

Figures for
BARNHAM COURT
Landscape and Visual Impact Assessment
For BL Solar 7 Ltd.

July 2015

THE **Landmark**
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Hope Chapel House
Hope Chapel Hill
Hotwells
Bristol BS2 4ND
United Kingdom

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-  Site location
-  Site boundary

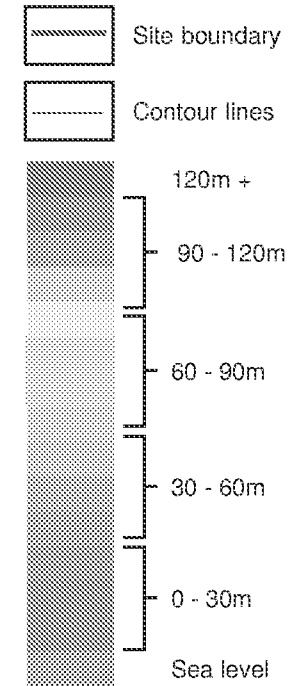
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FIGURE 1
Site location

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Hotwells
Bristol BS8 4ND
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FIGURE 2
Topography

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-  Site boundary
-  Zone of Theoretical Visibility (ZTV) 5km Radius
-  Nearby proposed and approved Solar Parks
- 1. Bilsham (in operation)
- 2. Shripney (Approved)
- 3. Decoy Farm (Approved)

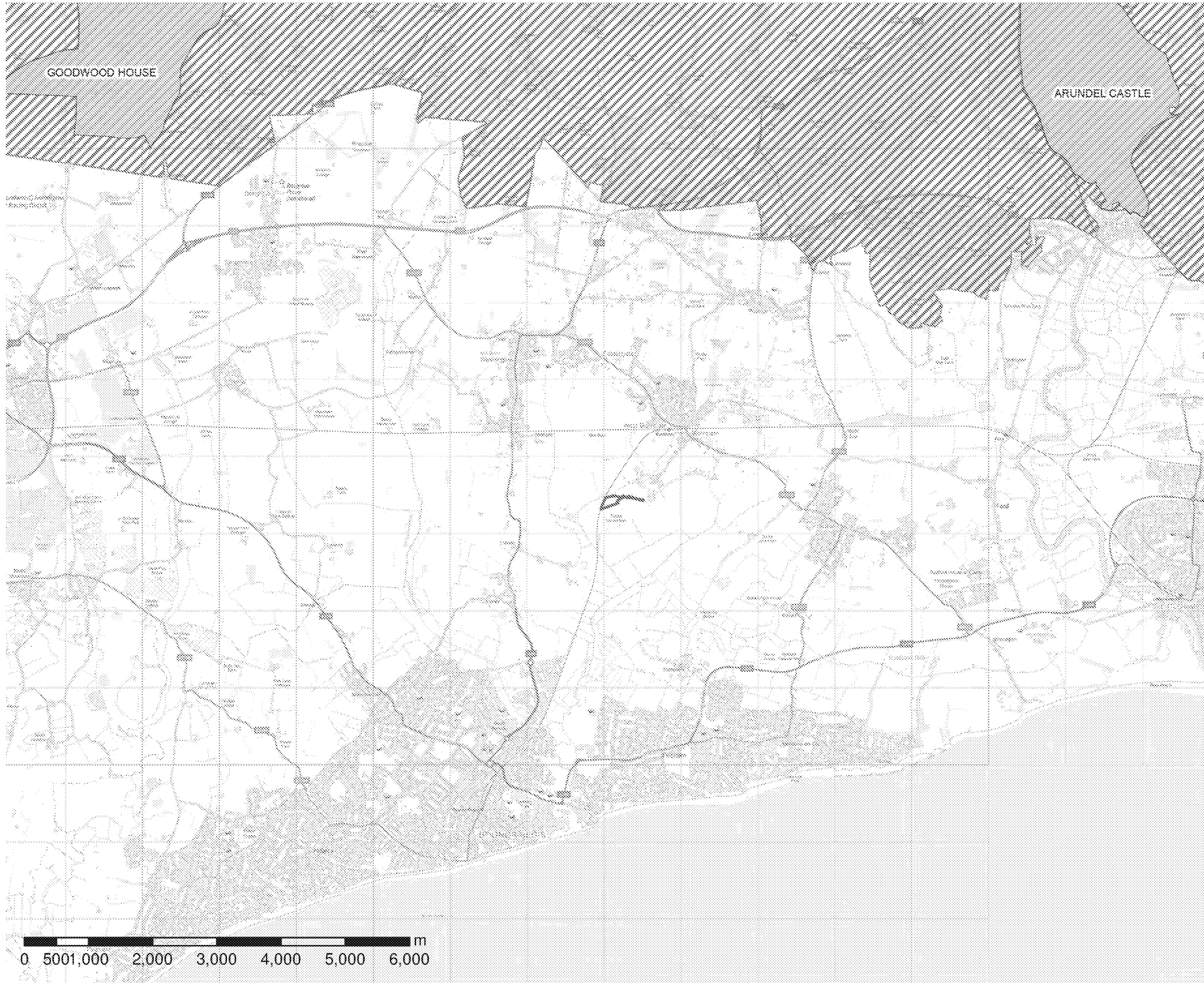
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FIGURE 3
Zone of Theoretical Visibility
(ZTV)

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- Site location
- South Downs National Park
- Registered Parks and Gardens

Sources:
English Heritage

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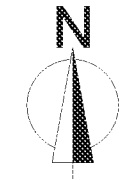
FIGURE 4
National planning designations

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- Site boundary
- Listed Buildings
- Conservation Areas
 1. Eastergate
 2. Barnham
 3. Yapton
 4. Shripney
- Priority Habitat Inventory - Deciduous Woodland

Sources:
English Heritage
Arun District Council
magic.gov.uk

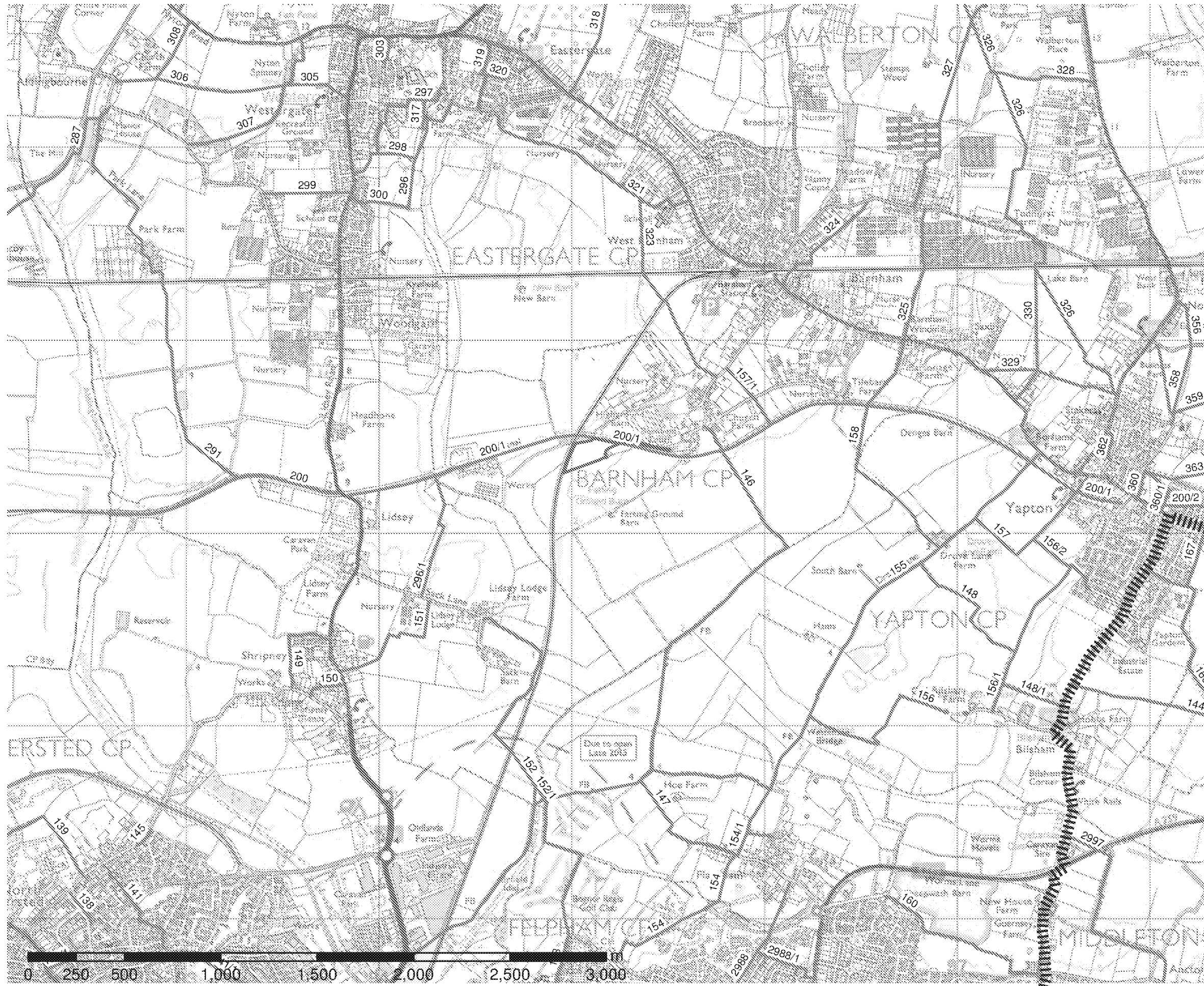
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FIGURE 5
Planning designations and landscape
constraints and opportunities

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Bristol BS5 4ND
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- Site location
- Footpath
- National Cycle Route 2

Sources:
Sustrans
West Sussex County Council

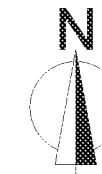
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FIGURE 6
Public Rights of Way and cycle routes

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 Built up areas

Sources:
Natural England
West Sussex County Council

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FIGURE 7
National and local landscape
character areas

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- Site boundary
- Internal viewpoints (A - E)

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FIGURE 8
Aerial view with site boundary and
location of photographs of the site

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Image © 2013 Getmapping plc



Viewpoint A. View from northwest corner of the site looking southeast



Viewpoint B. View from southeast corner of the site looking northwest

Barnham to Bognor Regis
railway line



Viewpoint C. View from southern boundary of the site looking northwest

Barnham to Bognor Regis
railway line



Viewpoint D. View from southern boundary of the site looking northeast

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FIGURE 9.2
Photographs taken from the site

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Viewpoint E. View from southwest corner of the site looking northeast

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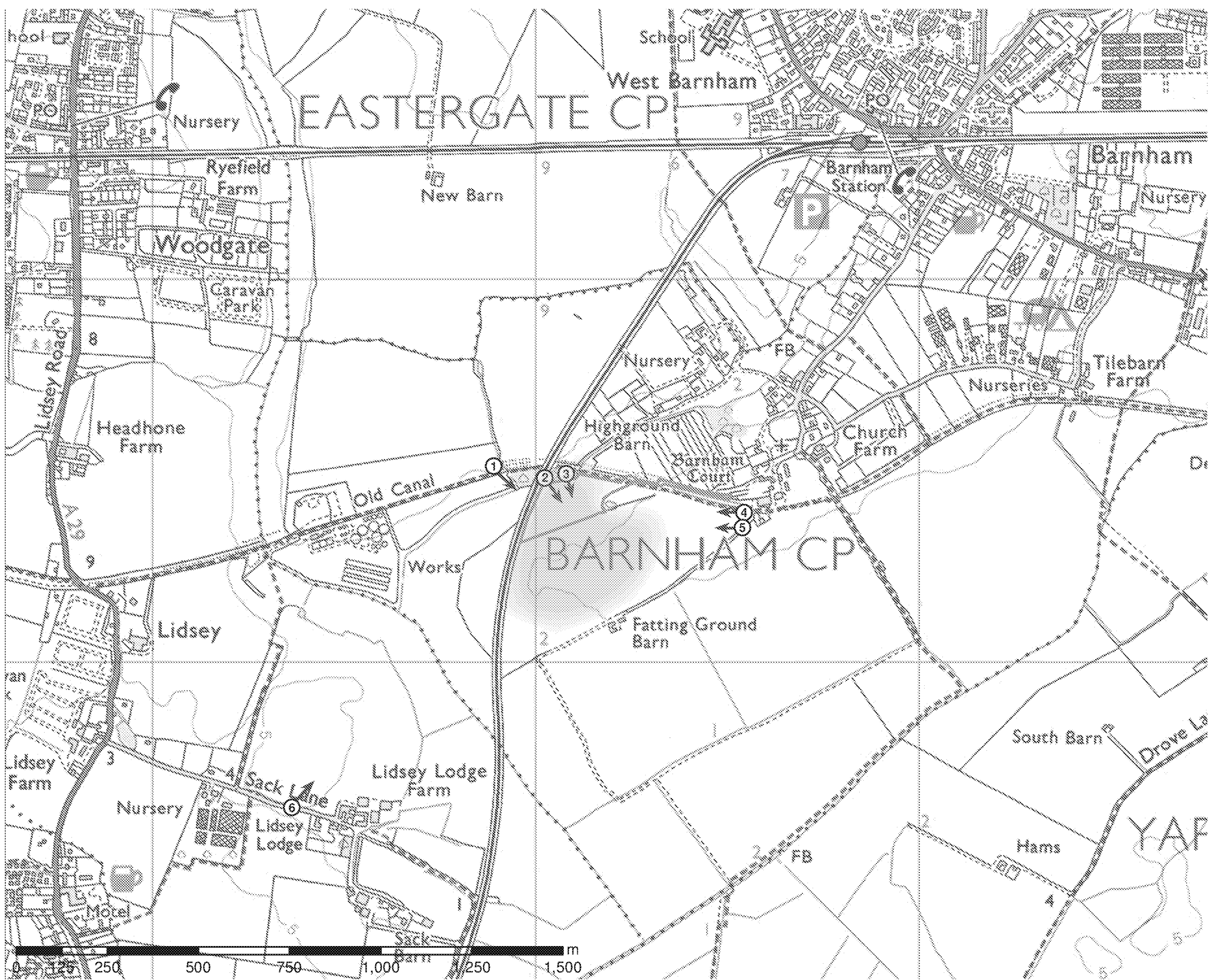
FIGURE 9.3
Photographs taken from the site

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C:\Arup\15_07\Barnham\15_07\Barnham_LVA_FIG10.dwg 27/03/2015 15:07:00 ARUN DISTRICT COUNCIL BN/29/15/PL



- Site boundary
- Viewpoints (1 - 6)
- Zone of visual influence

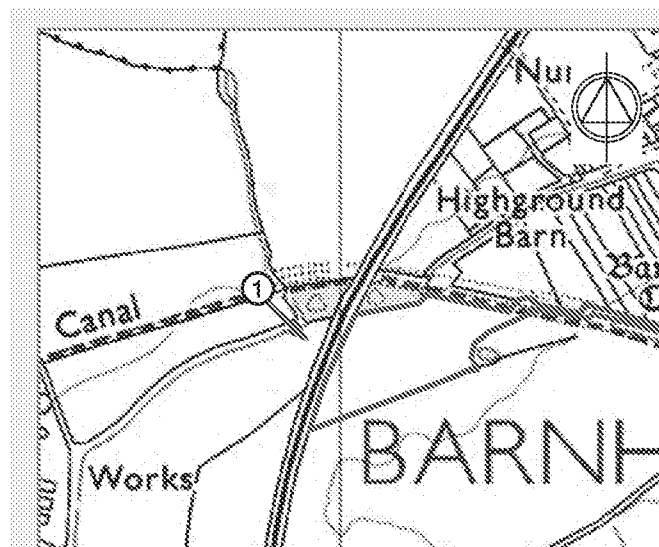
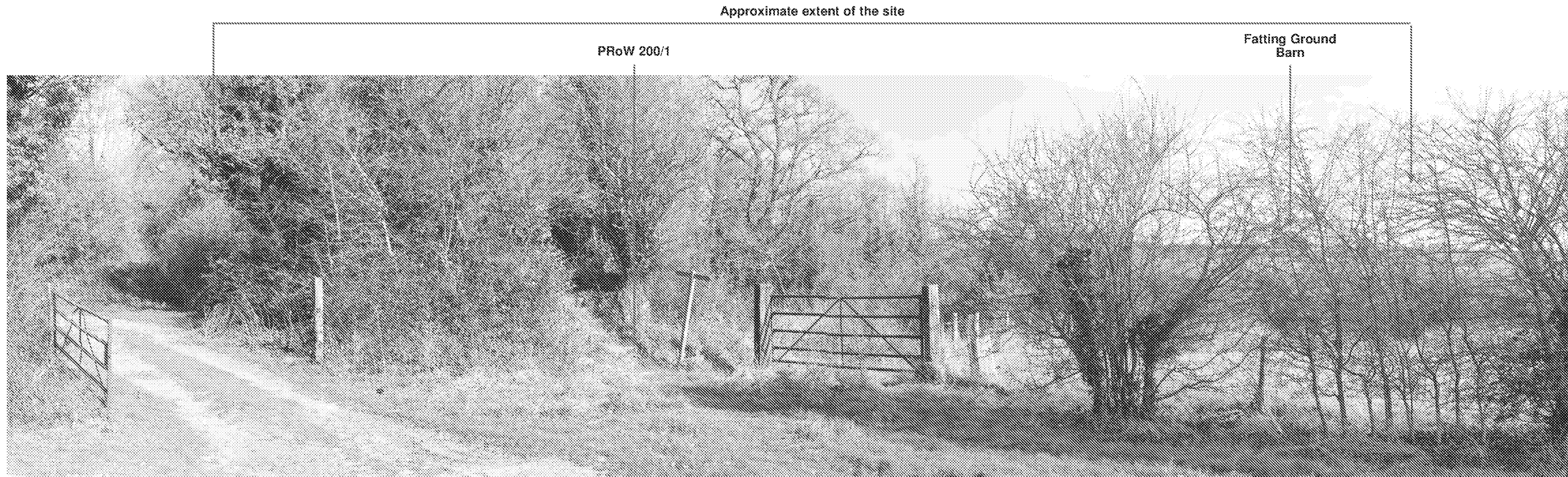
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FIGURE 10
Viewpoint locations plan and zone of visual influence

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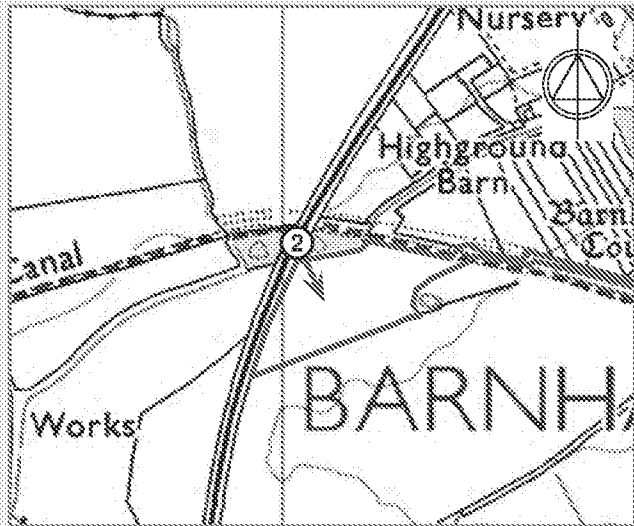
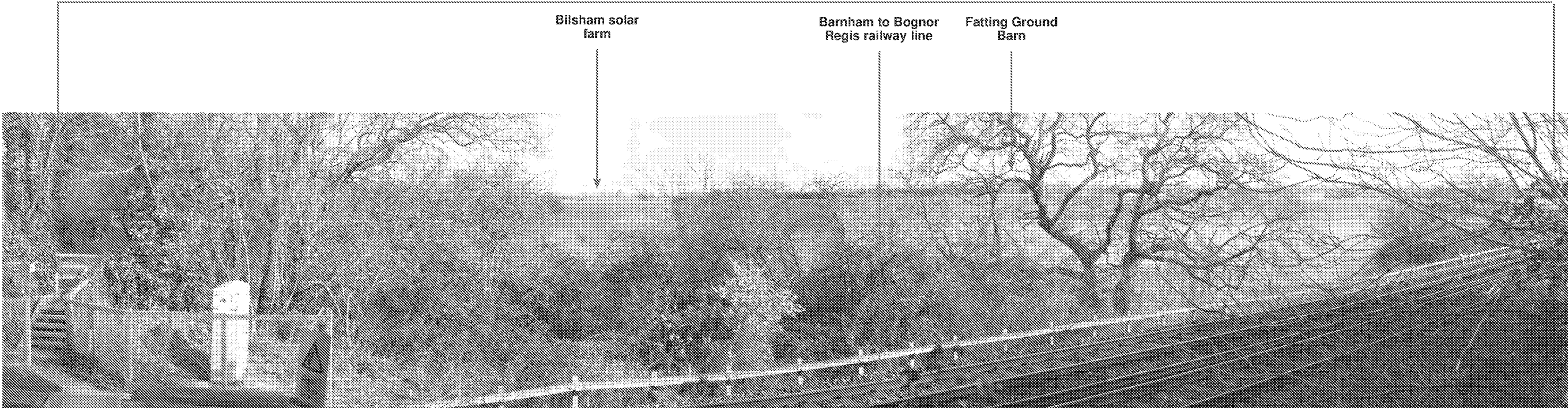
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View from PRoW 200/1 looking across to the site in a south-easterly direction. Hedgerows and woodland in the foreground screen most of the views to the landscape beyond, with just a few glimpses through the bare winter stems of the hedgerow towards Fatting Ground Barn. In front runs a small track and the footpath. The site is not discernible within the view.

Approximate extent of the site



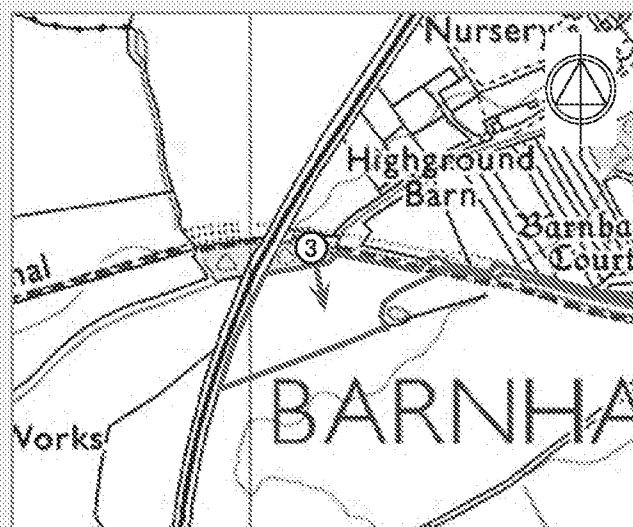
View from the junction of PRow 200/1 and the Bognor Regis to Barnham Railway Line looking across to the site in a south-easterly direction. The railway line dominates the foreground with mature trees and shrubs just beyond, screening the western part of the site. With vegetation not in leaf there are partial views through to the eastern part of the site and across agricultural land towards Fattening Ground Farm. There is also a long distance view towards Bilsham Solar Farm.

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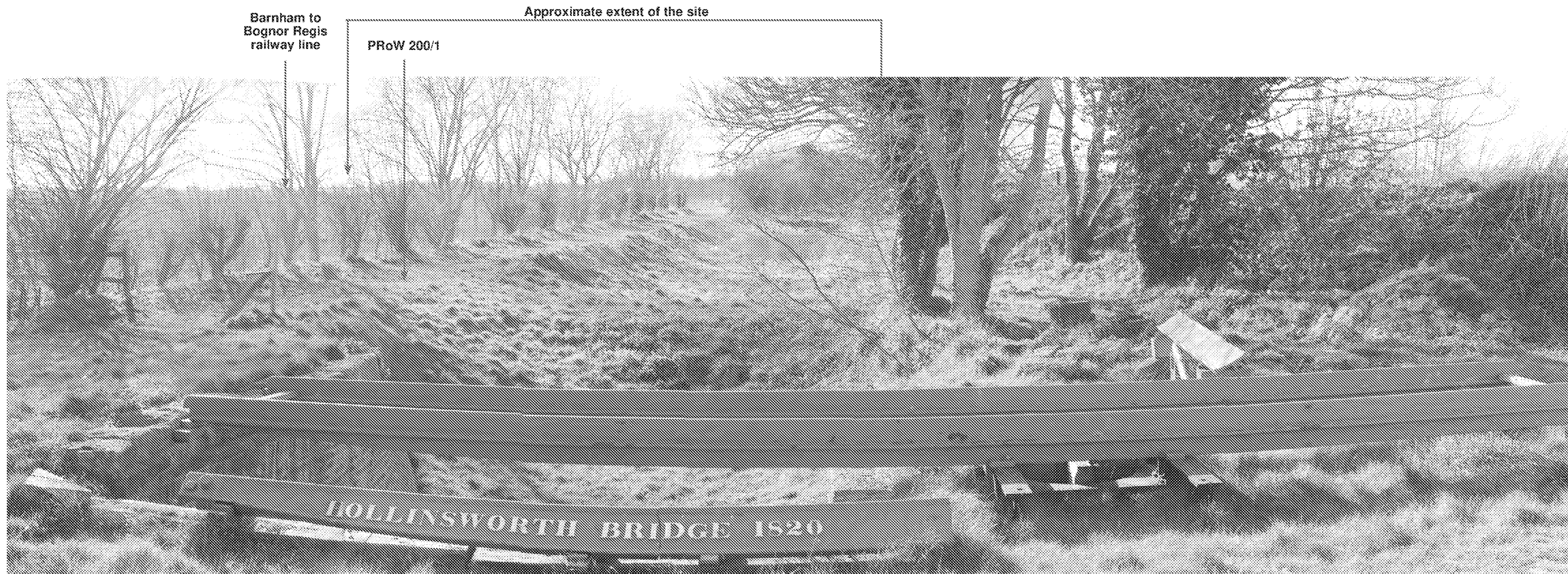
FIGURE 11.2
Viewpoint photographs

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View from a woodland block on PRoW 200/1 looking across to the site in a southerly direction. The view is dominated by mature woodland with dense understory which, while not in leaf, affords partial views to the site and across to agricultural land beyond.



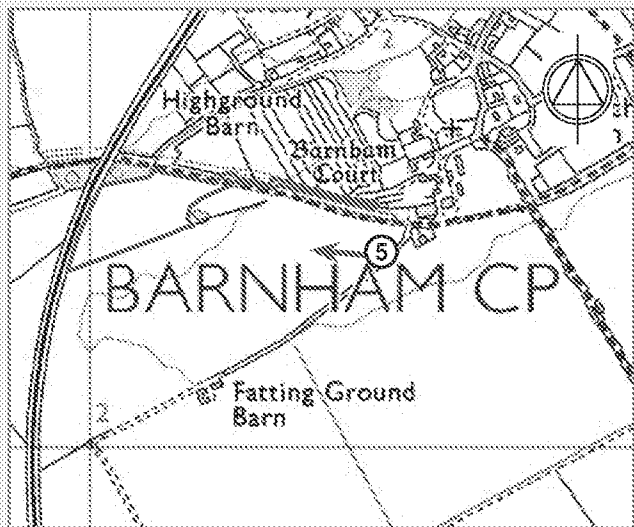
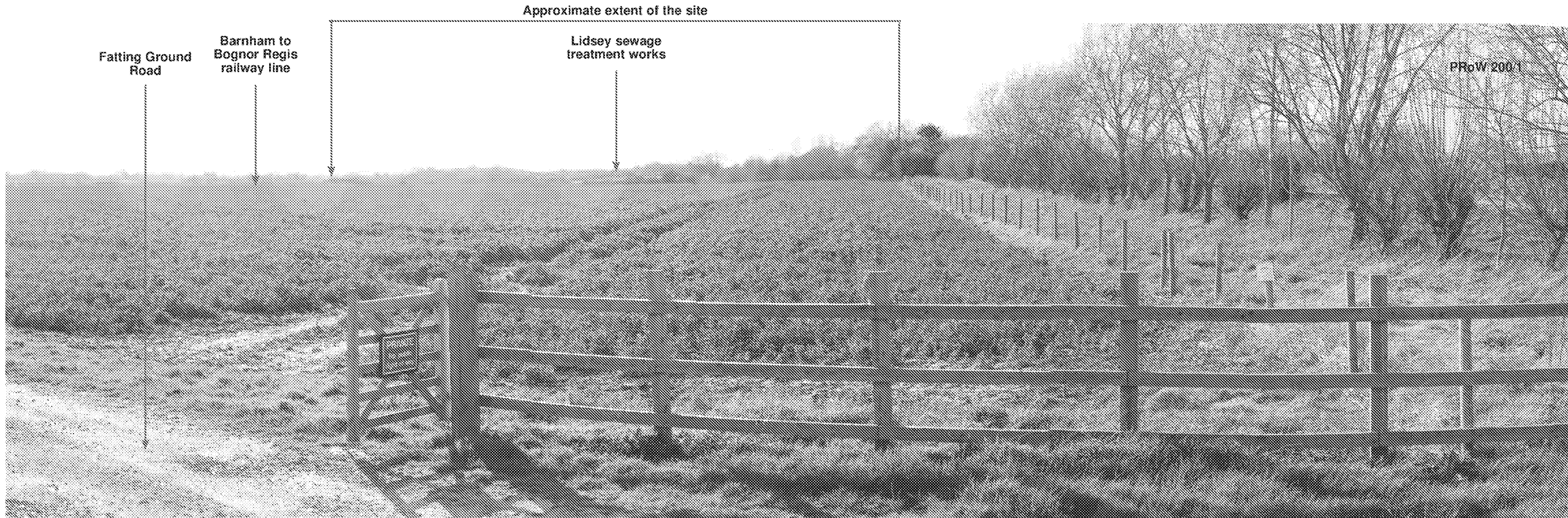
View from Hollinsworth Bridge on PRoW 200/1 looking across to the site in a westerly direction. The infilled canal and the bridge are prominent in the foreground bound by a mature hedgerow which affords partial views to the landscape beyond. The site is not discernible due to a drop in landform and intervening vegetation.

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FIGURE 11.4
Viewpoint photographs

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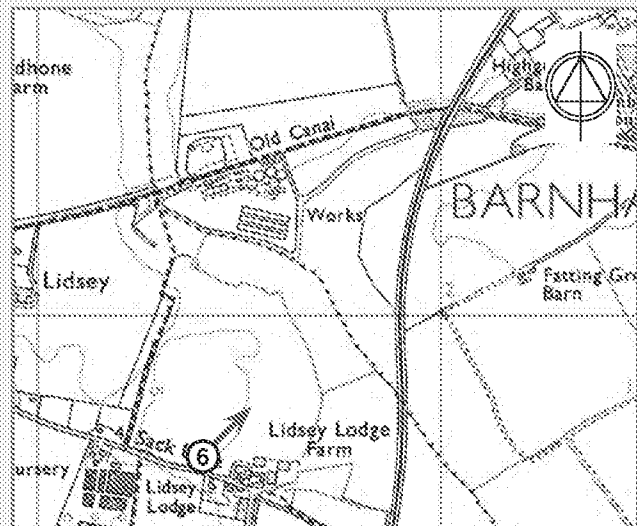
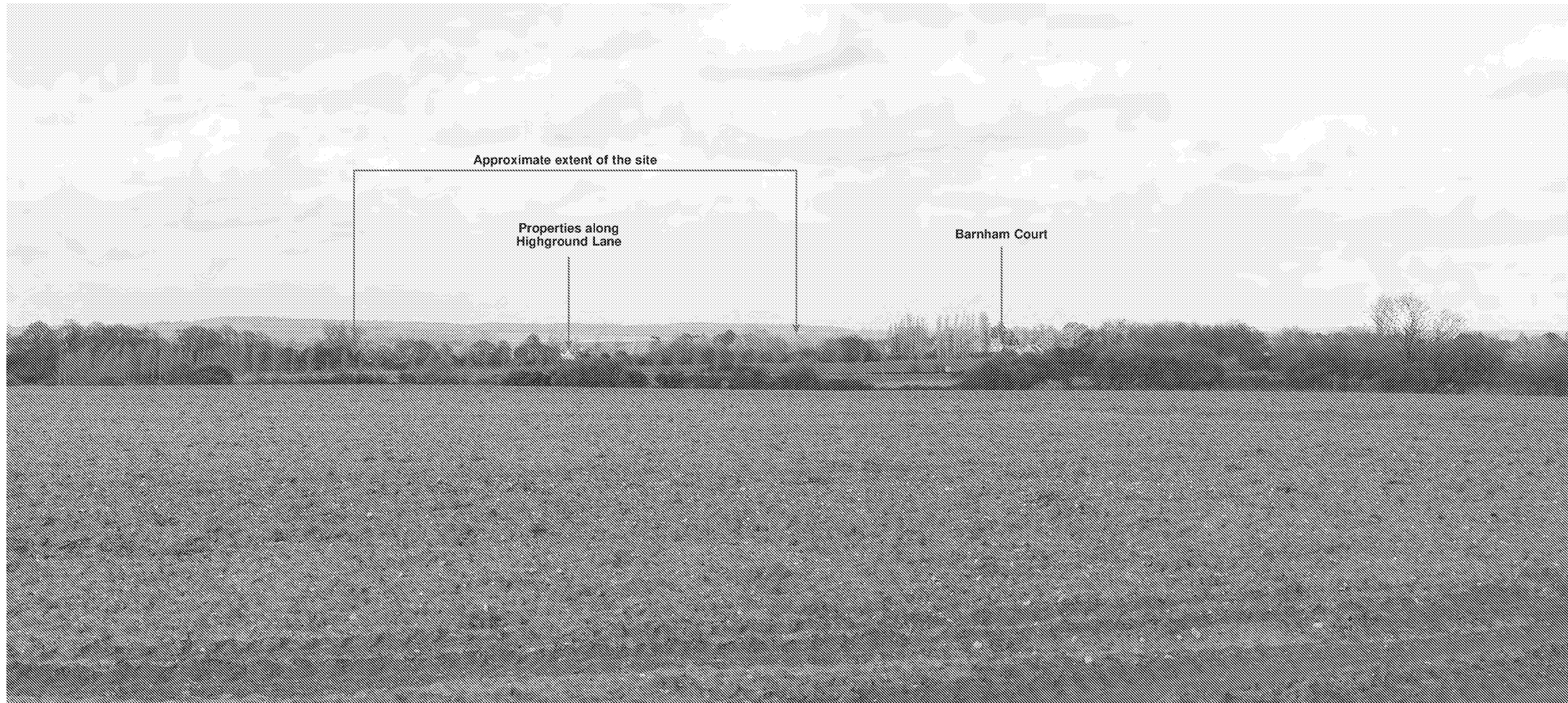


View from Fattening Ground Lane looking across to the site in a westerly direction. An open and long distance view across agricultural land. A line of trees and shrubs delineates the disused canal to the north. The site is not discernible due to a drop in landform and intervening vegetation.

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FIGURE 11.5
Viewpoint photographs

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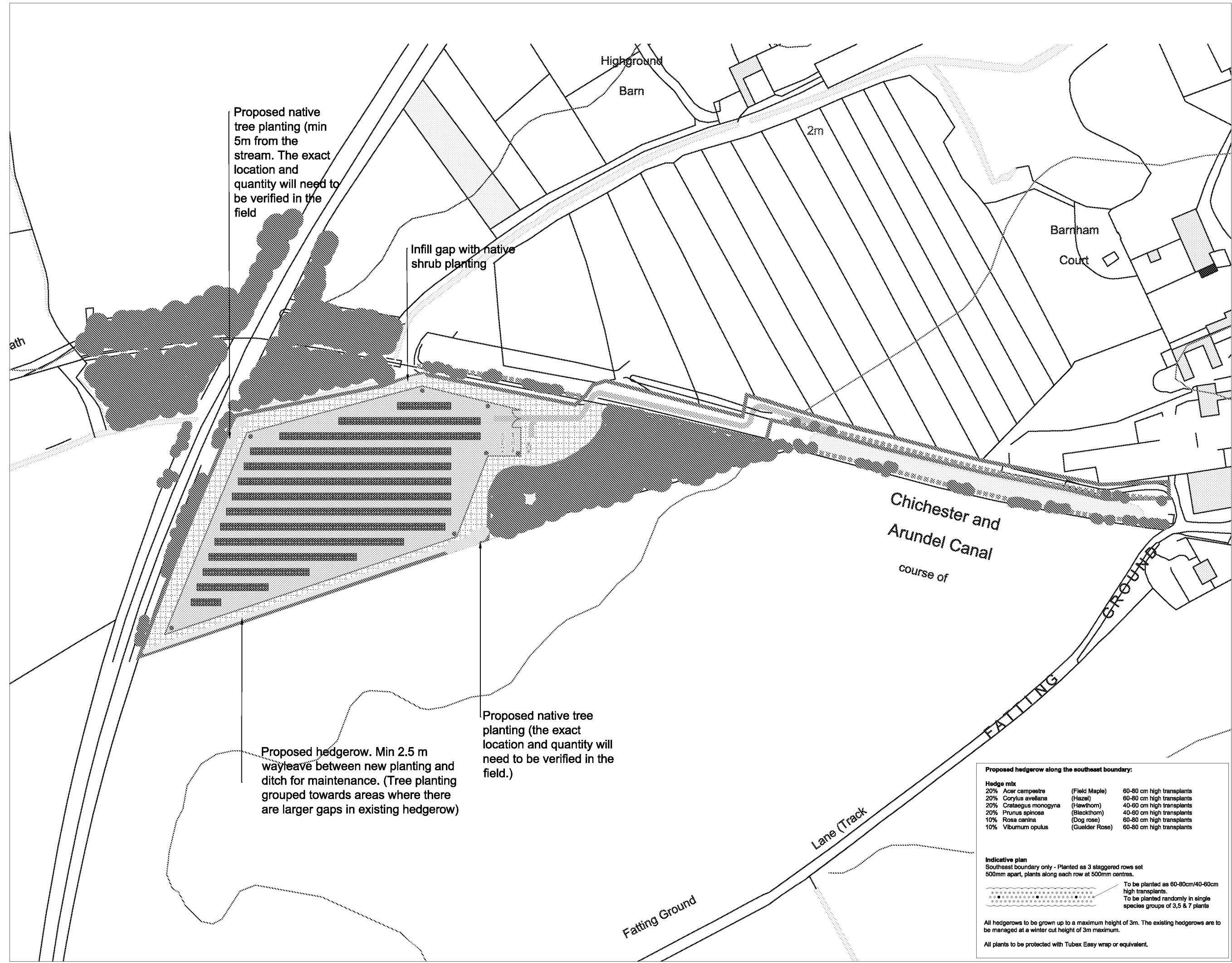
View from Sack Lane looking across to the site in a north-easterly direction. A middle distance view across agricultural land with intervening hedgerows and woodland affording partial views to the rooftops of properties along Highground Lane and Barnham Court. There are long distance views to rising land of the South Downs National Park. A drop in the landform removes the site from view

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FIGURE 11.6
Viewpoint photographs

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- GENERAL NOTES:
1. ALL DIMENSIONS AND LEVELS SHALL BE CHECKED ON SITE PRIOR TO CONSTRUCTION WORK COMMENCING.
 2. ALL LANDSCAPE DRAWINGS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS AND ARCHITECTS DRAWINGS AND SPECIFICATIONS.
 3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE LANDSCAPE SPECIFICATION.
 4. ANY DISCREPANCY CONCERNING THE DRAWINGS SHOULD BE REFERRED TO THE CA IMMEDIATELY.
 5. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
 6. ALL LEVELS IN METERS.
 7. DO NOT SCALE OFF THIS DRAWING.
 8. EXISTING SERVICE ALIGNMENTS SHALL BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION WORK COMMENCING.

- Legend
- Site boundary
 - Existing vegetation, consisting of poorly maintained hedgerows and trees and scrub
 - Proposed hedgerow (locally indigenous species) managed to a winter cut height of 3m
 - Proposed hedgerow with randomly spaced trees
 - Proposed area to be seeded with species rich grassland mix
 - Wildlife Protection Zone (WPZ) Min 6m wide. To be left to revegetate naturally

Notes:

- Drawing to be printed in colour

FIGURE 12
Landscape Masterplan



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Hedge Chapel House
Hedge Chapel Hill
Hedgeville
Barnham BN25 4ND
United Kingdom

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CLIENT BL SOLAR 7 LTD		
PROJECT BARNHAM COURT		
TITLE LANDSCAPE MITIGATION PLAN		
Status: FOR PLANNING	Drawn: JL	Checked: MR
Scale: 1:2500@A3	Date: 21/07/15	Approved: NR
Drawing Number: 2768 200 MITIGATION PLAN		Rev: A

Proposed hedgerow along the southeast boundary:

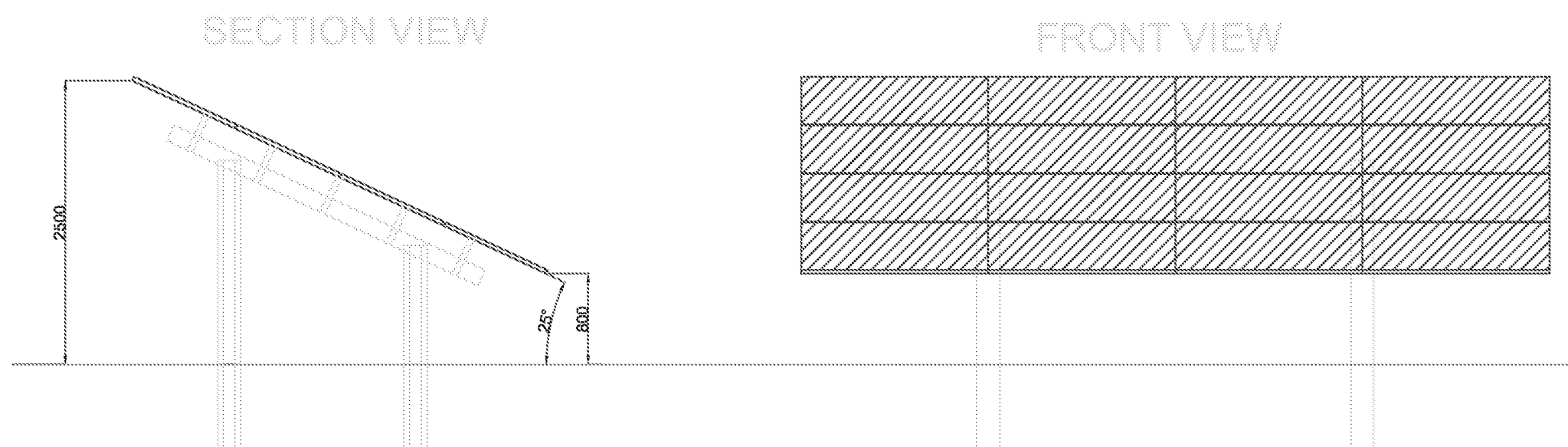
Hedge mix		
20% Acer campestre (Field Maple)	60-80 cm high transplants	
20% Corylus avellana (Hazel)	60-80 cm high transplants	
20% Crataegus monogyna (Hawthorn)	40-60 cm high transplants	
20% Prunus spinosa (Blackthorn)	40-60 cm high transplants	
10% Rosa canina (Dog rose)	60-80 cm high transplants	
10% Viburnum opulus (Guelder Rose)	60-80 cm high transplants	

Indicative plan
Southeast boundary only - Planted as 3 staggered rows set 500mm apart, plants along each row at 500mm centres.

To be planted as 60-80cm/40-60cm high transplants.
To be planted randomly in single species groups of 3, 5 & 7 plants

All hedgerows to be grown up to a maximum height of 3m. The existing hedgerows are to be managed at a winter cut height of 3m maximum.

All plants to be protected with Tubex Easy wrap or equivalent.



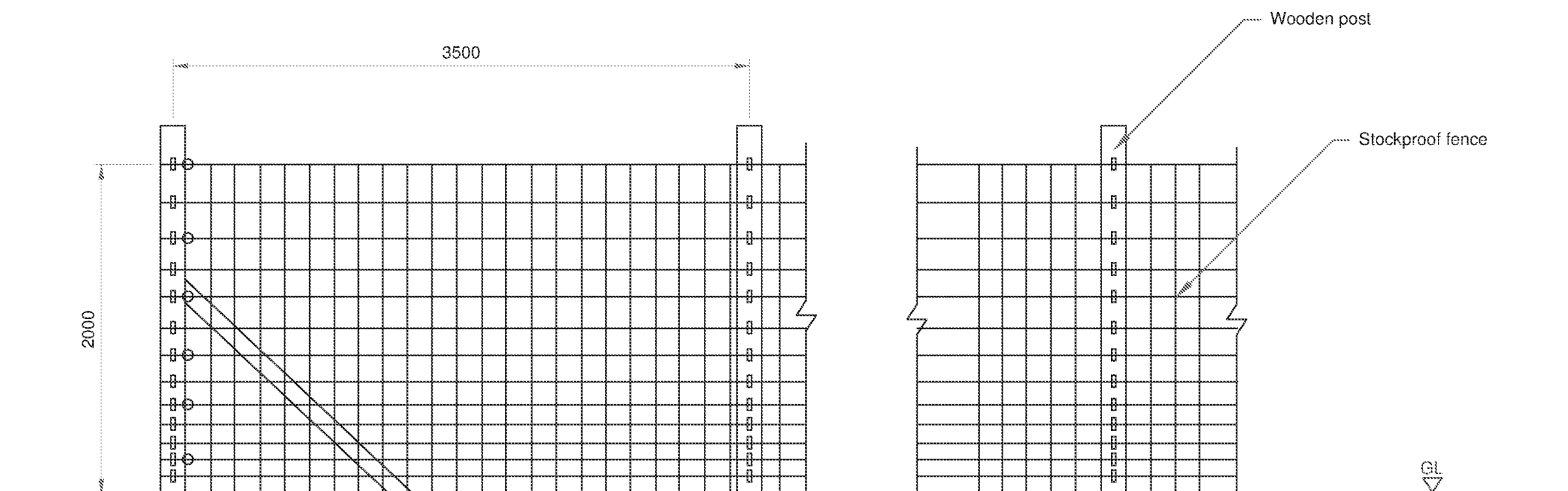
Scale 1:50 @A3

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FIGURE 13
Typical panel elevations

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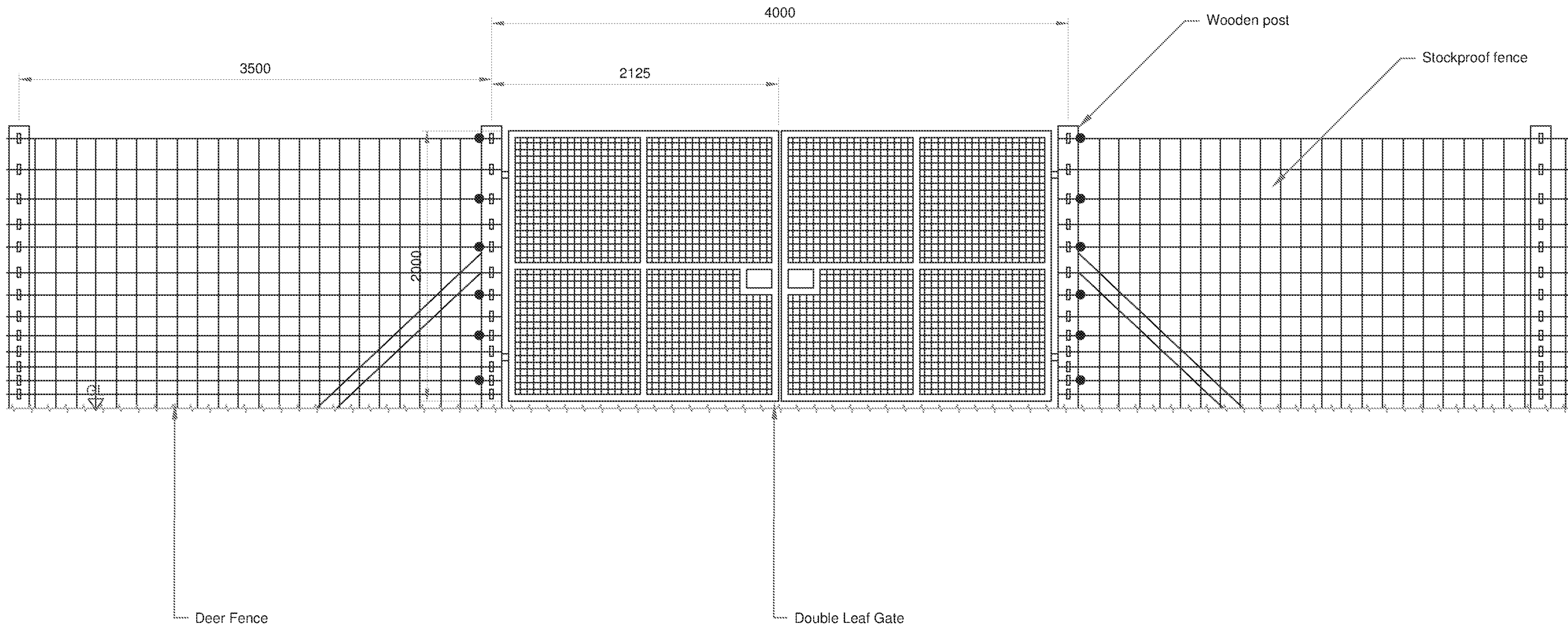


Scale 1:30 @A3

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FIGURE 14
Typical fence details

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Scale 1:30 @A3

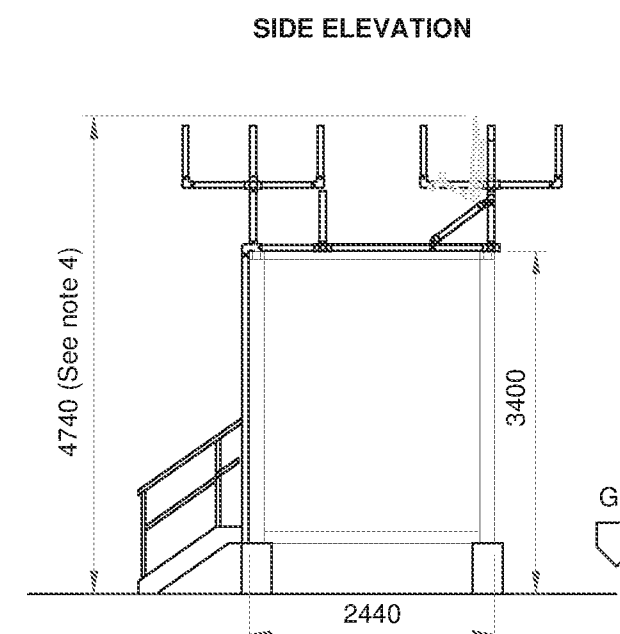
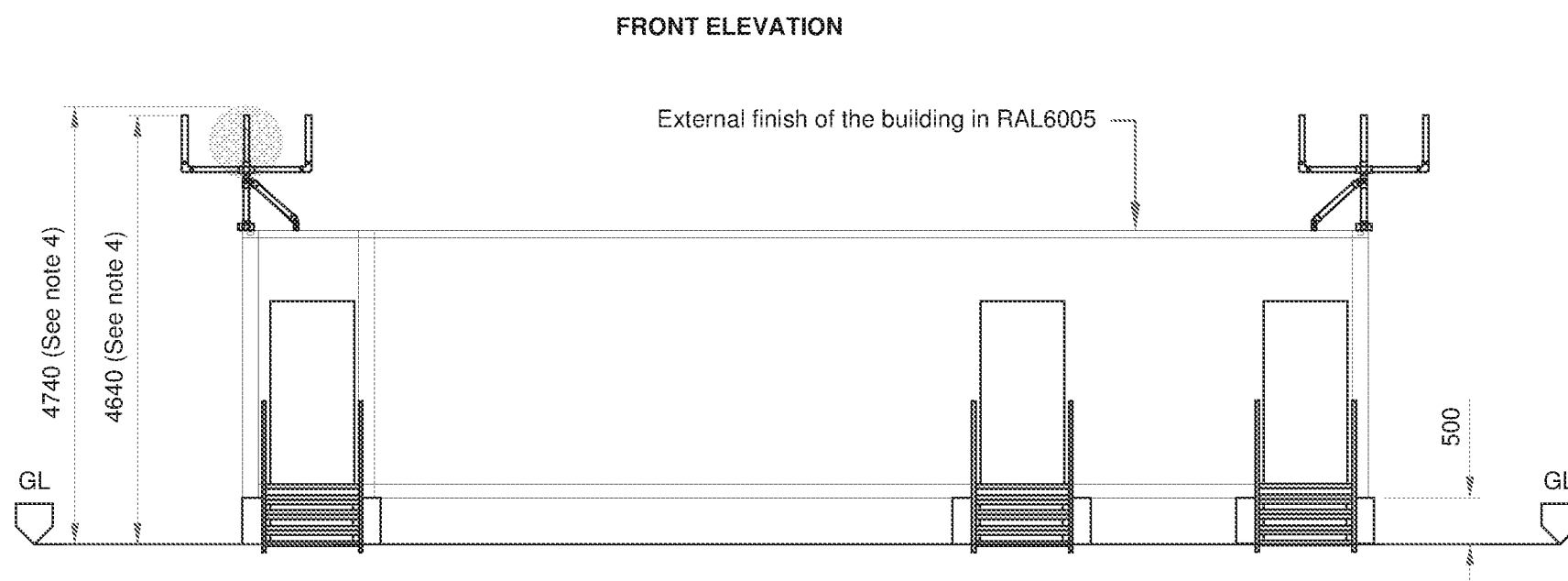
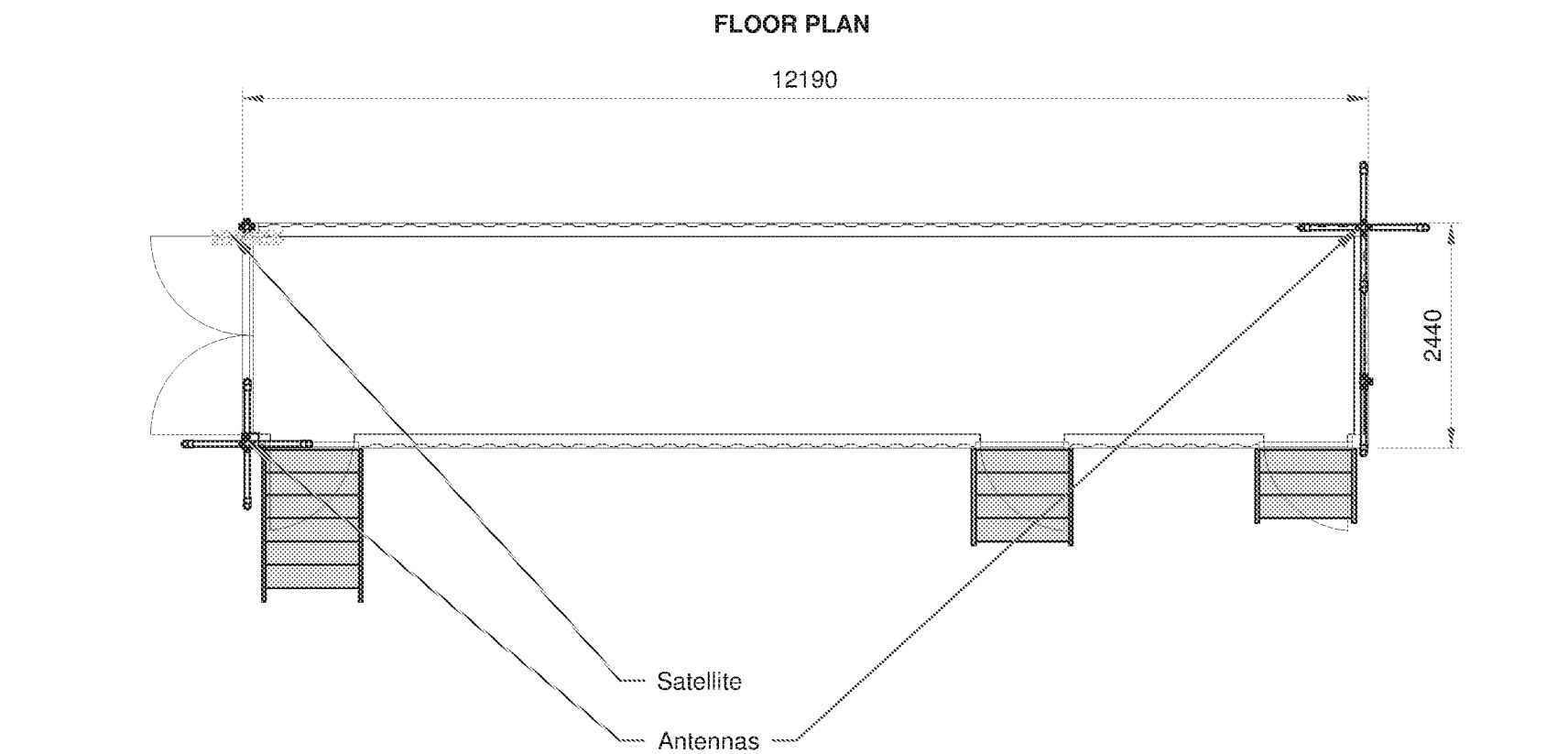
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FIGURE 15
Gate Elevation

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Scale 1:75 @A3

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FIGURE 16
Customer Switchgear Container
Elevations

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IMPORTANT NOTE

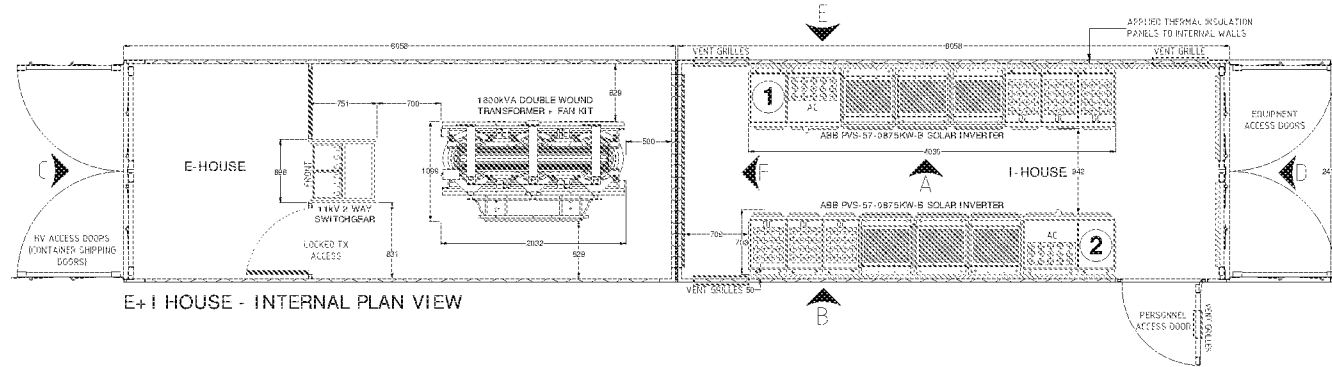
Patent Pending on the containerised arrangement of all equipment and ancillary items shown upon this drawing

E + I HOUSE ARRANGEMENT

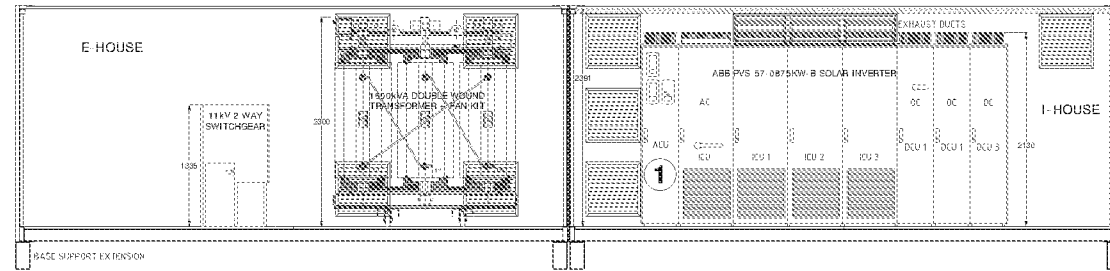
THIS DRAWING IS FOR INDICATIVE PURPOSES ONLY
WE RESERVE THE RIGHT TO CHANGE OR MODIFY AT OUR DISCRETION

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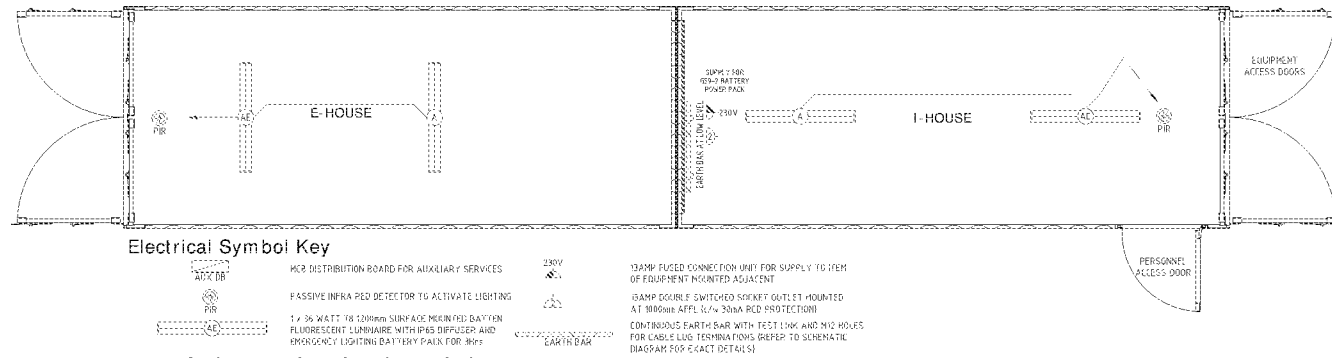
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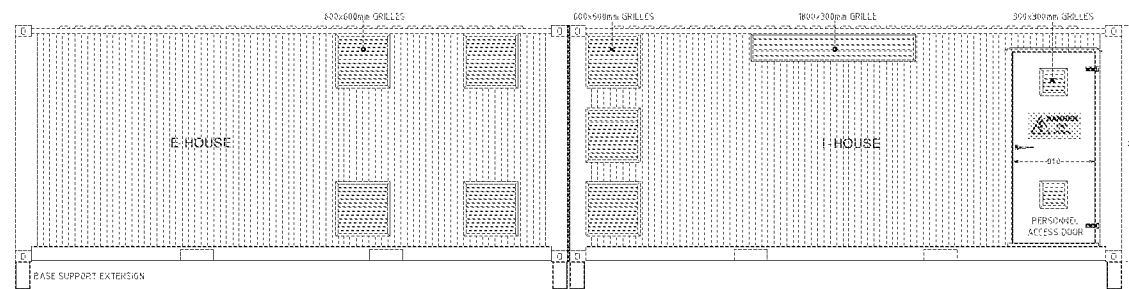
E+I HOUSE - INTERNAL PLAN VIEW



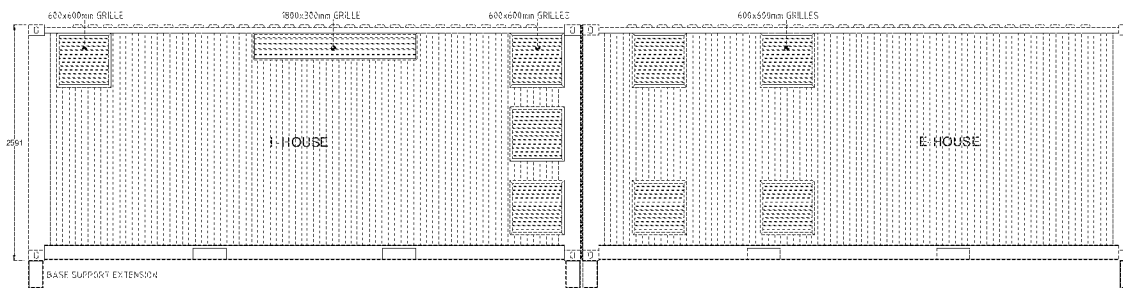
INTERNAL SIDE ELEVATION VIEW 'A'



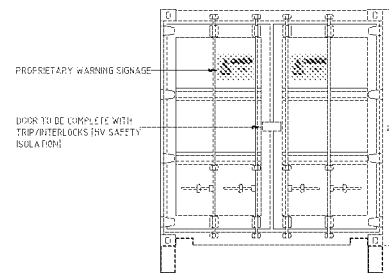
E+I HOUSE - ELECTRICAL SERVICES



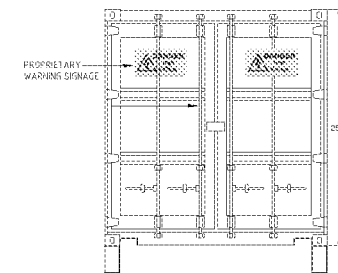
EXTERNAL SIDE ELEVATION VIEW 'B'



EXTERNAL SIDE ELEVATION VIEW 'E'



EXTERNAL END VIEW 'C'



EXTERNAL END VIEW 'D'

PROPOSAL ISSUE

Barnham Court Ground Mounted PV Scheme

ABB

DATE: 13/04/15
DRAWN: A. Groom
CHECKED: J. Groom
APPROVED: M. Groom
TITLE: 11kV 0875kW E + I House Arrangement (2 x PVS 0875)

barratt
BARRATT ENERGY
CAMELLIA HOUSE, 78 WATERLOO
WILMINGTON, CHESHIRE, SK9 2NR
TEL: 01625 537554

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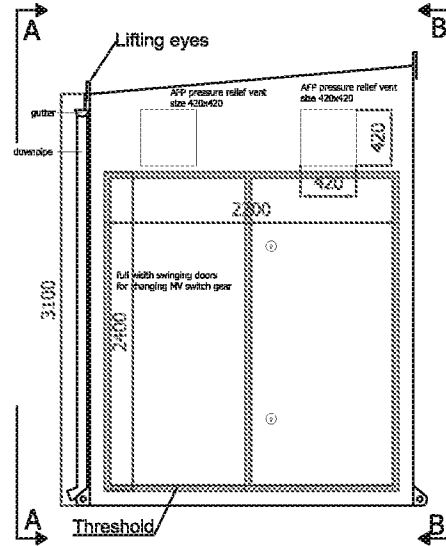
FIGURE 17
Inverter Transformer
Housing Elevations

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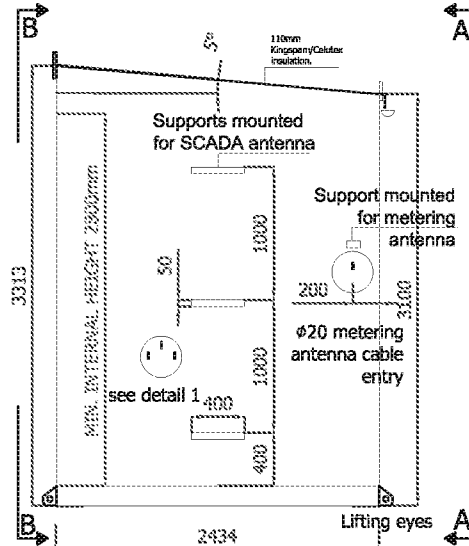
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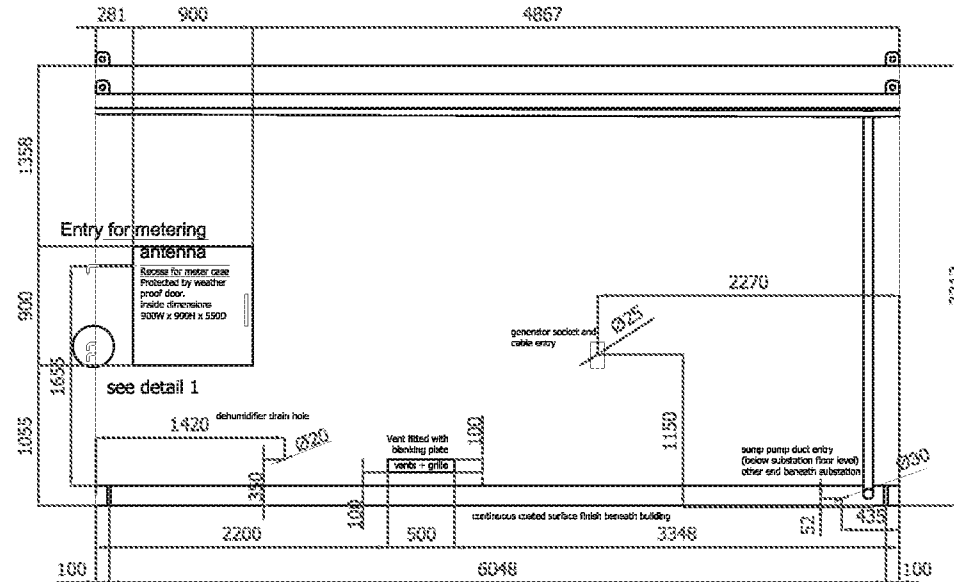
front view



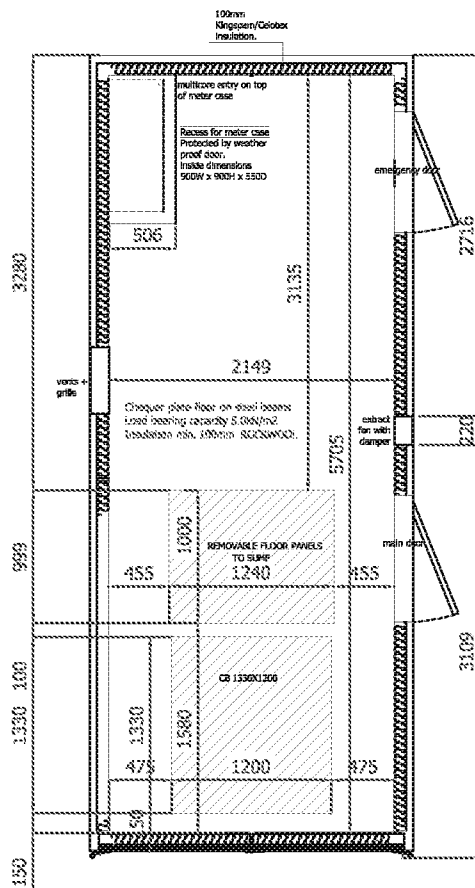
back view



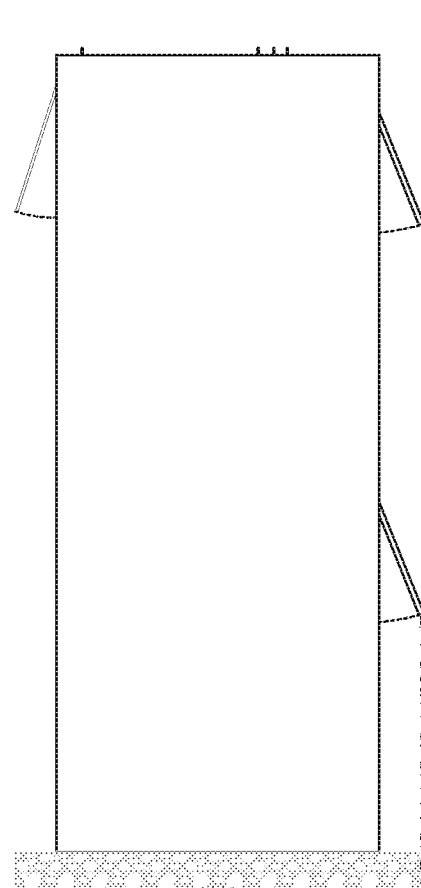
A-A view



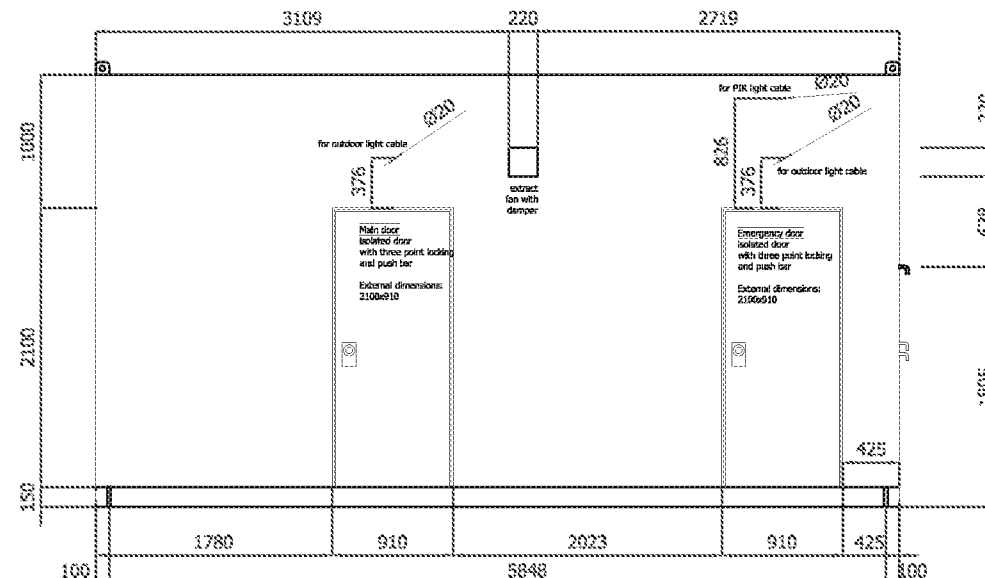
floor view



top view

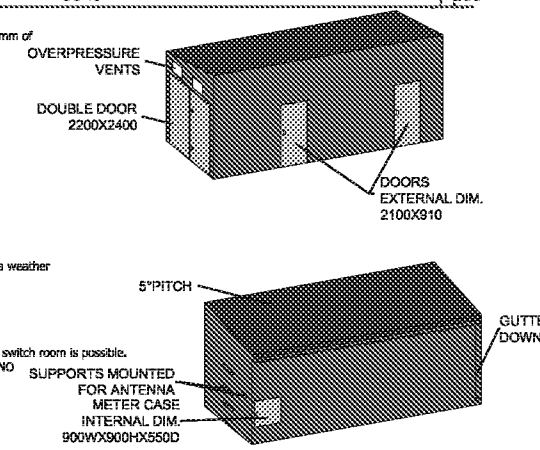


B-B view

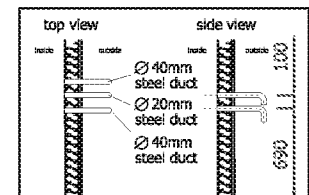


Building construction:
The outside layer of the building is constructed of 1.6mm anti-corrosive steel fitted into cassettes. The outside finish is smooth steel, painted with a two pack paint baked finish. It is insulated by 100mm of non-combustible insulation (Kingspan/Celotex), attached to the roof, and walls, to meet a U value of max. 0.22 W/m2.K as specified in DNO switch room specifications. See relevant drawing for the site for more details.
The internal walls are 1.5mm galvanised steel sheet.
The building is fire-proof, exceeds 1 hour fire rating, class A1 according to EN 13501-1, and entirely water-proof.
The building is constructed with a steel frame, fully vertical steel sides and front wall, steel double doors at the front end and a steel roof.
The roof has a 5° pitch. There is a gutter and down pipe fitted to the lower side of building.
The whole building is painted in gloss finish to RAL 6003-olive.
The floor is made of a galvanised steel checker plate.
There are 3 steel ducts (detail 1) fitted in the end of the building to allow the Scada antenna cables to pass through.
There is a removable threshold installed at the double doors to enable switchgear installation.

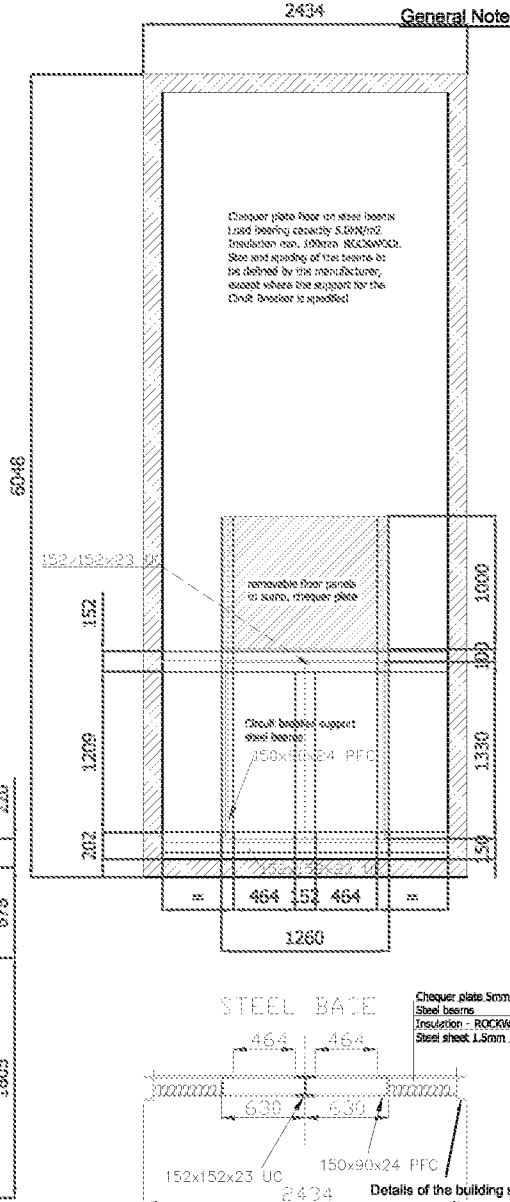
Metering:
A recessed meter compartment is provided to install metering, accessible only from the outside via a weather proof door with standard triangle lock.
There is a cable entry from outside to allow the metering antenna cable to pass through.
Access:
The switch-room is accessible by two side doors (external dimensions: 2100x910) and one double swing door at the front (2400x2200mm).
The metering cubicle is accessible by one side door. No direct access between metering cubicle and switch room is possible.
The side doors can swing 90° and are fitted with 90° open lock system. Provision is made for the DNO to fit Euro lock barrels as per the switch room specifications. The double front doors can swing 270° with 2 Euro lock mortice type style 5 lever locks.
The front doors are insulated with 100mm Kingspan/Celotex insulation.
Each side door opens outwards and is fitted with an internal panel push bar handle.
Openings:
Cable entries are cut in the building floor to allow cables to be terminated in the switch gear.
Opening is provided for the trap door in the floor in front of the switchgear. The trap door consists of a removable floor panel with handles (provided).
Ventilation:
Passive ventilation is provided on the side wall; at least 8000mm2 as specified in DNO switch room specifications. The opening is protected by a grille to prevent any intrusion.
An extract fan with damper is provided as well on the opposite wall to ensure air circulation through the room.
APF pressure relief vents are fitted above the double doors which is at rear of switchgear.
A dehumidifier will be fitted as standard equipment.



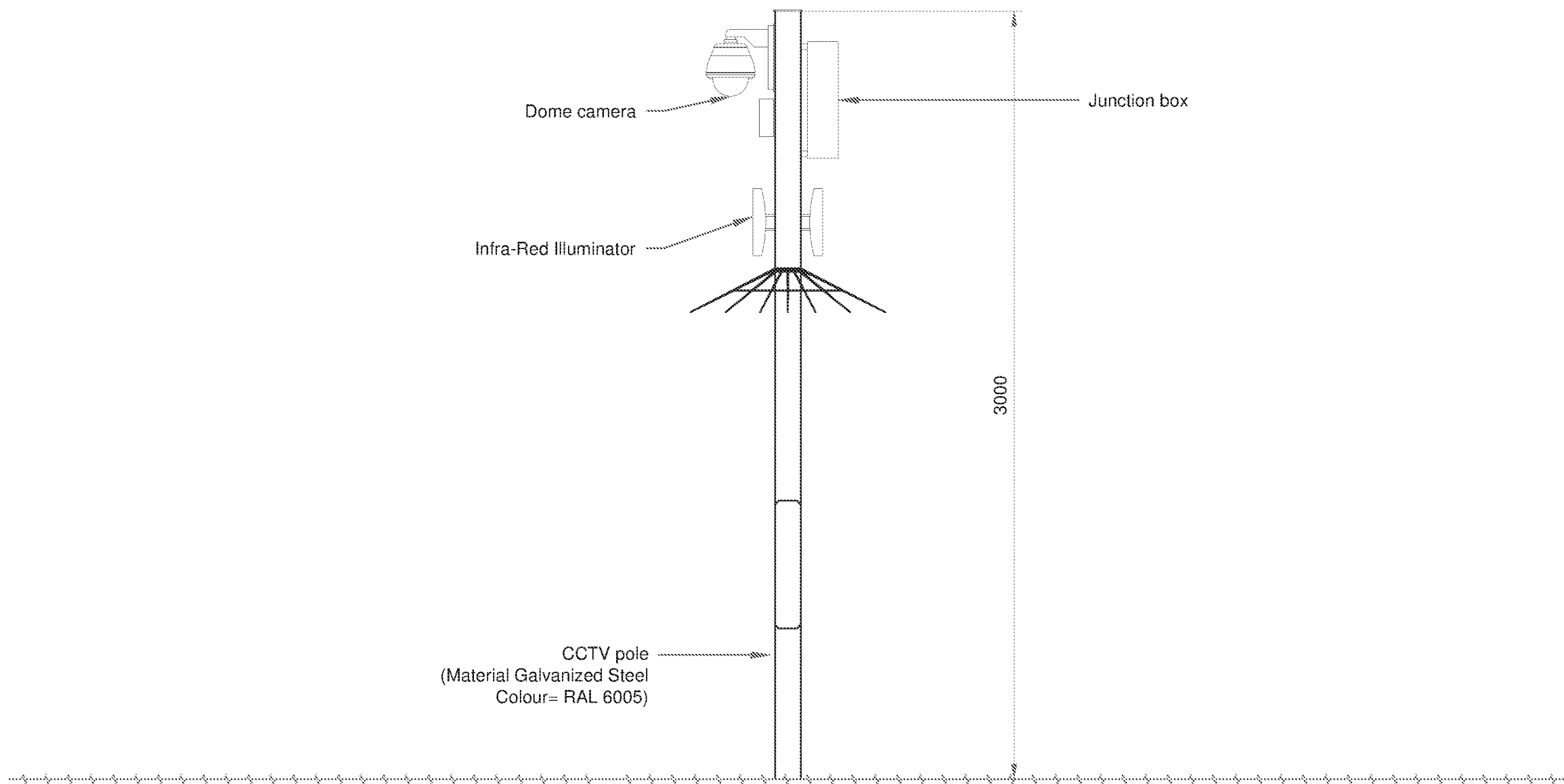
Detail 1 - SCADA antenna cable entry



3m of hard standing outside double door min. 250mm Type 1 material



Rev.	Modification	Date	Name
1	Scale	Date	Drawn by: AW
2	1:50 (A3)	08.04.14	Checked by: CG
3	Status: Approved		Approved by: LM
Project Name:			
Substation enclosure plan			
Project No.			
Generic drawing			
Drawing No.			
DNO Consulting Limited 3 Sheep Street Highworth Wiltshire SN6 7AA Tel: 01793 981482 Fax: 01793 250800 e-mail: info@dnoc-sep.co.uk			
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Scale 1:20 @A3

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FIGURE 19
CCTV Pole Elevation

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