Application for Hazardous Substances Consent

Hatton Compressor Station

National Gas Transmission plc

February 2023

national gas transmission

Project Environmental Solutions

Application for Hazardous Substances Consent

Application details	
Application	Application for Hazardous Substances Consent
Date	03 February 2023

Applicant details	
Applicant contact	Gareth Hocking
Applicant	National Gas Transmission plc
Applicant address	Hatton Compressor Station, Horncastle Road, Hatton, Market Rasen
Applicant postcode	LN8 5QE
Telephone number	+44 (0) 1926 653 000

Application site details	
Site	Hatton Compressor Station
Site address	Hatton Compressor Station, Horncastle Road, Hatton, Market Rasen
Site postcode	LN8 5QE
OS gird reference	517513, 376272 (easting, northing)

Contents

1 Part I: Application form

Application to the relevant hazardous substances authority (planning authority)

The Planning (Hazardous Substances) Act 1990 - Section 7(1)

England - The Planning (Hazardous Substances) Regulations 2015 (Regulation 5)

Wales - The Planning (Hazardous Substances) (Wales) Regulations 2015 (Regulation 5)

Application for Hazardous Substances Consent

1

Applicant	National Gas Transmission plc
Address	1-3 The Strand
	London
Post code	WC2N 5EH
Telephone number	

Person in control of the land to which the application relates, if different to above	Gareth Hocking Head of Operations, East National Gas Transmission plc
Address	National Gas Transmission plc
	Hatton Compressor Station, Horncastle Road, Hatton, Market Rasen
Post code	LN8 5QE
Telephone number	+44 (0) 1926 653 000

2

Address or other location details of application site	Hatton Compressor Station
	Horncastle Road
	Hatton Market Rasen
Post code	LN8 5QE
OS grid ref	517513, 376272 (easting, northing)

3 **Hazardous substance(s) covered by the application**

(a) List named substances falling within Part 2 of Schedule 1 to the Regulations first, then list any substances falling within the categories in Part 1 of that Schedule; finally list substances falling within the description in Part 3.

(b) Substances falling within Parts 1 or 3 of Schedule 1 to the Regulations may be listed under the relevant category or description or named specifically. Where a substance falls within Part 1 and 2 list under Part 2 only; where a substance falls within more than one category in Part 1 list under the category which has the lowest controlled quantity. Where a substance falling within Part 1 or 2 also falls within Part 3 list under the Part which has the lowest controlled quantity. The “controlled quantity” means the quantity specified for that substance in column 2 of Parts 1, 2 or 3 of Schedule 1 to the Regulations.

Note: The addition rule as set out in the schedule to the regulations should be applied to determine whether consent is required for substances below the Controlled Quantity. Examples are given in the associated planning guidance. The Planning (Hazardous Substances) (Amendment) Regulations 2017 are relevant to the use of the addition rule in England only. The Planning (Hazardous Substances) (Amendment) Regulations 2015 are relevant to Q* (addition rule) for LPG, and relevant to notes about ammonium nitrate.

Table A

Name, or relevant category or description of substance	*Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3*	*Do you have a current PHS consent* in respect of this substance? (Yes/No)*	*If "yes", state quantity for which consent granted*	*Maximum quantity proposed to be present in tonnes*
Flammable gases (natural gas)	P2	Yes	34	128 tonnes (assuming 75bar station maximum operating pressure (MOP), 0.805 compressibility and 15 degC temp).

*a hazardous substances consent

Where in Table A consent is sought for any substance below the relevant Control Quantity, give the reason in the box below including the calculation for each relevant type of hazard (health, physical and/or environmental) with the q/Q fractions that add to greater than or equal to 1.

N/A

4 Manner in which substance(s) are to be kept and used

For each substance, category or description of substance, covered by the application, provide the following information, referring to the substance location plan where appropriate.

"Vessel" means any container designed or adapted to contain hazardous substances which is affixed to the land, and includes a container which forms part of plant or machinery which is affixed to the land but does not include a pipeline.

	Substance present	Kept / used	Location
Compressor C, D and E	Natural gas	In transit	See Figure 2 – v1, v2, v3
Scrubbers x 4 (D-101A, D-101B, D-101C, D-101D)	Natural gas	In transit	See Figure 2 – v4, v5, v6, v7
Condensate tank	Natural gas	Blanket gas	See Figure 2 – v8
Pipeline Inspection Gauge (PIG) Traps x 8 (A-H)	Natural gas	In transit	See Figure 2, v9 – v16

"Buried" or "Mounded" vessel includes a vessel which is only partially buried or partially mounded.

"moveable container" means any container designed or adapted to contain hazardous substances other than a vessel.

(a) Tick one box below to show whether the substance(s) will be present for storage only or will be stored and involved in a manufacturing, treatment or other industrial process:

Table B

Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3	*Storage only*	*Stored and involved in an industrial process*
P2 Flammable gases (natural gas)	None	✓

(b) For each vessel to be used for **storing** the substance(s) give the following information:

Table C (i)

Vessel No See Figure 2*	*Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3*	*Installed above ground† (Yes/No)*	*Buried (Yes/No)*	*Mounded (Yes/No)*	*Maximum capacity (cubic metres)*	*Highest vessel design temperature °C*	*Highest vessel design pressure (bar absolute)*
Compressor C	P2 Flammable gases (natural gas)	Yes	No	No	<3	140	75
Compressor D	P2 Flammable gases (natural gas)	Yes	No	No	<3	140	75
Compressor E	P2 Flammable gases (natural gas)	Yes	No	No	2.5	140	75
Scrubber 1	P2 Flammable gases (natural gas)	Yes	No	No	17	140	75
Scrubber 2	P2 Flammable gases (natural gas)	Yes	No	No	17	140	75
Scrubber 3	P2 Flammable gases (natural gas)	Yes	No	No	17	140	75
Scrubber 4	P2 Flammable gases (natural gas)	Yes	No	No	17	140	75
Condensate tank	P2 Flammable gases (natural gas)	Yes	No	No	32.90	140	3.5
Pig trap 1	P2 Flammable gases (natural gas)	Yes	No	No	733**	140	75
Pig trap 2	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 3	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 4	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 5	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 6	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 7	P2 Flammable gases (natural gas)	Yes	No	No		140	75
Pig trap 8	P2 Flammable gases (natural gas)	Yes	No	No		140	75

* identify by reference to substance location plan

** Total volume = pig trap and associated AGI pipework

*** Maximum rated temperature for station pipework. NB - elevated pipe and vessel temps are localised to areas around the compressors and immediate downstream discharge pipework.

† if "Yes", specify whether or not it will be provided with full secondary containment

(c) For each substance, category, or description of substance, state the largest size (capacity in cubic metres) of any **moveable** container(s) to be used for that substance, category, or description of substances:

Table C (ii)

Substance including Part no. in Sch. 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3	*Storage area on site**	*Maximum capacity (cubic metres) of individual moveable containers*
N/A	N/A	N/A

* identify by reference to substance location plan

(d) Where a substance, category or description of substance is to be used in a **manufacturing, treatment or other industrial process(es)**, give a general description of the process(es), describe the major items of plant which will contain the substance(s); and state the maximum quantity (in tonnes) which is liable to be present in the major items of the plant, and the maximum temperature (°C) and pressure (bar absolute) at which the substance, category or description of substance is liable to be present:

Table D

Substance including Part no. in Schedule 1 to the Regs, and entry no. if Part 2, category if Part 1, identity if Part 3	*Description of process(es)*	*Major items of plant**	*Max. quantity (tonnes)*	*Max. temp. (°C)*	*Max. pressure (bar absolute)*
P2 Flammable gases (natural gas)	Natural gas from the National Transmission System (NTS) enters the station via feeders (large bore pipes). Within the station there is a network of buried and above ground pipework and valves at a range of sizes from small to large bore. Gas flows are redirected using values or compressed as required. Prior to compression gas passes through one of four scrubbers (separators) which remove any liquid hydrocarbon condensate, and other contaminants present in the gas stream, e.g. pipe scale dust and traces of lube oil). Material entrained in the scrubbers is transferred to the condensate tank prior to removal from the site as waste. Following scrubbing, natural gas is compressed in one of three process compressors. Following which it is redirected to the NTS via valves. PIG traps are used to launch and recover inspection and cleaning gauges used periodically on the system.	Pipework, PIG traps, compressors, scrubbers, condensate tank. Refer also to Figure 2.	128 tonnes (assuming 75bar station MOP (3.5 for condensate tank), 0.805 compressibility and 15 degC temp).	140°C – maximum rated temperature for station pipework. NB - elevated pipe and vessel temps are localised to areas around the compressors and immediate downstream discharge pipework.	75bar (station MOP)

* identify by reference to substance location plan

5 Additional Information

(a) If you have an existing PHS consent(s) as referred to in Table A, **attach a copy of each consent** to this application.

(b) **List the maps or plans** or any explanatory scale drawings of plant/buildings submitted with this application (**as a minimum submit a site map and a substance location plan –** see **Notes** below).

Figure 1 – Site location plan

Figure 2 – Substance location plan

Figure 3 – Transportation routes in and out of site (gas feeder pipelines)

Figure 4 – Nearby potential sensitive receptors

Appendix 1 – Existing PHS consent (ref N/079/0683/93, 13th April 1993)

Appendix 2 – Designated habitat sites

(c) Provide a brief overview description of the **main activities** carried out or proposed to be carried out on the land to which the application relates.

Natural gas from the NTS enters the station via feeders (large bore pipes). Within the station there is a network of buried and above ground pipework and valves at a range of sizes from small to large bore. Gas flows are redirected using values or compressed as required. Prior to compression gas passes through one of four scrubbers (separators) which remove any liquid hydrocarbon condensate, and other contaminants present in the gas stream, e.g. pipe scale dust and traces of lube oil). Material entrained in the scrubbers is transferred to the condensate tank prior to removal from the site as waste. Following scrubbing, natural gas is compressed in one of three process compressors. Following which it is redirected to the NTS via valves. PIG traps are used to launch and recover inspection and cleaning gauges used periodically on the system.

This application is being made due to a major site upgrade which will result in the retirement of two existing gas compressor units (A and B) and the installation of one new unit (E). This application also regularises the addition of existing compressor unit D.

(d) Provide details of how each relevant substance is proposed to be transported to and from the land to which the application relates, for example the size and frequency of vehicle deliveries, the size or maximum flow rate of pipeline imports/exports.

Substance including Part number in Schedule 1 to the Regulations, and entry number if Part 2, category if Part 1, identity if Part 3	*How, and other details such as frequency and quantity, transported to and from the land to which the application relates*	
	Transported to site	*Transported from site*
P2 Flammable gases (natural gas)	Gas feeder pipelines (import). Continuously pressurised, flow and pressure variable based on national gas demand. See Figure 3.	Gas feeder pipelines (export). Continuously pressurised, flow and pressure variable based on national gas demand. See Figure 3.

(e) Provide details of the vicinity of the land to which the application relates, where such details are relevant to the risks or consequences of a major accident (relevant details include numbers of people in neighbouring developments that could be affected by a major accident and details about environmentally sensitive receptors).

The installation is largely surrounded by agricultural fields with some scattered settlements. Hatton village is located approximately 300m to the north east of the site boundary. There is a European protected species (Great Crested Newt) identified as potentially present in a small pond south of the A158. Detailed risk assessments have been carried out by NG which confirm that none of the identified receptors are at risk from a major accident occurring on the compressor station or Above Ground Installation (AGI). All relevant receptors are shown in Figure 4.

There are no locally or nationally designated habitat sites within the vicinity of the installation. See Appendix 2.

(f) Provide a brief overview of the measures taken or proposed to be taken to limit the consequences of a major accident.

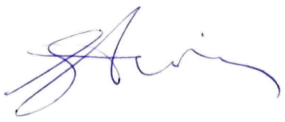
National Gas Transmission has an extensive formal process safety and environmental risk reduction governance framework which deals with potential risks at project design and construction phase and during operation of plant. These include:

- Formal Process Safety Assessments and Formal Environmental Assessments during project design and delivery stage. These include a number of formal quantitative and qualitative risk assessments.
- During the operational phase of the plant process operations are continually monitored either locally or via telemetry links to the Gas National Control Centre. All site interventions are subject to a comprehensive 'Permit to Work' system, underpinned by Risk Assessment Method Statements (RAMS).
- National Gas Transmission has a comprehensive emergency planning and business continuity system which includes emergency response exercises.
- Periodic (5 yearly) Process Hazard Reviews are carried out for the Hatton Compressor Station.

(g) Give any further information which you consider to be relevant to the determination of this application. (For example, details about any exempted established substances on site or a copy of any notification about 'other establishments'/exempted established substances if already submitted).

(Will print as blank space if no further information provided)

I/We hereby apply for hazardous substances consent in accordance with the proposals described in the application

Signed  .....

on behalf of National Gas Transmission plc.....
(insert name of person in control of the land if different to applicant)

Date 03/02/2023.....

To be accompanied by the notices and certificates required by regulations 6 and 7 of the Regulations.

Notes

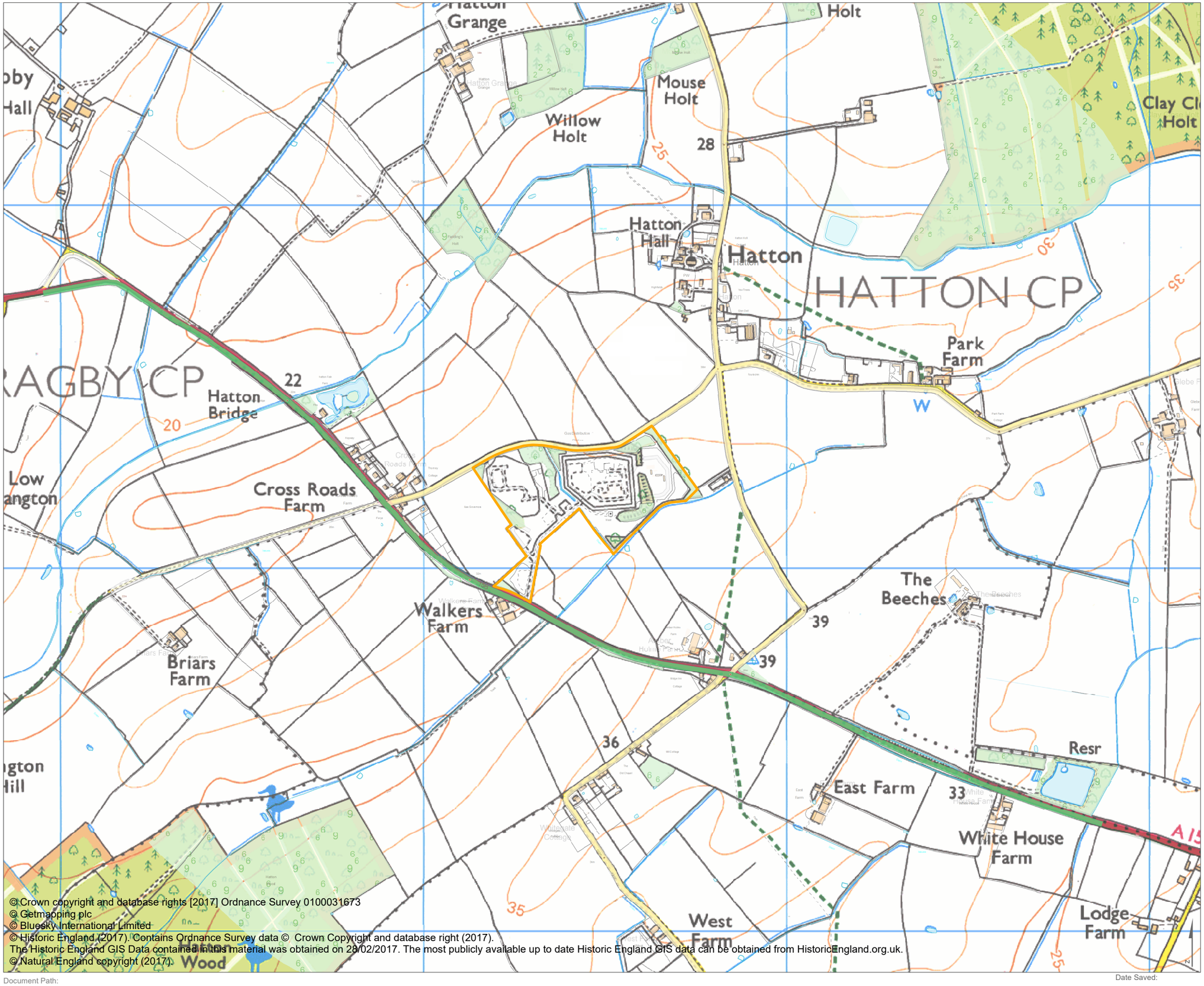
"Site map" is a map, reproduced from, or based on, an Ordnance Survey map with a scale of not less than 1:10,000, which identifies the land to which the application relates and shows gas transmission lines and reference numbers.

"Substance location plan" is a plan of the land to which the application relates, drawn to a scale of not less than 1:2,500, which identifies-

(a) any area of land intended to be used for the storage of the substance;
(b) where the substance is to be used in a manufacturing, treatment or other industrial process, the location of the major items of plant involved in that process in which the substance will be present; and
(c) access points to and from the land.

2 Part II: Figures

Figure 1 Site location plan



Document Path:

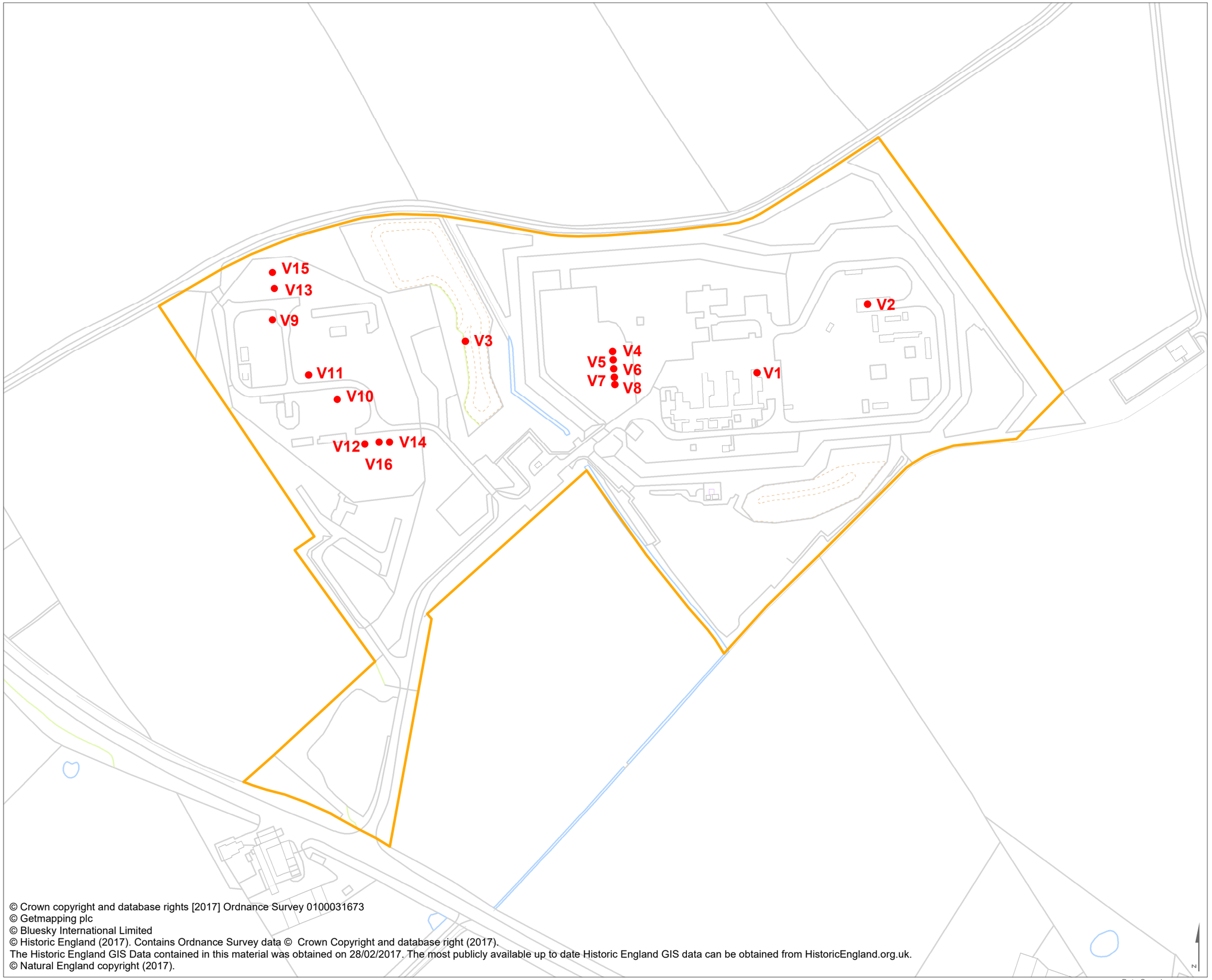
Date Saved:

Legend

National Gas Transmission land ownership boundary

Drawing title	Figure 1 - Site location plan
Scale	1:10,000 @ A3
PESL No.	NGG.036.b
Client	National Gas Transmission plc
Project	Hatton Compressor Station & AGI - Planning (Hazardous Substances) Application

Figure 2 Site layout plan showing substance location



Legend

- National Gas Transmission land ownership boundary
- V1 Compressor C
- V2 Compressor D
- V3 Compressor E
- V4 Scrubber D-101A
- V5 Scrubber D-101B
- V6 Scrubber D-101C
- V7 Scrubber D-101D
- V8 Condensate tank
- V9 - V16 Pig traps A-H

Note: pipework routings within site are not shown

Drawing title: Figure 2 - Substance location plan

Scale	1:2,500 @ A3
PESL No.	NGG.036.b

Client: National Gas Transmission plc

Project: Hatton Compressor Station & AGI - Planning (Hazardous Substances) Application

Document Path:

Date Saved:

Figure 3 Site layout plan showing location of buried pipework

Legend

- National Gas Transmission land ownership boundary
- Gas Feeder Pipelines

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Date Saved:

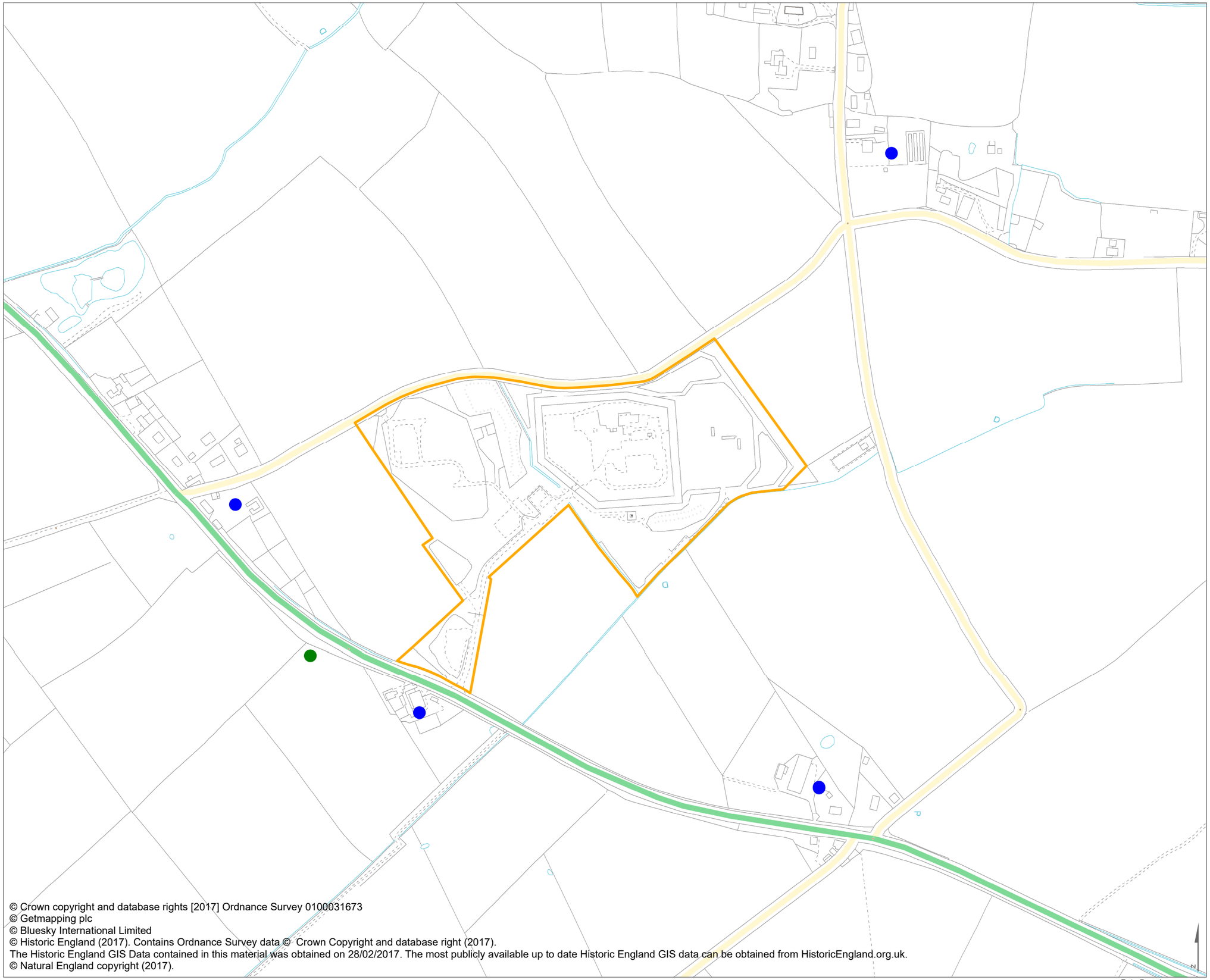
Drawing title
Figure 3 - Transportation routes in & out of site (gas feeder pipelines)

Scale	1:5,000 @ A3
PESL No.	NGG.036.b

Client
National Gas Transmission plc

Project
Hatton Compressor Station & AGI - Planning (Hazardous Substances) Application

Figure 4 Site layout plan showing nearby sensitive receptors



Legend

- National Gas Transmission land ownership boundary
- Local settlement areas
- Pond, Great Crested Newt potentially present

Drawing title
Figure 4 - Nearby potential sensitive receptors

Scale	1:5,000 @ A3
PESL No.	NGG.036.b

Client
National Gas Transmission plc

Project
Hatton Compressor Station & AGI - Planning (Hazardous Substances) Application

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3 Part III: Appendices

Appendix 1 Existing Hazardous Substances Consent

Planning (Hazardous Substances) Act 1990
The Planning (Hazardous Substances) Regulations 1992

HAZARDOUS SUBSTANCES CONSENT

Agent/Applicant's Name and Address
BRITISH GAS PLC.,
COMPRESSOR GROUP CENTRE,
1650 LINCOLN ROAD,
PETERBOROUGH,
CAMBS. PE6 7HH

Applicant's Name and Address
BRITISH GAS PLC.,
HATTON COMPRESSOR STATION,
HORNCASTLE ROAD, HATTON,
WRAGBY, LINCOLN.
LN3 5QE

Part I - Particulars of Application

Date received:
30/04/93

Application Number:
N/079/0683/93

Particulars and location of the application

PROPOSAL: Hazardous Substances Consent for the compression of natural gas as part of the national transmission system.
LOCATION: HATTON COMPRESSOR STATION, HORNCASTLE ROAD, HATTON, WRAGBY, LINCOLN.

O.S. Sheet Reference: [63.11] Grid Ref.: [517250][376250]

Field No: 179 part, 180 and 197 part.

Part II - Particulars of decision

In pursuance of its powers under the Planning (Hazardous Substances) Act 1990, the East Lindsey District Council grants consent to the application referred to in Part 1 hereof in accordance with the application and plans submitted subject to the following condition(s):

1. The maximum aggregate quantity of the substance that may be present-

(i) on, over or under the land to which this consent relates;
(ii) on, over or under other land which is within 500 metres of it and controlled by the same person; or
(iii) in or on a structure controlled by the same person any part of which is within 500 metres of it,

at any one time shall not exceed the established quantity of 34 tonnes

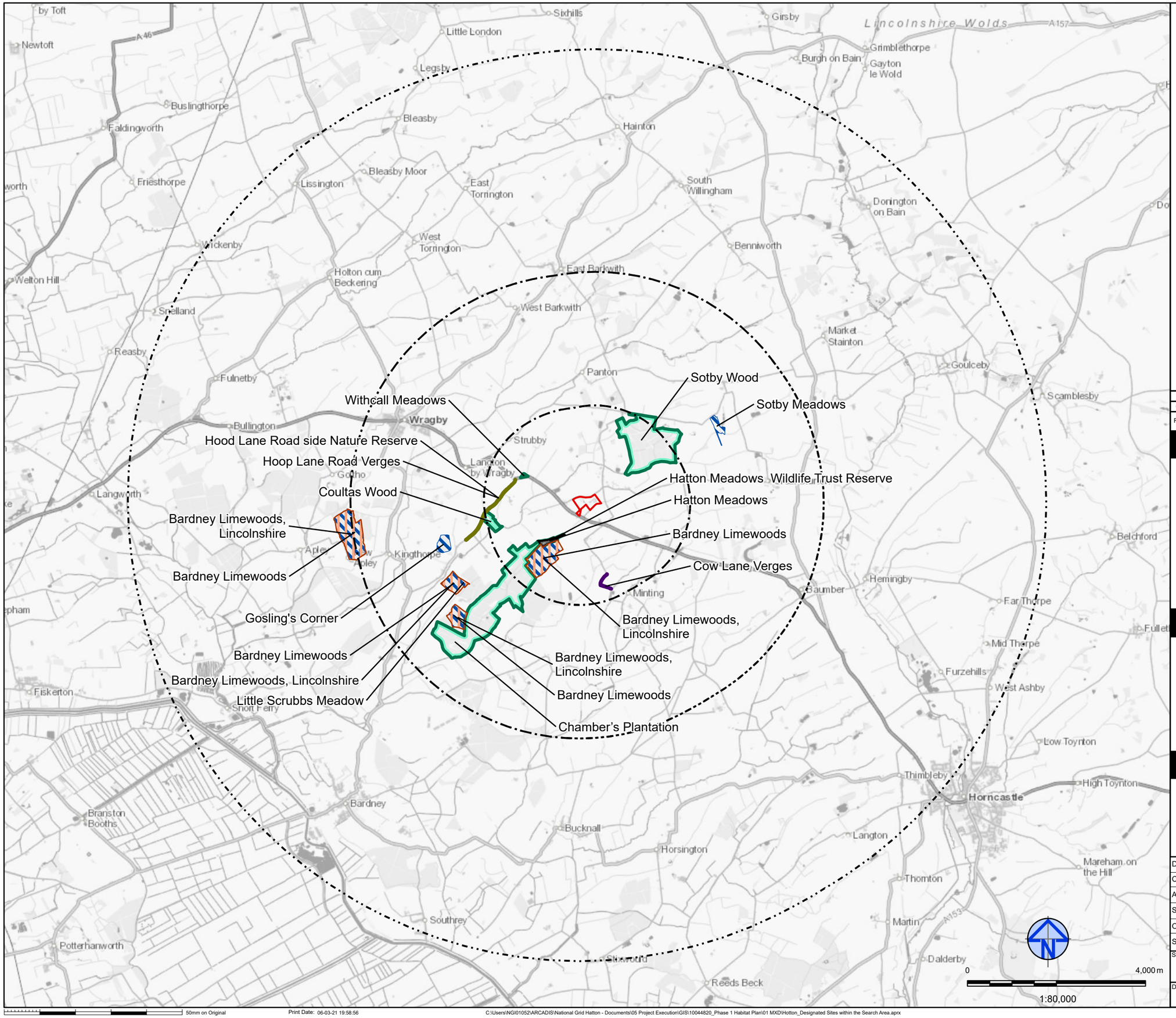
Reason: In order to comply with the requirements of Section 9(4)(c) of the Planning (Hazardous Substances) Act 1990.

Dated: 24/08/93

Signed S.P. Williamson.
.....
Director of Planning and Economic Development

Tel: Louth 601111
EAST LINDSEY DISTRICT COUNCIL, TEDDER HALL, MANBY PARK, LOUTH, LINCS. LN11 8UP

Appendix 2 Sensitive receptors within 2km, 5km and 10km of site



Legend

- Survey Area
- 2km, 5km and 10km Search Areas from the Survey Area

National and Local Statutory Designated Sites (within 5km)

- National Nature Reserve (NNR)
- Site of Special Scientific Interest (SSSI)

Non-statutory Designated Sites (Within 2km)

- Local Wildlife Site
- Site of Nature Conservation Interest
- Lincolnshire Wildlife Trust Reserve
- Roadside Nature Reserve

Rev	Date	Description	Drawn	Check	Approv
01	03/06/21	DESCRIPTION	NG	KT	HS

Client: National Grid

PROJECT: Hatton Compressor Upgrade

nationalgrid

Site

Client

National Grid
Corporate Headquarters
1 - 3 Strand
London
WC2N 5EH
Phone (0) 20 7004 3000
www2.nationalgrid.com

ARCADIS Design & Consultancy for natural and built assets

Registered office:
Arcadis House
34 York Way,
London
N1 9AB

Coordinating office:
5TH Floor,
401 Faraday Street,
Warrington
WA3 6GA

www.arcadis.com

TITLE:

Hatton - Designated Sites within the Search Area

Drawn	N. Gunasekaran	Date 03JUN21	Signed
Checked	K. Turner	Date 03JUN21	Signed
Approved	H. Smith	Date 03JUN21	Signed
Scale:	1:80,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	10044820

Suitability Description: Issued for information

Drawing Number:

Revision: 01

50mm on Original

Print Date: 06-03-21 19:58:56

C:\Users\NGI01052\ARCADIS\National Grid Hatton - Documents\05 Project Execution\GIS\10044820_Phase 1 Habitat Plan\01 MXD\Hotton_Designated Sites within the Search Area.aprx