Dogger Bank Creyke Beck: Community Working Group

25th October 2012

FOREWIND
DELIVERING YOUR ENERGY FUTURE

Agenda

• Chair's Welcome	18:45 – 18:50
• Previous Meeting's Actions and Updates	18:50 – 18:55
• General Project Update	18:55 – 19:00
• Current EIA Progress	19:00 – 19:35
• AC Cable Corridor Update	19:35 – 19:45
• AC Cable Corridor - Access Options	19:45 – 20:10
• Q+A Session	20:10 – 20:25
• Chair's Closing Remarks	20:25 – 20:30

Chair's Welcome

Councillor Jump

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Previous Meeting's Actions and Updates

Nikki Smith

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Actions

- **A visualisation of the converter station buildings could be shown**
  - Sam Oxley will cover this later in the presentation as part of current EIA progress.

- **Forewind to hold a meeting for the parish councils affected by the DC cable route**
  - Meetings held in August with all nine Parish Councils along the DC cable route. This provided helpful local information which Forewind will consider in further iterations of the design.

- **National Grid liaison officer to be invited to the next meeting**

- **Burial of converter stations**
  - Flat landscape, likely impacts on construction activity duration and flooding risks.

- **Forewind to circulate a report showing the AC Cable route options**
  - Completed – Option 1 favoured.

General Project Update

Nikki Smith

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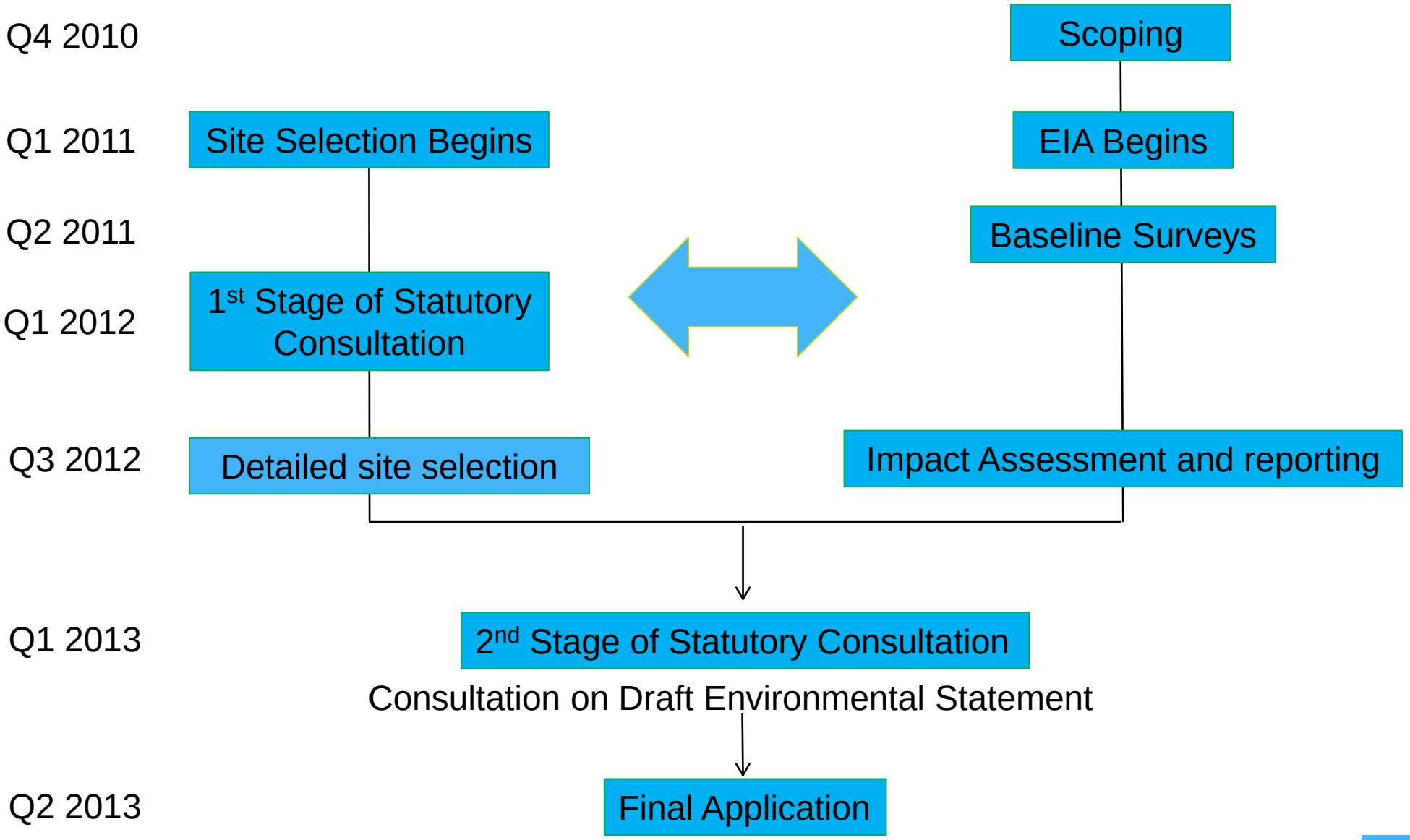
Site Selection and EIA



Looking ahead

- Forewind has recently revised its programme of development for Dogger Bank Creyke Beck

- In **Q1 of 2013**, the second stage of statutory consultation will take place
- This will include public exhibitions
- Forewind will be able to explain the potential impacts of the project as well as proposed mitigation measures
- This represents another chance to provide feedback and comments on the project

- The Development Consent Order application will now be submitted in **mid-2013**.

- Further meetings of the community working group?

Environmental Impact Assessments – Current Status

Jon Allen and Sam Oxley

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Current EIA Progress

- Baseline surveys undertaken (2011 / early 2012)
- Impact assessments (summer 2012)
- Work on construction phasing and project details (summer 2012)
- Report writing (autumn 2012)

Draft Environmental Statement
End 2012

Scope

- Landscape and Visual
- Archaeology
- Traffic and Transport
- Noise and Vibration
- Tourism and Recreation
- Socio-economics
- Ecology
- Land Use and Agriculture
- Geology and Hydrology
- Flooding

Landscape and Visual

Sam Oxley

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Existing Landscape – Recap

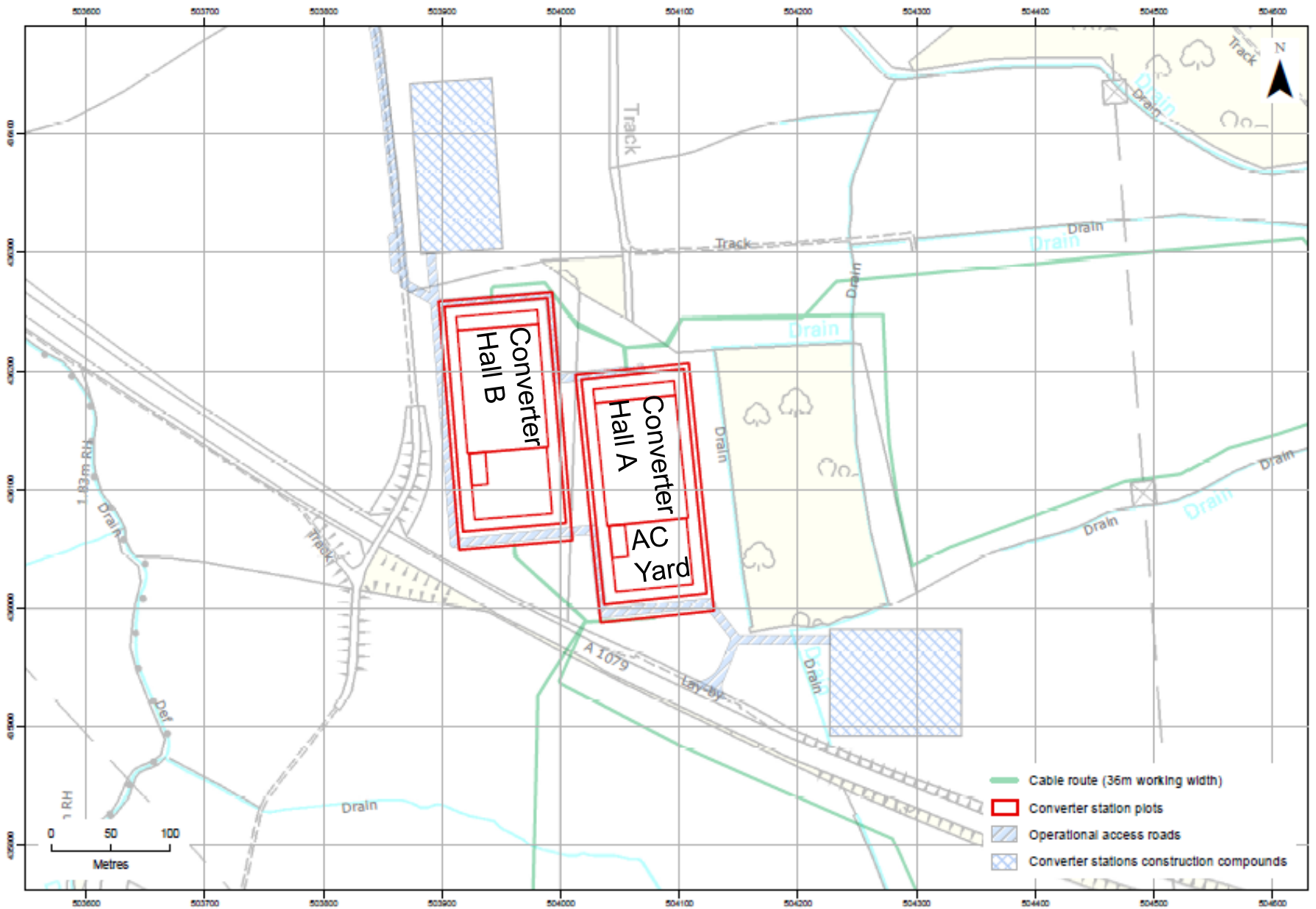
Model Farm

Area of High Landscape Value

Halfway House

A1079

The Proposals – indicative footprint



Cross Sections – a flat landscape – no scope to bury it

FOREWIND

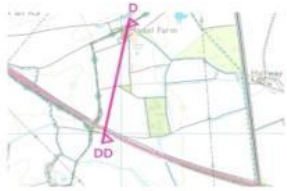
Dogger Bank: Creyke Beck: Existing and Proposed

Existing Section Elevation A - AA

Proposed Section Elevation A - AA

Existing Section Elevation D - DD

Proposed Section Elevation D - DD



Impacts and Considerations

- **Displacement of arable field**
  - avoids woodland but uses existing trees to help screen views

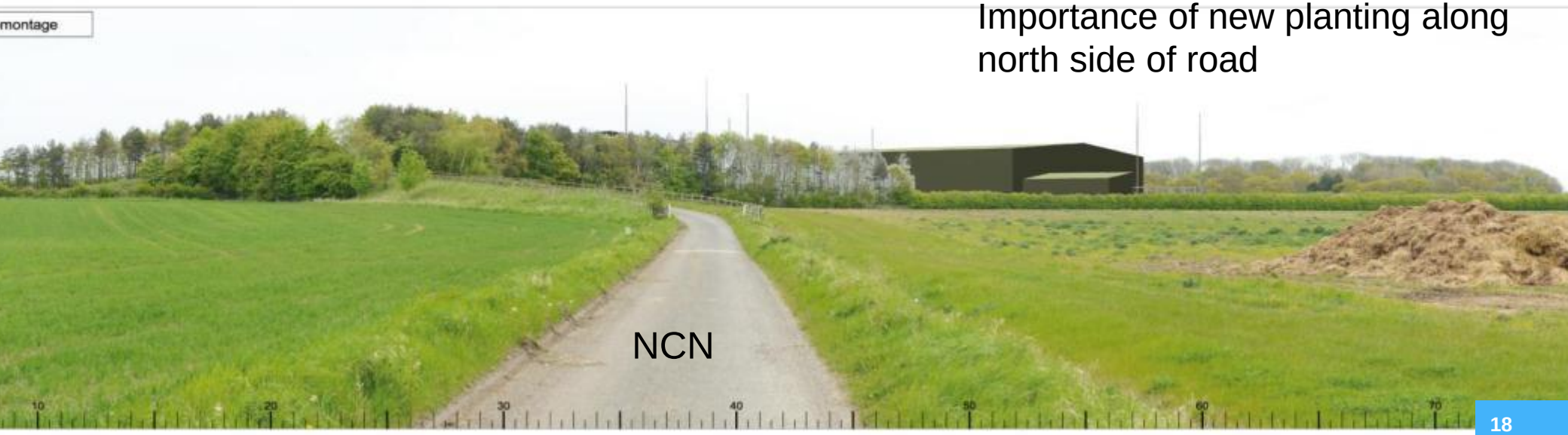
- **Visible from close views – N, S, E, W**
  - upper part of the converter halls and the roof line
  - lightning rods – slim
  - solid element in views

- **Considerations**
  - colour of buildings
  - fencing and lighting on periphery
  - extent of landscape planting possible
  - rate of growth of planting

Photomontages – Shepherd Lane

Photomontages – Long Lane

Photomontages – Cycle Route



Importance of new planting along north side of road

Photomontages A1079 to east

Gap in woodland enables views – plant?

Photomontages – A1079 to west

Plant to west to screen view

Photomontages – Beverley Parks NR

Roofline mimics that of woodland

Photomontages – Dunswell Road

Photograph

Photomontage

Existing substation

Example of a Converter Station ABB ESTLINK

Mitigation

Various types of mitigation:

- **'Designed in' or 'embedded' measures** which have been agreed to reduce landscape and visual impacts, during project siting and development
    - E.g. location, orientation, roof height
- **Committed landscape and habitat enhancement measures** which will be agreed in principle before application – but subject to detailed refinement and agreement with statutory consultees prior to construction
    - E.g. Position and species for structure planting
- **Additional optional measures** which can be taken on during the detailed design once the project is consented and being worked up by the developer – but subject to agreement with statutory consultees
    - E.g. detailed architectural design, matching where appropriate of design details

Landscaping Options

Example landscaping works from Glencourse Water Treatment Project, Edinburgh

- **Screening**
- **Landscape and habitat enhancement**
- **Structure planting - link to wider landscapes and habitats**
  - woodland
  - hedgerows
  - scrub
  - grassland
  - individual trees ('park' character)
- **Drainage**
  - swales and damp hollows
  - wet woodland and grassland

Mitigation Options - indicative

Importance of new planting along north side of road

Plant to north of road along southern boundary

Implementation of Landscape Works

- Landscape work could be implemented as a **separate contract** or as part of **main engineering contract**

- **Advance planting** is a possibility – in order that screening is more effective

- In order to ensure mitigation is implemented…

  - Robust contract and specification required
  - Regular **inspections and audits** during implementation to be part of contract requirements
  - **Defects period** – replace any failed planting
  - **Maintenance period** – manage planting

EIA – Archaeology, Traffic and Noise

Jon Allen

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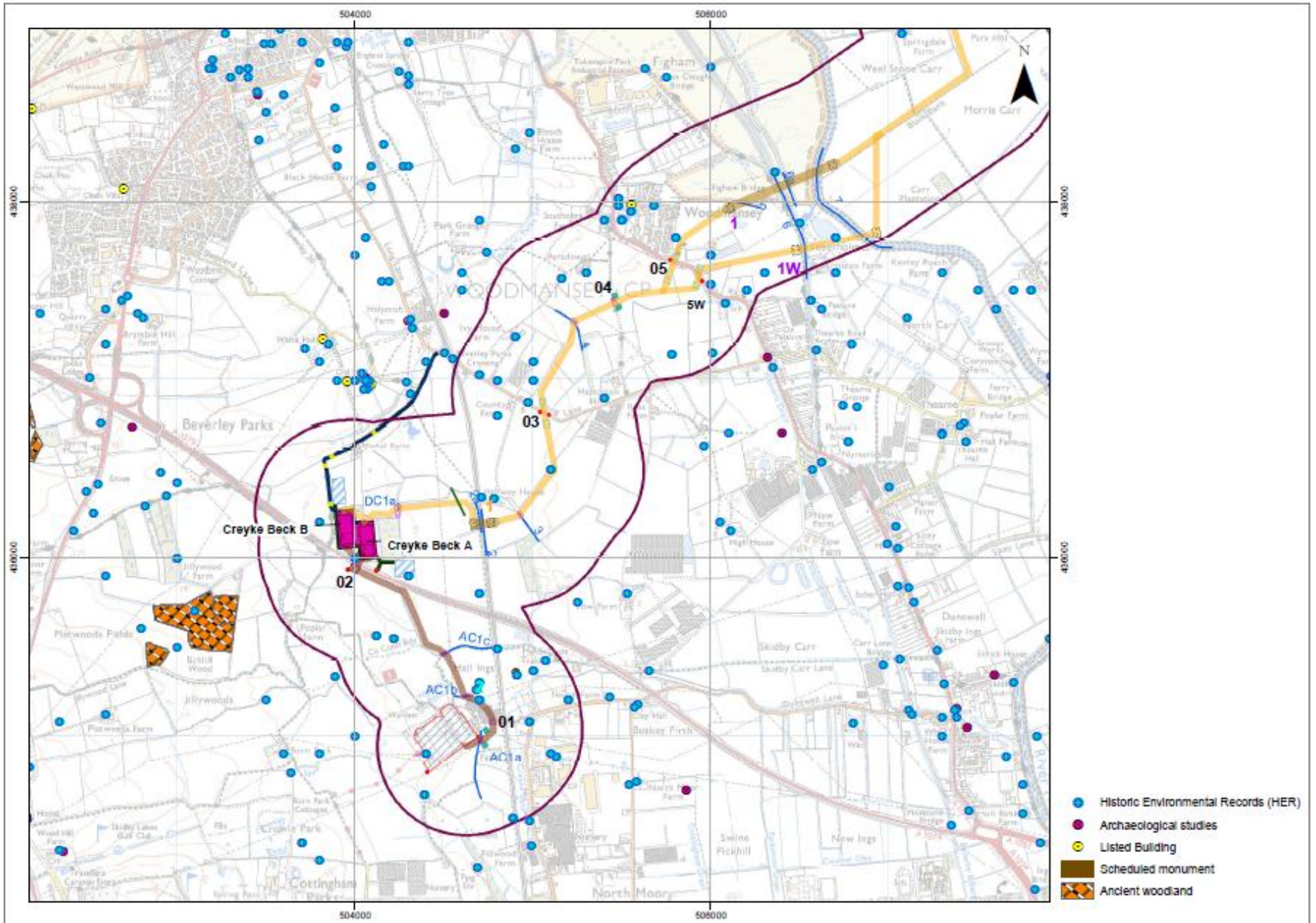
Archaeology

Work To Date:

- Desk based assessment - 2011
- Site walkover – 2011
- Site Selection activities – 2011/12 e.g. constraints analysis, setting of Beverley Minster
- Geophysics of the High Voltage Direct Current route commenced – Spring 2012
- Geophysics of the Converter Station sites commenced – Spring 2012
- Geophysics of the High Voltage Alternative Current route – Autumn 2012
- Targeted trial trenching - Autumn 2012

Draft Environmental Statement Chapter (end of 2012)

Desk Based Assessment Outputs



Archaeology – Geophysics

- Geophysical surveys were run to determine where anomalies within the cable route could be found
- Completed over the length of the HVDC and HVAC cable route
- Features ranging from prehistoric roundhouses and Iron Age burial practice commons to Roman enclosures and field systems
- Results used to develop a targeted trial trenching approach.

Trial Trench 9 – HVDC Cable Route

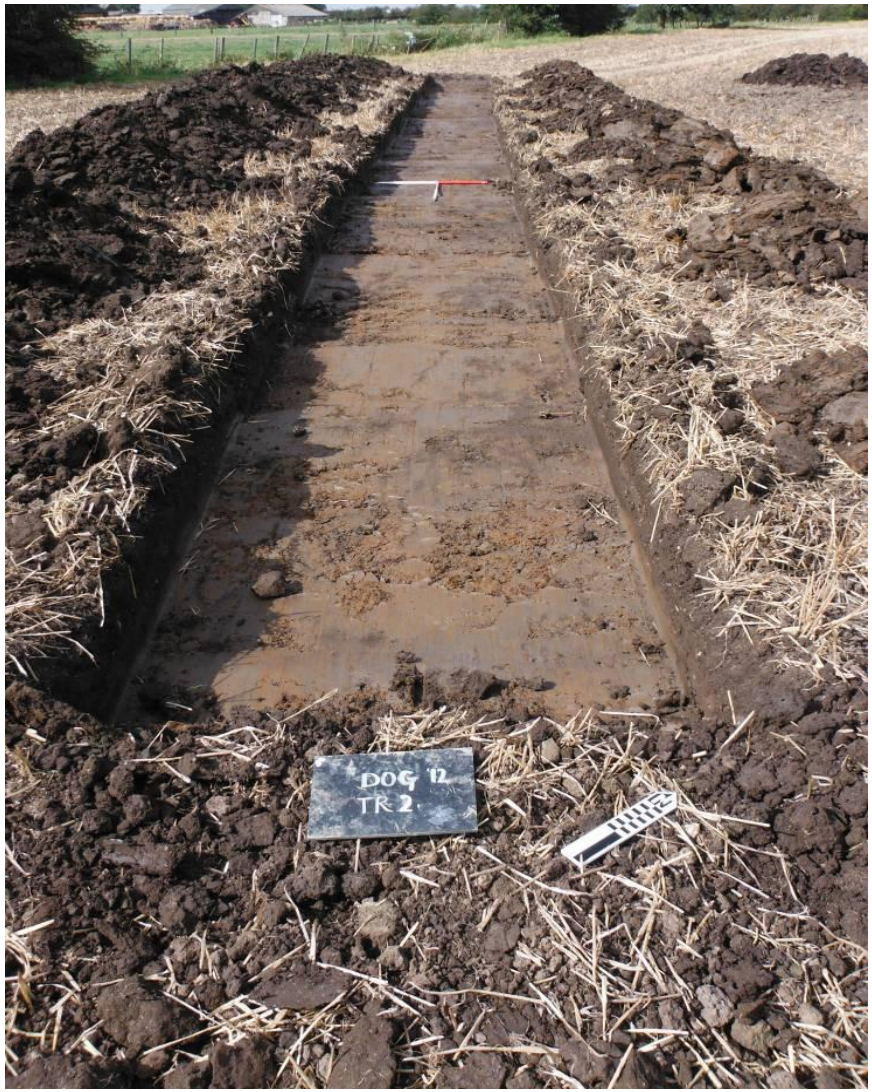
Trial Trench 9

Roman pottery fragments found in Trench 9

- Trial trenching and evaluation of the cable route is ongoing
- The converter station sites have not yet been examined

- Findings to date add to our understanding of the transition between late prehistoric and Roman settlement, and contribute to our knowledge of industry and trade in the area.

Trial Trench 2 – Converter Station Site



Trial Trench 2

- Other trenches along the route have revealed little of significance. This is as expected for such a low lying part of the county
- This also highlights the irregularity of the natural anomalies identified by the geophysical surveys
- It is likely the results will confirm the remnants of a rich prehistoric/ Roman landscape.

Setting - Beverley Minster

Traffic and Transport – Site Selection Work

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Construction Access

- Agreed with ERYC
- Direct access off the A1079 at existing layby, left in and left out arrangement
- Health and safety considerations - Temporary Order to close the layby, gated access to remain shut during the operational phase

Operational Access

- Access off A1079 not suitable
- Route off Long Lane down PRoW agreed in principle with ERYC on basis of 10 vehicle movements per day
- Detailed proposal by Forewind to be submitted to ERYC for agreement

HVAC Route – Construction Access

- Options to be assessed in group feedback session

Traffic Impact Assessment

Principles

- Assessment will use the ‘realistic worst case’ based on ‘peak traffic generation’ e.g. period during construction when maximum activities are occurring at the same time along the cable route and converter stations.
- Modelling is currently underway

Construction

- Total Project Construction Traffic Flows in ‘Month 5’ – over 200 vehicles per day /over 400 two-way traffic movements)
- Approximately 60% of these are HGVs
- Proportion associated with converter station and HVAC is a lot lower e.g. 22 HGVs per day during Month 5 for converter construction.

Operation

- Converter station un-manned
- Estimate 10 movements per day – maintenance etc.

Public Rights of Way

- The Beverley 20 shares a 1km stretch of public bridleway which will be an operational access route to the converter stations

- Should any upgrades need to be made, the material used on the surface will be unbound so that the track is suitable for horses.

Noise

- A buffer zone of 2 km around the converter station site has been established for background noise monitoring
- Monitoring now complete

- Included in the calculations are:
  - Operational noise from the converter stations
  - Operational noise from the substation
  - Construction related noise/vibration
  - Off-site construction traffic noise

- Forewind will liaise with East Riding of Yorkshire Council to ensure that noise thresholds are agreed at the nearest properties.

Background Noise Monitor Locations

Noise Mitigation

- Best practice guidance will be followed during construction and operation, including:

Construction

- Well maintained vehicles
- Machinery switched off when not in use
- Silent generators for night time should security or lighting be required
- Effective communication with locals, including information on works timings and potential night time works
- Provision of site representative contact details, complaints can be dealt with directly

Operation (converter stations)

- Selection of quieter equipment
- Installation of acoustic enclosures
- Installation of acoustic barriers

AC Cable Corridor

John Hughes

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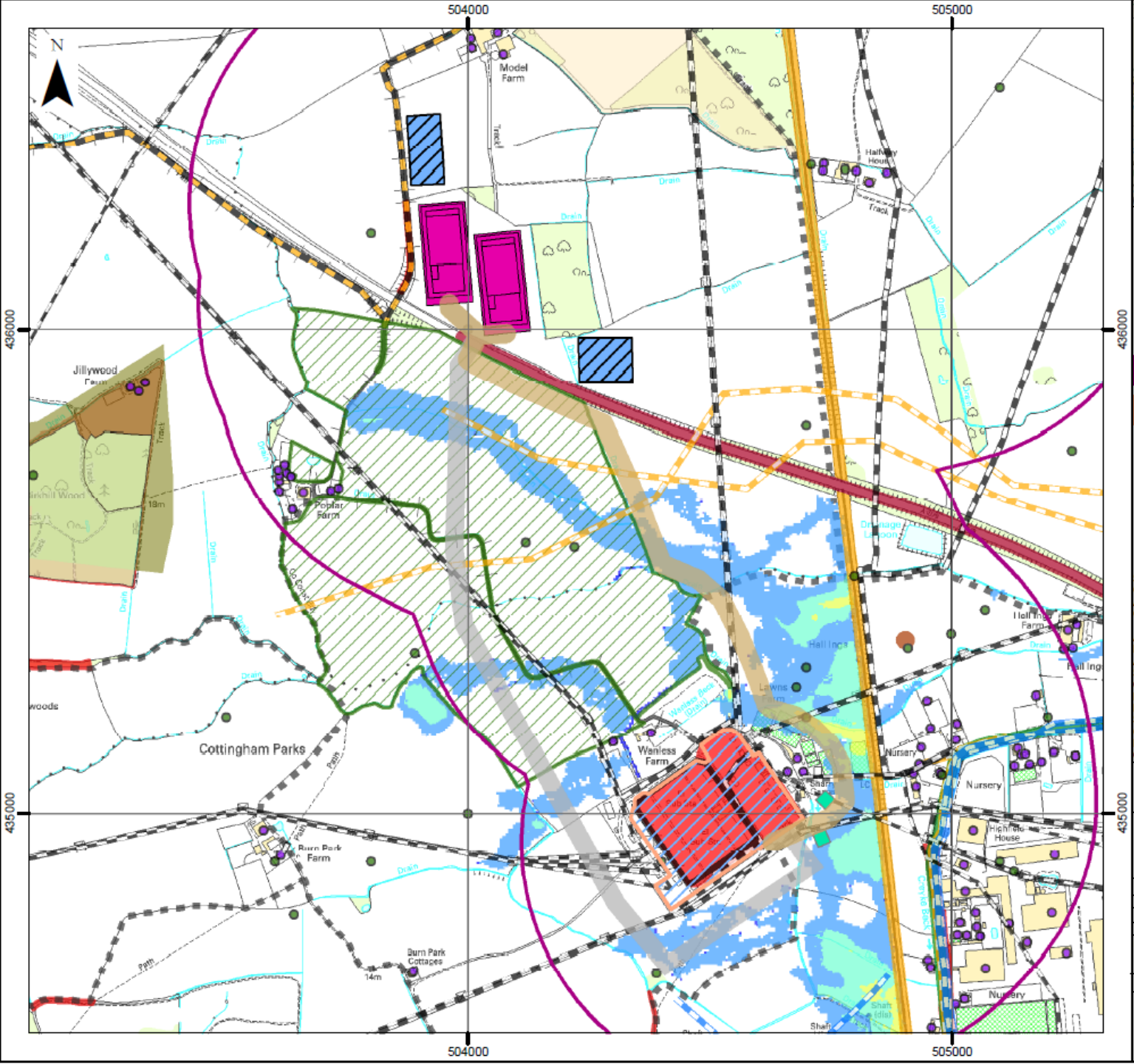
AC Cable Route Update

- This follows the information sent as part of the AC cable route update and outlines the development considerations identified for the two routes
- The micro-siting of the AC route has been influenced by the site selection work and proposed locations of the converter stations.

– Two options considered:

Option 1 – Eastern Route heads southeast from the A1079 road and arcs round to the east of the existing Creyke Beck substation before connecting to the south-east corner of the substation.

Option 2 – Western Route heads south from the A1079 road, passing across farmland before bearing east and passing to the south of the Creyke Beck substation, and connecting to the south-east corner of the substation.



Legend

Onshore Cable Details and Converter Station Details

- Option 1 AC cable route (38m working width)
- Option 2 AC cable route (38m working width)
- Onshore Development Footprint - 1km Buffer
- Creyke Beck Substation
- Converter stations site
- Converter stations construction compounds

0 100 200
Metres

PROJECT TITLE

DOGGER BANK CREYKE BECK

DRAWING TITLE

Figure 1. AC Cabling Option with Considerations

VER	DATE	REMARKS	Drawn	Checked
1	07/09/2012	AC with Considerations	MCG	JA

DRAWING NUMBER: **9W0421/AC_RAG/01**

SCALE	PLOT SIZE	DATUM	PROJECTION
1:12,000	A4	OSGB36	BNG

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Route Options

	Option 1 – Eastern Route	Option 2 – Western Route
Archaeology	Truncated barrow remains, easily avoidable	Iron Age settlement site, must be avoided
Ecology	Small number of hedgerows and watercourses to cross	Poplar Farm Environmental Stewardship Scheme area, small number of hedgerows and watercourses
Existing Infrastructure	2 gas pipelines, passes under some overhead lines	2 gas pipelines, passes under some overhead lines
Residential Amenity	3 properties within 100m	1 property within 200m
Public Rights of Way	1 footpath crossing	1 bridleway crossing
Traffic and Transport	1 minor road crossing	1 minor road which is access route to Creyke Beck substation and Wanless Farm caravan storage

Preferred Option

- **Option 1** is Forewind's preferred route
- To date, feedback from the working group has favoured **Option 1**
- Any additional feedback?

- **Option 1**

  - limits potential impact on an archaeological area of importance
  - avoids Poplar Farm Environmental Stewardship Scheme
  - avoids the use of Park Lane, an operational access road for the National Grid Substation and to the caravan storage business at Wanless Farm.

The key risk with Option 1 is potential impacts on residential properties at Lawn Farm during construction

Impacts will be temporary in nature, and where appropriate, mitigation measures will be identified

- Due to the cables being laid underground, the potential flood risk of both options is low.

AC Cable route – Temporary Construction Access Options

Group feedback exercise

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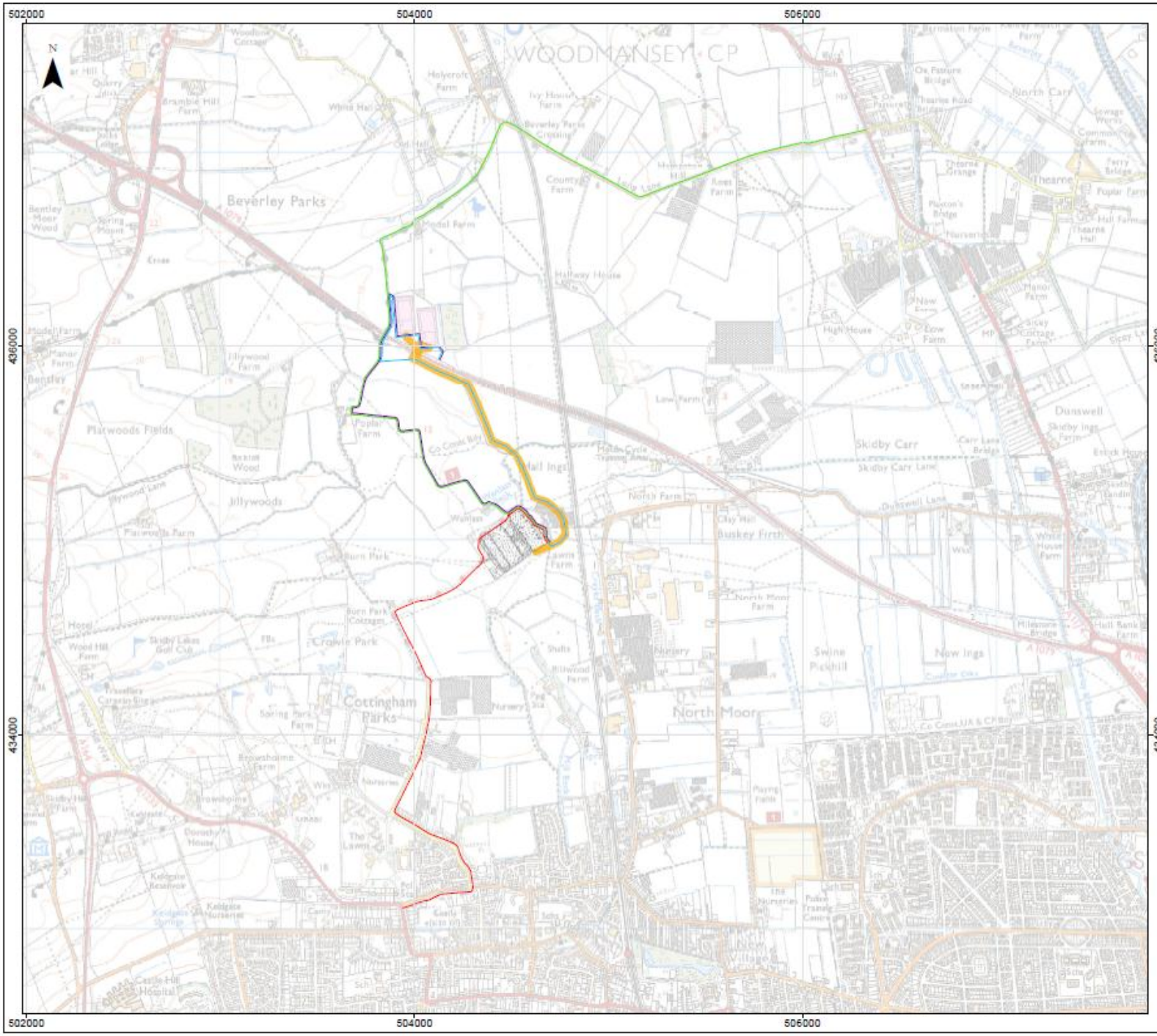

LEGEND

- Proposed Creyke Beck HVAC cable route
- Proposed converter stations site
- Existing Creyke Beck substation

Cable construction access options

- Option 1
- Option 2
- Option 3
- Option 4

0 500 1,000
Metres

PROJECT TITLE

DOGGER BANK R3 DEVELOPMENT

DRAWING TITLE

Creyke Beck AC Cable Route Construction Access Options

VER	DATE	REMARKS	Drawn	Checked
1	22/10/2012	First Issue	JR	NS

DRAWING NUMBER:

T-DES-0137-01

SCALE	1:20,000	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG

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Temporary Access Options

- **Option 1**
  - Construction of a new, temporary road between the Beverley 20 PRoW and AC cable route - surveys must be undertaken in order to understand the full impact of this
  - Covers the length of the AC cable route
  - Impacts on a small section of Beverley 20 PRoW.

- **Option 2**
  - Utilises existing private road via Poplar Farm which may or may not require upgrading
  - Disturbance of Poplar Farm Environmental Stewardship Scheme area
  - Close proximity to Poplar Farm and Wanlass residences
  - Impacts on Beverley 20 PRoW and National Cycle Network Route.

- **Option 3**
  - Utilises agreed converter station **operational** access route
  - Joins option 1 or 2 south of A1079
  - Proximity to Model Farm
  - Impacts on a greater length of the Beverley 20 PRoW

- **Option 4**
  - Passes through Cottingham village centre, additional traffic generation
  - Same operational access as National Grid, possible conflict
  - Impacts on National Cycle Network Route
  - Proximity to Burn Park Cottages and Wanless residences.

Group exercise

Group 1	Group 2	Group 3	Group 4
Forewind – John Hughes	Forewind – Nikki Smith	Forewind – Jon Allen	Forewind – Rebecca Sherwood/Sam Oxley
Cllr Kevin Casson – Cottingham Parish Council	Cllr Stephen McCloud – Rowley Parish Council	Cllr Peter Roustaby – Skidby Parish Council	Cllr Kerri Harold – Woodmansey Parish Council
Neville Jones – CPRE East Yorkshire	Gordon Scaife – Cottingham Wild Spaces Group	James Taylor – Beverley Local Nature Reserve	Doug Jennings – Cottingham Civic Society
Cllr Dominic Peacock – ERYC Minster and Woodmansey Ward	Cllr Tony Galbraith – ERYC Dale Ward	Cllr Ros Jump – ERYC Cottingham North Ward	Helen Reynolds – Joint Hull and East Riding Local Access Forum
Scott Royal - National Grid	Steve George – Beverley Minster	Ian Booth – St Mary's Church	Rod Mackey – East Riding Archaeology Society

AC Cable Corridor - Construction Access

1. Does the Working Group have any immediate thoughts on these routing options?
2. Are there any factors that we should consider which have not been mentioned in the options suggested?
3. Is there a clear preference from the options suggested?

Questions and Answers

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Chair’s closing remarks

Cllr Jump

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Thank you

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