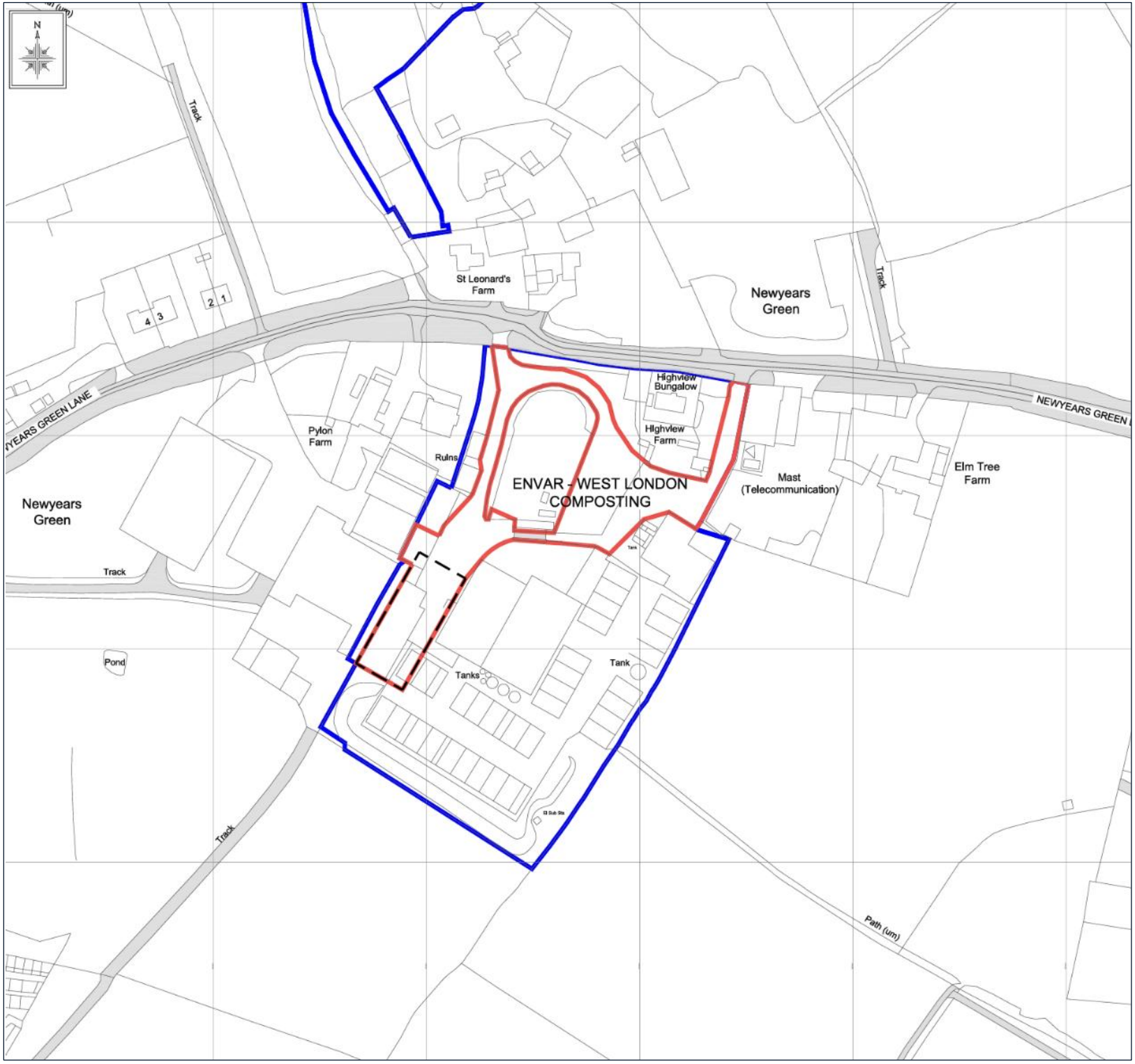
Groundsure.

Historic England. [online] Available at: <historicengland.org.uk>.

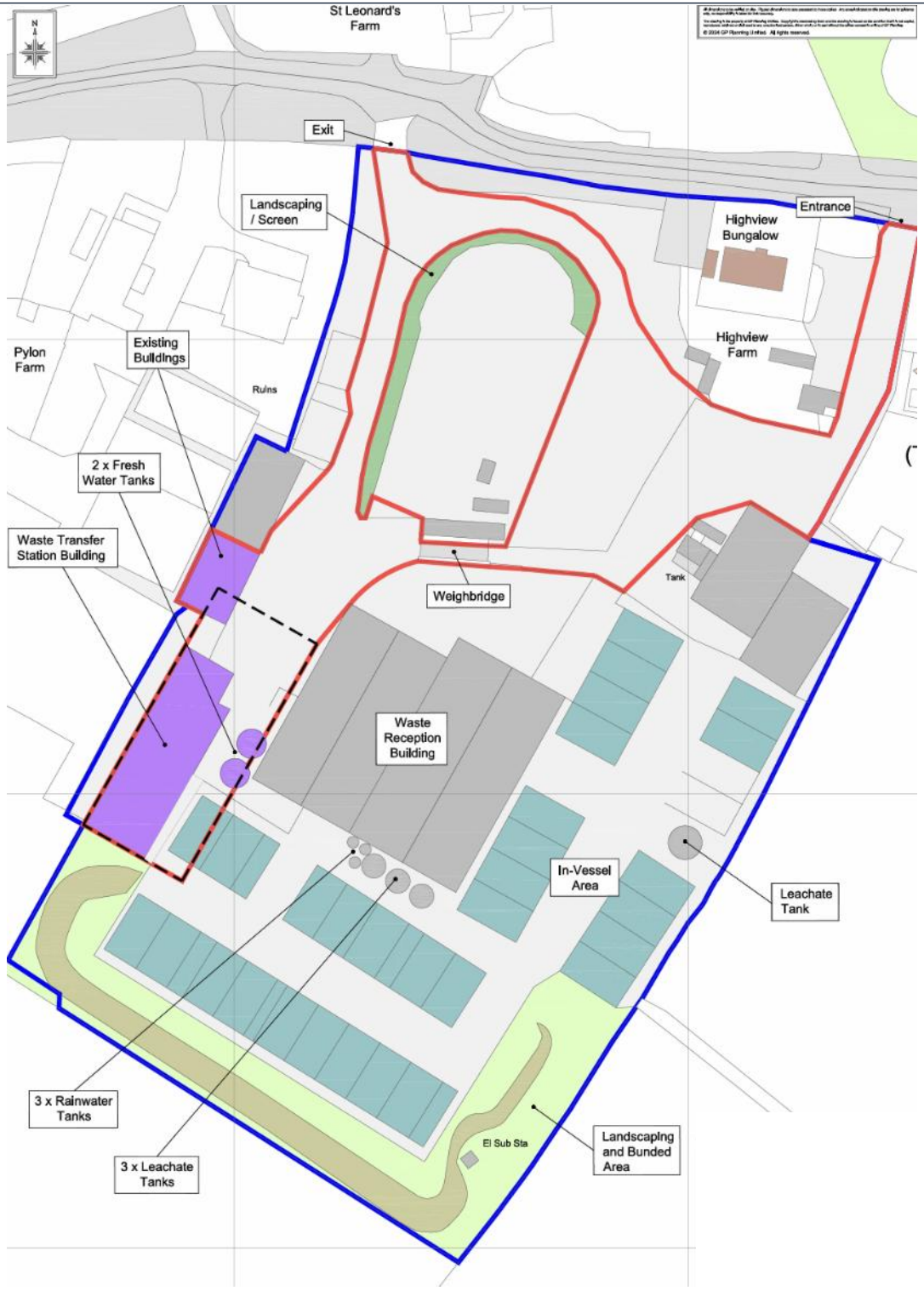
Ordnance Survey. [online] Available at: <ordnancesurvey.co.uk>.

Wardell Armstrong, 2024. *Site Condition Report.* ST21061

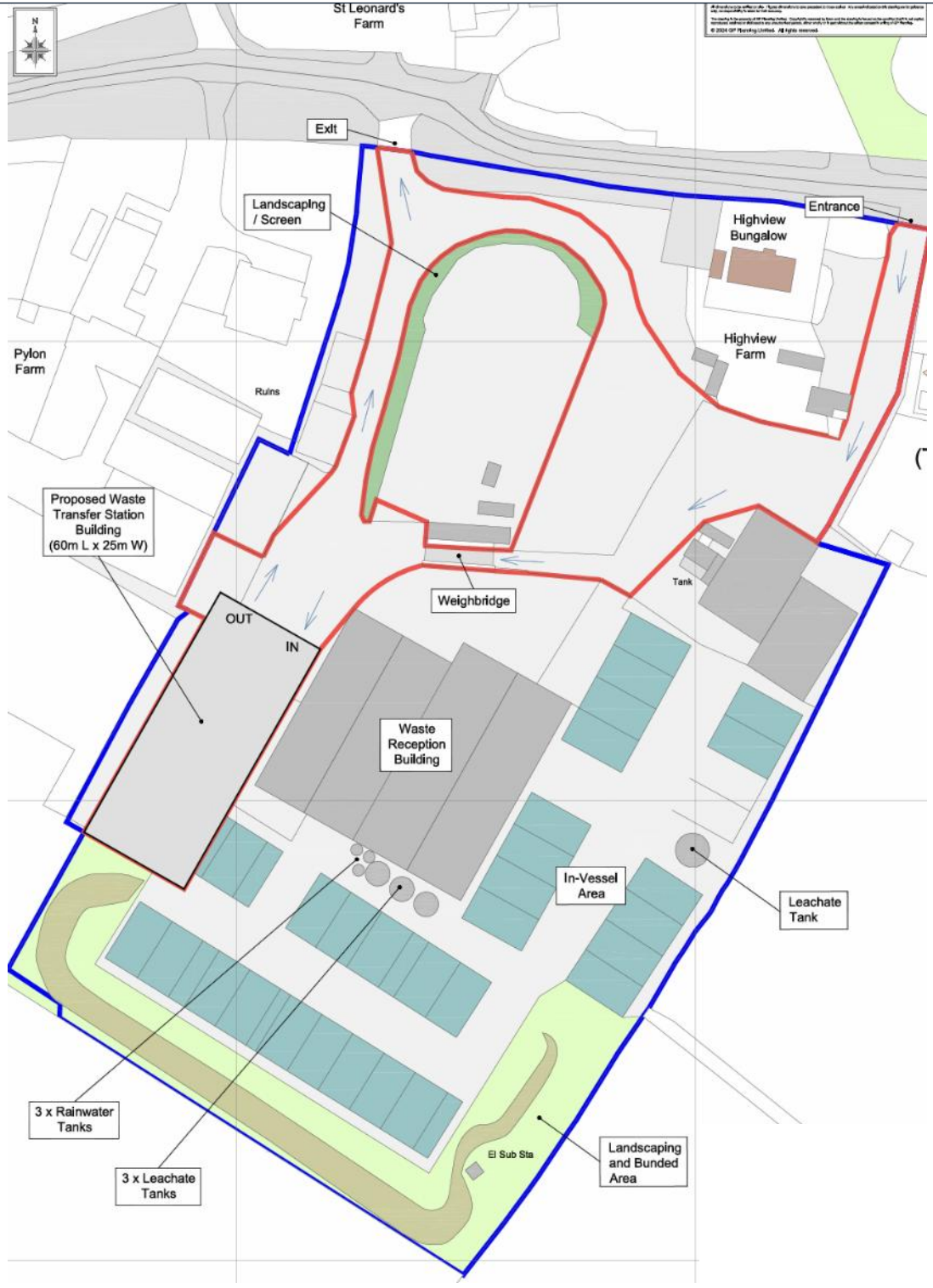
Oakshire Environmental. Available at: <oakshireenvironmental.co.uk>.



Appendix - Site Maps & Plans	
Description	
Site location plan	
Sources	
GP Planning	
Key	
	Site boundary (inc. access road)
	Other land within same ownership
▲	North



Appendix - Site Maps & Plans	
Description	
Existing site layout plan	
Sources	
GP Planning	
Key	
	Site boundary (inc. access road)
	Other land within same ownership
▲	North



Appendix - Site Maps & Plans	
Description	
Proposed site layout plan	
Sources	
GP Planning	
Key	
	Site boundary (inc. access road)
	Other land within same ownership
▲	North

Appendix - Site Photos
Description
Photo of storage buildings and concrete yard area at the north of the site, facing south west

Appendix - Site Photos
Description
Photo of waste transfer station building, facing south west

Appendix - Site Photos
Description
Photo of interior of waste transfer station building, facing south

Appendix - Site Photos
Description
Photo of interior of waste transfer station building, facing north east

Appendix - Site Photos
Description
Photo of freshwater tanks and concrete platform at the south east of the site, facing south west

Appendix - Site Photos
Description
Photo of skips at the south east of the site, facing south