

Phase II site investigation

Client; Scott Park Developments Ltd

Site; 36/38 Holbeach Road

Spalding

LINCS PE11 2HQ

Planning reference;

H16-0505-17

Report by; Jeremy Stock

Revision	Dated	Issue
0	21st July 2020	Pre demolition
1	10 th August 2020	Lab test results
2	20th September 2020	Post demolition
3	22 nd September 2020	Final
		Checked - JMS

Agricultural & Environmental Business Consultants

Burtey Fen Farm

Burtey Fen Lane

Pinchbeck

Spalding

Lincs PE11 3SR

Tel 07836 206993

Basis soil & water management No SW/255

FACTS registration No FE/981

BASIS registration No E/2420

BASIS waste to land No WL/23

Contents

Introduction	Page 3
Background	Page 3
Site context	Page 4
Method of assessment	Page 5
Initial Conclusion	Page 6
Recommendations	Page 7
Follow up site visit	Page 8
Further conclusions/ recommendations	Page 8

Appendices

Appendix I	Existing site layout
Appendix II	Conceptual site model
Appendix III	Sample location points
Appendix IV	Laboratory test results
Appendix V	SGV comparison
Appendix VI	Consignment notes – Exported
Appendix VII	Consignment notes - Imported fill
Appendix VIII	Photographs

1. Introduction

Jeremy Stock of Agricultural & Environmental Business Consultants has received instructions from Scott park Developments Ltd to conduct a Phase II site investigation on the site of an old engineering premises at 36 – 38 Holbeach Road, Spalding, Lincolnshire PE11 2HQ. Scott Park Developments Ltd are owners of the site.

The site benefits from full planning consent for the erection of 6 two storey dwellings issued on 11th September 2017 under reference number H16-0505-17.

A demolition notice was lodged with South Holland on 29th November 2019 with the proposal to deconstruct/ demolish the former engineering premises and adjacent working men's institute under reference DEM-00320-2019.

In advance of the demolition work commencing, it is understood that instructions have been issued to a specialist to conduct a pre demolition asbestos survey. Although the site visit and representative sample taking has taken place, the concluding report has not yet been issued. However, it has been confirmed to the author' that there is no asbestos containing material present on site.

In publishing the report, the author has referred to guidance given by the Environmental Protection Act 1990, Part 11A. In addition, consideration has been given to documents provided by the local Environmental Health Department titled 'Developing Land within Lincolnshire.'

2. Background

The primary objective of this report is to satisfy the requirements and conditions set out in the planning notice, more specifically paragraph 10 of the planning notice in relation to potential sources of contamination, the impact on human health, impact to land and controlled waters relevant/ adjacent to the site in question.

In this regard, a Phase I site assessment report was prepared and published on 1st March 2019 by Enviro Solution. The executive summary concluded that a Phase II ground/ site investigation is undertaken prior to redevelopment with the intention of meeting the requirements of the Local Planning Authority;

'if identified as being required following the completion of the desk-top study, a site investigation shall be carried out to fully and effectively characterise the nature and extent of any land contamination and/or pollution of controlled waters. It shall specifically include a risk assessment that adopts the Source-Pathway-Receptor principle, in order that any potential risks are adequately assessed taking into account the sites existing status and proposed new use'.

3. Site context

The site fronts on to Holbeach Road in Spalding and measures approximately 41m x 11 in depth (total area of 451m²) Given the extent of the buildings on site, these currently occupy around 65% of the total site. It is planned that all of the buildings will be deconstructed/ demolished to clear the site prior to redevelopment. (See appendix I – existing site layout)

A site visit and walkover was conducted on 18th July 2020 prior to work commencing on site. The prevailing weather conditions were both bright and dry.

4. Method of Assessment

4.1 Site Walk Over

Given the sites previous use, attention was given to perimeter walls; both inside and outside. This is to establish whether there was any evidence of past fuel/ oil storage facilities, where the risk of spilt or leaking fuels/ oils may be identified.

The site walk over was conducted on the 18th July 2020 at a 2-metre interval grid pattern.

There was no evidence of underground or above ground storage tanks on site. Nor is there evidence of tank bases or pedestals which may suggest tanks may have been in place in the past.

No evidence of staining inside or outside was noted during the visit.

It should be noted the only significant area not occupied by buildings incorporating concrete floors is the rear courtyard area.

On inspection there is undergrowth including self-sown trees, brambles, ivy and docks. There is no evidence that normal weed growth is being restricted due to the presence of potential contaminants.

4.2 Previous Site Use

Research undertaken as part of the Phase I study, identified that the site is occupied by a derelict Workman's Institute and two small engineering workshops.

4.3 Risk Assessment

A conceptual model has been developed and can be found in appendix II of this report. The model summarises the plausible pollutant linkages (source – pathway – receptor) for the site. The potential contamination associated with the previous land/ site use, the likely future receptors and the possible pathways between them.

As mentioned previously, a pre demolition survey has been undertaken. This confirms there is no asbestos containing material on site.

4.4 Soil Testing

Much of the site is occupied by concrete slabs. Indications suggest that the slabs are around 250mm to 350mm thick with reinforcing mesh.

During the site visit, 3 samples were taken. 'Windows' were cut through the slabs with 2 samples taken beneath. The samples included mortar residues, evidence of brick and soil. One sample was taken outside adjacent to the rear wall of the workmen's Institute. This sample resembled clean soil with root material present. (Appendix III – sample locations)

Samples were taken from a depth of between 350-450mm. Samples were sent to a UKAS accredited laboratory for analysis. When available, the results will be attached to this report.

None of the samples were discoloured or emitted an odour both, which if present, could suggest evidence of contamination.

A more thorough walkover and perhaps further soil assessment may be necessary once the area has been cleared of demolition arisings.

Due to the likely risks associated with such a site and its' previous use, the samples were sent for analysis of heavy metals and total petro - hydrocarbons to establish levels of potential contaminants.

It should be noted that these samples were random samples both within buildings and externally.

5. Initial Conclusions

5.1 Site walkover

During the site visit, both the concrete slab and external walls of the buildings were assessed. There was no evidence of fuel and oil storage facilities / tanks. Nor was there evidence to suggest such as usually indicated by soil or concrete staining.

No obvious spillages were noted within the engineering workshops.

There was no odour present within the areas from where samples were taken which would indicate that spillages may have occurred.

5.2 Soil test results

We await sample results from the laboratory. These will be added to the report when available.

5.3 Asbestos materials

There is no asbestos containing material on site as confirmed in a pre-demolition survey.

6. Initial Recommendations

- 6.1** A follow up site survey/ inspection should be undertaken during the process of demolition. If evidence of contamination should become visible, work should cease, with evidence referred to the LPA for further consideration and recommendations.

JMS

21st July 2020

7. Follow up site works and site visit

- 7.1 Demolition and site clearance was undertaken in the months of August and early September 2020. The follow up site visit was undertaken on 5th September 2020.
- 7.2 A site walkover was undertaken during the visit. It was understood that approximately 630m³ of material, including concrete, masonry and steel had been exported from site following demolition. See appendix VI – Exported material consignment notes.
- 7.3 The site has been registered with the Environment Agency to import ‘fill’ material under a U1 exemption. (WEX251096) Total Aggregates supplied and delivered 400 tonnes of ‘fill’ material to bring levels up on site. A copy of the consignment notes can be found in appendix VII.
- 7.4 Results from Samples taken at the pre demolition stage have now been reported and can be found in appendix IV of this report. The results have been summarised and compared to Soil Guideline Values (SGV’s) and can be found in appendix V.

8. Conclusion/ Recommendations

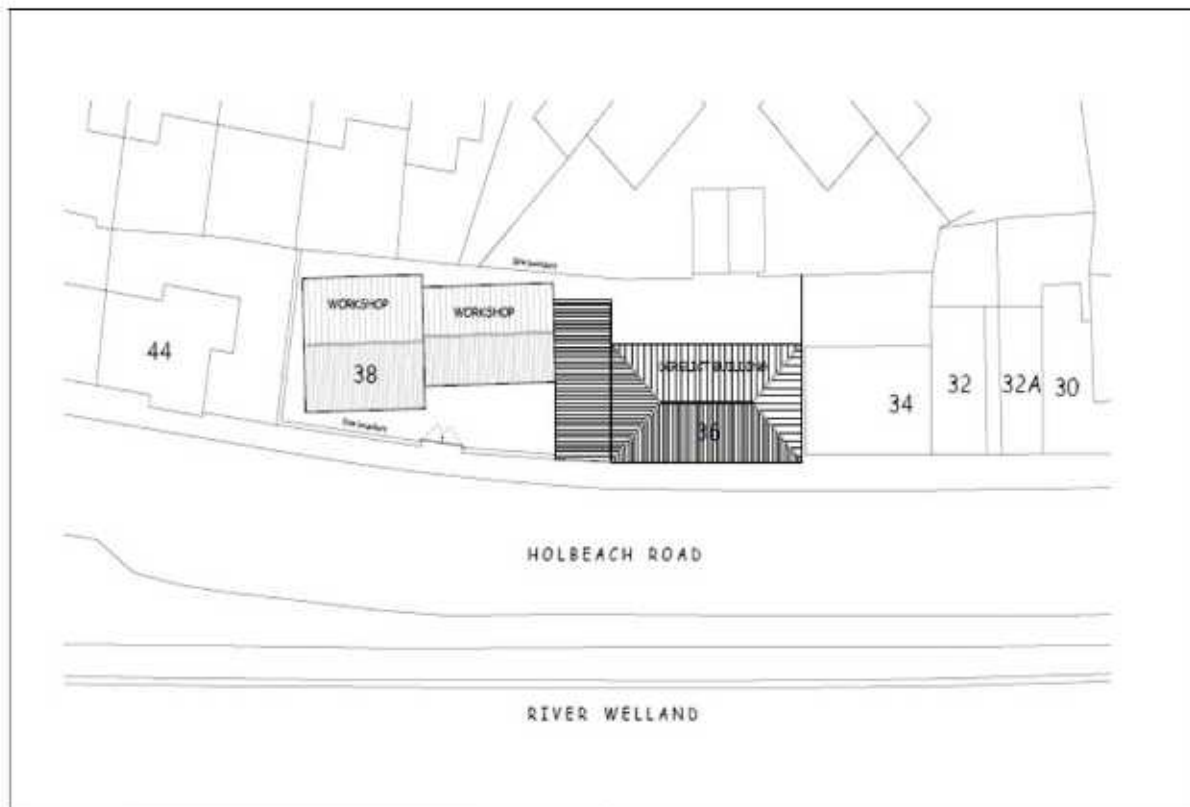
- 8.1 Laboratory test results indicate that at recorded levels, these are within acceptable levels when compared to SGV’s. It is noted that there is no garden areas allocated for these properties and therefore an assessment has been made in this context. I.e; Residential use with no plant uptake.
- 8.2 During site inspections and site walkover, before and after demolition/ site clearance, there was no evidence of contamination.
- 8.3 Should evidence of contamination come to light in the process of construction. Work on site should cease and the matter reported and discussed with the Local Planning Authority.
- 8.4 Water services installed to the redeveloped site should be protected using ‘clean soil’ or pea gravel to backfill excavated trenches.

JMS

21st September 2020

Existing Site Plan

36 – 38 Holbeach Road



Site; 36 – 38 Holbeach Road, Spalding

Source	Pathway	Receptor	Estimated Risk
Soils impacted by petroleum hydrocarbons, heavy metals. Asbestos fibres and fragments – confirmed none present.	Direct or dermal contact with soil	On site workers during demolition/ remedial works, excavation and/or development. Site visitors during development.	Moderate – potential for direct contact with contaminated soils
		Ecology	Low – Existing vegetation round site perimeter appears healthy.
		Buildings and infrastructure.	Low – soil conditions do not appear aggressive to building materials.
		Local offsite tenants and neighbours and future occupiers	Low – Hard landscaped area or where soils are capped.
		Future site occupiers.	Low

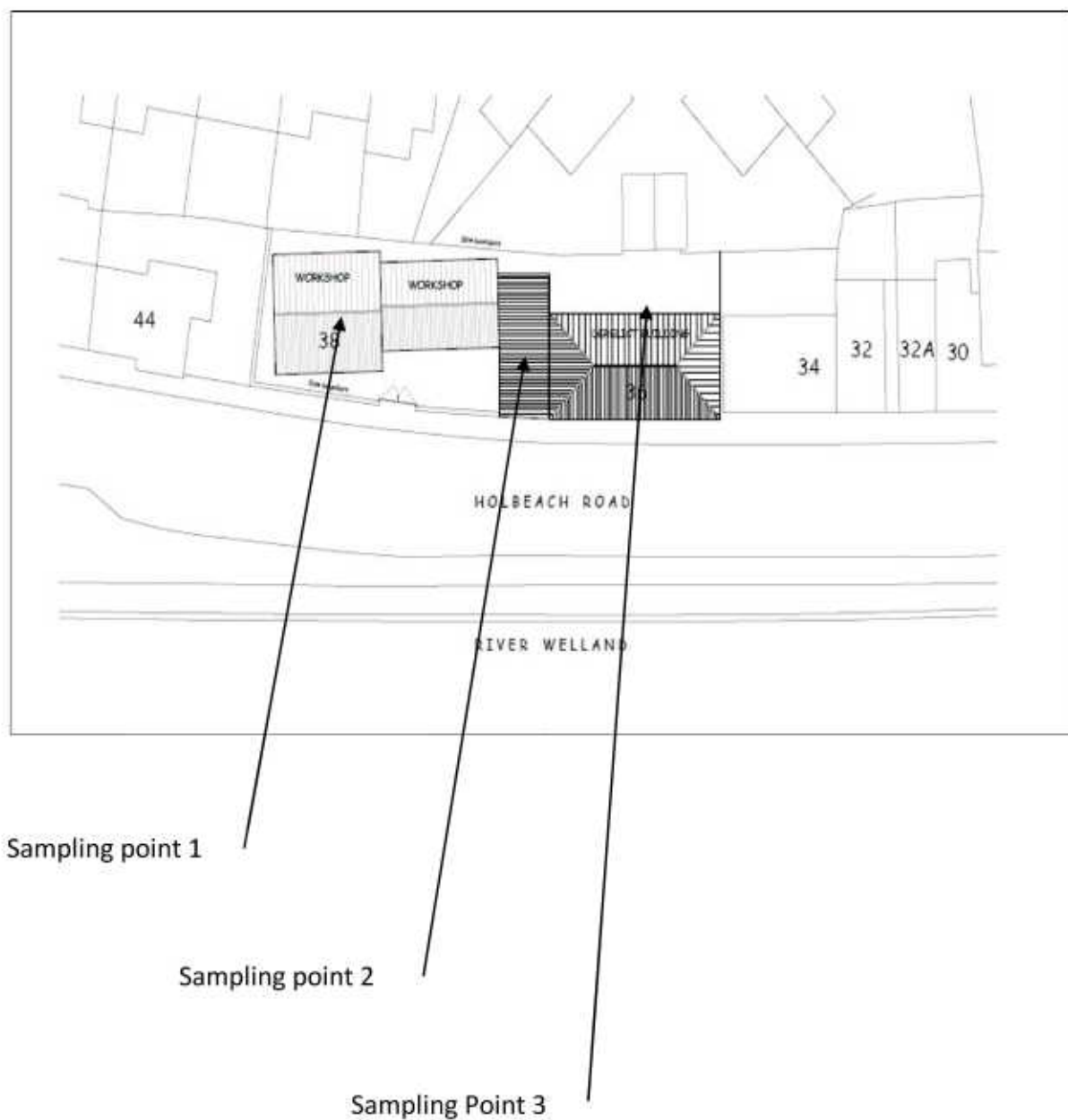
Conceptual Site Model of Contamination – continued

Source	Pathway	Receptor	Estimated Risk
Groundwater impacted by heavy metals and Petro Hydrocarbons	Contact with water, vertical and horizontal migration through to surface waters	On site workers during demolition/ remedial works, excavation and/or development.	Low – minimal, works undertaken above water table.
		Ecological systems	Low
		Buildings and Infrastructure.	Low – foundations are to be above water table.
		Local off site tenants.	Low – minimal groundwater impact and depth to groundwater.
		Future site occupiers	Low – minimal groundwater impact.

Sampling Point location

Appendix III

Site; 36 – 38 Holbeach Road, Spalding





ANALYTICAL REPORT										
Report Number	15825-20	V722	JEREMY STOCK	Client	SCOTT PARK DEV LTD					
Date Received	23-JUL-2020		AGRICULTURAL AND ENVIRO	REF	35-38 HOLBEACH ROAD					
Date Reported	30-JUL-2020		BUSINESS CONSULTANTS							
Project	KE 35 38 HOLBEACH ROAD		1 ELM LANE							
Reference	SCOTT PARK DEV LTD		FULNEY							
Order Number			SPALDING PE12 6EQ							
Laboratory Reference		ENV 56411	ENV 56412	ENV 56413						
Sample Reference		SAMPLE 1	SAMPLE 2	SAMPLE 3						
Determinand	Unit	SOIL	SOIL	SOIL						
pH (Value)		7.5	8.5	8.4						
Copper	mg/kg	15.7	17.3	40.0						
Zinc	mg/kg	61.9	68.3	337						
Lead	mg/kg	49.5	56.7	350						
Arsenic	mg/kg	13.4	12.2	19.7						
Cadmium	mg/kg	0.14	0.15	1.75						
Nickel	mg/kg	14.6	13.3	27.5						
Chromium	mg/kg	15.1	14.3	19.7						
Mercury	mg/kg	0.21	0.37	0.65						
Selenium	mg/kg	0.20	0.21	0.38						
Molybdenum	mg/kg	<1	<1	1.3						
Fluoride	mg/kg	11.2	10.9	66.9						
EPH (C10-C40)	mg/kg	99	78	288						
Dry Matter	% w/w	81.6	82.3	78.3						
Analysis Notes		The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis.								
Sample Storage		A portion of the sample will be stored for 3 weeks from the reported date.								
Document Control		This test report shall not be reproduced, except in full, without the written approval of the laboratory.								

Site Address – 36-38 Holbeach Road, Spalding.

Soil test results as a comparison against Soil Guideline Values (SGV)

Soil guideline values are assumed as ‘Residential use with no plant uptake’

Determinand	ENV56411	ENV54612	ENV56413	Soil guideline values
Copper	15.7	17.3	40	200*
Zinc	61.9	68.3	337	450*
Lead	49.5	56.7	350	310
Arsenic	13.4	12.2	19.7	40
Cadmium	0.14	0.15	1.75	150
Nickel	14.6	13.3	27.5	130
Chromium	15.1	14.3	19.7	200
Mercury	0.21	0.37	0.65	10
Selenium	0.20	0.21	0.38	350
Molybdenum	<0.1	<0.1	1.3	
Fluoride	11.2	10.9	68.9	
EPH(C10-C40)	99	78	288	<200
pH	7.5	8.5	8.4	
Dry Matter	81.6	82.3	78.3	

Notes - Analysis undertaken by NRM Laboratories

All values expressed on mg/Kg basis unless stated otherwise

* = SGV for Copper – none available at present

* = SGV for Zinc – none available at present

Consignment Note – Exported material off site

TOTAL Aggregates

Office:
Melvyn Robert House, Bakerbrook Industrial Estate
Wigwam Lane, Hucknall, Nottingham NG15 7SZ
Tel: 0115 963 7444
Fax: 0115 963 7445

Waste Trn
1783

WASTE CARRIER LICENCE No.
CBDU90660

Section A - Description of Waste

Naturally occurring soil/stone/clay	17.05.04	
Concrete/Bricks/Tiles	17.01.07	☒
Concrete	17.01.01	
Bituminous Mixture	17.03.02	
Bricks	17.01.02	
Other		

Vehicle Reg **FPL9ALZ**
Date **10-9-20**
Time
Container
Size
Weight **1x20**

Section B - Customer/Current Holder of Waste Are you?

Producer of the waste: ☐
Importer of the waste: ☐
Holder of Environmental Permit? ☐ Y/N
Details: ☐
A Registered Waste Carrier? ☐ Y/N
Details: ☐
Registered Waste Exemption? ☐ Y/N
Exemption details: ☐
SIC Code 2007
Demolition 43.11.0 ☐
Construction (comm) 41.20.1 ☐
Construction (resid) 41.20.2 ☒

Business/Site Address:
S-A. PARKER
36-38 HOLBACH RD
SPALDING

Local Authority:

Section C - Haulier/Collector of Waste
TOTAL Aggregates, Melvyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Broker: CBDU90660 Ashfield District Council
SIC (2007): 38.32 Recovery of sorted materials / 38.11 Collection of non haz waste

Section D - DETAILS OF TRANSFER/DISPOSAL
BROKER: TOTAL Aggregates, Melvyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Broker: CBDU90660

Transfer/Disposal Address:
TOTAL AGGS
RAILHEAD
BOSTON

Date of Transfer **10-9-20** **Time of Transfer**

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. ☒

Signed for the Customer/Holder of Waste: **Ted**
Print Name: _____

Signed for the Haulier/Collector of Waste: _____
Print Name: Total Aggregates

Consignment Notes – Imported 'Fill' Material

TOTAL Aggregates

Waste Transfer Note

15913

Office:
Melwyn Robert House, Bakerbrook Industrial Estate
Wigwam Lane, Hucknall, Nottingham NG15 7SZ
Tel: 0115 963 7444
Fax: 0115 963 7445

WASTE CARRIER LICENCE No.
CBDU90660

Section A - Description of Waste

Naturally occurring solid/liquid/slag	17.05.04	Vehicle Reg.	10.16.0001
Concrete/Bricks/Tiles	17.01.07	Date	10.9.20
Concrete	17.01.01	Time	
Bituminous Mixture	17.03.02	Container	8 bins
Bricks	17.01.02	Size	
Other		Weight	12 tons

Section B - Customer/Current Holder of Waste Are you?

Business/Site Address:

Producer of the waste: ☐ Importer of the waste: ☐

Holder of Environmental Permit? ☐ Y/N

Details: ☐ Y/N

A Registered Waste Carrier? ☐ Y/N

Registered Waste Exempt? ☐ Y/N

Exemption details: ☐

Local Authority: ☐

Business/Site Address: *Lower Charles John Field School, Hucknall Road, Hucknall*

SIC Code 2007

Demolition	43.11.0	Therm construction	42.12
Construction (general)	41.20.1	Manufacture of other products	38.11
Construction (resid)	41.20.2	Other	

Section C - Haulier/Collector of Waste

TOTAL Aggregates, Melwyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Holder: CBDU90660
SIC (2007): 38.12 Recovery of sorted materials / 38.11 Collection of non-haz waste

Section D - DETAILS OF TRANSFER/DISPOSAL

BROKER: TOTAL Aggregates, Melwyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Holder: CBDU90660

Transfer/Disposal Address:

Date of Transfer: *10.9.20* Time of Transfer: *12.15.09.6*

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Signed for the Customer/Holder of Waste

Signed for the Haulier/Collector of Waste

Print Name:

Print Name: Total Aggregates

TOTAL Aggregates

Waste Transfer Note

15912

Office:
Melwyn Robert House, Bakerbrook Industrial Estate
Wigwam Lane, Hucknall, Nottingham NG15 7SZ
Tel: 0115 963 7444
Fax: 0115 963 7445

WASTE CARRIER LICENCE No.
CBDU90660

Section A - Description of Waste

Naturally occurring solid/liquid/slag	17.05.04	Vehicle Reg.	10.16.0001
Concrete/Bricks/Tiles	17.01.07	Date	10.9.20
Concrete	17.01.01	Time	
Bituminous Mixture	17.03.02	Container	8 bins
Bricks	17.01.02	Size	
Other		Weight	12 tons

Section B - Customer/Current Holder of Waste Are you?

Business/Site Address:

Producer of the waste: ☐ Importer of the waste: ☐

Holder of Environmental Permit? ☐ Y/N

Details: ☐ Y/N

A Registered Waste Carrier? ☐ Y/N

Registered Waste Exempt? ☐ Y/N

Exemption details: ☐

Local Authority: ☐

Business/Site Address: *Lower Charles John Field School, Hucknall Road, Hucknall*

SIC Code 2007

Demolition	43.11.0	Therm construction	42.12
Construction (general)	41.20.1	Manufacture of other products	38.11
Construction (residual)	41.20.2	Other	

Section C - Haulier/Collector of Waste

TOTAL Aggregates, Melwyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Holder: CBDU90660
SIC (2007): 38.12 Recovery of sorted materials / 38.11 Collection of non-haz waste

Section D - DETAILS OF TRANSFER/DISPOSAL

BROKER: TOTAL Aggregates, Melwyn Robert House, Wigwam Lane, Nottingham, NG15 7SZ
Registered Waste Carrier/Holder: CBDU90660

Transfer/Disposal Address:

Date of Transfer: *10.9.20* Time of Transfer: *12.15.09.6*

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011.

Signed for the Customer/Holder of Waste

Signed for the Haulier/Collector of Waste

Print Name:

Print Name: Total Aggregates

Photographs

Photograph 1 – Site frontage adjacent to Holbeach Road (Pre demolition)



Photograph 2 – Internal floor slab



Photograph 3 – Sample point 1



Photograph 4 – Sample point 2



Photograph 5 – Sample point 3



Photograph 6 – Vegetation in rear courtyard area.

