APPENDIX 12 – WATER QUALITY AND HYDROLOGY

APPENDIX 12.1 FLOOD RISK ASSESSMENT

Energy Recovery Centre, Corby

Flood Risk Assessment

Energy Recovery Centre, Corby

Flood Risk Assessment

Revision	Date	Notes	Author	Checked	Approved
1	16/06/2016		Ben Lewis	Dr R Murdock	Dr N Davey

Entran Limited
12 Greenway Farm
Bath Road
Wick
Bristol
BS30 5RL

T: 0117 937 4077
www.entranltd.co.uk

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1 INTRODUCTION

Background

1.1 Entran Ltd has been commissioned by Clean Power Properties Ltd to carry out a Flood Risk Assessment (FRA) for a proposed development within the Willowbrook East Industrial Estate, Shelton Road, Corby, Northamptonshire, NN17 5XH.

1.2 This FRA has been prepared in accordance with the National Planning Policy Framework (NPPF), associated Planning Practice Guidance (PPG) and Environment Agency (EA) standing advice on flood risk for new development.

Site Location

1.3 The Site is situated within the northern area of the Willowbrook East Industrial Estate and is currently occupied by a network of tarmac roads and gravel parking spaces, with some soft landscaping adjacent to the Willow Brook North Arm. The Site covers an area of approximately 2.5 hectares (ha) at an approximate National Grid Reference of SP 90990 90880, as shown in Figure 1.1.

1.4 The Site is located approximately 2.2 km north-east of Corby Town Centre in a predominantly light industrial area. Industrial units are located to the south and south-east with an open vehicle storage area located to the west. Located immediately to the north of the Site is the Willow Brook North Arm within a small wooded area and the Rockingham Motor Speedway located further to the north-east. Vehicular access to the Site can be gained from Shelton Road to the east.

1.5 Further details on Site topography, hydrology and sources of flood risk are set out in Section 2.

Proposed Development

1.6 The Proposed Development is a bespoke Energy Recovery Centre that has been designed to recover all available resources from mixed solid waste feedstocks. The Proposed Development provides a single treatment facility for solid wastes which would otherwise be destined for landfill or mass-burn incineration. The provisional Site layout is provided in **Appendix A.**

Requirements for a Flood Risk Assessment

1.7 The requirements for FRA are provided in the NPPF and associated PPG, which came into effect in March 2012 and March 2014, respectively. This policy states that flood risk is a material consideration that must be taken into account when considering all planning applications. In addition, the requirements of the EA and the local Strategic Flood Risk Assessment (SFRA) should be considered.

1.8 Paragraph 103 of the NPPF requires that a site-specific FRA should be submitted with planning applications for all sites greater than 1 hectare (ha) in Flood Zone 1 or for sites of any size within Flood Zones 2 or 3.

1.9 Flood Zone 1 is defined as land with little or no flood risk (an annual probability of flooding of less than 0.1%); Flood Zone 2 is defined as having a medium flood risk (an annual probability of between 0.1% and 0.5% for tidal areas and 0.1% and 1.0% for rivers); and Flood Zone 3 is defined as high risk (with an annual probability of flooding of greater than 0.5% for tidal areas and greater than 1.0% for rivers).

1.10 The FRA is required to describe and assess all flood risks (from rivers, the sea, sewers and groundwater) to and from the development and demonstrate how they will be managed, including an evaluation of climate change effects.

1.11 Guidance on the content of FRAs is contained in the NPPF PPG: Flood Risk and Coastal Change (March 2014) and associated EA standing advice[1]. These documents have been consulted with regard to the acceptability of the development proposals described in this FRA.

[1] Flood Risk Assessment Guidance Note 1, Environment Agency, March 2012

2 BASELINE ENVIRONMENTAL CONDITIONS

Topography and Land Use

2.1 The Site is currently occupied by a network of tarmac roads and gravel parking spaces, with some soft landscaping adjacent to the Willow Brook North Arm. The existing Site levels generally vary between 106.92 metres Above Ordnance Datum (mAOD) and 104.58 mAOD with a gentle downwards slope in a south-easterly direction; a topographic survey plan of the Site is included in **Appendix B** (Babtie Site Validation Report, March 2002).

Hydrology

2.2 There are three 'main' rivers[2] that flow within 2 km of the Site; these are the Willow Brook North Arm, Gretton Brook and Willow Brook South Arm. The Willow Brook North Arm is located immediately adjacent to the Site and flows in a west to east direction. Gretton Brook is located approximately 815 m to the north-west and the Willow Brook South Arm is located approximately 1.8 km to the south-east.

2.3 There are several flood storage reservoirs (FSR) and balancing ponds located on the Willow Brook North Arm upstream of the Site. Further information on these has been identified in the Corby Strategic Flood Risk Assessment (SFRA) – Stage 2 and are provided below:

- Stanier Road FSR, online reservoir with approximately 645 m^3 of storage;
- Pen Green FSR, offline reservoir with approximately 15,500 m^3 of storage;
- Pen Green Lane Balancing Pond, offline reservoir with approximately 4,000 m^3 of storage; and
- Phoenix Parkway FSR, online reservoir with approximately 10,000 m^3 of storage.

2.4 There are two pond areas indentified on the OS mapping approximately 110 m to the north-west of the site, these are disused British Steel Corporation sludge beds and play no role in flood storage. Recent aerial imagery of this area identifies it as being well vegetated.

Flood Zone Classification

2.5 The EA's flood map for planning (Figure 2.1) shows that the Site lies within Flood Zone 1 (low risk). Land in this flood zone is predicted to flood with an annual probability of less than 0.1% from rivers and the sea.

[2] Main river is defined by the EA as any watercourse that contributes significantly to the hydrology of a catchment.

Historic Flooding

2.6 The British Hydrological Society database[3] of historical flood events has been reviewed for records of flooding in the area and no specific data has been found for the Site.

2.7 In addition, the Corby SFRA Stage 2 (Faber Maunsell, August 2006) has been reviewed and no records of historical flooding have been reported for the Site or adjacent areas as a result of river, sewer or groundwater flooding.

Geology and Hydrogeology

2.8 According to the BGS Geology of Britain Viewer, the Site is directly underlain by Northampton Sand Formation bedrock consisting of Ooidal Ironstone. No superficial deposits have been recorded.

2.9 The Babtie Site Remediation Report (March 2002) (refer to **Appendix B**) indentifies that there are limited remains of the Northampton Sand Formation aquifer due to previous mining activities at the Site. This is overlain by reworked boulder clay up to a depth of 19 m which has a low permeability and does not drain well. Test results have indicated that there is a low potential for the vertical migration of compounds into any underlying water-bearing strata due to the reworked fill preventing lateral and vertical migration. Natural groundwater levels are within or below the remaining Northampton Sand Formation with limited perched groundwater existing in the infill. This is contaminated where present in areas previously used as sludge lagoons.

[3] Chronology of British Hydrological Events (www.dundee.ac.uk/geography/cbhe/)

3 EXTERNAL FLOOD RISK

Flooding Mechanisms

3.1 As discussed in Section 2, the EA's flood map for planning (Figure 2.1) shows that the Site lies within Flood Zone 1 (low risk). The EA Flood Zones are based on undefended scenarios, i.e. without the benefit of any flood defences.

3.2 Based on a review of the Corby SFRA, no other recorded sources of flooding, i.e. from sewers, groundwater or reservoir, have been identified for the Site.

Flood Levels

3.3 Flood levels for the Willow Brook North Arm located adjacent to the north of the Site were acquired from the EA for a variety of probability events; these were taken from the Willow Book Model (April 2007) and are provided in Table 3.1 below (refer to **Appendix C**).

Table 3.1: Modelled Flood Levels

			Annual Exceedance Probability – Maximum Water Levels (mODN)				
Node Label	Easting	Northing	4% (1 in 25)	1% (1 in 100)	1% + CC (1 in 100)	0.1% (1 in 1000)	0.1% + CC (1 in 1000)
WBN5495	490671	290864	96.18	96.25	96.28	96.37	96.43
WBN5281	490868	290939	95.46	95.55	95.60	95.74	95.87
WBN5087	491051	290970	94.42	94.55	94.71	95.22	95.52

3.4 There are no formal flood defences for the Willow Brook North Arm, with the natural channel providing nominal protection against a 1% annual probability event. The channel is maintained by the EA and is regularly inspected.

3.5 To the north of the Site, topographic levels are set at approximately 105.08 mAOD to the north-east and 107.82 mAOD to the north-west. Topographic levels therefore provide the Site with a freeboard of approximately 9.21 m above the 0.1% annual probability event. There is also a 1.5 m high landscape bund located between the Site and the Willow Brook North Arm.

The Sequential Test

3.6 As set out in the NPPF, the aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding. As the Site has been shown to be located in Flood Zone 1, it is not necessary to apply the Sequential Test to the proposal, in accordance with the NPPF.

Safe Access and Egress

3.7 The Site and surrounding area to the east, south and west is within Flood Zone 1 and, therefore, provides continual safe access and egress.

Land Use Vulnerability

3.8 Table 2 of the NPPF PPG sets out a schedule of land uses based on their vulnerability or sensitivity to flooding. The Proposed Development is classified as 'less vulnerable' to flooding as set out in Table 2. Referring to Table 3 of the NPPF PPG, 'less vulnerable' land uses are considered appropriate within Flood Zone 1 without the need for the Exception Test.

4 DRAINAGE ASSESSMENT

Introduction

4.1 The NPPF states that those proposing development are responsible for drainage designs which reduce flood risk to the development and elsewhere, preferably through the use of Sustainable Drainage Systems (SUDS).

4.2 Surface water arising from a developed site should, as far as is practicable, be managed to mimic the surface water flows arising from the site prior to the proposed development while reducing the flood risk to the site itself and elsewhere.

4.3 The 'North Northamptonshire Core Spatial Strategy' (NNCSS) was adopted in June 2008 and sets out the following relevant policy:

- Policy 13 – General Sustainable Development Principles: subsection 'Protect Assets' (Q) – *"development should not cause a risk to (and where possible enhance) the quality of the underlying groundwater or surface water, or increase the risk of flooding on the site or elsewhere, and where possible incorporate Sustainable Drainage Systems (SUDS) and lead to a reduction in flood risk"*

4.4 Previous Site remediation works have been completed that affect the surface water drainage system. The current drainage arrangements are as follows (extract from Card Geotechnics, pers comm., January 2010) (**Appendix D**):

"As part of the remediation works undertaken when the site was redeveloped for its current use, the site was re-graded to facilitate surface water run-off into a dedicated drainage system passing through an oil interceptor to the mains surface water sewer.

The remediation works also included capping of the site with a geotextile and 100 mm thick granular drainage layer (to prevent infiltration), linked to the surface water drainage system, under a 500 mm Type 1 surface capping layer."

4.5 It is anticipated that these capping layers will remain for the Proposed Development thereby rendering the Site as 100% impermeable both pre-and post-development.

Runoff Rates for Existing Land Use

4.6 Runoff rates for the existing Site have been calculated using the Modified Rational Method as described by the Wallingford Procedure. Flood Estimation Handbook (FEH) modelling software has been used to generate statistical data on rainfall events for a range of specified return periods, as follows:

- FEH to establish rainfall depths for a range of return periods and catchment descriptors such as annual average rainfall;
- the Wallingford Procedure to determine values for soil index (SOIL) and urban catchment wetness index (UCWI); a soil index value of 0.45 and a UCWI value of 55 have been determined for the Site;
- the Modified Rational Method to calculate storm run-off volumes for each return period;
- a developable area of 2.5 ha with the percentage impermeable surface as 100% for the existing Site; and
- peak discharges for a default 30 minute critical storm were determined from storm volumes using the standard hydrograph approach.

4.7 The resulting runoff rates for a range of return periods are presented in Table 4.1.

Table 4.1: Existing Site Runoff Rates.

Return Period (yrs)	Modified Rational Method Calculations		
	30 min Rainfall (mm)	Storm Volume (m^3)	Peak Flow (l/s)
2	11.3	285.5	158.7
5	16.3	411.8	229.0
10	20.7	523.0	290.8
30	29.9	755.4	420.0
50	35.3	891.9	495.9
100	44.2	1116.7	620.9

4.8 All Site runoff is currently directed to the dedicated drainage system passing through an oil interceptor to the mains surface water sewer. It has been identified that the mains surface water sewer is located on Shelton Road, adjacent to the eastern boundary of the Site (refer to **Appendix E**). The mains surface water sewer discharges to the Willow Brook North Arm to the north of the Site.

Runoff Rates for Proposed Development

4.9 Runoff rates for the proposed development have been calculated using the same procedure as for the existing Site and using the same parameters, with the percentage impermeable surface area also remaining at 100%. This is assuming that the impermeable drainage layers associated with the previous development of the Site are not removed.

4.10 The resulting runoff rates for a range of return periods are presented in Table 4.2.

Table 4.2: Post-Development Site Runoff Rates.

Return Period (yrs)	Modified Rational Method Calculations		
	30 min Rainfall (mm)	Storm Volume (m^3)	Peak Flow (l/s)
2	11.3	285.5	158.7
5	16.3	411.8	229.0
10	20.7	523.0	290.8
30	29.9	755.4	420.0
50	35.3	891.9	495.9
100	44.2	1116.7	620.9
100 + CC	61.9	1563.4	869.3

4.11 To account for the predicted increases in rainfall intensities as a result of climate change, the 100 year runoff rate and volume have been increased by 40% in accordance with the latest EA climate change rainfall allowances. This produces a climate change corrected peak runoff rate of 869.3 l/s for the critical 100 year storm and a total storm volume of 1,563.4 m^3.

4.12 Table 4.3 provides an overview of the feasibility of a range of SUDS techniques in order to identify which may be suitable for the proposed development. Further details are provided for the techniques which are considered to be possible.

Table 4.3: SUDS Feasibility Matrix.

Technique	Comments	Feasibility
Green roofs	Requires flat or minimal slope roofs. Limited value for runoff attenuation in comparison with other techniques. Rooftop solar panels are anticipated to be included within the design limiting space for green roof.	**Not Feasible**
Soakaways and infiltration trenches	Require infiltration rates of 1 x 10^{-6} m/s or greater. Shallow soakaways or infiltration trenches would be required where groundwater is shallow (i.e. less than 2.0 mbgl). Use of infiltration at the Site not feasible due to impermeable capping layer.	**Not Feasible**
Infiltration basins / swales	Are widely applicable for attenuation and treatment of surface runoff by infiltration into the ground. Require slope of no more than 4-10% and can act as a substitute for soakaways where groundwater is shallow. Use of infiltration at the Site not feasible due to impermeable capping layer.	**Not Feasible**
Bio-retention – landscaped infiltration areas	Primarily used to remove pollutants from runoff and due to their shallow nature are not as effective at runoff attenuation as other SUDS techniques. Use of infiltration at the Site not feasible due to impermeable capping layer.	**Not Feasible**
Permeable pavement	Ideally requires a level Site and favourable underlying ground conditions. Could be implemented on parking and pedestrian pavement if linked with conveyance system. Not suitable for areas of HGV traffic.	**Limited Feasibility**
Non-infiltration basins / swales	Used in the same way as carrier ditches or storage bunds. These could be used for storage and/or conveyance to a balancing pond. Feasible for the site, particular in areas identified for landscaping.	**Feasible**
Filter drains	These are normally used adjacent to areas of car parking or roads and convey runoff via flow through an engineered substrate. Potential use in the treatment train for the Site.	**Potentially Feasible**

Technique	Comments	Feasibility
Balancing ponds	These are permanent ponds that provide storage above the resting water level in the pond. Are appropriate for most Sites but require suitable space. Require impermeable soils or can be lined. Space is potentially available within the areas designated for landscaping but will be limited in depth due to underlying capping layer disturbance.	**Potentially Feasible**
Geo-cellular storage	Geo-cellular storage or similar sub-base medium beneath car parking areas and/or other areas of hardstanding and/or other forms of underground attenuation. Potential use for high volume to minimum depth ratio.	**Potentially Feasible**

Proposed Drainage Strategy

4.13 Table 4.3 concludes that there are relatively few SUDS measures that could potentially be adopted on the Site to provide the desired rate of attenuation assuming that the impermeable capping layer will remain unaltered.

4.14 The current 100 year runoff rate for the critical 30-minute storm is 620.9 l/s (Table 4.1). It is intended to provide attenuation to ensure that the 100 year plus climate change rainfall event is controlled on Site and discharged at a rate no greater than 496.7 l/s, i.e. 20% less than the existing 100 year runoff rate. This would provide the betterment in runoff rates required by the NPPF, Northamptonshire County Council Surface Water Guidance for Developers, NNCSS Policy 13 and associated EA standing advice.

4.15 The 100 year plus climate change rainfall event post-development has a volume of 1,563.4 m^3 for the 30 minute critical storm duration for peak flow (Table 4.2). However, the critical storm duration for peak runoff rate is not necessarily the same as that for peak volume. The most feasible option identified to manage Site drainage is through the use of a non-infiltration basin, with non-infiltration swales utilised for conveyance and additional storage if required. This will be located within the eastern part of the Site as identified on the Site Layout Plan (**Appendix A**).

4.16 A basic simulation has been undertaken in MicroDrainage which has modelled a range of rainfall scenarios in order to ascertain the volume of storage required to attenuate the 100 year plus climate change rainfall event to 496.7 l/s. A non-infiltration pond or basin with assumed surface area of 1,254 m^2, basal area of 816 m^2 and depth of 1 m is enough to control a range of rainfall scenarios on-site (refer to **Appendix F**). The proposed non-infiltration basin contains the required volume as well as an additional freeboard allowance of 100 mm.

4.17 It is considered that the addition of non-infiltration swales for conveyance and storage will decrease the total amount of storage required in the non-infiltration basin and provide additional water quality benefits.

4.18 The attenuation system would discharge through the dedicated surface water sewer on-Site to the mains surface water sewer located on Shelton Road, adjacent to the eastern boundary of the Site (as per the current arrangement) which subsequently discharges to the Willow Brook North Arm watercourse. All drainage would be routed to the ultimate point of discharge by gravity.

4.19 A detailed drainage design will be undertaken in due course to consider the implementation of SUDS on the Site. The total volume of attenuation required could be reduced through the combination of several SUDS components.

Designing for Exceedance Events

4.20 Current best practice guidance on flood risk requires an evaluation of how rainfall events beyond the design capacity of the proposed drainage system would be managed and what effects they are likely to have on flood risk at the Site or surrounding areas.

4.21 For the drainage proposals described above, should a rainfall event exceeding the 100 year plus 20% climate change event occur, then it is expected to result in an exceedance of the drainage system leading to runoff draining in a south-easterly direction towards the main access track. The Site is currently graded to encourage flows to this point as part of the surface water drainage strategy. Such exceedance flows are therefore not expected to affect people or property in the vicinity of the Site.

Long Term Maintenance of SUDS

4.22 It would be the responsibility of the developer to either maintain the infiltration/ detention basin themselves or to negotiate with and secure the agreement of a third party to maintain the sustainable drainage system, as detailed in consultation document 'Delivering Sustainable Drainage Systems' (September 2014) published by Defra.

4.23 However, such an adoption would require consultation with the adopting body during the detailed design stage to ensure that the minimum requirements for SUDS design are met. The

requirements for the detention basin operation and maintenance has been extracted from The SUDS Manual[4] and provided in Table 4.4 below:

Table 4.4: Detention Basin Operation and Maintenance Requirements

Maintenance Schedule	Required Action	Frequency
Regular maintenance	Litter, debris and trash removal	Monthly
	Grass cutting – for landscaped areas, spillways and access routes	Monthly (during growing season), or as required
	Grass cutting – meadow grass in and around basin	Half yearly (spring before nesting season and Autumn)
	Manage other vegetation and remove nuisance plants	Monthly (at start, then as required)
	Tidy all dead growth before start of growing season (detention basin)	Annually
	Remove sediment from inlets, outlets and forebay (detention basin)	Annually (or as required)
	Manage wetland plants in outlet pool – where provided (detention basin)	Annually
Occasional maintenance	Re-seed areas of poor vegetation growth	Annually, or as required
	Prune and trim trees and remove cuttings	2 years, or as required
	Remove sediment from pre-treatment system when 50% full	As required
	Remove sediment from micropools if volume reduced by >25% (detention basin)	3 – 10 years, or as required
Remedial actions	Repair of erosion or other damage by re-seeding or re-turfing	As required
	Realignment of rip-rap	As required

4 The SUDS manual (C697). London: CIRIA.

Maintenance Schedule	Required Action	Frequency
	Repair/rehabilitation of inlets, outlets and overflows	As required
	Rehabilitate infiltration surface using scarifying and spiking techniques if performance deteriorates	As required
	Re-level uneven surfaces and reinstate design levels	As required
Monitoring	Inspect inlets, outlets and overflows for blockages and clear if required	Monthly
	Inspect banksides, structures, pipework etc for evidence of physical damage	Monthly
	Inspect inlets and and pre-treatment systems for silt accumulation. Establish appropriate silt removal frequencies	Half yearly
	Inspect infiltration surfaces for compaction and ponding	Monthly
	Check penstocks and other mechanical devices (detention basin)	Half yearly

5 CONCLUSIONS

5.1 The requirements for a Flood Risk Assessment are provided in the National Planning Policy Framework and associated Planning Practice Guidance together with the Environment Agency's Guidance Notes. This policy and associated guidance have been followed in the preparation of this FRA.

5.2 The assessment of flood risk has established that the Site lies entirely within Flood Zone 1 and therefore has a 'low risk' of flooding as defined in the NPPF. The Corby SFRA Stage 2 (Faber Maunsell, August 2006) has been reviewed and no records of historical flooding have been reported for the Site or adjacent areas as a result of river, sewer or groundwater flooding.

5.3 Flood levels for the Willow Brook North Arm located adjacent to the north of the Site were acquired from the EA for a variety of probability events taken from the Willow Book Model (April 2007). The maximum flood level is modelled at 95.87 mAOD for the 0.1% event. The Site topographic levels are set at approximately 105.08 mAOD to the north-east and 107.82 mAOD to the north-west. There is also a 1.5 m high landscape bund located between the Site and the Willow Brook North Arm. These topographic levels therefore provide the Site with a freeboard of approximately 9.21 m above the 0.1% annual probability event.

5.4 Table 2 of the NPPF PPG sets out a schedule of land uses based on their vulnerability or sensitivity to flooding. The Proposed Development is classified as 'less vulnerable' to flooding as set out in Table 2. Referring to Table 3 of the NPPF PPG, 'less vulnerable' land uses are considered appropriate within Flood Zone 1 without the need for the Exception Test.

5.5 A review of the feasibility of a variety of SUDS techniques has been undertaken to identify those that are feasible for the Proposed Development. It has been concluded that the preferred drainage strategy for the Site is to attenuate runoff in non-infiltration swales and basins prior to discharge to the dedicated surface water sewer as per the current arrangement. However, consideration should be given at the detailed design stage to other potentially feasible SUDS components that can reduce the required volume of attenuation within the non-infiltration basin, as well as provide potential water quality, biodiversity and visual amenity benefits.

5.6 The existing 100 year runoff rate is 620.9 l/s (Table 4.1); therefore, attenuation would be provided to control runoff to 80% of this rate (i.e. 496.7 l/s) for all events up to and including the 100 year plus 20% climate change rainfall event.

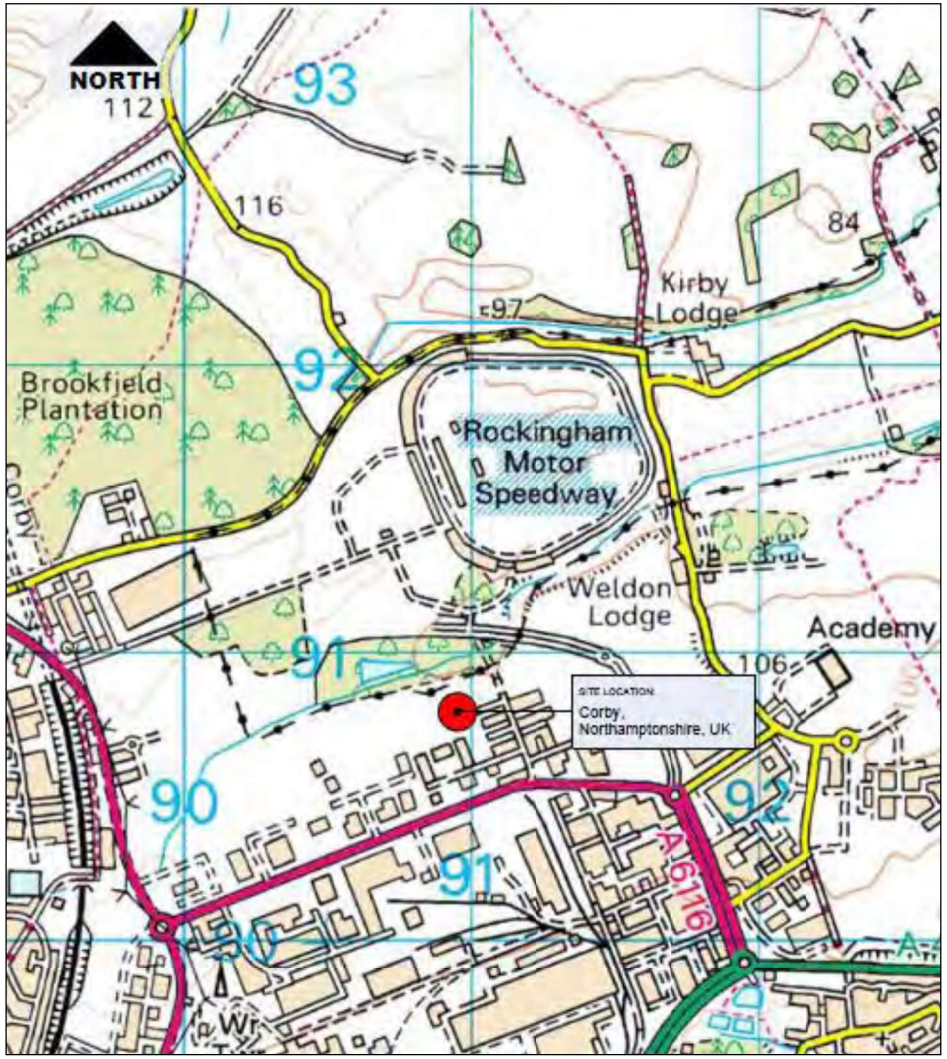
5.7 A basic simulation has been undertaken in MicroDrainage which indicates that a non-infiltration pond or basin with assumed surface area of 1,254 m2, basal area of 816 m2 and depth of

1 m is enough to control a range of rainfall scenarios on-site. The proposed non-infiltration basin contains the required volume as well as an additional freeboard allowance of 100 mm.

5.8 Additional storage could be provided by non-infiltration swales used for conveyance. This drainage strategy is considered feasible and would provide the betterment in runoff rates required by the NPPF, Northamptonshire County Council Surface Water Guidance for Developers, NNCSS Policy 13 and associated EA standing advice.

5.9 This FRA has demonstrated that the Proposed Development will be safe and that it would not increase flood risk elsewhere. The Proposed Development use is considered appropriate in relation to the flood risk vulnerability classifications set out in Table 3 of the NPPF PPG. The Proposed Development should therefore be considered acceptable in planning policy terms.

FIGURE 1.1: Site Location Plan



entran
environmental & transportation
Entran Ltd, 12 Greenway Farm, Bath Road, Bristol, BS30 5RL
TEL: 0117 937 4077

PROJECT TITLE : Energy Recovery Centre, Corby

DRAWING TITLE: Site Location Plan

DATE:	July 2015	**SCALE:**	NTS	**STATUS:**	ISSUED
DRAWN BY:	BL	**CHECKED BY:**		**APPROVED:**	
DRAWING SIZE :	A4	**DRAWING No:**	FIGURE 1.1	**REV :**	A

NOTES:

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2. All dimensions to be confirmed on site
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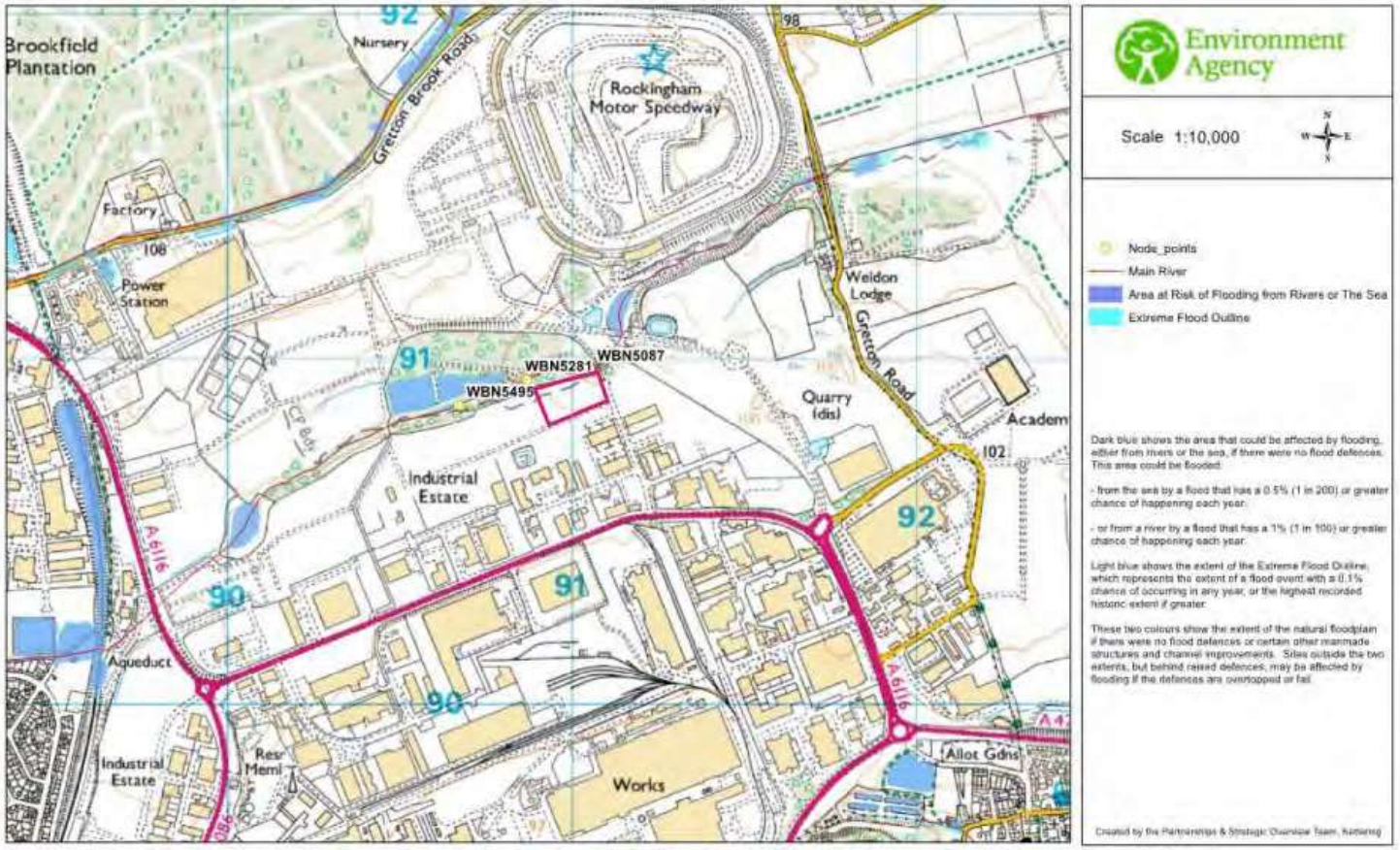
FIGURE 2.1: EA Detailed Flood Map

Basic FRA Map
Map centred on SP 90900 90810 - created April 2013 [Ref: CCN-2013-34013]



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KEY

Approximate Site Boundary

entran environmental & transportation
Entran Ltd, 12 Greenway Farm, Bath Road, Bristol, BS30 5RL
TEL: 0117 937 4077

PROJECT TITLE: Corby					
DRAWING TITLE: Detailed Flood Map					
DATE:	June 2013	**SCALE:**	NTS	**STATUS:**	ISSUED
DRAWN BY:	DM	**CHECKED BY:**		**APPROVED:**	
DRAWING SIZE :	A4	**DRAWING No:**	FIGURE 2.1	**REV :**	A

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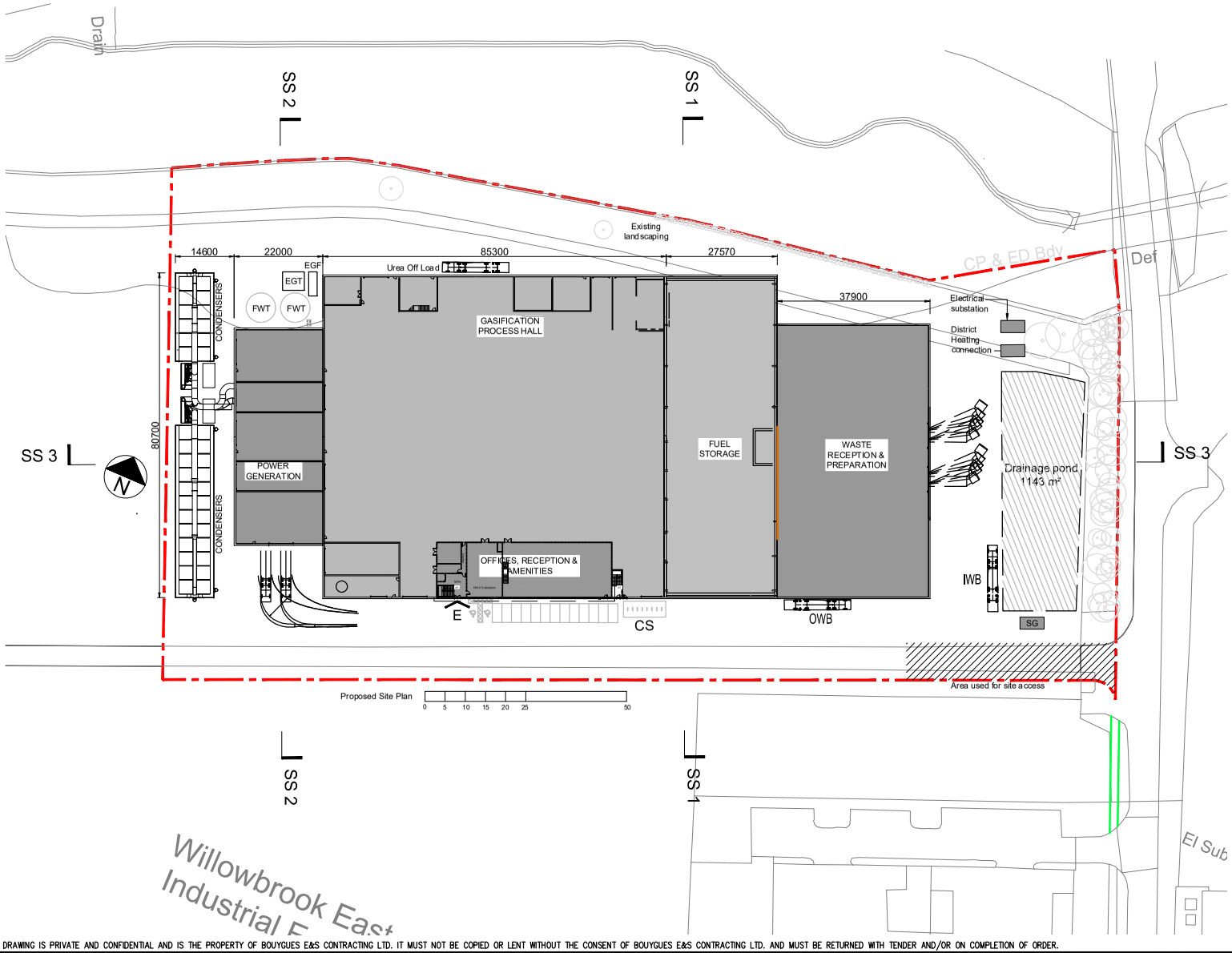
APPENDIX A – Proposed Site Layout



Notes:

1. Do not scale from this drawing.
2. All dimensions are in millimeters unless otherwise stated.
3. All dimensions must be checked on site.
4. The designers shall be notified of any discrepancies.
5. This drawing has been produced for sole use on this project and is not intended for use by any other person or any other purpose.

DRAWING NOTES:

1. This drawing represents the schematic design, and is subject to detail design development.
2. All waste reception & deliveries will be carried out within the building.
3. Roof lights are to maximise natural daylight within the building.

KEY:
CS - CYCLE STORE
E - ENTRANCE
EGT - EMERGENCY GENERATOR TURBINE
EGF - EMERGENCY GENERATOR FIRE WATER
PB - PROCESS BACKUP PUMP
PA - PROCESS AUXILIARY
IWB - IN WEIGH BRIDGE
OWB - OUT WEIGH BRIDGE & VEHICLE INSPECTION
FWT - FIRE WATER TANK

Rev	Date	Description	Drawn	Ckd	App
P02	21.06.16	Planning application	SC		
P01	03.07.15	Planning amendment	SC		

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BOUYGUES ENERGIES & SERVICES

Client
Clean Power Properties Ltd
Project
Advanced Conversion Technology CORBY

Description
Site plan

Drawn	Checked	Scale	BYes Proj. No.
SC		1:1000@A3	CORBY_ACT
Date	Approved	BYes Dwg. No.	
21.06.2016		D1001	A3

Purpose
Planning Application

Dwg No.
D1001

REV
P02

APPENDIX B – Babtie Site Validation Report

Babtie

Kenilworth Corby Ltd.

Site G – Shelton Road, Willowbrook Industrial Estate, Corby

Validation Report

BGE 200945.11 March 2002

Babtie Group Simpson House, 6 Cherry Orchard Road, Croydon, Surrey CR9 6BE
Tel 020 8686 8212 Fax 020 8681 2499

Kenilworth Corby Ltd.
Site G – Shelton Road, Willowbrook Industrial Estate
Validation Report

Contents

Introduction

1.1 Babtie Group Ltd (BG) was appointed by Kenilworth Corby Ltd. (KCL) to provide advice and observation services for remedial works at Site G – Shelton Road, Willowbrook Industrial Estate, Corby, Northants.

1.2 This report details the clearance and remediation carried out for the site, as observed by Babtie, and provides records of the monitoring that was undertaken. Validation was required to confirm that remediation works have been carried out in accordance with the relevant Remediation Statement[3].

1.3 Works were carried out by Weston Landfill Ltd (WLL) and commenced in October 2000. Babtie Group provided an engineer to observe and record the works on a limited part-time basis throughout the contract.

1.4 Due to previous open cast mining operations and infilling with poor quality materials, the site has a potential for settlement and drains poorly and is considered suitable for industrial use subject to capping with a layer of inert material and installation of adequate drainage. The design criteria for the works is specified in Austin Trueman Associates (ATA) Health and Safety Plan [1] and briefly comprises:

- The ground surface will be reshaped, balancing cuts and fills as far as possible.
- A zone of landscaping 17m wide will be provided along the top of the bank above Willowbrook Stream to allow for any possible future instability of the bank. On the east, south and west sides of the site a zone of landscaping of 4m wide will be provided. Suitable plants will be selected to both survive in the slightly contaminated soils existing on the site and to enhance the stability of the sloping ground surfaces.
- The finished surface of the parking area will have a minimum crossfall of 1:50. The site will be graded to fall towards a central valley where stormwater will drain through a system of gullies and oil separators into the existing piped stormwater drainage system within the site.
- Levels and gradients will be arranged such that if one part of the piped system becomes blocked or otherwise fails then the surface water would overflow to the next point of entry, or off site, without ponding to an unacceptable level.
- A drainage layer is to be incorporated beneath the Type 1 material laid down to intercept any waters that percolate through the surface.
- The existing deep drainage ditch is to be infilled.

1.5 Remediation works were based on information available from previous investigations.

1.6 Recommendations, remedial options and the procedures adopted during the remediation works are detailed in Frank Graham Consulting Engineers Ltd. Remediation Statement [3].

1.7 Work comprised:

- Clearance and disposal of all unwanted vegetation and contaminated topsoil to a suitably licensed landfill
- Regrading of the site to provide the required falls, with rolling of final formation.
- Breaking out of the concrete within the naphthalene pit area with subsequent chemical analysis prior to re-use of uncontaminated material.
- The central ditch was filled in with hard materials to form a haul road down the site.
- Placement of a 100mm drainage layer comprising clean chippings over a close weave polypropylene geotextile, Propex 6040 and Propex 6047, and in the area of the haul road topped with a geotextile separator Terram 1000.
- Construction of a 500 mm thick capping layer over the drainage layer to finished site levels.

Site Conditions

Site Description

2.1 The site is approximately rectangular in shape, being 350m long and 220m (max) wide, and covers an area of 6.7ha. The National Grid Reference for the site is SP 915 907 (Figure 1).

2.2 Willowbrook Stream bounds the site to the north, and Shelton Road and a low landscaped mound to the east. The site is bounded to the south by industrial units on Shelton and Pywell Roads and to the west by a large car park used for parking fleet vehicles. There are post and wire security fences on the northern and western boundaries.

2.3 At the initiation of works the site was undeveloped and overgrown. An east west depression approximately 1m deep ran through the centre of the site and there was a slight fall towards the east end of the site. A stormwater and foulwater sewer were laid on both sides of this depression through the site. Details of existing services can be found on ATA's Drawing No. 30550/02/P5.

2.4 A 3025m^2 bunded and fenced area indicated on historical maps as a 'Naphthalene pit' is present in the south west corner of the site. A moat lies on the inside of the fence with a concrete wall surrounding a square central area that is accessed by a concrete bridge.

2.5 Access to the site is via Shelton Road, located to the east of the site.

Site History

2.6 The historical development of the site has been extracted from Austin Trueman Associate's (ATA) Report [1] and Frank Graham Consulting engineers Ltd Report [3]. This is summarised below:

2.7 The site was extensively quarried for Northampton Sand Ironstone from 1904 up until 1948. This has resulted in depths of up to 19m of loosely compacted overburden.

2.8 Up until 1958 the site consists of open fields.

2.9 After this time, settlement ponds for waste slurry from the nearby steelworks were present along the eastern part of the site. The slurries were contained by a bund and allowed to find their own level over the backfilled opencast waste. Chemical analysis of the slurries carried out by British Steel Corporation describes it as "non-toxic inert fine dust made up of ore/sinter, coke, lime/limestone particles and blast furnace volatilisation products such as zinc and lead."

2.10 In the mid 1950's additional material was imported and the site was levelled to around 106.70m AOD. Following this, parts of the site were used for dumping flue dust and slag from the adjoining gas works. Drainage from the gas works was directed to a moated enclosure near the south west corner of the site, possibly now the area of the naphthalene pit.

2.11 Between 1964 and 1973 an area was constructed for the storage of naphthalene from British Steel's Dene Coke Works. It is believed that this 'naphthalene pit' may have been stripped out/removed on completion of this activity and backfilled with materials taken from the Shelton Road Site.

2.12 There are five known closed or open landfill sites in the immediate vicinity of the site. However, it is considered by Frank Graham Consulting Engineers Ltd [3] that there is negligible possibility for on-site migration of landfill gases from these landfills.

Ground Conditions

2.13 A summary of known ground conditions and contamination on site prior to remediation is detailed below.

2.14 The original geology of the site prior to open cast mining comprised [2]:

- Boulder Clay,
- Upper Lincolnshire Limestone
- Lower Lincolnshire Limestone
- Lower Estuarine Series
- Northampton Sand Ironstone
- Upper Lias Deposits

Previous Report No. CKG/590196/001 [3] describes drift deposits on the site as Glacial Till, underlain by Northampton Sand Ironstone. Soils on the site are depicted as restored ironstone workings, mainly fine loam over clayey soils. The same investigation [3] encountered coke production waste to a maxim depth of 1.4m bgl in localised discreet surface layers in certain areas of the site overlying the glacial till deposits which were encountered across the whole site. These deposits comprise low permeability stiff silty reworked clays, occasionally sandy and with chalk gravel to depths between 1.7m and 14.3m Within the reworked glacial till soft to very soft black silty steelworks waste up to 8.7m thick was encountered in parts of the site towards the north overlying up to 4.2m of glacial till at depth. The deep glacial till contained sand and ironstone pockets.

2.15 The Northampton Sand Ironstone (NSI), the limited remains of which underlie the site, is identified as a locally important minor aquifer. A worst case soil vulnerability classification i.e. high soil leaching potential, has been assumed for this area from the Groundwater Vulnerability Map of Northamptonshire and West Fens. However previous leachability tests indicate that the reworked boulder clay material has a very low leaching potential [3]. In addition most of the NSI has been mined from the site, and so the site no longer contains the potentially vulnerable water bearing stratum.

2.16 Test results indicated that there is a low potential for the vertical migration of compounds into any underlying water bearing strata due to the reworked glacial till surrounding the sludge, preventing lateral and vertical migration.

Obstructions

2.17 Prior to remediation works, site investigations identified that parts of the site had been used for industrial purposes for some time. As a result some historical and existing structures and services may be anticipated as potential obstructions.

2.18 Stormwater and foulwater drains have already been identified running through the site.

Summary of Prior Known Soil Contamination

2.19 ATA's Report [1] describes the soils as being relatively uncompacted and likely to settle over time. The soils also have a low permeability and will not drain well. Natural groundwater levels appear to be within or below the underlying ironstone, with limited perched water existing at a higher level. Chemical analysis indicates high levels of heavy metals, sulphate and sulphur. Other contaminants including PAHs, phenols, TPH, sulphide, cyanide and thiocyanate were found below ICRCL threshold trigger levels for public open spaces.

2.20 Contest Melbourne Weeks Ltd. investigation [2] encountered similar ground conditions and results from soil sample analysis show some evidence of contamination by zinc, ammoniacal nitrogen, sulphate and sulphide.

2.21 Previous reports have concluded that there is a minimal but recognisable risk as a result for the historical and current conditions on the site. Personal Protective Equipment (PPE) should be worn by site workers carrying out earthworks or construction in the ground.

2.22 Chemical analysis from a previous report No. CKG/590196/001 [3] has indicated elevated levels of contaminative substances generally within the black steelworks waste, where leaching tests have indicated that these compounds have limited mobility. Heavy metals (zinc, arsenic, lead, boron and nickel) were encountered at concentrations above the relevant ICRCL threshold trigger level in all the material found on site. However, they were concentrated within the steelworks sludge found at depths of between 4.8m and 15.65m bgl. Sulphur and

sulphates were found to be at elevated concentrations across the whole site in the near surface soil layer at concentrations ranging from 0.22 to 3.2%. Organic contamination, including PAHs, phenols and TPH, was found to be below the relevant ICRCL threshold trigger level and Dutch guideline values. Other determinants analysed were found to be generally at concentrations below the relevant guidelines. Leachability tests undertaken indicate that the quantities of contaminants leaching from the soil are below the Dutch Intervention levels.

2.23 It is concluded that the majority of the contamination is found within the steelworks wastes which are encapsulated in glacial till within the site. The near surface deposits are impacted but with contaminants which do not pose a risk to the users of the proposed 'industrial' development of the site as a car park, which in effect provides a barrier between site users and any contamination. The contamination found has been shown to be relatively insoluble and therefore immobile.

Summary of Prior known Groundwater Conditions

2.24 Previous investigations [3] have not encountered any significant groundwater. However, the steelwork waste encountered was found to be "very soft, loose and wet (saturated)". A perched water table was also thought to be encountered in the north west corner of the site.

2.25 Report No. CKG/590196/001 [3] indicates that groundwater was encountered at the site in five boreholes. Chemical analysis of this groundwater indicated that the water contained only elevated levels of sulphate above background levels. Depths of groundwater in existing wells on the site installed during previous investigations were noted between 7.0m and 20.0m bgl.

2.26 Contest Melbourne Weeks Ltd. investigation [2] encountered groundwater in the fill at depths of between 3.0m and 15.3m bgl and locally within the Northampton Sand Ironstone at depths of between 12.7m and 20.0m bgl. Levels measured in standpipes ranged from 2.63m to 19.0m bgl. Chemical analysis indicated that groundwater quality at the site was generally poor, being contaminated predominantly with ammoniacal nitrogen, cyanide (total), lead and sulphate.

2.27 Chemical analysis from surface water samples taken from Willowbrook and the moat surrounding the naphthalene pit for Report No. CKG/590196/001 [3] have indicated levels of contaminants below the Dutch guidelines for groundwater. Results from the sediment samples analysed were below the detection limit specified by the Engineers.

2.28 The available information suggests that there is evidence of contamination within perched water on the site, but that this affected water is contained within the site as no impacts have been recorded in the adjacent stream.

Gas Monitoring

2.29 The site is known to be producing limited landfill type gas in the form of methane and carbon dioxide from the limited sludge deposits buried deep within the waste.

2.30 Gas Monitoring reported in Frank Graham Consulting Engineers Ltd. Report [3] showed methane levels ranging from 0 to 5.9%, carbon dioxide levels ranging from 0 to 18.7% and oxygen levels falling to 0%. The report believes that the gases originate within the steelworks waste material which is sealed above and below by the reworked Boulder Clay, effectively providing a seal to major gas migration. Hydrogen sulphide monitoring during one visit indicated maximum levels to be 41.8ppm.

2.31 Corby Borough Council does not consider the site to be at risk due to landfill gas. Gas protection measures have not been required for development previously occurring in the vicinity of Site G.

2.32 A gas spike survey undertaken on the site encountered very low levels of carbon dioxide and no methane.

2.33 A low level gas risk has been identified, which may be magnified by capping the site. Therefore the remediation measures incorporate measures to mitigate such risks.

Liaison with Environment Agency and Local Authority

3.1 The findings of the site investigation and subsequent remediation statement have been discussed and agreed with the Environment Agency Groundwater Protection Officer and the local Environmental Health Officer at Corby Borough Council prior to the commencement of the site remediation works

3.2 The regulatory bodies require copies of all validation data to be supplied on completion of the site works as a record of the remediation carried out, and in compliance with the planning conditions attached to the site. A copy of the relevant planning conditions is presented in Appendix A.

Site Remediation

Scope of Works

4.1 Remediation Works were carried out in compliance with the Remediation Statement [3]and in accordance with the Contractors Method Statements.

4.2 The remediation works were carried out in accordance with the relevant requirements of the following legislation, as current at the time of the site works:

- Environmental Protection Act 1990;
- Control of Pollution Act 1974;
- Control of Substances Hazardous to Health (COSHH) Regulations 1994 as amended by COSHH (Amendment) Regulation 1996 and COSHH (Amendment) Regulation 1997;
- Health and Safety at Work Act 1974 and (Application to Environmentally Hazardous Substances) Regulation 1996;
- Construction (Design and Management) Regulations 1994;
- Water Resources Act 1991;
- Water Regulations 1999;
- Landfill Tax Regulation s 1996 (SI 1996, Nos. 1527, 1528, 1529);

4.3 The Remediation Works were carried out to provide a suitable site for redevelopment as car parking and above ground storage.

4.4 Material unsuitable for engineering purposes and obstructions were removed.

Project Management

4.5 Babtie Group Ltd was appointed to review the remediation design and drawings, liaise with the Environment Agency and the Local Authority, provide advice and validation services based on occasional site observation.

4.6 Weston Landfill Ltd. have undertaken the remediation works on the site, supported by an Environmental Specialist, Ken Rashbrooke, to carry out the necessary site inspections and validation sampling. Babtie Group Ltd were not present at all times when Mr Rashbrooke was on site.

4.7 Haulage of materials taken off site was undertaken by G. Webb Haulage Ltd., whose Waste Registration Number is CAM/105231. All materials were taken to Weldon Landfill Site in Northamptonshire. This site is operated by Shanks Waste Solutions under landfill licence number C/25. Copies of the waste transfer tickets and landfill licence are presented in Appendix B.

4.8 Analysis of soil and water samples were carried out by Eclipse Voelcker Science (EVS). This laboratory is UKAS accredited. A copy of the laboratory accreditation certificate is included as Appendix C. The results of chemical analysis of soils are presented in Appendix D.

4.9 Weston Landfill Ltd. was responsible for all site works including site clearance and demolition works, excavation, regrading, backfilling, and compaction of backfill. In addition Weston Landfill Ltd. was also responsible for site health and safety procedures, and fulfilling the role

of Principal Contractor under Construction (Design and Management) Regulations 1994 (CDM).

4.10 Austin Trueman Associates provided project management, structural design and planning supervisor services for the works.

Progress of Remediation

4.11 The progress of the works, as observed, and key issues are summarised in the following section. The full minutes of the site meetings are provided as Appendix E. Site visits were carried out by Babtie on 28/11/00, 19/01/01, 2/02/01, 30/03/01, 18/5/01, 6/7/01, 8/8/01, 31/8/01, 28/9/01, 19/10/01, and 21/12/01.

4.12 Works commenced October 2000 and were effectively complete on 21 December 2001.

4.13 The initial site works comprised setting up site accommodation and securing access. This was followed by clearance of existing site vegetation and any other obstructions.

4.14 A single surface water sample was taken from a location adjacent to the contractor's diesel fuelling site on 9th October 2000 (W1). The concentration of PAHs found to be present in the sample (0.38µg/l) was above the 0.2µg/l Water Supply (Water Quality) Regulations [3]. To remedy this situation the tanks were enclosed in bunds to prevent spillage and further testing of the surface water undertaken. The results of this and any other testing are presented in the Appendices and discussed in Sections 4.33- 4.39.

4.15 A site visit on 28th November 2000 noted that the site clearance was near completion and a fence had been erected around the perimeter of the site. Clearance of the area to the south-west of the naphthalene pit was still to be undertaken and the site had been partially regraded. Surplus material was stockpiled near the northern edge to form a landscape bund.

4.16 Breaking out of the naphthalene pit started on 8th January 2001.

4.17 The site had been cleared of all vegetation by the site visit on 19th January 2001, and the naphthalene pit was being broken out. The site had been further regraded and surplus material stockpiled near to the northern edge. All topsoil had been stockpiled separately on site. At this time only rubbish had been taken off site.

4.18 It was confirmed on Monday 22nd January 2001 that three samples had been taken from the naphthalene pit area. These samples consisted of concrete and soil under the concrete.

4.19 Works were being carried out in the naphthalene pit area on the site visit of 2nd February 2001. Black sludge from the moat around the naphthalene pit was being taken off site at this time to Weldon Landfill Site, operated by Shanks Waste Solutions and the concrete from the naphthalene pit was stockpiled within the area delimited by the moat. Surface water was

being collected in the ditch bisecting the site and discharged into the surface water drainage system, with a straw filter installed to prevent silt from entering the sewer.

4.20 On the 2nd February 2001, three soil samples were taken at surface level in the naphthalene pit area after spoil had been removed. Two water samples were also taken, one from the trench leading to the surface water drainage manhole (W3) and the second from the trench leading to discharge into the surface water drainage (W4).

4.21 The site visit of 30th March 2001 noted that the haulage road was being constructed and that the concrete from the naphthalene pit had been crushed and placed in the haulage road. The ditch around the naphthalene pit had not been drained at this time but the water from the ditch looked clear. The ditch previously running along the eastern boundary of the site had been backfilled and the area re-profiled. Profiles had been set up across the site, but it was noted that the set up of the profiles in the south-east corner of the site was incorrect. These were checked and modified accordingly.

4.22 On the site visit of 18th May 2001 it was noted that the ditch around the naphthalene pit had been drained and that the water, which had been tested (W2) and proven to be uncontaminated had been discharged into the foul sewer. Two soil samples were taken at the western end of the site, north of the haulage road, a further soil sample was taken in the middle of the site where topsoil was present, and one water sample was taken where the surface water discharges into the sewer (W5).

4.23 The backfilling of the ditch to form the haulage road had been completed by the site visit of 6th July 2001. In addition, the area to the south of the haulage road had been levelled and proof rolled and the area to the north of the haulage road was in the process of being proof rolled. Hardcore material had been stockpiled at the eastern extremity of the haulage road and a trial area of geotextile covered with backfill material had been prepared to the south of the haulage road. At this site meeting it was noted that elevated concentrations were recorded in soil samples G13, and that three additional samples in vicinity of G13 were taken (G14, G15 & G16). It was also noted that the area around G13 had been recapped. It was decided at this meeting that the trial backfill material was not suitable for the intended use and an alternative suitable source material was required.

4.24 A site visit took place on 8th August 2001 to undertake validation soil sampling of the area to the south of the haulage road (G17 to G26 inclusive). Two plastic sample bags were filled with surface material in ten different locations. A fax received from EVS confirmed that the use of plastic bags for sample collection would not affect the UKAS accreditation of the analysis.

4.25 At the time of the site visit of 31st August 2001 works were being undertaken on the haulage road and the area to the south of the haulage road. The area to the north of the haulage road had previously been levelled. Reinforcement bars were found to be sticking out of the ground

in a number of locations south of the haulage road. An alternative source of backfill, being local sandstone, had been secured.

4.26 The ProPex geotextile had been laid and subsoil was being laid and rolled in the area to the south of the haulage road at the time of the site visit on 28th September 2001. Also, drainage channels had been installed in part of the northern section of the site. It was confirmed on site that the reinforcement bars found to be sticking out of the ground previously were dealt with prior to the geotextile being laid down.

4.27 On the site visit of 19th October 2001 the stone layer was being laid in the area to the south of the haulage road and the northern section of the site was levelled and ready for the ProPex to be laid. Validation samples were taken consisting of two plastic sample bags each from 16 different locations (G27 to G42 inclusive).

4.28 An additional six validation samples were taken during a later site visit by Mr Rashbrooke. Samples G43 to G48 inclusive were taken in the area previously used as the site compound and along the Haulage Road.

4.29 The fencing around the site compound and two site cabins had been removed, and the stone layer was being completed in this section of the site at the time of the site visit on 21st December 2001. Weston Landfill confirmed that the perimeter venting trench comprising pea shingle had also been constructed. The diesel tank had been moved to the southern side of the haulage road. All except one manhole had been cut down to ground level and covered appropriately. The gas monitoring points had also been reduced to ground level and gas taps, concrete surround and approximately 250mm diameter circular access covers installed.

4.30 Figure 2 has been produced by Austin Trueman Associates and shows the site layout and construction details, including the drainage layout, formation levels, the surface construction and the venting trench. No specific 'as-built' drawings are available during production of this report. Photographs of the site progress are provided in Appendix F

4.31 At the time of writing, the landscaping details had not been finalised and remain outstanding. Future additional drainage such as the oil interceptor and any further surfacing works do not form part of the remediation stage of the works and are not covered by this report.

Soil and Water Testing

4.32 A total of 48 soil and 4 water samples were taken and analysed throughout the site works. A location plan of the samples is presented in Figure 3. Chemical test results are presented in Appendix D.

4.33 Once the ground had been levelled and proof rolled ten validation samples were taken from the area to the south of the haulage road and 16 samples to the north of the haulage road. A further 6 samples were taken in the area of the site compound and along the Haulage road.

These samples were taken from the surface material using two plastic bags.

4.34 Results from the soil samples analysed have been compared to ICRCL trigger levels for Landscaped areas, buildings and hard cover and Parks, playing fields and open space. Water analyses were compared to the UK Drinking Water Standard and in the absence of appropriate parameters, the Dutch Groundwater Intervention Concentrations.

4.35 Sample G13 taken close to the haulage near the western end of the site recorded a concentration of arsenic of 77mg/kg. This is above the ICRCL 40mg/kg threshold trigger level for parks, playing fields and open spaces. Due to this result three further samples were taken to clarify the contamination levels in this area (G14, G15 & G16). Concentrations measured in these additional soil analyses are below the remediation criteria for all determinants including arsenic. The area was therefore deemed to be satisfactory for the proposed end use of the site.

4.36 Analyses of all other soil samples did not record contaminant concentrations above the remediation criteria for contaminants that are hazardous to human health. However, phytotoxic contaminants (nickel and zinc) were found in some samples to be above the ICRCL threshold trigger value. Concentrations of zinc were generally found to be above the ICRCL trigger threshold value for sites where vegetation is to be grown in the western extremity of the site, with the majority being in the area of the naphthalene pit and its surroundings. G47 is the only sample found to be above the remediation criteria in the eastern part of the site. Table1 presents the samples that have recorded concentrations above the specific remediation criteria. However the presence of elevated concentrations of phytotoxic metals is not considered relevant to the proposed site usage as hardstanding.

Sample Reference	Determinand	Measured Value (mg/kg)	ICRCL threshold trigger level (mg/kg)
G4	Nickel	77	70
G5	Zinc	430	300
G11	Zinc	460	300
G13	Arsenic	77	40#
G13	Zinc	7600	300
G14	Zinc	360	300
G23	Zinc	320	300
G25	Zinc	850	300
G27	Zinc	300	300
G28	Zinc	310	300
G47	Zinc	310	300

Table 1: Soil Samples found to be above the remediation criteria.

G13 revalidated and found to be within acceptable limits.

All other determinants are phytotoxic metals and do not represent a risk to the site development.

4.37 All of the five water samples analysed contain high concentrations of sulphate above the UK Drinking Water Standard(DWS), as can be seen in Table 2. The levels are still relatively low and do not pose a risk to the proposed development. However sulphate protection measures may be required if concrete is ever to be placed in the ground in the future. A PAH concentration of 0.38µg/l was also measured in sample W1, which is above the 0.2µg/l UK Drinking Water Standard. This relates to conditions near the fuel tank before remedial bunding was implemented.

4.38 Phenols have been analysed to a detection limit of 0.1mg/l, which is actually above the UK DWS of 0.5µg/l. We, therefore, cannot determine if the levels of phenols in the water samples are above the DWS, however all samples recorded phenols levels below detection and phenols are not considered to represent an appreciable risk to the development or associated ground and surface water..

Sample Reference	Determinand	Measured Value	UK Drinking Water Standard
W1	Sulphate	403 mg/l	250 mg/l
W1#	PAHs	0.38 µg/l	0.2 µg/l
W2	Sulphate	701 mg/l	250 mg/l
W3	Sulphate	869 mg/l	250 mg/l
W4	Sulphate	427.5 mg/l	250 mg/l
W5	Sulphate	1668 mg/l	250 mg/l

Table 2: Water Samples found to be above the remediation criteria.
Sample taken adjacent to fuel tanks. Area subsequently bunded to prevent surface water contamination by spillages.

Conclusions

5.1 The remediation of the site, as observed by Babtie, has been carried out in accordance with the Remediation Statement and Contractors Method Statements.

5.2 The remediation of the site has been designed to reduce infiltration and direct any rainwater or runoff into the dedicated subsurface drains and surface water sewers. Remediation involved the reworking and levelling of the site, with validation samples taken of the surface soils to confirm soil concentrations were below the acceptable concentrations, prior to capping with imported crushed natural stone.

5.3 Venting of any underground gasses was facilitated by construction of perimeter granular trenches.

5.4 With the exception of zinc and nickel all validation samples taken from reworked and levelled ground had concentrations of contaminants below the remediation criteria. Zinc and nickel are phytotoxic contaminants only. Due to the proposed end use of the site being hardstanding the presence of phytotoxic contaminants is not considered to be a potential risk to the end use of the site and the presence of such metals is not relevant to the current land-use. Clean topsoil is to be provided in landscaped areas.

References

1. Austin Trueman Associates, Health and Safety Plan for the Remediation Works at Site G, Willowbrook Industrial Estate, Corby, Northants, April 2000, Report No. Sa/50211/815/AT/ptw,

   which includes:

   Austin Trueman Associates, Report on the Development Proposals for Light Vehicles Storage Area at Site G, Shelton Road, Corby, Northamptonshire, August 1998, Report No. SA/30550/765/NH/RF

2. Contest Melbourne Weeks Ltd., Report on Willowbrook Slurry Ponds, Corby, Northants, January 1993, report No. DS121, ATA's (July 200) Report No. SA/30550/819/RW/ptw.

3. Frank Graham Consulting Engineers Ltd., Commission for the New Towns, Shelton Road, Corby, Northamptonshire, Remediation Statement Report, August 1996, report No. CKG/590196/001.

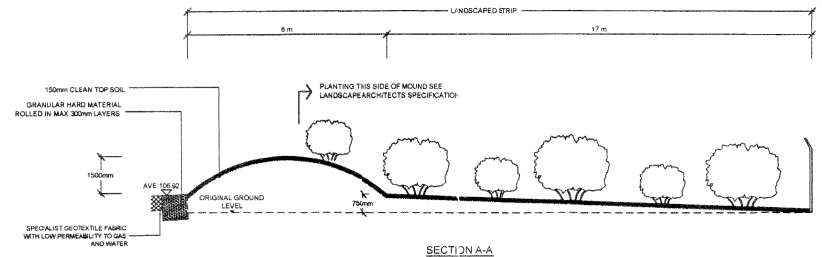
4. Weston Landfill Ltd., Project Health and Safety Plan, Site G, Willowbrook Industrial Estate, Corby, Northants, April 200. Report No. SA/50211/815/AT/ptw.

Kenilworth Corby Ltd.
Site G – Shelton Road, Willowbrook Industrial Estate
Validation Report

Figure 2

Site Layout and Construction Details

(ATA's Drawing No. 21, Revision B)



SECTION A-A

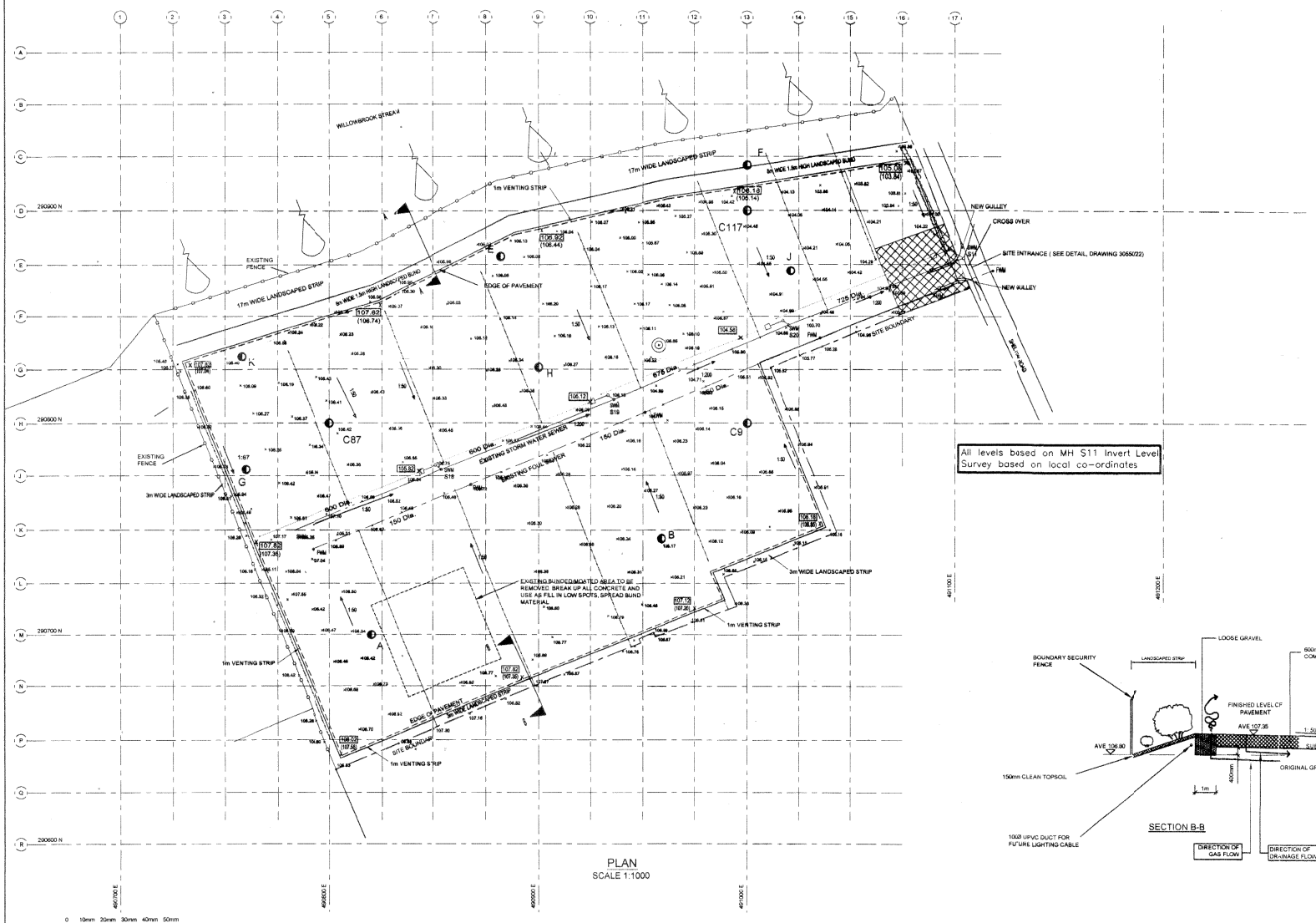
Do not scale. Work to figured dimensions only. Any discrepancies should be reported immediately. This drawing is to be read in conjunction with all other relevant documents.

NOTES

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTS, INCLUDING ATA SPECIFICATION WHEREVER APPROPRIATE.
2. THE WORKS INDICATED ON THIS DRAWING HAVE, AS FAR AS REASONABLY PRACTICABLE, BEEN DESIGNED TO ENSURE THAT WHERE APPLICABLE THOSE BUILDING, MAINTAINING OR REPAIRING THEM WILL NOT BE SUBJECTED TO UNDUE RISKS TO THEIR HEALTH AND/OR THEIR SAFETY. CONSEQUENTLY, THE CONTRACTOR MUST ALSO ENSURE THAT NO SUCH RISKS EXISTS BEFORE PUTTING THE NECESSARY WORKS IN HAND.
3. x104.50 DENOTES SOIL FORMATION LEVEL
4. 1:50 DENOTES CROSSFALL
5. DENOTES CHEMICAL ANALYSIS AND BOREHOLE LOCATIONS, FOR DETAILS OF COVERS SEE DRAWING No. 30550/22
6. DENOTES 150 Ø PERFORATED PIPE, WITH VENT COWL AT TOP END.
7. [107.82] DENOTES AMMENDED PROPOSED FINISHED LEVELS
8. (107.23) DENOTES ORIGINAL PROPOSED FINISHED LEVELS

SPECIFICATION:

1. PAVEMENT: REFER TO DRAWING 30550/22
2. DRAINAGE: SURFACE DRAINAGE INLET TO CONSIST OF A BLOCK OF 6 No. 840x450 GULLIES DISCHARGING THROUGH A MANHOLE DISCHARGING INTO THE EXISTING STORM WATER SEWER, SHOWN THUS: SEE DETAIL DRAWING 30550/22



PLAN
SCALE 1:1000

Scale bar 1:1
0 10mm 20mm 30mm 40mm 50mm

SECTION B-B

Ref	By	Date	Description	QA
B	RW	22/01/01	FINISHED LEVELS AMENDED, REFERENCE GRID AND SURVEYED LEVELS ADDED.	
A	JMT	26/09/00	FOR CONSTRUCTION	
P2	RW	05/09/00	SAFE AREA CHANGED	
P1	RW	05/06/00	PRELIMINARY ISSUE	

Project

SITE REMEDIATION
SITE G WILLOWBROOK INDUSTRIAL ESTATE
CORBY
NORTHANTS

Client

KENILWORTH CORBY LTD
THE BIRCHES
MEGG LANE
CHIPPERFIELD
HERTFORDSHIRE

Drawing Title

SCHEME A
SITE LAYOUT FOR REMEDIAL WORKS

Drawing Status

FOR CONSTRUCTION

Scales 1:1000 1:100

Drawn RW	Job No	Drg No	Ref
Date 05/06/00	30550	21	B
Checked			
Passed			

Austin Trueman Associates

Austin Trueman Associates 8 Spicer Street St Albans Hertfordshire AL3 4PQ Telephone: 01727 858752 Facsimile: 01727 852376 E Mail engineers @ austintrueman.co.uk

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APPENDIX C – EA Data

Mr B Lewis
Ben.lewis@rma-environmental.co.uk

Our ref: CCN-2013- 34013
Your ref: **130313/FW11**

Date: 11 April 2013

Dear Mr Lewis

Basic Flood Risk Assessment Data Request for Willowbrook East Industrial Estate, Corby (SP9090090810).

Thank you for your request of 12 March 2013 to use Environment Agency data, Product 3, in the development of the Flood Risk Assessment (FRA) for the above site. The information is attached.

If you have requested this information to help inform a development proposal, then you should note the detail in the attached advisory text on the use of Environment Agency Information for Flood Risk Assessments / Flood Consequence Assessments.

Flood Map
The attached Basic FRA Map includes the current Flood Map for your area. The Flood Map indicates the area at risk of flooding, **assuming no flood defences exist**, for a flood event with a 0.5% chance of occurring in any year for flooding from the sea, or a 1% chance of occurring for fluvial (river) flooding. It also shows the extent of the Extreme Flood Outline which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

The Flood Map only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered that flooding may occur from other sources such as surface water sewers, road drainage, etc.

Fluvial Flood Levels
The fluvial flood levels for the model nodes shown on the attached Basic FRA Map are set out in the table below. They are measured in metres above Ordnance Datum Newlyn (mODN).

Contd…/

			Annual Exceedance Probability - Maximum Water Levels (mODN)				
Node Label	Easting	Northing	4% (1 in 25)	1% (1 in 100)	1% (1 in 100) inc Climate Change	0.1% (1 in 1000)	0.1% (1 in 1000) inc Climate Change
WBN5495	490671	290864	96.18	96.25	96.28	96.37	96.43
WBN5281	490868	290939	95.46	95.55	95.60	95.74	95.87
WBN5087	491051	290970	94.42	94.55	94.71	95.22	95.52

These levels are taken from the Willow Brook Model (April 2007) and are the most up-to-date currently available. We aim to review our models on a regular basis, so if you are using these levels more than twelve months from the date of this letter, please contact us again to check that they are still valid.

Please note that these levels are “in-channel” levels and therefore may not represent the flood level on the floodplain, particularly where the channel is embanked or has raised defences.

Fluvial Defence Information
There are no formal flood defences protecting this site. The natural channel which is maintained by us, provides a nominal protection against a flood event with a 1% chance of occurring in any year (1 in 100). We inspect the channel regularly to ensure that any potential defects are identified early.

History of Flooding
With regards to the history of flooding I can advise that we do not have any records of flooding in this area. It is possible that other flooding may have occurred that we do not have records for, and other organisations, such as the Local Authority or Internal Drainage Boards, may have records.

Climate Change
Climate change will increase flood risk due to overtopping of defences. Please contact our Welland and Nene Partnership and Strategic Overview Team to discuss how this risk should be considered within your Flood Risk Assessment.

This information is provided subject to the enclosed notice, which you should read.

If you have any queries or would like to discuss the content of this letter further please contact Heather Claase using the telephone/email details below. Please quote our CCN reference number in all correspondence where data is referenced, including the Flood Risk Assessment.

Yours sincerely

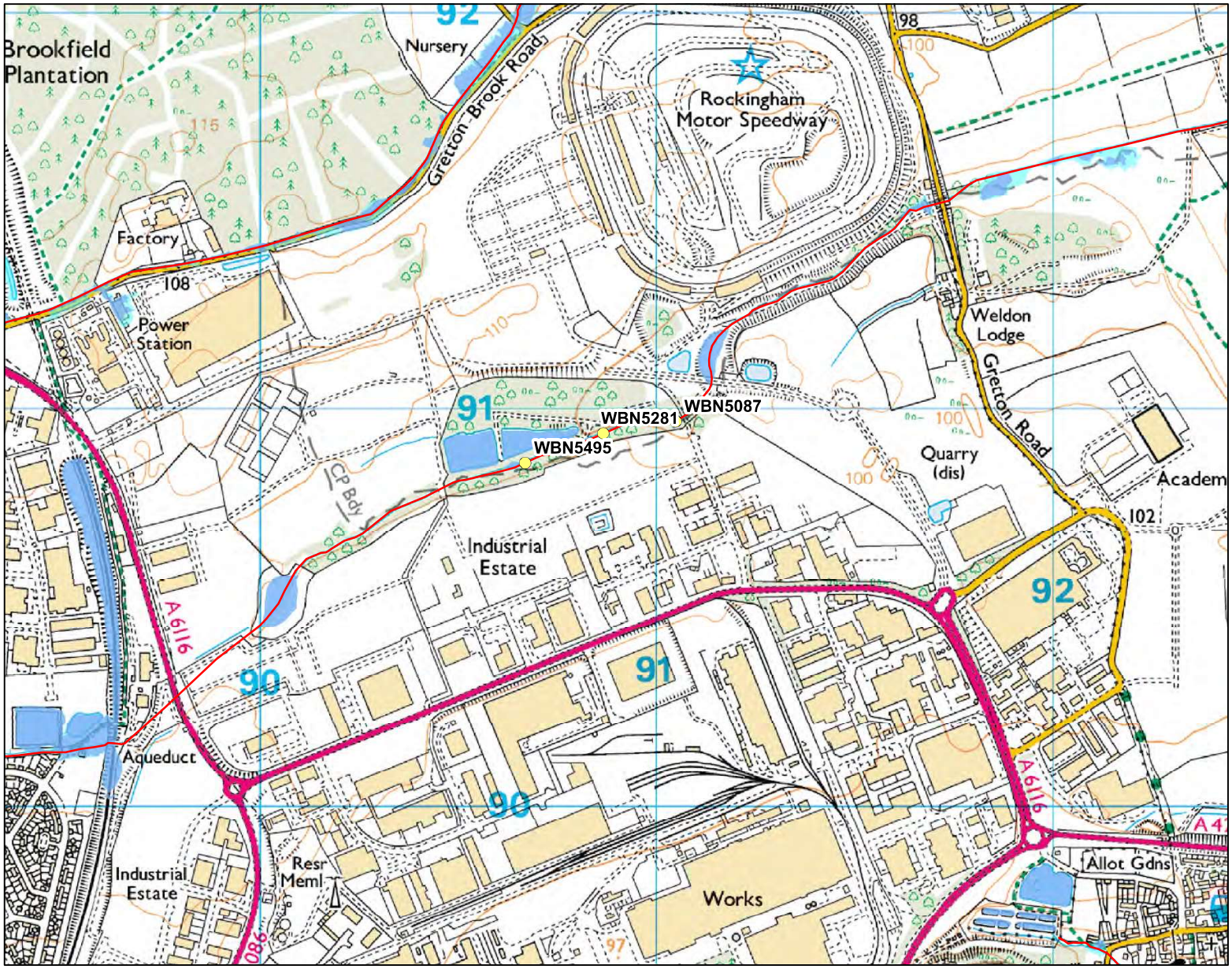
FOR Ben Thornely
Welland and Nene Partnerships and Strategic Overview Team Leader

Direct dial 01536 385126

Direct e-mail psown@environment-agency.gov.uk

Enc.
FRA Advisory Text
Basic FRA Map
Standard Notice

Basic FRA Map
Map centred on SP 90900 90810 - created April 2013 [Ref: CCN-2013-34013]



Environment Agency

Scale 1:10,000

N
W E
S

- Node_points
- Main River
- Area at Risk of Flooding from Rivers or The Sea
- Extreme Flood Outline

Dark blue shows the area that could be affected by flooding, either from rivers or the sea, if there were no flood defences. This area could be flooded:

- from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year.

- or from a river by a flood that has a 1% (1 in 100) or greater chance of happening each year.

Light blue shows the extent of the Extreme Flood Outline, which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Sites outside the two extents, but behind raised defences, may be affected by flooding if the defences are overtopped or fail.

Created by the Partnerships & Strategic Overview Team, Kettering

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Use of Environment Agency Information for Flood Risk / Flood Consequence Assessments

Important
If you have requested this information to help inform a development proposal, then we recommend that you undertake a formal pre-application enquiry using the form available from our website:-

http://www.environment-agency.gov.uk/research/planning/33580.aspx

Depending on the enquiry, we may also provide advice on other issues related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In **England**, you should refer to the Environment Agency's Flood Risk Standing Advice, the technical guidance to the National Planning Policy Framework and the existing PPS25 Practice Guide for information about what flood risk assessment is needed for new development in the different Flood Zones. These documents can be accessed via:

http://www.environment-agency.gov.uk/research/planning/82587.aspx

http://www.communities.gov.uk/publications/planningandbuilding/nppftechnicalguidance

http://www.communities.gov.uk/publications/planningandbuilding/pps25guideupdate

You should also consult the Strategic Flood Risk Assessment produced by your local planning authority.

In **Wales,** you should refer to TAN15 for information about what flood consequence assessment is needed for new development in the different flood zones
http://new.wales.gov.uk/splash;jsessionid=8ylGTfGZthmB0t2vhp6hS1GcB1LXvZzB3Ylczf20Xn7LK3zK0nMk!981825250?orig=/topics/planning/policy/tans/tan15/

You should also consult the Strategic Flood Consequence Assessment if one has been produced by your local planning authority.

In both **England and Wales** you should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk / Consequence Assessment (FRA / FCA) where one is required, but does not constitute such an assessment on its own.

2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or overland runoff. The information produced by the local planning authority referred to above may assist here.

3. Where a planning application requires a FRA / FCA and this is not submitted or deficient, the Environment Agency may well raise an objection.

4. For more significant proposals in higher flood risk areas, we would be pleased to discuss details with you ahead of making any planning application, and you should also discuss the matter with your local planning authority.

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APPENDIX D – Card Geotechnics Response

CARD GEOTECHNICS

15 February 2010

Mr P McDonagh
Avoncrest Developments Limited
Suite 11, Berkeley House
Barnet Road
London Colney
Herts
AL2 1BG

Your ref: 29th January 2010

Our ref: js/CG/5374

Dear Pat

SITE G CORBY, NORTHANTS
Review of Remediation Contractor's Proposals

Thank you for your letter dated 29th January 2010. As requested, we have reviewed the report extract supplied and assessed the issues associated with redeveloping the site as a business park.

The site comprises 20 acres, the majority of which is currently in use as vehicle storage. The northern boundary is the Willowbrook, which lies at the bottom of a steep embankment.

The site has a history of being quarried for Northampton Sand Ironstone (NSI) and then backfilled with uncompacted reworked overburden (Boulder Clay) with the addition of some areas, which were subsequently used as sludge lagoons containing steelworks waste, and some localised surface deposition of flue dust and slag from a nearby gasworks. There has been an investigation undertaken on the site which has indicated that the fill material is up to 19m thick, but contamination is limited and restricted to the buried imported sludge lagoons and slag waste on the site. Similarly, the only groundwater encountered on the site was perched within the reworked fill and was contaminated where found within the sludge materials. However this water is confined within the site by the clay fill and no impacts were found in the adjacent stream. The NSI is the local aquifer but has been extracted and is no longer present in this area of Corby. Low levels of soil gas were recorded as result of the organic content within the sludge material.

As a result of the above conditions, when the site was redeveloped for its current use, a series of remediation works were completed, including removal of existing redundant structures, regrading of the surface to fill in hollows/ditches and facilitate surface water run-off into a dedicated drainage system passing through an oil interceptor to the mains surface water sewer.

The remediation works also included capping of the site with a geotextile and 100mm thick granular drainage layer (to prevent infiltration), linked to the surface water drainage system , under a 500mm Type 1 surface capping layer. A 17m wide zone of landscaping was retained along the boundary with the stream to avoid slope stability issues.

The site was remediated for an industrial/commercial end use of open storage. To this end the capping layer provides a barrier which breaks potential pollution linkages to current and future site users. The open surfacing allows potential soil gases to vent safely to atmosphere. The perched water is confined on the site and remains undisturbed with no impacts on the local water courses.

If the site is to be redeveloped as a business park, it is envisaged that this would incorporate hard surfacing of the existing granular surfacing and provision of commercial/office buildings. This change of use will not affect the environmental risk to site occupiers associated with the completed site, as the end use remains commercial/industrial and the hard surfacing and buildings will continue to provide a barrier to break the pollution linkages. Therefore no additional soil remediation is envisaged. However, where excavations are required, construction workers will require appropriate training and use of PPE and excavated materials will be required to be analysed for contamination and waste acceptability for disposal of excess spoil in accordance with the Landfill (England and Wales) Regulations 2002. Waste disposal will have to comply with Duty of Care Regulations.

The hard surfacing will have to be designed to incorporate falls and 'soft'/permeable areas to allow gas venting through the existing drainage layer and new buildings, especially over the sludge lagoon areas, are likely to require basic gas protection measures. Typically this may include a gas impermeable membrane, cast in situ slabs and possibly passive underfloor venting, but gas monitoring will be required in accordance with CIRIA C665 to ensure appropriate design of gas protection.

Not with standing the above, contamination assessment methods have changed significantly since the original site investigation, and it may be necessary to undertake a further contamination investigation, compliant to current standards to satisfy local planning requirements. It is also likely that given the recent High Court judgement against Corby Borough Council with respect to liabilities associated with remediation of British Steel land, the Council will be seeking for developers to take a very robust approach to assessment and remediation of potentially similar land. It is envisaged that environmental monitoring during the works, good site practise and prevention of off site impacts are likely to be key requirements.

The lack of compaction of the fill and the variability of the soils, especially in the areas of the sludge lagoons, means that foundations for proposed buildings are likely to require piling into the Upper Lias. The concrete used for piles will require careful design to withstand the conditions within the remains of the sludge lagoons and gas works waste, and negative skin friction will be a consideration in those areas.

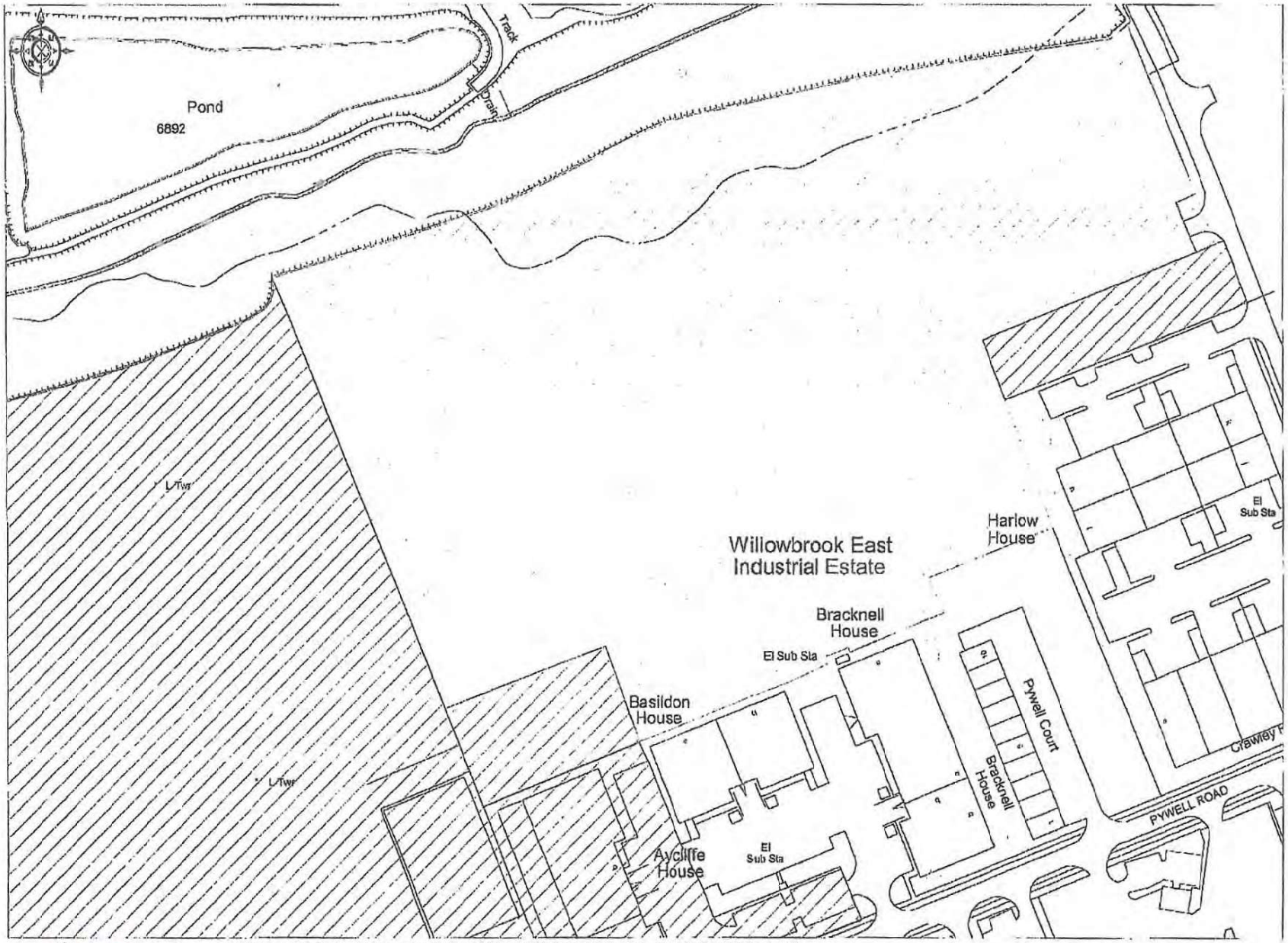
If development space is to be maximised and building is required on the landscape buffer zone at the top of the embankment above the stream, slope stability works are likely to be required to protect the slope and stream.

A development specific geotechnical investigation will be required to provide accurate design parameters for pile design. This should be combined with the contamination investigation for maximum value.

We trust that the enclosed fulfils your current requirements, but please call if you have any queries.

Yours sincerely

Jo Strange, Regional Director
Card Geotechnics Limited



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This plan is for identification purposes only and should not be relied upon for accuracy.


SITE


WILLOWBROOK INDUSTRIAL ESTATE • CORBY • NORTHAMPTONSHIRE
GRETTON BROOK ROAD
ROCKINGHAM SPEEDWAY
PHOENIX PARKWAY
19.86 ACRES
SHELTON ROAD
STEEL ROAD A6116
Boundaries are for indicative purposes only
INVESTMENT/DEVELOPMENT OPPORTUNITY
19.86 ACRES (8.04HA) INDUSTRIAL LAND • 16.93 ACRES LET TO INCHCAPE ESTATES • ADJACENT TO ROCKINGHAM SPEEDWAY
Lambert Smith Hampton
01604 664366
www.lsh.co.uk

LOCATION

Corby is located in Northamptonshire and lies 14.5 km (9 miles) north of the A14, which links the M1 and A1. The town is approximately 37km (23 miles) north-east of Northampton, 35km (22 miles) south-east of Leicester and 31km (20 miles) west of Peterborough. The east coast ports of Felixstowe and Harwich and the major conurbations of Manchester, Leeds, Bristol and London are all within three hours drive time.

Corby has been included within the Government's Milton Keynes and South Midlands Sub-Regional Strategy. According to Government figures released in March 2010 Corby has the fastest growing population in the UK. Up to 2021 North Northamptonshire is estimated to grow its employment workforce by 47,400 jobs and, to absorb this growth in population, 16,800 new houses are due to be built in Corby over the same period.

Corby has a population of 87,000 (2009 census) which is expected to rise by 1% per annum from 2009 to 92,000 by 2014. Its significant industrial base attracts major companies to the town including Avon Cosmetics, Golden Wonder, British Steel Consumer Products, British and American Tobacco, Dixons, Electrolux and Morrisons.

COMMUNICATIONS

Road - Corby has excellent road communications, with the A6 offering links to Leicester 40km (24.8 miles) to the north west and the A43 connecting the town with Peterborough 40km (25 miles) to the north east and Northampton 36.5km (22.7 miles) to the south west. The A43 also provides access to the A14 16km (10 miles) to the south. The A14 links to the M11 and Cambridge 67.5km (42 miles) to the south east and the M1 46km (28.6 miles) to the West.

Rail - A new station in Corby, opened in April 2009, provides direct links to London St Pancras with a fastest journey time of 1 hour and 14 minutes.

SITUATION

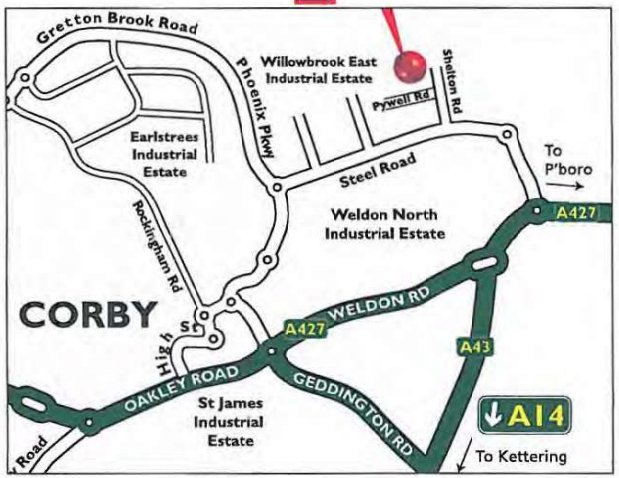
The property is situated on the northern edge of Willowbrook East Industrial Estate, 3.5km (2.2 miles) to the north of Corby town centre.

The property is accessed directly from Shelton Road with the Rockingham Motor Speedway situated directly to the north. Shelton Road leads south to the A6116 Steel Road which runs east west to Corby town centre and the A43 respectively. The A43 provides a direct link to the A1 approximately 22km (13.6 miles) to the north east. To the south east the A43 connects with the A14 at Kettering before joining the M1 at Junction 19.46 km (28.5 miles) from the property.

The newly developed £8.3m Corby railway station, approximately 3.5km (2.2 miles) to the south-west of the property, was opened in April 2009 providing direct links to London St Pancras with a fastest journey time of 1 hour and 14 minutes. It has been estimated by the North Northants Development Company, that the opening of this rail service has the potential to unlock an estimated £200m of further commercial investment in the area.

The property is adjacent to and south of Rockingham Speedway. There is currently a development Masterplan being prepared by North Northants Development Company involving 80.94ha (200 acres) of land for a high quality employment development centred on the speedway circuit. This proposal incorporates the property.

The property is also a short distance from Priors Hall, which, at 400ha (988 acres), is one of the largest on-going developments in the country. Having gained planning approval in 2007 there is planning permission for 5,100 homes, three new schools, 200ha (494.2 acres) of parkland and employment initiatives designed to generate 3,000 jobs.



INVESTMENT/DEVELOPMENT OPPORTUNITY

19.86 ACRES (8.04HA) INDUSTRIAL LAND • 16.93 ACRES LET TO INCHCAPE ESTATES • ADJACENT TO ROCKINGHAM SPEEDWAY

Lambert Smith Hampton
01604 664366
www.lsh.co.uk

COVENANT INFORMATION

Inchcape Estates Limited is the UK's largest automotive retailer. Working with brand partners, such as Toyota, Lexus and Subaru, Inchcape Estates Ltd provides the import, distribution and marketing of motoring products. It also provides retail network's marketing and sales strategies, pricing, finance products, servicing, parts and accessories, for all their brand partners.

Inchcape Estates Limited is a subsidiary of Inchcape Plc, which is the world's leading automotive retailer. Inchcape Estates Ltd itself has a tangible net worth of £47,872,000 based on a turnover of £21,434,000.

A summary of the tenant's latest trading performance is as follows:-

Inchcape Estates Ltd	31/12/2008 12 Months GBP '000	31/12/2007 12 Months GBP '000	31/12/2006 12 Months GBP '000
Turnover	21,434	18,575	19,764
Profit (Loss) before Tax	(597)	7,922	2,671
Tangible Net Worth	47,872	46,826	38,056
Net Current Assets	(98,466)	(92,988)	(153,321)

Inchcape Estates Limited has a Dun and Bradstreet rating of 5A1, with a minimal risk of business failure.

The parent company, Inchcape Plc, has been listed on the London Stock Exchange since 1958. With headquarters in London, Inchcape currently employs over 15,000 people worldwide, in locations such as UK, Singapore, Greece, Australia, Hong Kong, Belgium and Russia. In the UK Inchcape operates two businesses, Inchcape Retail and Inchcape Fleet Solutions. The retail section includes 128 franchised retail centres, whilst Inchcape Fleet Solutions has a combined fleet size of 41,000 cars, providing the distribution arm of the company.

Inchcape Plc saw sales worldwide of £5.5 billion, with assets of £1.8 billion, in the past year. The UK represents 24.1% of group revenues, with sales in the UK of £2 billion.

VAT

The property is elected for VAT. We understand that the sale of the property is to be treated as a Transfer of a Going Concern (TOGC).

DOWNLOADS

- CORBY Growth Proposals
- Building a bigger, better, brighter CORBY
- Welcome to CORBY

INVESTMENT SUMMARY

A unique opportunity to acquire 8.04ha (19.86 acres) of industrial land which offers the potential for a medium term industrial development

- The property comprises approximately 8.04ha (19.86 acres), 6.85ha (16.93 acres) of which is currently let to a strong covenant for a further 6 years and used for car/vehicle storage. 1.19ha (2.93 acres) is currently vacant.
- Located in Corby, the fastest growing town in the UK with a new high speed rail link to London
- The car/vehicle storage area is let to Inchcape Estates Limited (5A1) on a lease which expires in March 2018. The remaining 1.19ha (2.93 acres) is to be sold with vacant possession.
- Inchcape plc, the parent company, is a FTSE 250 company and is the world's leading automotive retailer.
- The current passing rent is £351,699 per annum which is subject to a further rent review in March 2014. The rent review is upwards only to RPI less 0.5%.
- The property, which is adjacent to Rockingham Speedway, forms part of a 80.94ha (200 acre) area that is currently subject to a Masterplanning review by North Northants Development Company for a high quality employment development centred around the motor racing track.

PROPOSAL

Full details are available on request from the sole agents, Lambert Smith Hampton.

Ian Harman

Lambert Smith Hampton

01604 664366

www.lsh.co.uk

iharman@lsh.co.uk

USEFUL LINKS

Corby Borough Council:
www.corby.gov.uk

North Northants Development Company:
www.nndev.co.uk/key-locations/corby

Welcome to Northamptonshire:
www.northamptonshireletyourselfgrow.com/visit

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