



Contaminated Land Inspection Report

Potential Landfill,
Blackborough End
King's Lynn

October 2017

Reference no. S103100038911

Written by

Alex Grimmer
Senior Environmental Quality Officer

Reviewed by

Fabia Pollard
Scientific Officer

Approved by

Dave Robson
Environmental Health Manager

Please Note:

This report is the property of and confidential to Borough Council of King's Lynn and West Norfolk and its use by and disclosure to any other person without the expressed prior consent of the council is strictly prohibited.

Borough Council of King's Lynn and West Norfolk
King's Court
Chapel Street
King's Lynn
Norfolk
NR30 1EX

Tel: 01553 616200

Email: environmentalquality@west-norfolk.gov.uk

Contents

Executive Summary	1
1. Introduction	2
2. Desk Study Information.....	2
Location	2
Initial Prioritisation Score	2
Previous Site Usage	2
Present Site Usage	2
Environmental Setting.....	2
Geology	2
Hydrogeology	3
Hydrology	3
Local Authority Pollution Prevention and Control Regulations	3
The Environment Agency Web site records	3
MAGiC website records	3
Historic Maps	4
E-map Explorer	4
Historic Maps on file at the Borough Council of King's Lynn and West Norfolk (Presented in Appendix B)	4
Aerial Photographs	5
Planning History.....	5
Environment Agency Records	5
Norfolk County Council Records.....	5
3. Site Walkover.....	6
4. Assessment of Site Use	6
Assessment of probability of a contamination event.....	6
Assessment of Hazard.....	6
Human Health	7
Property.....	7
Environment	7
Controlled Water	7
Groundwater	7
Surface waters	7
Conceptual site model	7
Outcome of Preliminary Risk Assessment	8
Conclusion	9
Human Health	9
Controlled Waters.....	9
Part 2A status of the site	9
Appendices	10
Appendix A Site Photographs	11
Appendix B Drawings	16
Appendix C. Norfolk County Council Planning Documents	22
Appendix D. Risk Assessment Methodology	39
Appendix E. Determination of contaminated land – Contaminated Land Statutory Guidance, April 2012.....	41

Executive Summary

The Borough Council of King's Lynn and West Norfolk (BCKLWN) has a statutory duty to inspect its district for potentially contaminated land under Part 2A of the Environmental Protection Act 1990. The contaminated land inspection strategy has identified the potential landfill at Blackborough End as a site which requires detailed inspection.

This site is potentially a former landfill which forms part of a field adjacent to some residential properties and other landfills within the district of King's Lynn. An initial assessment of the site was undertaken to assess the potential for harm to human health, controlled waters and property under Part 2A.

To gather information of the site's history a desk study and preliminary risk assessment were carried out by the Environmental Quality Team. From the evidence gathered during the desk study of the site history and a site walkover, the following can be stated:

- The site has been excavated for mineral extraction on two separate occasions.
- The excavation has not been backfilled, although some deposits of waste were noted during the site walkover these are considered to be the result of fly tipping or to be left over from the mineral extraction process.
- The site was used as a 'Members Only' fishing club.
- The site is now under private ownership and is used as a personal nature reserve, fishing lakes and shooting area.

Following the initial assessment it was concluded that no additional information was required to characterise and categorise the site. No evidence has been found that the site has been used for waste disposal. This indicated that the site in its current use is unlikely to pose a significant risk to human health or property. There is not a strong case for taking action under Part 2A EPA 1990 and therefore the site has been classified into category 4 regarding the risk to human health. No evidence was found of significant pollution or significant possibility of such pollution of controlled waters.

Therefore the site is not considered to be contaminated land under Part 2A of the Environmental Protection Act 1990.

1. Introduction

This report details a review of information and written statement about a potential landfill at Blackborough End, King's Lynn and provides a conclusion on the risk to human health, property, groundwater and the wider environment.

The Contaminated Land Statutory Guidance (DEFRA, 2012) suggests that where the authority has ceased its inspection and assessment of land as there is little or no evidence to suggest that it is contaminated land the authority should issue a written statement to that effect. This document provides that written statement.

2. Desk Study Information

Location

The site's location is shown in Appendix B. The grid reference for the centre of the site is 568276, 314404 and the nearest postcode is PE32 1NN.

Initial Prioritisation Score

The site was initially assessed as having a 'Very High' Potential Hazard Rating due to the fact that it was a former quarry in an area which has extensively been used for landfilling.

Previous Site Usage

The site (drawing S103100038911/101) was a gravel pit, which has the potential to have been used as a landfill.

Present Site Usage

Its present use comprises a fishing lake which is accessed by a road from the west. A residential property and forest exists to the west. A forest is to the south and open fields and a farm are to the east. To the north are mineral extractions and a landfill.

Ownership

Enquiries have been made to establish land ownership. This report will be made available to the site owners.

Environmental Setting

Geology

The Solid and Drift Geology Sheet 160, 1:50,000, 1999 and Regional Hydrological Characteristics Sheet 1 1:125 000 shows the site surface is approximately to vary between 3 and 4 meters above ordnance datum (maOD).

The bedrock geology is the Mintlyn Member – Sand.

The superficial geology is the Lowestoft Formation – Sand and Gravel.¹

¹ BGS website: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

Hydrogeology

The site is on land classified as a principle aquifer but not within a Source Protection Zone (SPZ) (Environment Agency Website).

The Principle Aquifer comprises the Leziate Sand Member, which has a very high permeability allowing it transmit pollutant very easily. Some of the superficial deposits are classified as 'Secondary A' superficial deposits.

Hydrology

Fishing lakes are on site and a ditch is 12m south of the southern boundary of the site.

There are no surface water abstraction points within 1000m. No private water or Environment Agency licenced abstractions exists on site or within 500m.

Local Authority Pollution Prevention and Control Regulations

No LAPPC processes are on site or within 500m of the site.

The Environment Agency Web site records

The Environment Agency Web site records the following:

- The site is not at risk from flooding.
- The site is within a priority Waters Area and is vulnerable to Nitrate (surface and Groundwater).
- The superficial deposits beneath the site are classified as being a Secondary A Aquifer.
- The bedrock beneath the site is a Principal Aquifer.
- The groundwater has a high vulnerability at this location.
- The site is not recorded as being a landfill. The nearest recorded landfill is adjacent to the northwest.
- Two significant pollution incidents are recorded within 1km of the site. These are:
 - 11/03/2002. Significant impact to Land by Special Waste Materials (Incident Number 63574).
 - 22/06/2008. Significant Impact to Air by Atmospheric Pollutants and Effects. (Incident Number 598505)

MAGIC website records

MAGIC website records the following

- Two areas of registered common land are to the west and southwest, which are covered by the Countryside and Rights of Way Act 2000 (England).
- The site is covered by the MMO Marine Areas (England)
- Part of the site is covered by the Woodland Priority Habitat Network (High Spatial Priority).
- Part of the site is covered by Woodland Improvement (High Spatial Priority).

- Part of the site is covered by the Priority Habitat Inventory Deciduous Woodland (England).
- Part of the site is on the National Forestry Inventory (Broadleaf).
- The site is a Farm Wildlife Package Area (England).
- The site is covered by the Phosphate Issues Priority (England) (Medium Priority).
- Part of the site is covered by Woodland – Water Quality (England) of the Lower Spatial Priority.
- The site is covered by the Keeping Rivers Cool Initiative (England).
- The site is covered by Low and Medium Climate Change Vulnerability Buffers (England).
- The site is designated as a Nitrate Vulnerable Zone for Surface and Groundwater.
- The site is designated as part of a Higher Level Stewardship Themes (England).
- The site forms habitat for:
 - Yellow Wagtail
 - Turtle Dove
 - Tree Sparrow
 - Stone Curlew
 - Redshank
 - Lapwing
 - Grey Partridge
 - Curlew
 - Grassland Assemblage Farmland Birds (England) Grade 4.
 - Arable Assemblage Farmland Birds (England) grade 5.
- The site is part of the Higher Level Stewardship Theme.

Historic Maps

E-map Explorer

Tithe map circa 1840 –The site comprised a field numbered 102.

Enclosure Map 1800 - 1850 – Not available.

Tithe map circa 1840– The site comprised a field numbered 92 and is surrounded by fields.

Ordnance Survey 1st Ed. 1879-1886 – The site was a field, to the south and east are woodland (Cranberry Plantation) and to the north and west are fields. To the south west was what appears to be a building labelled as Foster's End beyond which was scrubland and fields.

Historic Maps on file at the Borough Council of King's Lynn and West Norfolk (Presented in Appendix B)

1843 – 1893: The site was a field, to the south and east is woodland (Cranberry Plantation) and to the north and west are fields. To the south west was what

appears to be a building labelled as Foster's End beyond which is scrubland and fields.

1891 – 1912: The site was as depicted above.

1904 – 1939: The site was as depicted above with the exception that a small excavation was now located to the north of the site.

1919 – 1943: Not available.

1945 – 1970: The site was shown as a series of pits (disused) which are filled with water. Foster's House to the southwest has been renamed Fulwood House. A structure (presumed to be part of the quarry's structures) was noted to be to the north of the site. Woodland was shown to the south and west.

1970 – 1996: Not available.

Aerial Photographs

1945 – 1946 MOD Aerial Photograph - The site was a field at this time, with a stockpile of material in the western corner. Woodland was shown to the south and west. To the north and east are fields.

1988 Aerial Photograph - The site was depicted as a pond/lake. To the south and west are woodlands. To the northwest was a quarry and to the north and east are fields.

1999 Aerial Photograph – The site was generally as described.

2006-09 Aerial Photograph – The site was generally the same as above. Two new ponds/lakes are noted to the north and northeast. To the north beyond the lakes was a quarry and also to the west of the site.

Planning History

Three planning application exist in the Borough Council records on or adjacent to the site. These are all related to county matters regarding the surrounding landfills.

Unfortunately the information relating to these planning applications are held by County Hall and as they are over 5 years old the information is not available on their website.

Environment Agency Records

Not consulted as not recorded on their website as a landfill.

Norfolk County Council Records

Mr M Adams of Norfolk County Council Minerals and Waste department was contacted and information requested regarding the planning history of the site. Two planning permissions are associated with the site, these are:

- FL.1993 – Erection of Concrete Batching plant and Site Office. Operated by Messrs. C & G Concrete. Granted 1964.

- C/2/97/2006 – Area A. Operated by Mr Sid George for Mineral Extraction. Granted 1998.

No information has been received regarding the site being used as a landfill. The planning records are presented in Appendix C

3. Site Walkover

A site visit was carried out by an Environmental Quality Officer of the Borough Council of King's Lynn and West Norfolk in the presence of the site owner on 09/03/2017. Photographs are presented in the Appendix A.

The site was accessed by a locked gate on the western boundary of the site. The western part of the site was wooded and contained several mounds of soil which were left over from the mineral extraction process. Two top-hat covers of groundwater monitoring boreholes were noted in this area, we were informed that these were monitored by Norfolk County Council for any contamination emerging from the adjacent landfill. A track through the wooded area led into the site along the southern boundary towards the lakes. A few small ponds surrounded by trees were noted, some of which were covered with blanket weed. A large body of water was noted in the middle of the site with further smaller water bodies to the north beyond which was richly vegetated.

No signs of landfilling were noted during the site walk over and conversations with the site owner indicated that as far as he was aware no landfilling had been undertaken on the site. The site owner also indicated that the site was monitored regularly by Natural England and other conservation bodies to assess the environmental quality of the site.

4. Assessment of Site Use

From the assessment of the site using County Council data, historic maps, aerial photography and a site walk over it has been possible to conclude that the site has been used for mineral extraction. The site is being used as a fishing lake for private members.

Assessment of probability of a contamination event

The site was a quarry which has ceased being used for mineral extraction. The site does not appear to have been used as a landfill, as the extraction areas are now filled with water and the site is being used as a private fishing lake/nature reserve.

As the site does not appear to have undergone any landfilling process it is considered that the probability of a contamination event affecting human health (via direct contact or inhalation) or groundwater is considered UNLIKELY.

Assessment of Hazard

The risks posed by the site have been assessed separately under the separate statutory guidance, the Contaminated Land Statutory Guidance. This is discussed further below:

Human Health

The site does not appear to have been used as a landfill; as such no source exists on site. Therefore it is considered that the hazard to human health (via direct contact or inhalation) is considered VERY LOW.

Property

The site is a series of fishing lakes used to by the owner. As the site does not appear to have been backfilled the hazard to the fish is VERY LOW.

Environment

The site and area do not contain any of the receptors stipulated in Table 1 of the Statutory Guidance.

Controlled Water

Groundwater

The site is a former quarry which doesn't appear to have been used as a landfill, which is now being used as private fishing lakes/nature reserve. Therefore the hazard is VERY LOW.

Surface waters

No landfilling has occurred on site, as such there is considered to be no hazard to the fishing lakes. As such the hazard to surface water is considered to be VERY LOW.

Conceptual site model

The conceptual site model (Table 1) shows the sources, pathways and receptors identified and the subsequent risk classification.

Table 1: Preliminary conceptual site model

Source	Pathway	Receptor	Probability	Hazard	Risk
Metals and metalloids within waste material	Direct contact	Humans	Unlikely	Low	Very Low
	Inhalation				
Metals and metalloids within waste material	Direct Contact	Property	Unlikely	Low	Very Low
	Inhalation				
Metals and metalloids within waste material	Direct contact	Environment	Unlikely	Low	Very Low
Metals and metalloids within waste material	Direct contact	Controlled water	Unlikely	Low	Very Low

Outcome of Preliminary Risk Assessment

No plausible source pathway receptor linkage was identified as no source of contamination has been identified. Therefore further investigation is not considered necessary.

Conclusion

From the information gathered and the site walkover it is apparent that the site was excavated for sand and gravel but the excavations were not then backfilled with waste material but were allowed to fill with water and are being used as fishing lakes.

No evidence was noted of significant harm and there is not a strong case to consider that the risks from the land are of sufficient concern that the land poses a significant possibility of significant harm to Humans (via direct contact, ingestion and inhalation), Property, Environmental Receptors or Controlled Water as defined in the statutory guidance. CIRIA C552 states that on a site with a very low risk classification 'There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.'²

Human Health

Following the above assessment the site is assessed as Category 4: Human Health³ as set out in the Statutory Guidance, as such no further assessment is considered necessary with regards to the risk to human health.

Controlled Waters

No further inspection is considered to be required with regards to controlled waters as it is considered that there is no reasonable possibility that a significant contaminant linkage exists as set out in the Statutory Guidance⁴. This assessment applies to the site's current use.

No further assessment of the site is considered necessary unless additional information is discovered or if the site is considered for redevelopment.

Part 2A status of the site

The site is not considered to be contaminated land under Part 2A of the Environmental Protection Act 1990.

² Contaminated land risk assessment. A guide to good practice. CIRIA C552, ISBN 0860175529.

³ Appendix E sets out the categories of land in the Contaminated Land Statutory Guidance.

⁴ (Contaminated Land Statutory Guidance April 2016)

2.13. If at any stage the local authority considers, on the basis of information obtained from inspection activities, that there is no longer a reasonable possibility that a significant contaminant linkage exists on the land, the authority should not carry out any further inspection in relation to that linkage.

Appendices

Appendix A Site Photographs



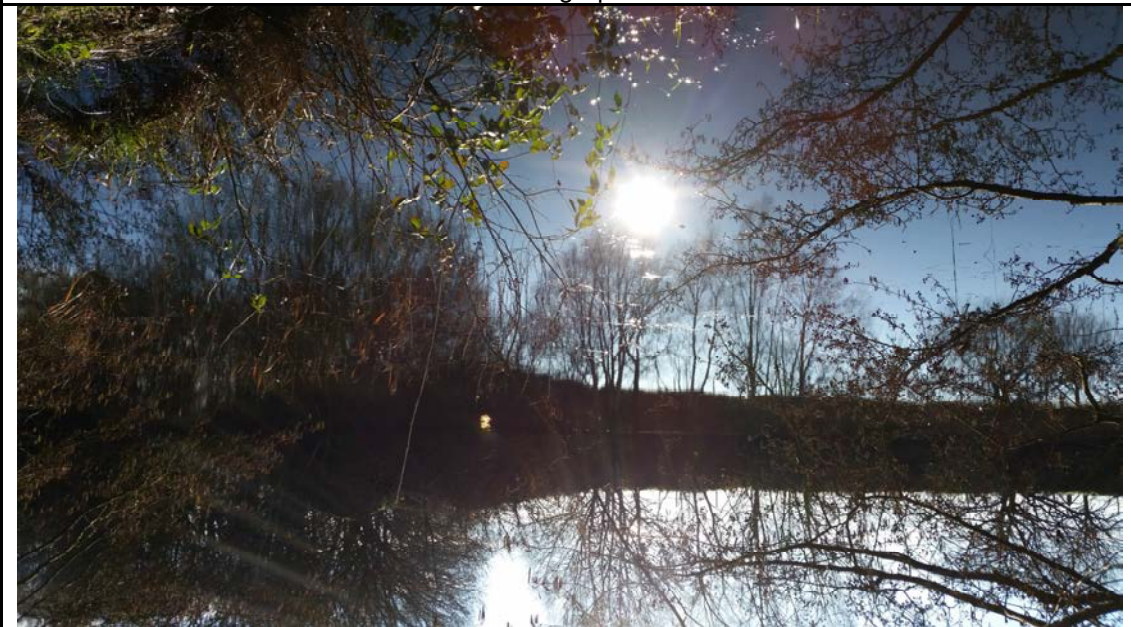
Photograph 1.



Photograph 2.



Photograph 3



Photograph 4



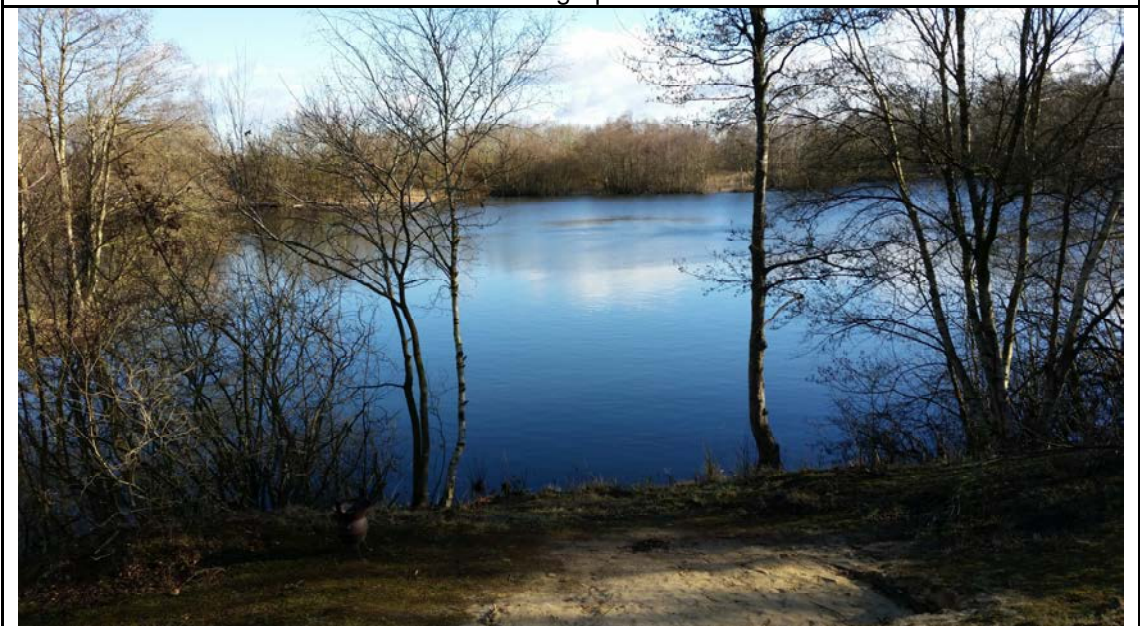
Photograph 5.



Photograph 6.



Photograph 7.



Photograph 8.

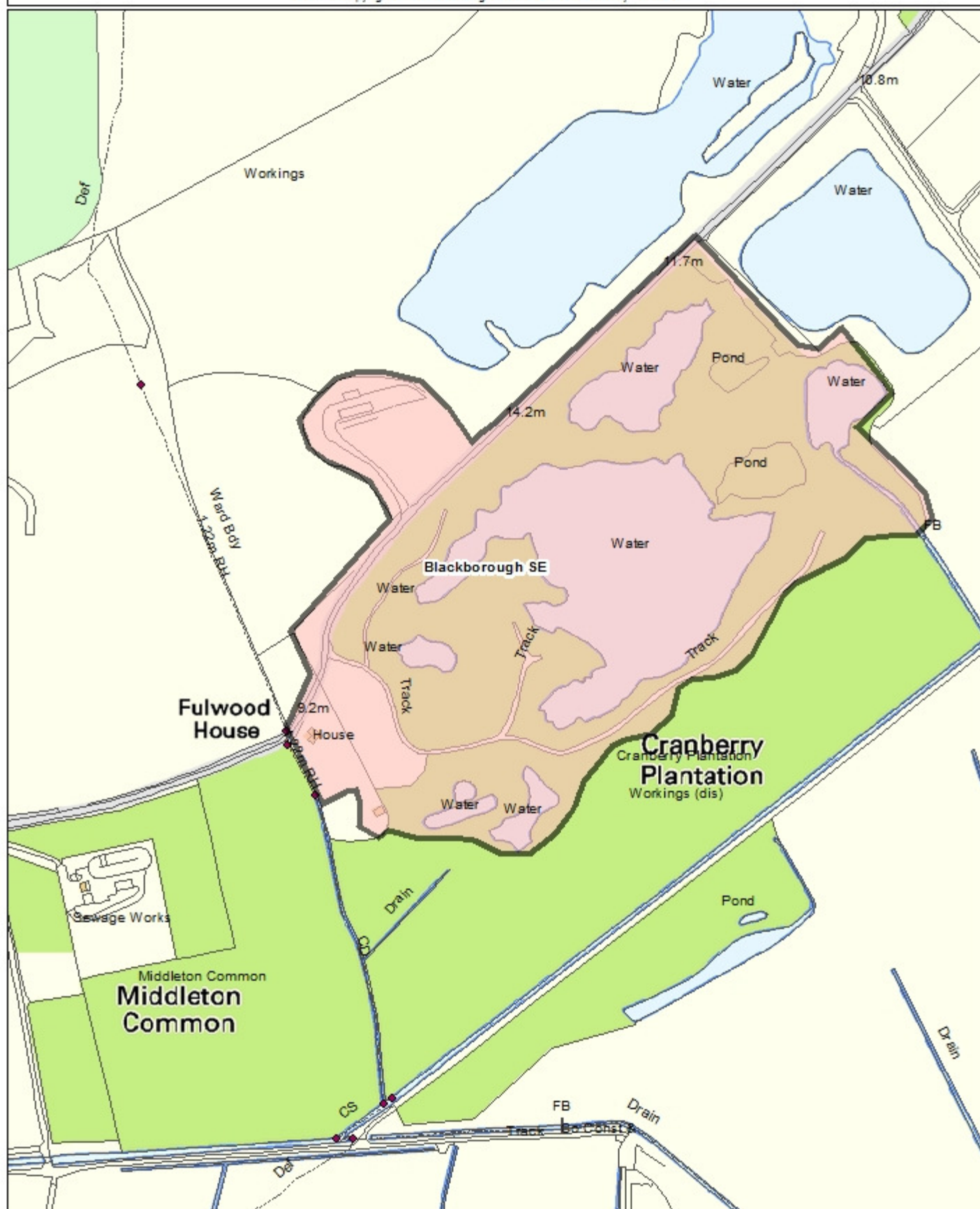



Photograph 9.

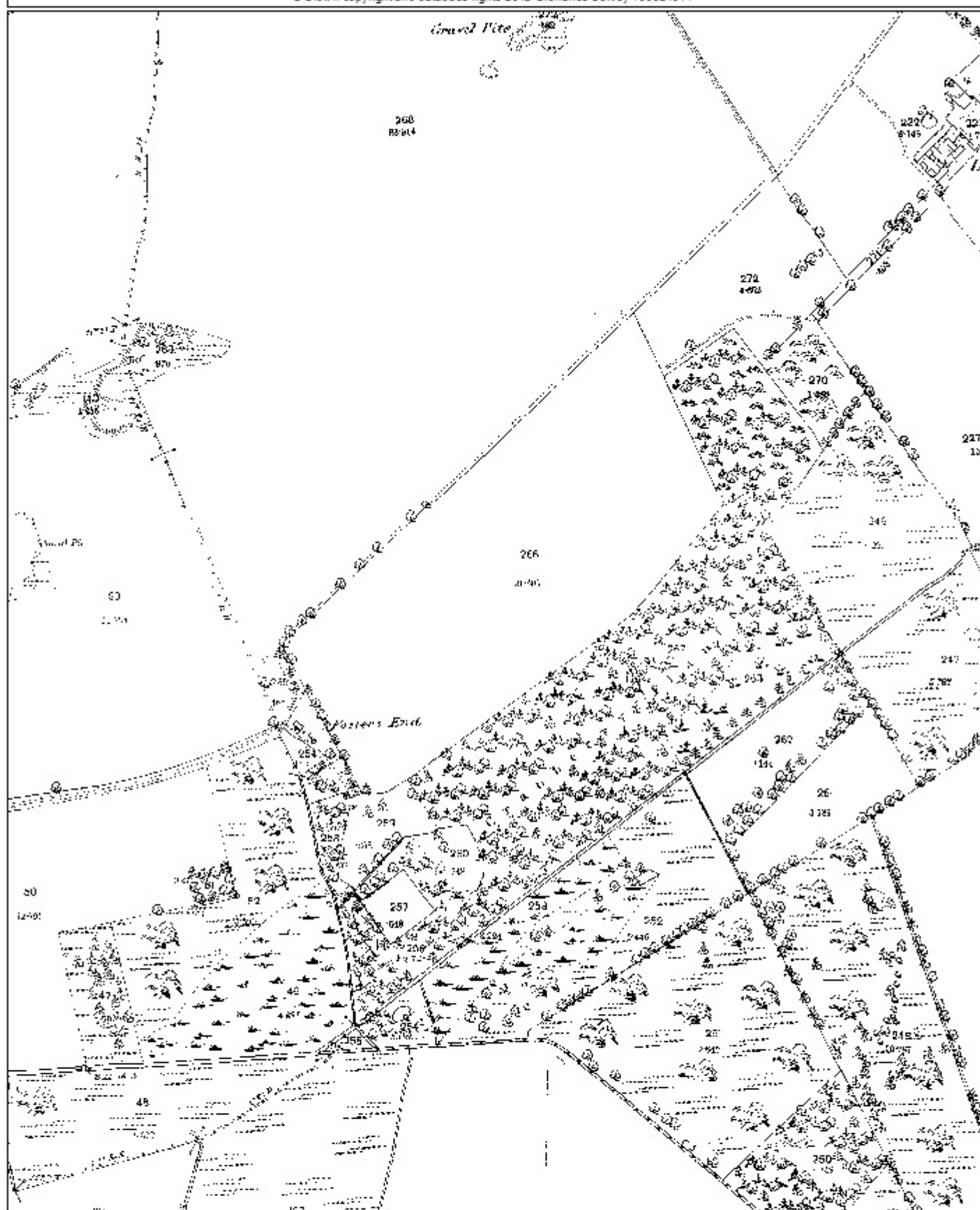


Photograph 10.

Appendix B Drawings



<p>Borough Council of King's Lynn & West Norfolk</p>  <p>Tel. 01553 616200 - Fax 01553 691663</p>	<p>Title</p> <p>Site Plan</p>		<p>Scale</p> <p>1:4,000</p>
	<p>Project / Details</p> <p>Blackborough End, King's Lynn Norfolk</p>		<p>Date</p> <p>March 2017</p>
			<p>Drawn by</p> <p>EH&H</p>
			<p>Drawing / Reference Number</p> <p>S103100038911/101</p>



Borough Council of
**King's Lynn &
West Norfolk**



Tel. 01553 616200 - Fax 01553 691663

Title
Historic Map 1843 - 1893

Project / Details
Blackbrough End, King's Lynn

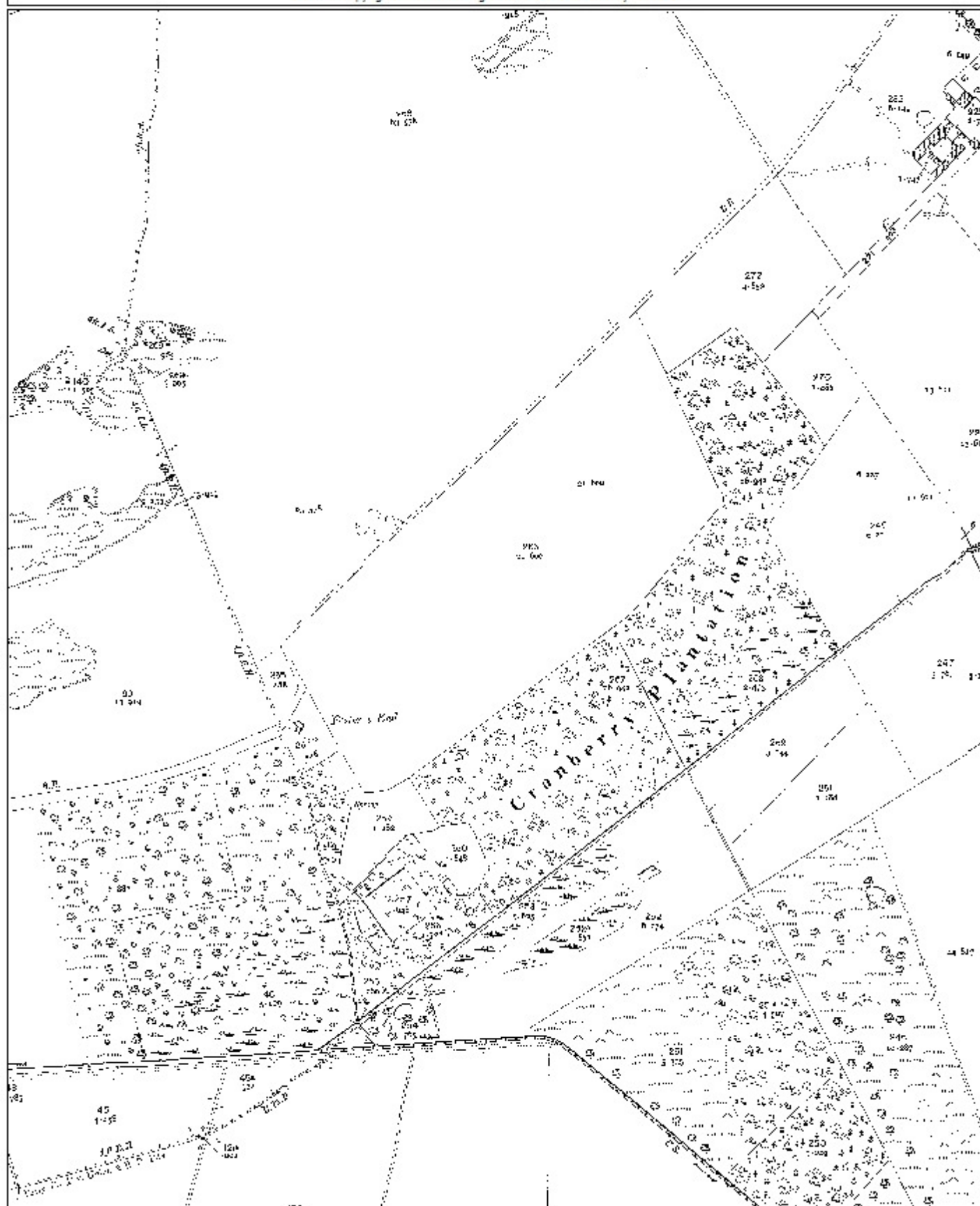


Scale
1:5,000

Date
May 2017

Drawn by
EH&H

Drawing / Reference Number
S103100038911/102



Borough Council of
King's Lynn &
West Norfolk



Tel. 01553 616200 - Fax. 01553 691663

Title
Historic Map 1891 - 1912

Project / Details
Blackbrough End, King's Lynn

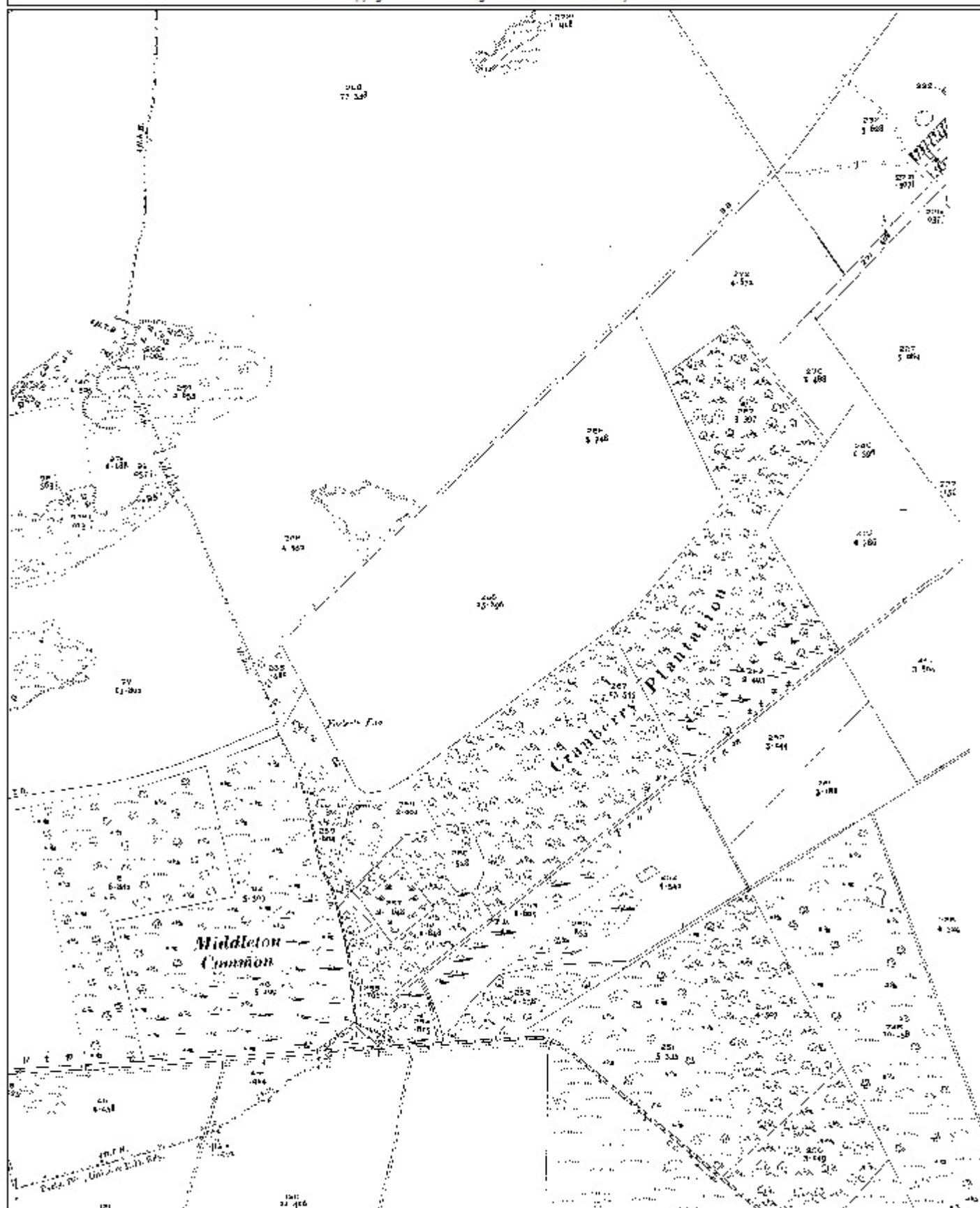


Scale
1:5,000

Date
May 2017

Drawn by
EH&H

Drawing / Reference Number
S103100038911/103



Borough Council of
King's Lynn &
West Norfolk



Tel. 01553 616200 - Fax. 01553 691663

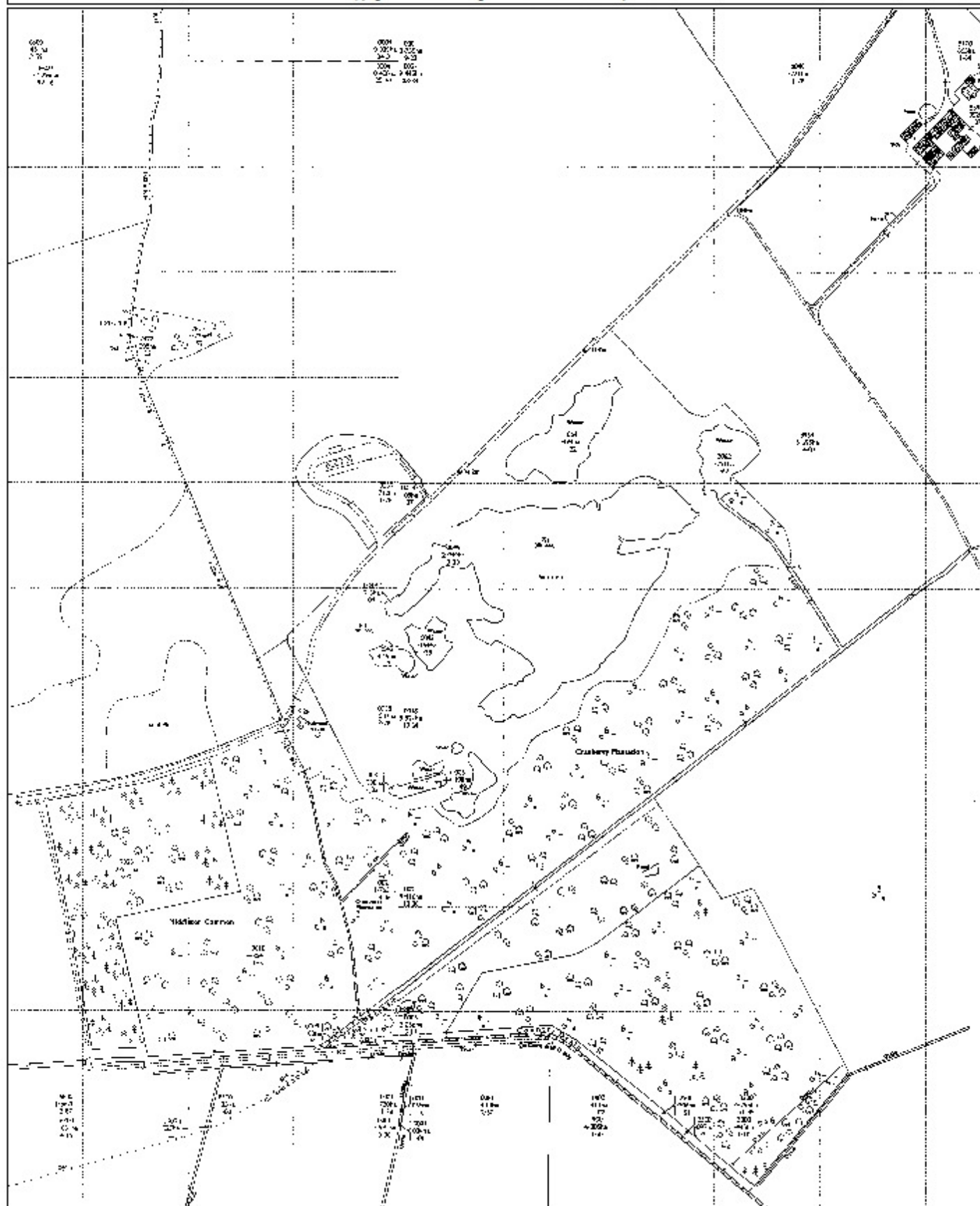
Title
Historic Map 1904 - 1939

Project / Details
Blackbrough End, King's Lynn



Scale
1:5,000
Date
May 2017

Drawn by
EH&H
Drawing / Reference Number
S103100038911/104



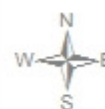
Borough Council of
**King's Lynn &
West Norfolk**



Tel. 01553 616200 - Fax 01553 691663

Title
Historic Map 1945 - 1970

Project / Details
Blackbrough End, King's Lynn



Scale
1:5,000

Date
May 2017

Drawn by
EH&H

Drawing / Reference Number
S103100038911/105

Appendix C. Norfolk County Council Planning Documents

Form G.D.2.A.

County Ref. No.:
FL.1993

District Ref. No.:
TP.3663

NORFOLK COUNTY COUNCIL

Town and Country Planning Acts, 1947 to 1954
Town and Country Planning General Development Order, 1950

To: Messrs. C. and G. Concrete Ltd.,
Uffington Road,
STAMFORD,
Lincs.

PARTICULARS OF PROPOSED DEVELOPMENT:

Parish: Middleton

Location: Poster's End

Name of Applicant: Messrs. C & G. Concrete Ltd. Name of Owner: -

Name of Agent: - Applicant's interest in property Tenant

Proposal: Erection of Concrete Batching plant and Site Offices.

In pursuance of their powers under the above-mentioned Acts and Order, the Norfolk County Council **HEREBY PERMIT** the development as shown on the plan(s) and/or particulars deposited with the Freebridge Lynn Rural District Council on the 28th day of May, 1964.

The permission is granted subject to due compliance with the byelaws (local Acts, Orders, Regulations) and general statutory provisions in force.

Dated this Eighth day of July, 1964

(Signed) W. G. D. REEVES

Freebridge Lynn
Clark to the Rural District Council.

(Address of Council Offices 11 King Street, King's Lynn.).

NCC-S-56-CP

ORFOLK COUNTY COUNCIL

Note:—Applicants should read the attached explanatory leaflet carefully before filling in this form.

REFERENCE
(FOR OFFICIAL
USE ONLY)

COUNTY
FL 1993

DISTRICT
3663

TOWN AND COUNTRY PLANNING ACT, 1962

APPLICATION FOR PERMISSION TO DEVELOP LAND (THREE COPIES OF THIS FORM ARE REQUIRED)

Insert 'OUTLINE' if applicable

To the FREERIDGE LYNN

{ BOROUGH —
URBAN DISTRICT
RURAL DISTRICT } COUNCIL

I/We hereby apply for permission to carry out the development described in this application and on the attached plans.

Date 23RD May 1964

Signed

T. C. Clancy

NAME AND ADDRESS OF APPLICANT
(In Block Letters)

MEHRS C & G CONCRETE LIMITED
UFFINGTON ROAD
STAMFORD Lincs
STAMFORD 2174

Telephone No.

NAME AND ADDRESS OF AGENT (if any)
(In Block Letters)

Telephone No.

SITUATION OF PROPERTY (i.e. address or location of the land to be developed in sufficient detail to enable it to be readily identified)

FOSTER'S END,
MIDDLETON COMMON
KING'S LYNN

PROPOSED DEVELOPMENT (including the purpose for which the land and/or buildings are to be used. If they are to be used for more than one purpose, give details. In case of industrial development, see note 4.)

READY MIXED CONCRETE BATCHING
PLANT & SITE OFFICES

MATERIALS

If buildings are to be erected, altered or extended state the Materials to be used and colour proposed for the external finish of the walls and roof.

Materials	Colours
Walls <u>GLAZED</u>	<u>PAINTED</u>
Roof <u>ALUMINUM METAL</u>	<u>GREY</u>

PRESENT USE

State the purpose for which the land and/or buildings are now used, and if used for more than one purpose, give details.

WASTE - NOT USED

ACCESS

State whether the proposed development involves the construction of a new, or the alteration of an existing, access to or from a highway. If so, state the purpose and width.

ENTRY FIELD GATES ON A MADE
FIELD ROAD - ALL EXISTING

CERTIFICATE UNDER SECTION 18 OF THE TOWN AND COUNTRY PLANNING ACT, 1962

N.B.—The application cannot be entertained unless the appropriate certificate is completed (see Note 6).

CERTIFICATE A

I hereby certify that:

1. I am the estate owner in respect of the fee simple
The applicant is entitled to a tenancy

of every part of the land to which the accompanying application

dated 23RD May 1964 relates;

*2. None of the land to which the application relates constitutes or forms part of an agricultural holding.

*2. I have given the requisite notice to every person who, 21 days before the date of the application was a tenant of any agricultural holding any part of which was comprised in the land to which the application relates, viz.:

Name of Tenant

Address

Date of service of Notice

Signed

T. C. Clancy

on behalf of

C & G CONCRETE LTD

Date

23RD MAY 1964

Delete where inappropriate

If this certificate is inappropriate please complete one of the certificates mounted

Notice of Intention to Erect, Alter or Extend a Building and to execute Works or Install Fittings in connection therewith

I hereby give you Notice, in pursuance of the Council's Building Byelaws, that I intend to carry out building operations in accordance with the following particulars:—

1. Full address of Site *'Foster's End' Middleton Common Kings Lynn*
2. Class or nature of Building *Concrete Butchery Plant & Offices*
3. Foundations : thickness *15"* width *4'6"* *for Butchery Plant - all others as drawings.*
4. Damp Proof Courses : description *9" felt*
5. Site covering : materials, thickness *4" 1/2" concrete over site*
6. (a) Walls : external, thickness *9"* materials *concrete blocks*
(b) " internal partition, thickness *4"* materials *concrete blocks*
7. Roof Members : (materials, clear span, distance apart, dimensions)
Timber span 10ft 4"x2" 10ft with purlins 2x2
8. Roof : type of covering (any lining, etc.) *'Big Six' asbestos cement decking*
9. Floors : (materials, clear space, and dimensions of joists)
ground floor *solid concrete over ground*
first floor _____
10. Height of Buildings : from ground level—to eaves *8* ft. *0* ins.
to ridge *11* ft. *6* ins. *4'6" Butchery Plant*
11. Water Supply : how obtained *main bore hole on site*
12. Drainage : (a) Method of disposal *Septic Tank for food - soakaways for surface*
(b) Soil pipes, material to be used *4" Pitch fibre*
(c) Ventilation pipes *3" cast iron*
13. Rainwater : method of disposal *soakaways*
14. Miscellaneous Works and Fittings
*Wash down pit - slurry from washing out truck must
to be deposited in pit*

(Apart from the drainage works, etc., shown on the plans, particulars should be given here of other items which have to comply with Part IV of the Bye-laws, e.g. fireplaces, grates, etc., to be fitted or replaced; fitted gas fires and water heaters).

Signature *J. C. Clancy*

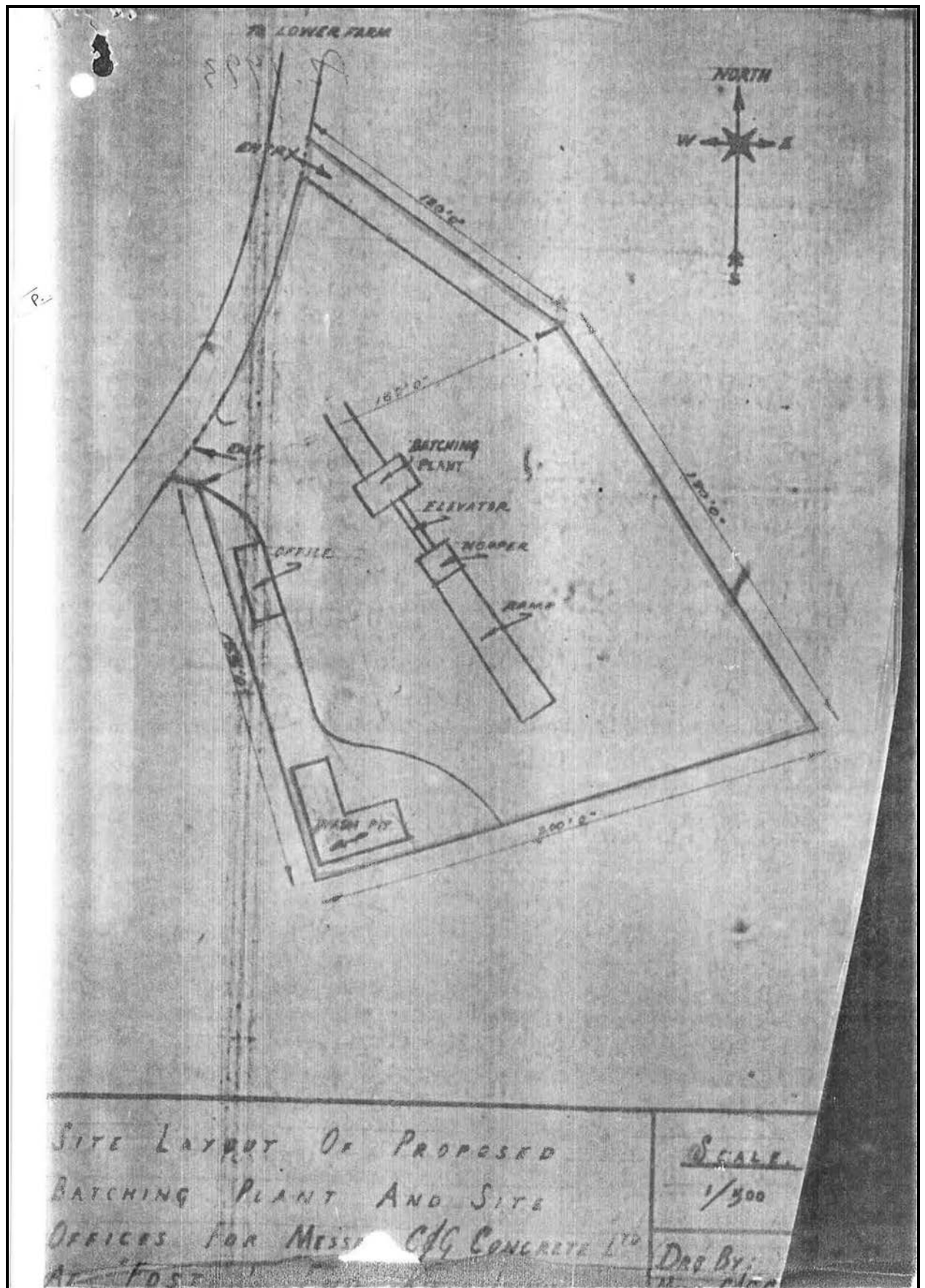
Date *23rd May 1964*

Address *C. & G. Concrete Ltd. 10th Station Rd. Portsmouth Lines*

If not the Owner, state the Name and Address of the person on whose behalf this notice is given.

Name and Address of Builder
(if known)

FOR USE IN COUNCIL OFFICE ONLY



NORFOLK COUNTY COUNCIL

Environment Act 1995

Determination by the Mineral Planning Authority of an Application
under Paragraph 9 of Schedule 13

NOTICE OF CONDITIONS TO WHICH PERMISSION IS TO BE SUBJECT

To: Mr S Westaway
Simon Westaway Associates
46 Connaught Road
Attleborough
Norwich
Norfolk
NR17 2BW

Location: Foster's End Quarry, East Winch, King's Lynn

Applicant: Sid George

Agent: Mr S Westaway

The Norfolk County Council hereby gives notice of its determination of the conditions to which the Planning Permission MW.14 is to be subject. The said conditions are set out on the attached schedule.

The reasons for these conditions are also set out on the attached sheet(s).

Signed: B. Flint Date: 28.4.98

for **DIRECTOR OF PLANNING AND TRANSPORTATION**

Norfolk County Council
County Hall
Martineau Lane
Norwich
NR1 2SG

SEE NOTES ON ATTACHED SHEET

NOTES

- (1) Where the Mineral Planning Authority (a) determine conditions different from those submitted by the applicant; or (b) so determine conditions and give notice that, in their opinion, a restriction on working rights would not prejudice adversely to an unreasonable degree either the economic viability of operating the site or the asset value of the site, the applicant has the right of appeal to the Secretary of State*.
- (2) An appeal must be made to the Secretary of State before the end of the period of six months beginning with the date of the Authority's notice of determination.
- (3) In certain circumstances, a claim may be made against the Mineral Planning Authority for compensation under Section 107 of the Town and Country Planning Act 1990. The circumstances are set out at paragraph 15 of Schedule 13 to the Environment Act 1995.

* Appeals must be made on a form which is obtainable from the Norfolk County Council, County Hall, Martineau Lane, Norwich, NR1 2SG.

Location: Foster's End Quarry, East Winch, King's Lynn

Conditions:

PLANNING PERMISSION MW.14 WHICH IS THE SUBJECT OF THIS DETERMINATION IS DIVIDED INTO 4 AREAS UNDER THE CONTROL OF DIFFERENT OPERATORS. THE AREAS ARE INDICATED AS A,B,C & D ON PLAN 001 DATED 19/11/97 AS FOLLOWS:-

AREA A: APPLICANT: SID GEORGE
AREA B: APPLICANT: ANTI WASTE LTD
AREA C: APPLICANT: A R WILSON & MIDDLETON AGGREGATES
AREA D: APPLICANT: FRIMSTONE LTD

THE FOLLOWING CONDITIONS 1 TO 8 ARE APPLICABLE TO AREAS A,B,C & D:-

1. Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 1995 (or any Order revoking or re-enacting that order), no further buildings, plant or machinery, nor structures of the nature of plant or machinery other than that permitted under planning permission MW.14 as amended by these conditions, shall be erected on the site, except with permission granted on an application under Part III of the Town and Country Planning Act 1990.
2. No minerals other than sand, gravel and carstone shall be removed from site.
3. No materials, including waste, soil, sand or clay shall be brought onto site for the purposes of restoration or fill, other than that permitted by permissions C/88/4762, C/90/2442, C/92/2001 as amended by C/97/2009 and C/93/2002 as amended by C/96/2022.
4. Measures shall be taken, including the provision of wheel cleaning facilities where necessary, to ensure that vehicles leaving the site shall not be in a condition whereby they would deposit mud or other loose material on the public highway.
5. Any oil storage tanks on the site shall be sited on impervious bases and surrounded by oil tight bund walls; the bunded areas shall be capable of containing 110% of the tank volume and shall enclose all fill and draw pipes.
6. Unless otherwise agreed in writing with the County Planning Authority, no dewatering of excavations shall be carried out.
7. Noise emitted from the site shall not exceed 55 dB expressed as a 1 hour L_{Aeq} as measured at any noise sensitive property adjacent to the site.
8. Measures shall be taken to minimise dust nuisance and sand blow caused by the operations, including spraying of road surfaces, plant area and stockpiles as necessary.

THE FOLLOWING CONDITIONS 9 TO 23 ARE APPLICABLE TO AREA A ONLY

9. To the extent that the planning permission which is the subject of this determination relates to Area A, it shall expire on the 30 April 2013 and unless on or before that date permission is granted for its retention:-
 - (a) the use hereby permitted shall be discontinued;
 - (b) the buildings, plant, machinery and stockpiles shall be removed;

Location: Foster's End Quarry, East Winch, King's Lynn

- (c) the said land shall be restored in accordance with condition 21 below.
10. Prior to the commencement of the development the applicant shall submit to and obtain the written approval of the County Planning Authority to:-
- (a) a written scheme of investigation to establish the impact of the development on the ecology of the site;
 - (b) a programme of ecological work arising from the said investigation;
 - (c) a list of working restrictions arising from the said investigation.

Notwithstanding conditions 11,12,13,19,21:-

- (d) no development shall take place which does not comply with the programme of ecological work and list of working restrictions referred to above;
 - (e) in so far as the programme of ecological work and list of working restrictions referred to above hinder or prevent the implementation of any schemes and measures referred to in the said conditions, the applicant shall submit to the County Planning Authority further proposals to be implemented as approved by the County Planning Authority.
11. No operations shall take place until a scheme of working is submitted and agreed in writing with the County Planning Authority. This scheme shall be submitted within six months of the date of this determination or such other period agreed with the County Planning Authority. No operation shall take place except in accordance with the agreed scheme. The scheme shall include details of:-
- (a) phased extraction and timescale;
 - (b) the order and direction of working;
 - (c) the method of working and the types of machinery to be used;
 - (d) the location of the processing area including plan, parking areas, mineral stockpile areas and lagoons;
 - (e) the angle of slope of excavation faces and banks;
 - (f) the system to be adopted for disposal of silt.
12. No excavation shall take place in land within 20 metres from the top of the bank of the Trout Stream
13. No excavations shall be carried out at a depth greater than 2.5 metres B.O.D.
14. Stockpiled material shall not be stacked or deposited to a height exceeding 6 metres.
15. Screens, chutes and hoppers shall not be used until they have been lined with rubber or similar material.
16. No operations hereby permitted shall take place unless signs have been placed at the site accesses on to Fosters End Bridleway to warn users of the public bridleway of the presence of site vehicles and additional signs to warn operators of site vehicles that the users of the public bridleway have right of way over the bridleway. Such signs shall be maintained for the duration of site operations.
17. The accesses onto the bridleway referred to in Condition 16 above shall be maintained in a level and drained condition so as not to interfere with the public use of the bridleway.

Location: Foster's End Quarry, East Winch, King's Lynn

18. No operation authorised or required under permission MW.14 as amended by these conditions shall take place on Sundays or public holidays, or other than during the following periods:-

07.00 - 18.00 Mondays to Fridays
07.00 - 13.00 Saturdays

19. No development shall take place until a scheme of landscaping is submitted and agreed in writing by the County Planning Authority. This scheme shall be submitted within six months of the date of the planning permission or such other period agreed in writing with the County Planning Authority. The scheme shall include details of size, species and spacing of trees, hedges and shrubs, arrangements for their protection and maintenance, and details of the construction and maintenance of the soil bunds. It shall be completed within 1 year of the date of this permission and shall make provision for:-

- (a) the screening of the operations by trees, hedges and soil bunds;
- (b) the protection and maintenance of existing trees and hedges which are to be retained on the site;
- (c) re-seeding and re-planting where failures or damage occur within a period of five years from the date of planting;
- (d) the replacement of any damaged or dead trees with trees of similar size and species at the next appropriate season.

20. All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding season following the completion of each phase of the development, and any trees or plants which within a period of 5 years from the completion of the development die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, unless the County Planning Authority gives written consent to any variation.

21. No operations shall take place until a scheme of restoration suitable for an amenity/wildlife habitat after-use is submitted and agreed in writing with the County Planning Authority. This scheme shall be submitted within six months of the date of this planning permission or such other period agreed in writing by the County Planning Authority. The said scheme shall include:-

- (a) dates for the starting and completion of each phase of restoration;
- (b) a maximum area of disturbed land which at any time is unrestored;
- (c) the contours of the restored land shown by plans and sections;
- (d) the provision to be made for drainage of the site;
- (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
- (f) bank profiles, batters and shoreline contours.

22. Handling, movement and re-spreading of topsoil and subsoil shall not take place except when the soils are in a suitably dry and friable condition and in such a way and with such equipment as to ensure minimum compaction.

23. An aftercare scheme specifying such steps as may be necessary to bring the land to the required standard for use for amenity/wildlife habitat shall be submitted for the approval

Location: Foster's End Quarry, East Winch, King's Lynn

of the County Planning Authority not later than 1 year from the date of this determination. The approved aftercare scheme shall be implemented over a period of five years following the completion of restoration or in the case of phased restoration in stages each of five years duration dating from each completed restoration phase.

Note:

- A1. Conditions 1-23 are in substitution for all the existing conditions to which planning permission MW.14 is subject.
- A2. This area is subject to a legal agreement under Section 106 of the Town and Country Planning Act 1990 relating to traffic routeing.
- A3. Attention is drawn to the requirements of the Environment Agency as contained in their letter dated 21 March 1997, a copy of which is attached to this notice.

THE FOLLOWING CONDITIONS 24 TO 30 ARE APPLICABLE TO AREA B ONLY

- 24. To the extent that the planning permission which is the subject of this determination relates to Area B, it shall expire on the 7 July 2010 and unless on or before that date permission is granted for its retention:-
 - (a) the use hereby permitted shall be discontinued;
 - (b) the buildings, plant, machinery and stockpiles shall be removed;
 - (c) the said land shall be restored in accordance with condition 30 below.
- 25. A scheme of working shall be submitted to the County Planning Authority within 6 months of the date of this determination, to be agreed in writing with the County Planning Authority. No operation shall take place except in accordance with the agreed scheme. The scheme shall include details of:-
 - (a) phased extraction and timescale;
 - (b) the order and direction of working;
 - (c) the method of working and the types of machinery to be used;
 - (d) the location of the processing area including plan, parking areas, mineral stockpile areas and lagoons;
 - (e) the angle of slope of excavation faces and banks;
 - (f) phased filling and time scale;
 - (g) the order and direction of filling.
- 26. No excavations shall be carried out at a depths greater than those shown in the area referred to as the "red land" on attached Drawing Figure 2 dated October 1997.
- 27. Unless otherwise agreed in writing with the County Planning Authority, there shall be no vehicular access to Area B except via the existing access from Mill Drove only.
- 28. No operation authorised or required under this permission shall take place on Sundays or public holidays, or other than during the following periods:-

Location: Foster's End Quarry, East Winch, King's Lynn

07.00 - 17.00 Mondays to Fridays

07.00 - 13.00 Saturdays

29. A scheme of restoration interim to that set out in Condition 30 below shall be submitted to the County Planning Authority within 1 year of the date of this determination, to be agreed in writing by the County Planning Authority. The said scheme shall include:-
- (a) dates for the starting and completion of each phase of restoration;
 - (b) a maximum area of disturbed land which at any time is unrestored;
 - (c) the contours of the restored land shown by plans and sections;
 - (d) the provision to be made for drainage of the site;
 - (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
 - (f) measures to deal with leachate and landfill gas emissions.
30. Restoration and aftercare of Area B shall be in accordance with Conditions 7-11 given in Planning Permission Ref. C/2/90/2442 dated 7 July 1995

Note:

- B1. Conditions 1-8 and 24-30 are in substitution for all existing conditions to which planning permission MW.32 is subject.
- B2. This area is subject to a legal agreement under Section 106 of the Town and Country Planning Act 1990 relating to traffic routeing

THE FOLLOWING CONDITIONS 31 TO 43 ARE APPLICABLE TO AREA C ONLY

31. To the extent that the planning permission which is the subject of this determination relates to Area C, it shall expire on the 30 April 2013 and unless on or before that date permission is granted for its retention:-
- (a) the use hereby permitted shall be discontinued;
 - (b) the buildings, plant, machinery and stockpiles shall be removed;
 - (c) the said land shall be restored in accordance with condition 42 below.
32. No operation authorised or required under permission MW.14 as amended by these conditions shall take place on Sundays or public holidays, or other than during the following periods:-
- 07.00 - 18.00 Mondays to Fridays
07.00 - 13.00 Saturdays
33. There shall be no vehicular access to Area C except from East Winch Road only.

Location: Foster's End Quarry, East Winch, King's Lynn

34. A scheme of working shall be submitted to the County Planning Authority within 6 months of the date of this determination, to be agreed in writing with the County Planning Authority. Thereafter no operation shall take place except in accordance with the agreed scheme. The scheme shall include details of:-
 - (a) phased extraction and timescale;
 - (b) the order and direction of working;
 - (c) the method of working and the types of machinery to be used;
 - (d) the angle of slope of excavation faces and banks;
 - (e) the angle of slope of final batters;
 - (f) the depth of working;
35. A scheme indicating the measures to be taken to seal the breach in the clay layer below phase 1 as shown on Plan No.001 dated 19/11/97 shall be submitted to the County Planning Authority within 1 year of the date of this determination, to be agreed in writing with the County Planning Authority. The said scheme shall include:-
 - (a) details of the proposed engineering method;
 - (b) materials to be used to form the seal;
 - (c) details of plant to be used;
 - (d) date of implementation.
36. Unless otherwise agreed in writing with the County Planning Authority, no working shall take place in Phase 2 until extraction has been completed in Phase 1 as shown on Plan No 001 dated 19/11/97.
37. No excavation other than soil stripping shall take place in phase 2 as shown on Plan No 001 dated 19/11/97 until a screening bund is constructed adjacent to the southern boundary of the bridleway crossing Area C. The bund shall be constructed using soils stripped from phase 2; have a northern slope not steeper than 1 in 3; be 2.5 metres high and be grass seeded with low maintenance mix and cut twice yearly during the growing season.
38. No operations hereby permitted shall take place in phase 2 as shown on Plan No.001 dated 19/11/97 unless signs have been placed at the point where the haul route crosses the bridleway to warn users of the public bridleway of the presence of construction traffic and additional signs to warn operators of site vehicles that users of the public bridleway have right of way over the bridleway crossing. Such signs shall be maintained for the duration of site operations.
39. The crossing point between phase 1 and 2 referred to in Condition 38 above shall be maintained in such a level and drained condition so as not to interfere with the public use of the bridleway.
40. No excavation shall take place within 5 metres of the public bridleway between phases 1 and 2 as shown on Plan No 001 dated 19/11/98.
41. All landscaping within Phase 1 as shown on Plan No. 001 dated 19/11/97 shall be in accordance with the tree planting details including species mix, spacing, protection and tree planting areas specified on Drawing No 12/92/945.1 and referred to in Condition 9 of planning permission ref C/93/2002 (subject to amended timescales). Landscaping within phase 2 shall be to a specification to be agreed in writing by the County Planning

Location: Foster's End Quarry, East Winch, King's Lynn

Authority.

42. A scheme of restoration shall be submitted to the County Planning Authority within six months of the date of this determination, to be agreed in writing with the County Planning Authority. The said scheme shall include:-
- (a) dates for the starting and completion of each phase of restoration;
 - (b) a maximum area of disturbed land which at any time is unrestored;
 - (c) the contours of the restored land shown by plans and sections;
 - (d) the provision to be made for drainage of the site;
 - (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
 - (f) bank profiles, batters and shoreline contours.
43. An aftercare scheme specifying such steps as may be necessary to bring the land to the required standard for use for agriculture/wildlife habitat shall be submitted for the approval of the County Planning Authority not later than 1 year from the date of this determination. The approved aftercare scheme shall be implemented over a period of five years following the completion of restoration or in the case of phased restoration in stages each of five years duration dating from each completed restoration phase.

Note:

- C1. Conditions 1-8 and 31-43 are in substitution for all existing conditions to which MW.14 is subject.
- C2. This area is subject to a legal agreement under Section 106 of the Town and Country Planning Act 1990 relating to traffic routeing.

THE FOLLOWING CONDITIONS 44 TO 57 ARE APPLICABLE TO AREA D ONLY

44. To the extent that the planning permission which is the subject of this determination relates to Area D, it shall expire on the 31 December 2005 and unless on or before that date permission is granted for its retention:-
- (a) the use hereby permitted shall be discontinued;
 - (b) the buildings, plant, machinery and stockpiles shall be removed;
 - (c) the said land shall be restored in accordance with condition 57 below.
45. No operations shall take place until a scheme of working is submitted and agreed in writing with the County Planning Authority. This scheme shall be submitted within 1 year of the date of this determination or such other period agreed with the County Planning Authority. No operation shall take place except in accordance with the agreed scheme. The scheme shall include details of:-
- (a) phased extraction and timescale;

Location: Foster's End Quarry, East Winch, King's Lynn

- (b) the order and direction of working;
 - (c) the method of working and the types of machinery to be used;
 - (d) the location of the processing area including plan, parking areas, mineral stockpile areas and lagoons;
 - (e) the method and route of transport of minerals from the site;
 - (f) the angle of slope of excavation faces and banks;
 - (g) the depth of working.
46. Prior to the commencement of the development the applicant shall submit to and obtain the written approval of County Planning Authority to:-
- (a) a written scheme of investigation to establish the impact of the development on the archaeology of the the site;
 - (b) a programme of archaeological work arising from the said investigation;
 - (c) a list of working restrictions arising from the said investigation.

Notwithstanding conditions 45 and 52:-

- (d) no development shall take place which does not comply with the programme of archaeological work and list of working restrictions referred to above;
 - (e) in so far as the programme of archaeological work and list of working restrictions referred to above hinder or prevent the implementation of any schemes and measures referred to in the said conditions, the applicant shall submit to the County Planning Authority further proposals to be implemented as approved by the County Planning Authority.
47. No operation authorised or required under permission MW.14 as amended by these conditions shall take place on Sundays or public holidays, or other than during the following periods:-
- 07.00 - 18.00 Mondays to Fridays
07.00 - 13.00 Saturdays
48. No discharge shall be made into any watercourse without the prior consent in writing of the County Planning Authority.
49. No external lighting shall be installed on the site unless it is maintained such that it will not cause glare beyond the site boundaries.
50. No operation hereby permitted shall take place unless signs have been placed at the site access on to Fosters End Bridleway to warn users of the public bridleway of the presence of site vehicles and additional signs to warn operators of site vehicles that the users of the public bridleway have right of way over the bridleway. Such signs shall be maintained for the duration of site operations.
51. The access on to the bridleway referred to in Condition 50 above shall be maintained in such a level and drained condition so as not to interfere with the public use of the bridleway.
52. No operations shall take place until a scheme of restoration is submitted and agreed in writing with the County Planning Authority. This scheme shall be submitted within 1 year of the date of this determination or such other period agreed in writing by the County Planning Authority. The said scheme shall include:-

Location: Foster's End Quarry, East Winch, King's Lynn

- (a) dates for the starting and completion of each phase of restoration;
 - (b) a maximum area of disturbed land which at any time is unrestored;
 - (c) the contours of the restored land shown by plans and sections;
 - (d) the provision to be made for drainage of the site;
 - (e) areas to be seeded or planted with trees, including provision for re-seeding and re-planting during the following planting season where such action is necessary as a result of any failure which occurs within a period of five years from the date of initial planting;
 - (f) bank profiles, batters and shoreline contours.
53. Handling, movement and re-spreading of topsoil and subsoil shall not take place except when the soils are in a suitably dry and friable condition and in such a way and with such equipment as to ensure minimum compaction.
54. No topsoil or subsoil shall be taken off the site.
55. Measures including ripping and/or subsoiling shall be carried out after soil replacement so that the compacted layers and pans are broken up to assist free drainage.
56. All stones and deleterious materials in excess of 15cm which arise from the ripping of the subsoil and topsoil shall be removed from the site.
57. An aftercare scheme specifying such steps as may be necessary to bring the land to the required standard for use for agriculture shall be submitted for the approval of the County Planning Authority not later than 1 year from the date of this determination. The approved aftercare scheme shall be implemented over a period of five years following the completion of restoration or in the case of phased restoration in stages each of five years duration dating from each completed restoration phase.

Note:

- D1. Conditions 1-8 and 44-57 are in substitution for all the existing conditions to which planning permission MW.14 is subject.
- D2. This area is subject to a legal agreement under Section 106 of the Town and Country Planning Act 1990 relating to traffic routeing.

Location: Foster's End Quarry, East Winch, King's Lynn

The reasons for the Council's determination are:

1,3,7-9, To ensure orderly working in the interest of the amenities of the
11,14-15, surrounding area.
18-20,
24-25,28,31-32,
36-37,40-41,44-45,47,49.

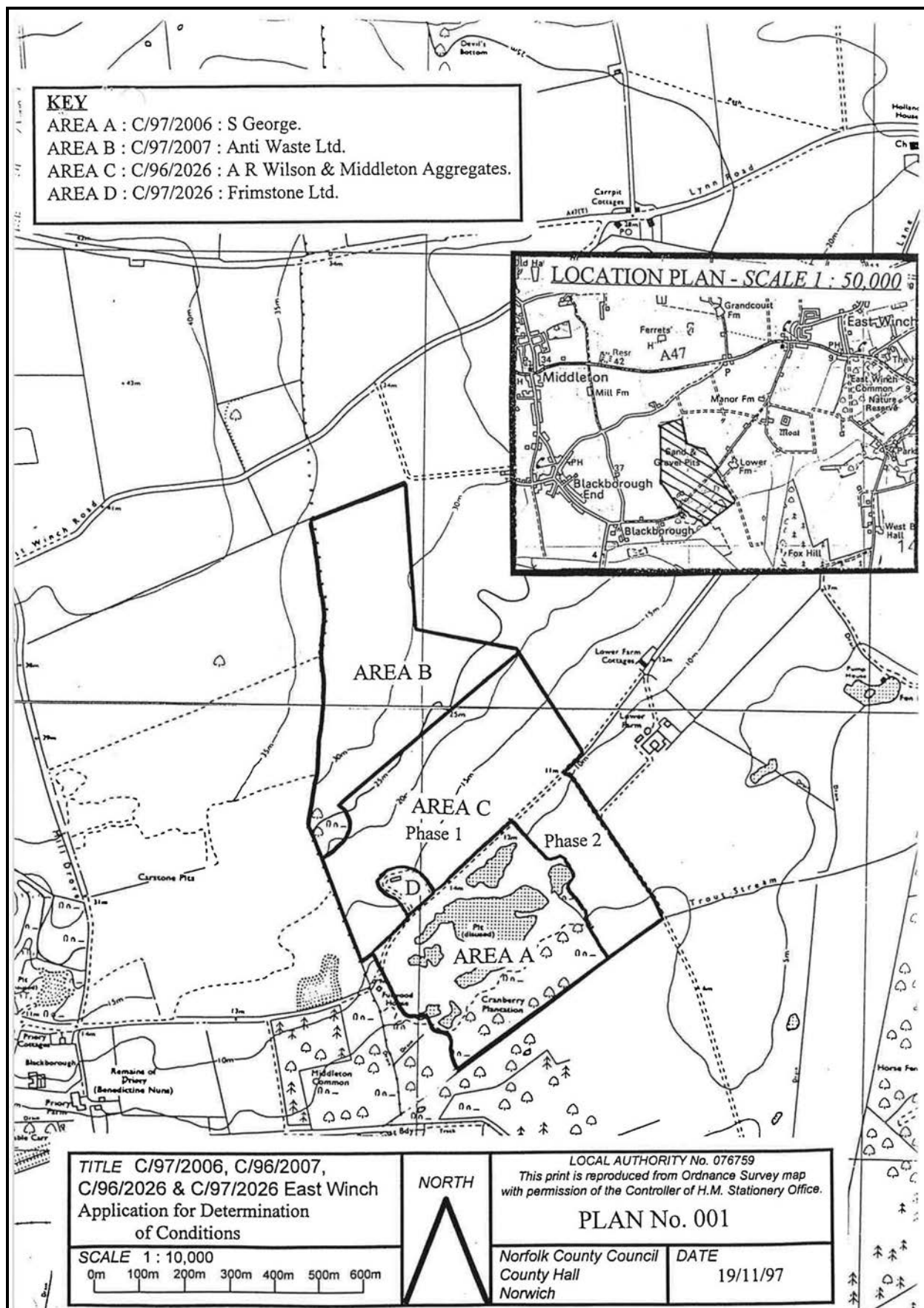
4,16-17, To facilitate the safe access of vehicles on and off the site.
27,33,38-39,50,51.

5-6,12, To safeguard hydrological interests.
35,48.

10. To safeguard nature conservation interests.

2,13, To ensure the proper and expeditious restoration of the site.
21-23,26,29-30,
43,52-57.

46. To ensure adequate time is available to investigate any features of archaeological
interest.



Appendix D. Risk Assessment Methodology

The Model Procedures for the Management of Land Contamination (CLR11⁵) provide the technical framework for applying a risk management process when dealing with contaminated land.

The Borough Council's Contaminated Land Strategy has identified priority sites based on mapping and documentary information. The Contaminated Land Inspection Report collates all the existing information on the site and develops a conceptual site model to identify and assess potential pollutant linkages and to estimate risk.

The risk assessment process focuses on whether there is an unacceptable risk, which will depend on the circumstances of the site and the context of the decision. The Council has used a process adapted from CIRIA C552, Contaminated Land Risk Assessment, a guide to good practice⁶ to produce the conceptual site model and estimate the risk of harm to defined receptors. This involves the consideration of the probability, nature and extent of exposure and the severity and extent of the effects of the contamination hazard should exposure occur.

The probability of an event can be classified as follows:

- Highly likely: The event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution;
- Likely: It is probable that an event will occur, or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;
- Low likelihood: Circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term;
- Unlikely: Circumstances are such that it is improbable the event would occur even in the long term.

The severity of the hazard can be classified as follows:

- High: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Contaminated Land Statutory Guidance, April 2012');
- Medium: Chronic damage to human health ('significant harm' as defined in 'Contaminated Land Statutory Guidance, April 2012'), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Contaminated Land Statutory Guidance, April 2012');
- Low: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined

⁵ <https://www.gov.uk/guidance/land-contamination-risk-management>

⁶ <https://www.brebookshop.com/samples/142102.pdf>

in 'Contaminated Land Statutory Guidance, April 2012'). Damage to sensitive buildings, structures or the environment.

Once the probability of an event occurring and hazard severity has been classified, a risk category can be assigned from the table below:

		Hazard		
		High	Medium	Low
Probability	High Probability	Very High Risk	High Risk	Moderate Risk
	Likely	High Risk	Moderate Risk	Moderate/Low Risk
	Low Probability	Moderate risk	Moderate/Low Risk	Low Risk
	Unlikely	Moderate/Low Risk	Low Risk	Very Low Risk
Very High Risk		<p>There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening</p> <p>This risk, if realised, is likely to result in a substantial liability.</p> <p>Urgent investigation (if not undertaken already) and remediation are likely to be required.</p>		
High Risk		<p>Harm is likely to arise to a designated receptor from an identified hazard.</p> <p>Realisation of the risk is likely to present a substantial liability.</p> <p>Urgent investigation (if not undertaken already) if required to clarify the risk and to determine the potential liability. Some remedial work may be required in the longer term.</p>		
Moderate risk		<p>It's possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that harm would be relatively mild.</p>		
Moderate/Low risk		<p>It is possible that harm could arise to a designated receptor from an identified hazard. However, if any harm were to occur it is more likely that harm would be relatively mild.</p>		
Low Risk		<p>It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.</p>		
Very Low Risk		<p>There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is unlikely to be severe.</p>		

Appendix E. Determination of contaminated land – Contaminated Land Statutory Guidance, April 2012

Human Health

Category	
1	<p>The local authority should assume that a significant possibility of significant harm exists in any case where it considers there is an unacceptably high probability, supported by robust science-based evidence that significant harm would occur if no action is taken to stop it. For the purposes of this Guidance, these are referred to as “Category 1: Human Health” cases.</p> <p>Land should be deemed to be a Category 1: Human Health case where:</p> <ul style="list-style-type: none"> (a) The authority is aware that similar land or situations are known, or are strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere; or (b) The authority is aware that similar degrees of exposure (via any medium) to the contaminant(s) in question are known, or strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere; (c) The authority considers that significant harm may already have been caused by contaminants in, on or under the land, and that there is an unacceptable risk that it might continue or occur again if no action is taken. Among other things, the authority may decide to determine the land on these grounds if it considers that it is likely that significant harm is being caused, but it considers either: (i) that there is insufficient evidence to be sure of meeting the “balance of probability” test for demonstrating that significant harm is being caused; or (ii) that the time needed to demonstrate such a level of probability would cause unreasonable delay, cost, or disruption and stress to affected people particularly in cases involving residential properties.
2	<p>Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm, with all that this might involve and having regard to Section 1. Category 2 may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.</p>
3	<p>Land should be placed into Category 3 if the authority concludes that the strong case described in 4.25(a) does not exist, and therefore the legal test for significant possibility of significant harm is not met. Category 3 may include land where the risks are not low, but nonetheless the authority considers that regulatory intervention under Part 2A is not warranted. This recognises that placing land in Category 3 would not stop others, such as the owner or occupier of the land, from taking action to reduce risks outside of the Part 2A regime if they choose. The authority should consider making available the results of its inspection and risk assessment to the owners/occupiers of Category 3 land.</p>

Category

4	<p>The local authority should consider that the following types of land should be placed into Category 4: Human Health:</p> <ul style="list-style-type: none">(a) Land where no relevant contaminant linkage has been established.(b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of this Guidance.(c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with Section 3 of this Guidance, or relevant technical tools or advice that may be developed in accordance with paragraph 3.30 of this Guidance.(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).
---	---

Ecological system effects

Relevant types of receptor	Significant harm	Significant possibility of significant harm
<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • A site of special scientific interest (under section 28 of the Wildlife and Countryside Act 1981) • A national nature reserve (under s.35 of the 1981 Act) • A marine nature reserve (under s.36 of the 1981 Act) • An area of special protection for birds (under s.3 of the 1981 Act) • A "European site" within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010 • Any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or • Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949. 	<p>The following types of harm should be considered to be significant harm:</p> <ul style="list-style-type: none"> • Harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or • Harm which significantly affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location. <p>In the case of European sites, harm should also be considered to be significant harm if it endangers the favourable conservation status of natural habitats at such locations or species typically found there. In deciding what constitutes such harm, the local authority should have regard to the advice of Natural England and to the requirements of the Conservation of Habitats and Species Regulations 2010.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological receptor where the local authority considers that:</p> <ul style="list-style-type: none"> • Significant harm of that description is more likely than not to result from the contaminant linkage in question; or • There is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration. <p>Any assessment made for these purposes should take into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>

Property effects

Relevant types of receptor	Significant harm	Significant possibility of significant harm
<p>Property in the form of:</p> <ul style="list-style-type: none"> • Crops, including timber; • Produce grown domestically, or on allotments, for consumption; • Livestock; • Other owned or domesticated animals; • Wild animals which are the subject of shooting or fishing rights. 	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this section, this description of significant harm is referred to as an “animal or crop effect”.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
<p>Property in the form of buildings. For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation. The local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage should also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>In this Section, this description of significant harm is referred to as a “building effect”.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.</p>

Controlled waters

Significant pollution of controlled waters

The following types of pollution should be considered to constitute significant pollution of controlled waters:

- (a) Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations.
- (b) Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use.
- (c) A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.
- (d) Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC)5).

Significant possibility of significant pollution of controlled waters

Category

1	This covers land where the authority considers that there is a strong and compelling case for considering that a significant possibility of significant pollution of controlled waters exists. In particular this would include cases where there is robust science-based evidence for considering that it is likely that high impact pollution (such as the pollution described in paragraph 4.38) would occur if nothing were done to stop it.
2	This covers land where: (i) the authority considers that the strength of evidence to put the land into Category 1 does not exist; but (ii) nonetheless, on the basis of the available scientific evidence and expert opinion, the authority considers that the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis, with all that this might involve (e.g. likely remediation requirements, and the benefits, costs and other impacts of regulatory intervention). Among other things, this category might include land where there is a relatively low likelihood that the most serious types of significant pollution might occur
3	This covers land where the authority concludes that the risks are such that (whilst the authority and others might prefer they did not exist) the tests set out in Categories 1 and 2 above are not met, and therefore regulatory intervention under Part 2A is not warranted. This category should include land where the authority considers that it is very unlikely that serious pollution would occur; or where there is a low likelihood that less serious types of significant pollution might occur.
4	This covers land where the authority concludes that there is no risk, or that the level of risk posed is low. In particular, the authority should consider that this is the case where: <ul style="list-style-type: none"> (a) No contaminant linkage has been established in which controlled waters are the receptor in the linkage; or (b) The possibility only relates to types of pollution described in paragraph 4.40 above (i.e. types of pollution that should not be considered to be significant pollution); or (c) The possibility of water pollution similar to that which might be caused by “background” contamination as explained in Section 3.