NATIONAL GRID
(NORWICH TO TILBURY)
S.42 CONSULTATION BRAMFORD 400kV SUBSTATION PROPOSED SITE LAYOUT DRAWING
SECTION B, SHEET 1 OF 1

RG209
RG210
FOR CONTINUATION SEE INSERT 1
Refer to note 13
JC001
JC002
JC003
JC004
FOR CONTINUATION SEE ABOVE

INSERT 1

LAYOUT DRAWING SCALE
1:1000 0 50m 100m

LAYOUT DRAWING SCALE
1:2500 0 125m 250m

Legend

- Draft order limits
- Existing substation boundary (to contain proposed project works)
- Proposed substation extension boundary (to contain proposed project works)
- Temporary construction compound
- Approximate fill earthworks extents
- Permanent spoil bund (refer to note 13)
- Permanent substation access route
- Temporary substation haul road
- Temporary overhead line haul road
- Permanent surface water attenuation drainage pond
- Temporary surface water attenuation drainage pond
- Permanent drainage outfall alignment
- Temporary drainage outfall alignment
- Outfall location
- New overhead line
- Overhead line pylon construction area

Notes

1. This drawing is scaled at paper size A0, therefore any prints taken at smaller sizes will affect accuracy of the measurement units and should not be scaled against.
2. These plans show the draft Order Limits. Due to the need for future flexibility, National Grid will be applying for Order Limits and Limits of Deviation within its Development Consent Order, within which any potential permanent infrastructure would be sited. Further information is provided in National Grid's 'Guide to Interacting with our Consultation Plans' document.
3. This drawing is to be read in conjunction with the Consultation Plans and Construction Access Plans.
4. This drawing is produced for development and consultation purposes only, further work is required to validate the design for construction.
5. Bramford Substation is located at UK grid reference 609699, 245862.
6. The design is work in progress and is relevant to the project stage at the time of issue. All further design development require further site information and engagement with relevant third parties. The detailed design shall be in accordance with relevant national design standards, as well as NG technical specifications.
7. Access to the substation extension for construction and operation will be via Bullen Lane, as per the existing access arrangements. Where permanent and temporary access routes use the same alignment, only permanent routes are shown within this drawing.The access routes include existing access roads, which may require upgrade or alteration, and areas of new construction.
8. The designers are aware of other schemes being progressed at and in the vicinity of Bramford Substation. The design takes account of information available at the time of production, however further consideration of interface between all relevant projects (including timelines) is required as the designs progress.
9. Due to anticipated ground conditions, it is expected that some of the proposed substation apparatus will be installed on piled foundations. Clearance to overhead lines will need to be considered during the works, especially during piling.
10. The substation layout has been assessed by vehicle tracking. It is anticipated that a girder trailer can be used to deliver the transformers and shunt reactors to their positions within the substation. The detailed layout of the substation is excluded for clarity at this stage.
11. The earthworks design is based on OS terrain data and assumed slope angles. The platform level matches the existing platform to the east of Bramford that will be occupied by the scheme. The design may vary following completion of a topographical survey for the site.
12. Only permanent earthworks and topsoil/subsoil bunds are shown. Any temporary earthworks and spoil requirements are not depicted on this drawing (this has the potential to take up further space within the draft Order Limits).
13. Spoil bunds are represented to demonstrate the requirement for permanent bunding of soil arising from the site area. These are still to be designed and are subject to further assessment. These will be integrated into the bio-diversity net gain and landscaping design.
14. The full scheme is represented within the draft Order Limits, however some design information has been omitted for clarity of the drawings.

Drainage Notes:

1. For both temporary and permanent drainage design the location, size and type of attenuation ponds is currently based on preliminary OS terrain 5 topographical data (vertical design accuracy to 2m) and desktop ground information. The drainage design for project has considered the anticipated worst case where possible, allowing for sufficient construction space to accommodate potential change, however the extent of potential change cannot be confirmed at this stage.
2. Pond levels, drainage pipelines, discharge points and local ground conditions will need to be confirmed to allow for a more accurate design. This will follow at later design stages upon receipt of adequate survey information.
3. Drainage design criteria is based on the requirements of local planning policy. Stakeholder engagement regarding the design criteria for drainage features is ongoing. The layouts will be reviewed and updated as necessary in subsequent design stages.
4. No allowance for potential existing field or land drainage has been made at this time. This will need to be considered following receipt of landowner information on existing drainage.
5. Filter drains have not been shown as they have not been designed at this stage. The proposed drainage attenuation/infiltration volumes do not consider attenuation through filter drains.
6. Existing drainage is expected on the platform area to the west of the existing Bramford substation. Current drainage proposals do not consider how this will be affected and this will be reviewed in subsequent design stages. Drainage proposals only considered for the substation extension.

Issue	Date	Remarks	Drawn	Checked	Approved
A	April 2024	For statutory consultation	TL	CK	MI

Title

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S.42 CONSULTATION BRAMFORD 400kV
SUBSTATION PROPOSED SITE LAYOUT DRAWING
SECTION B, SHEET 1 OF 1

nationalgrid

National Grid Drawing Reference
AENC-NG-ENG-DWG-0005

Scale	Sheet Size	Sheet	Issue
As shown	A0	SHEET 1 OF 1	A