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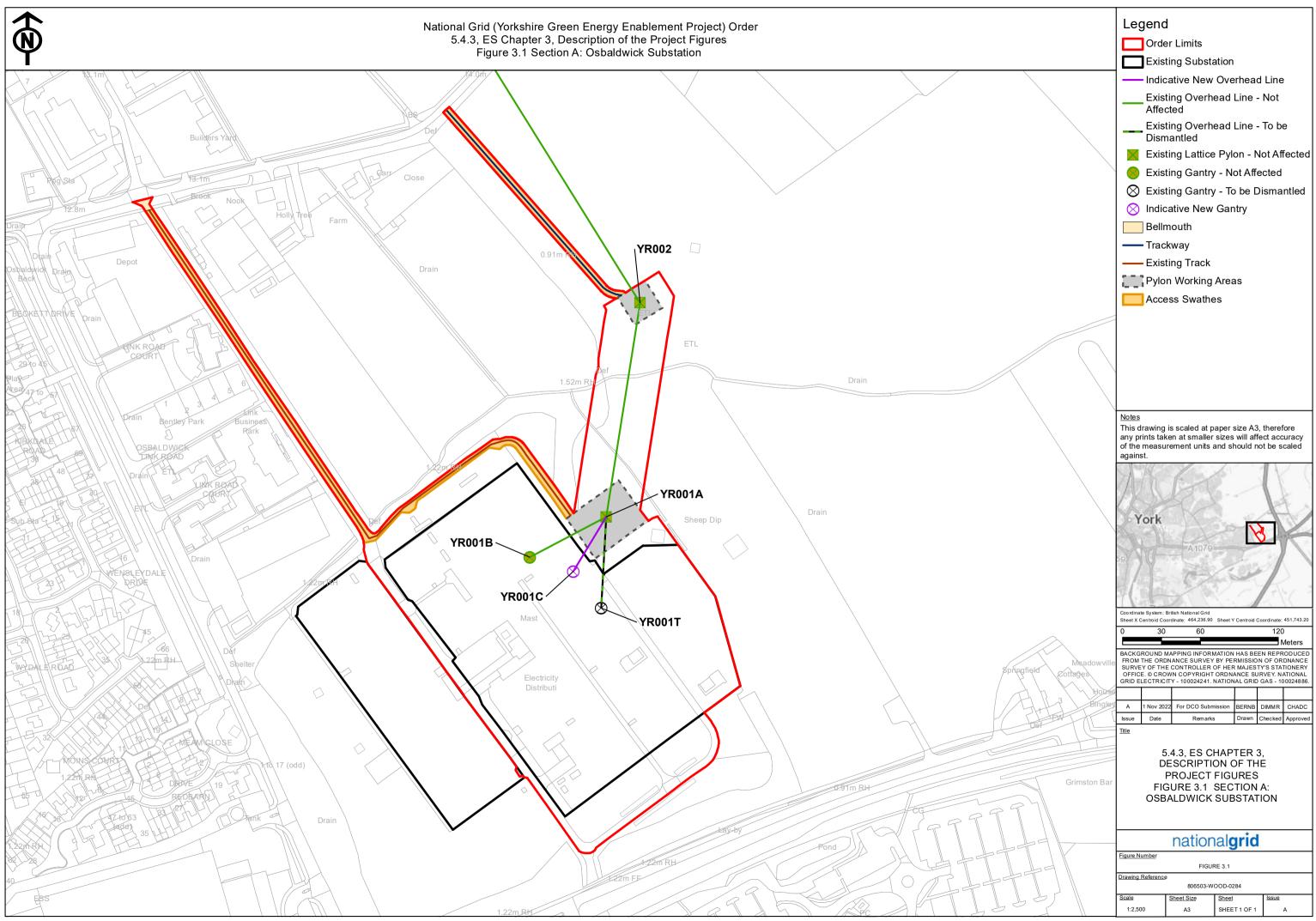
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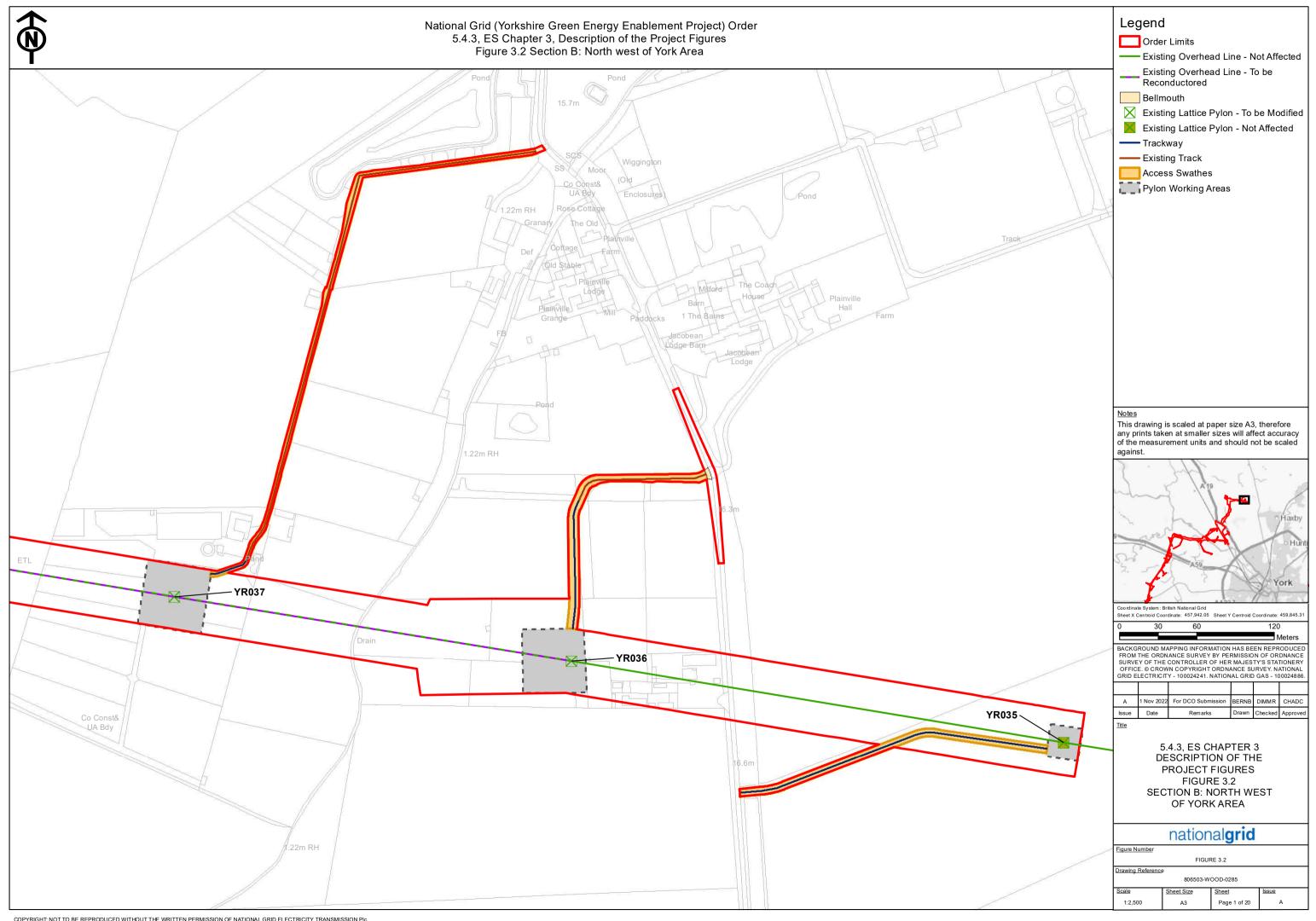
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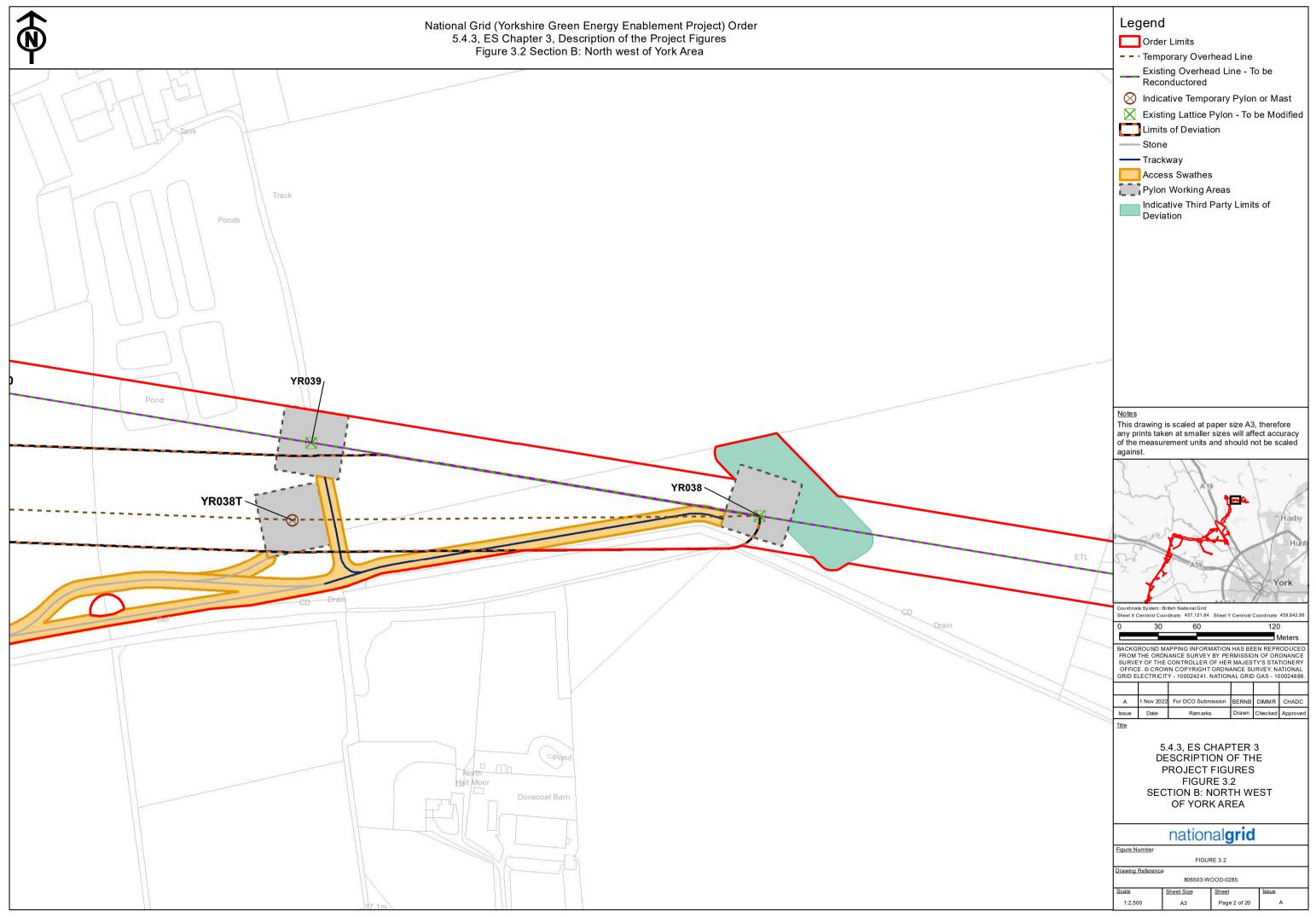
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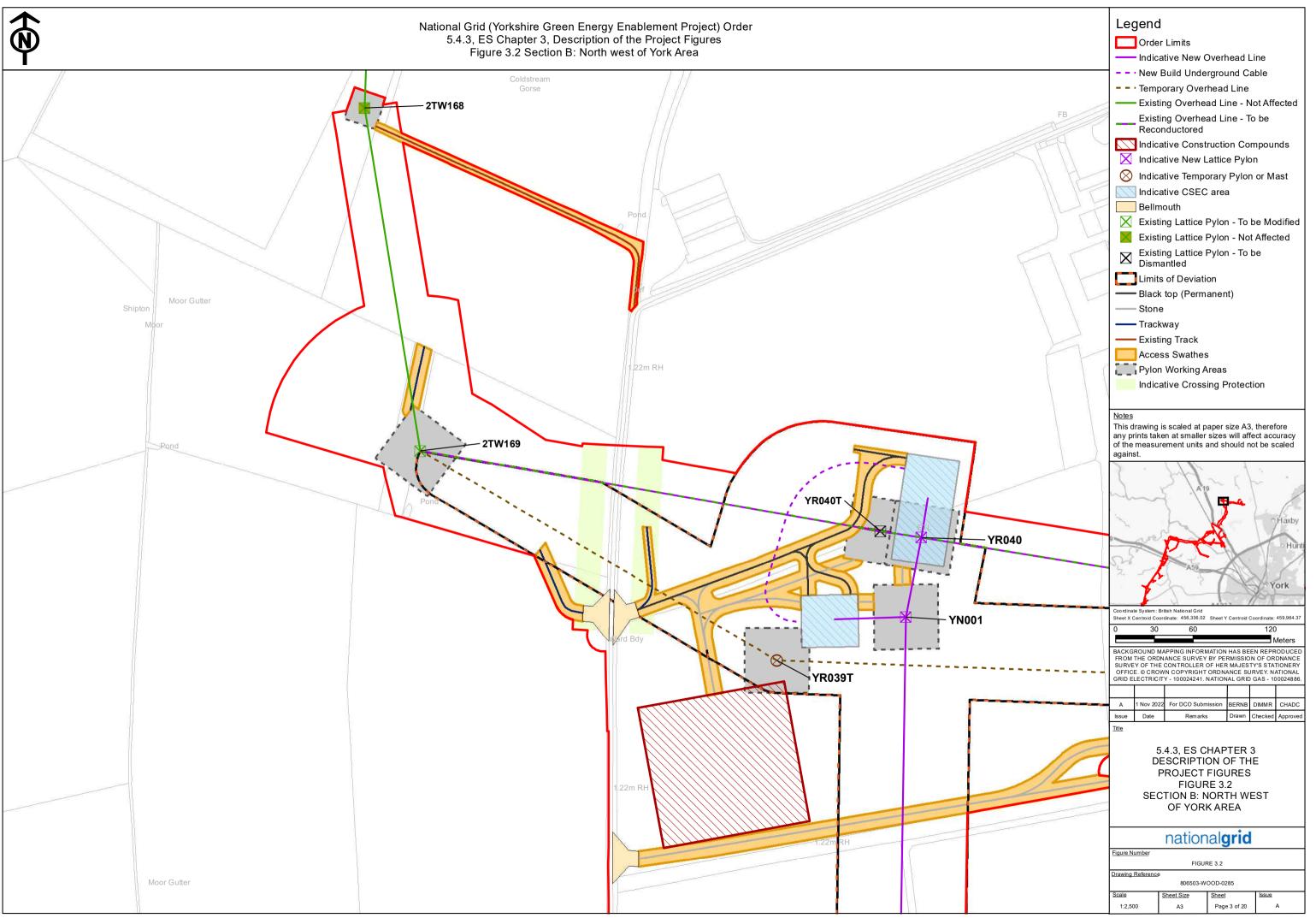
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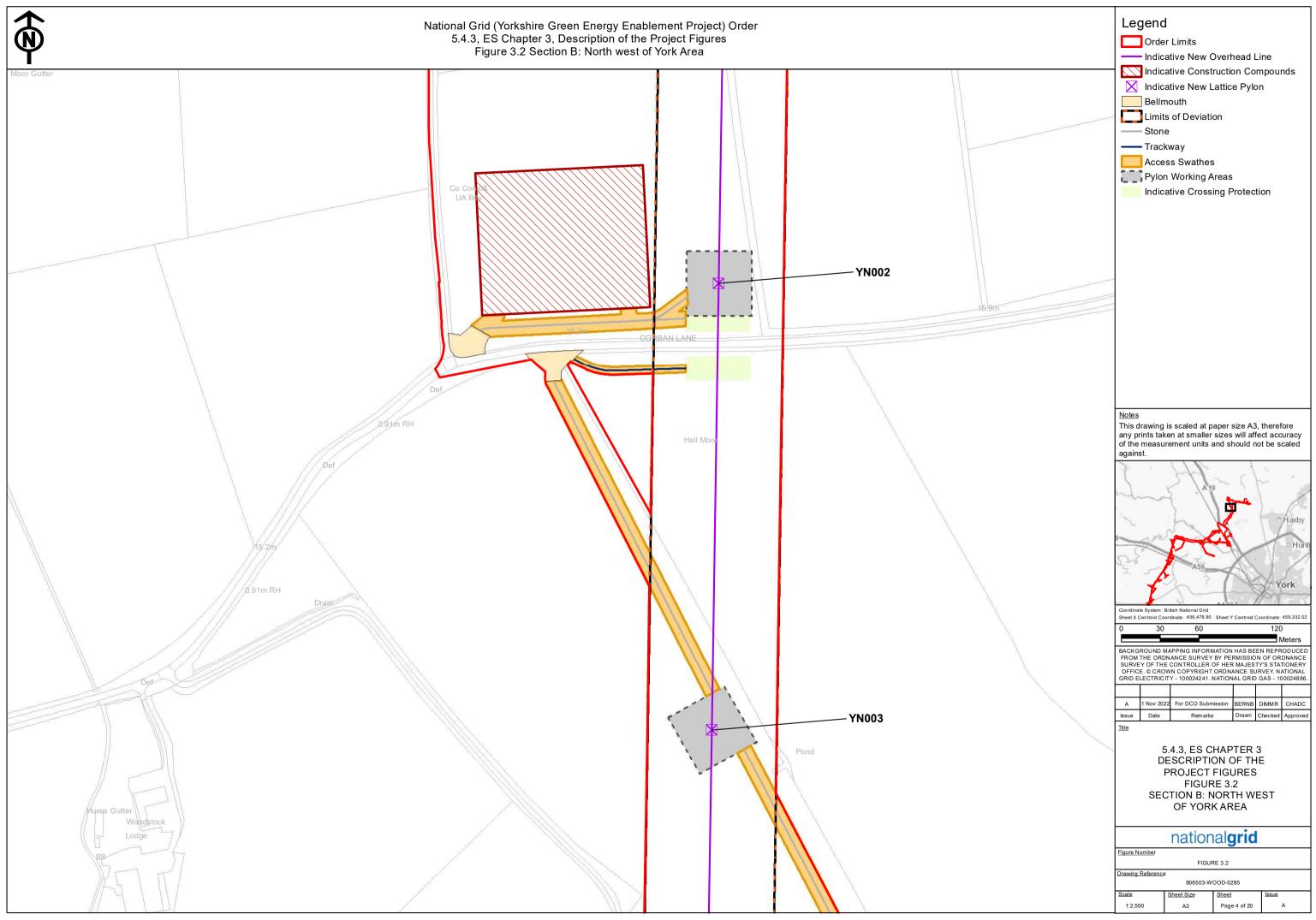
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01/11/2022	A	Final	First Issue
17/02/2023	В	Final	Additional pages added for Figure 3.3.

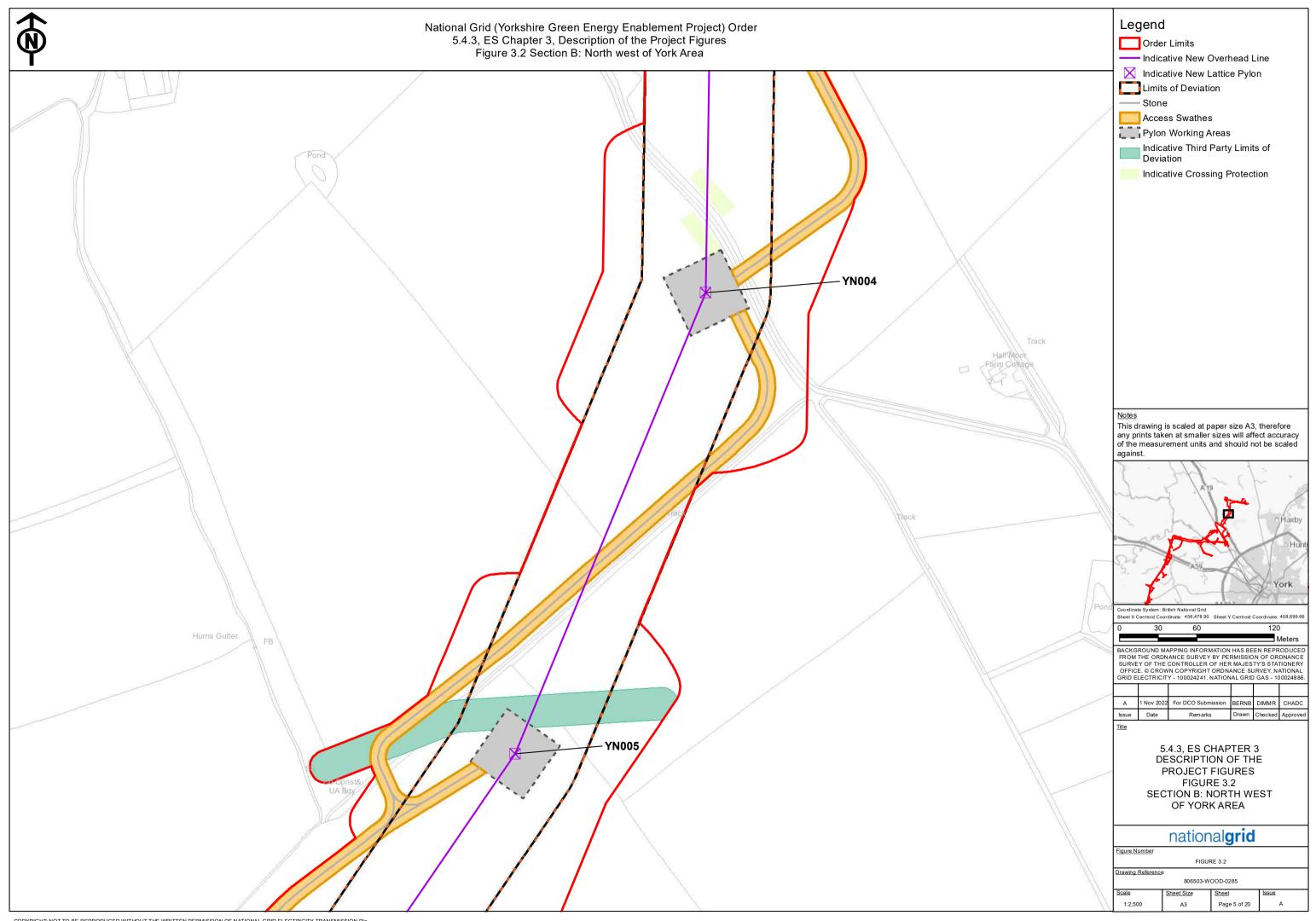


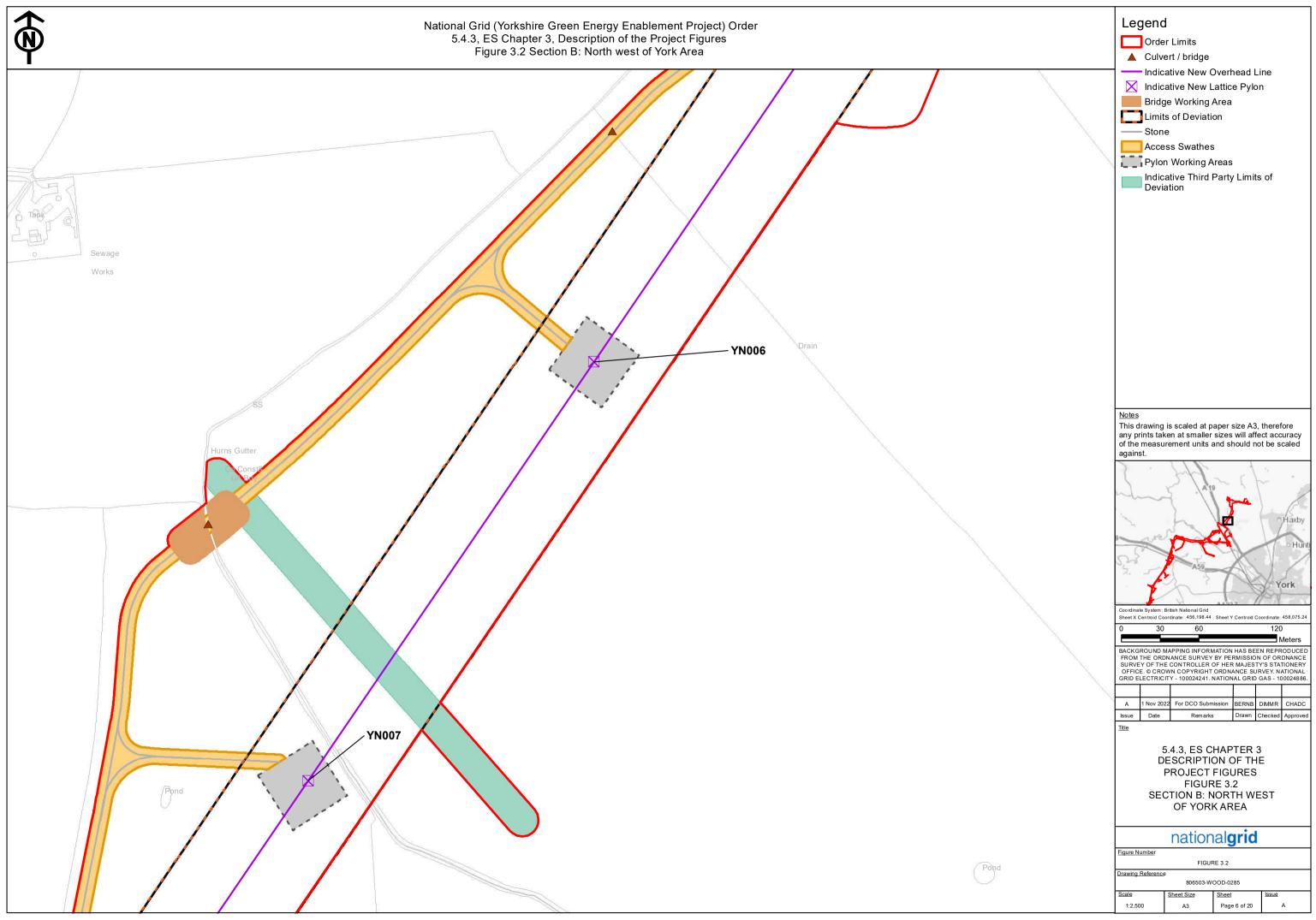


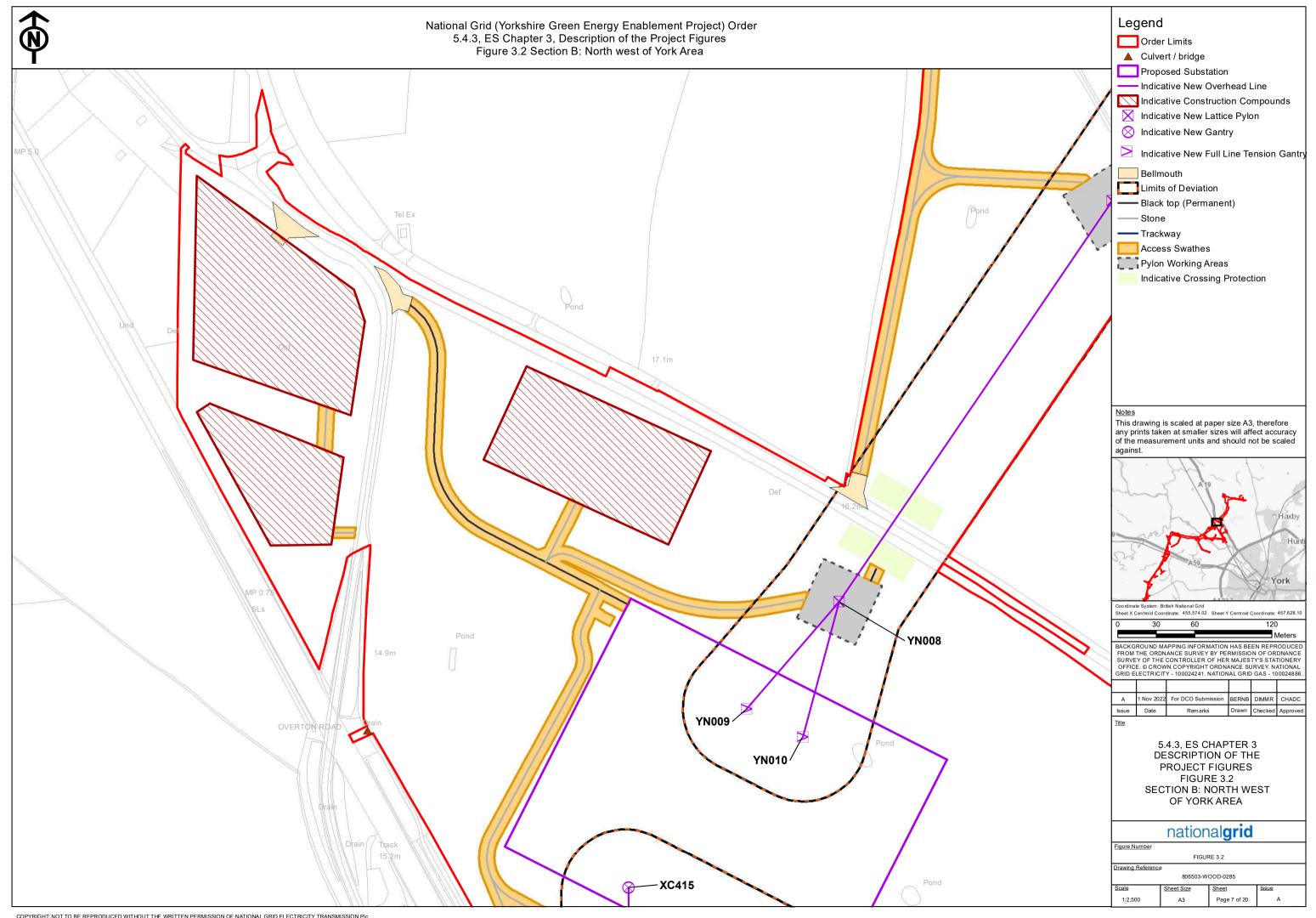


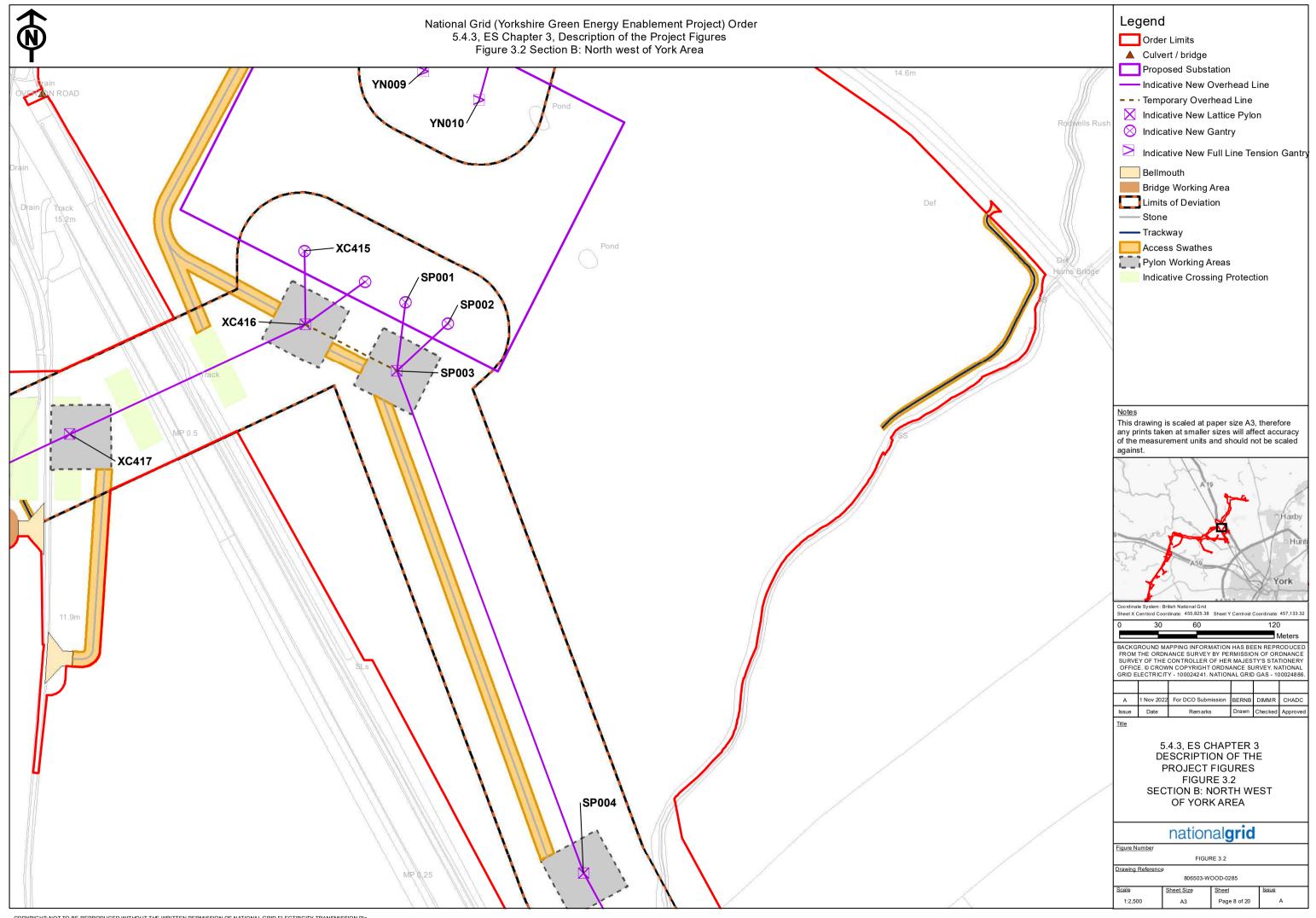


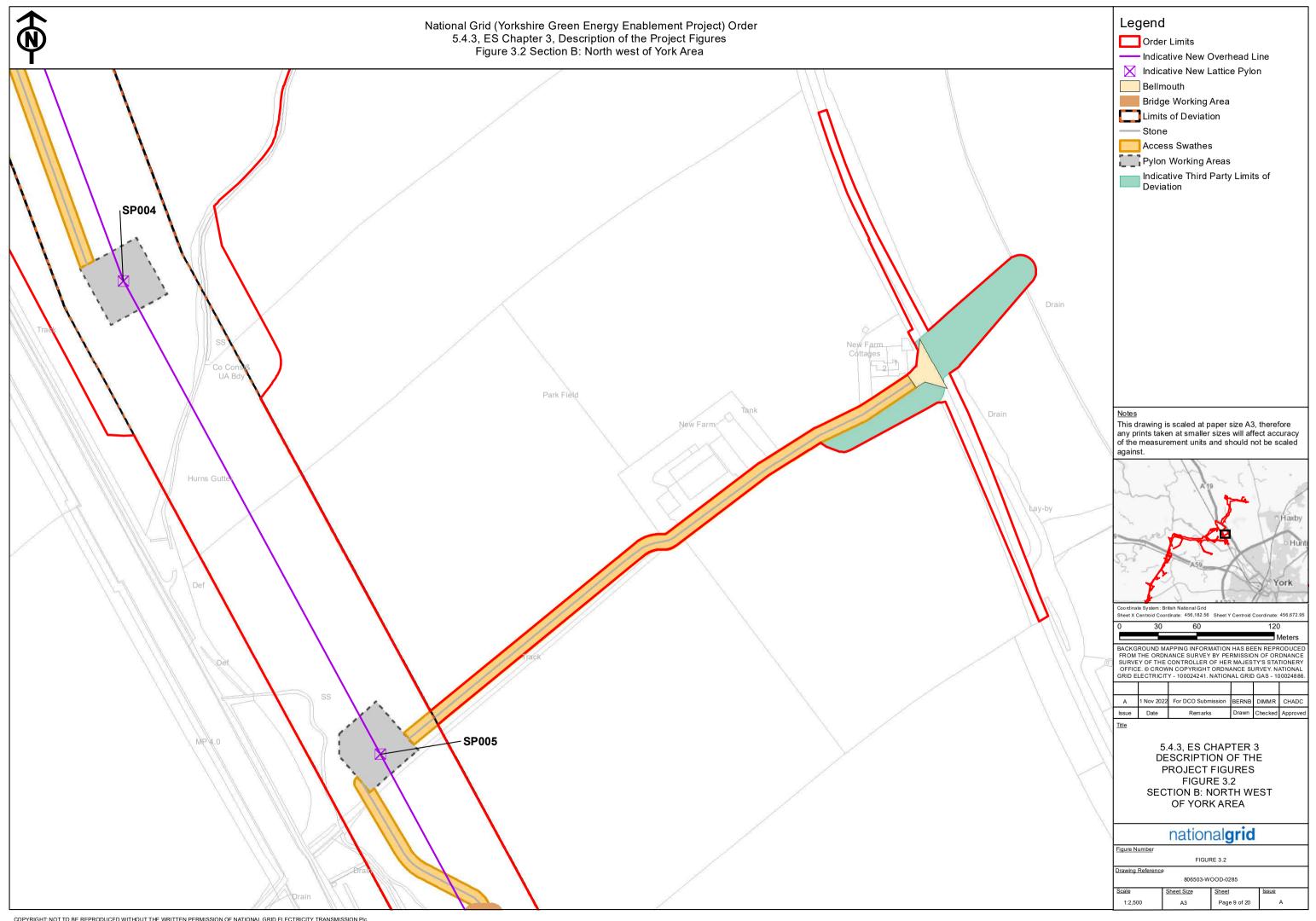


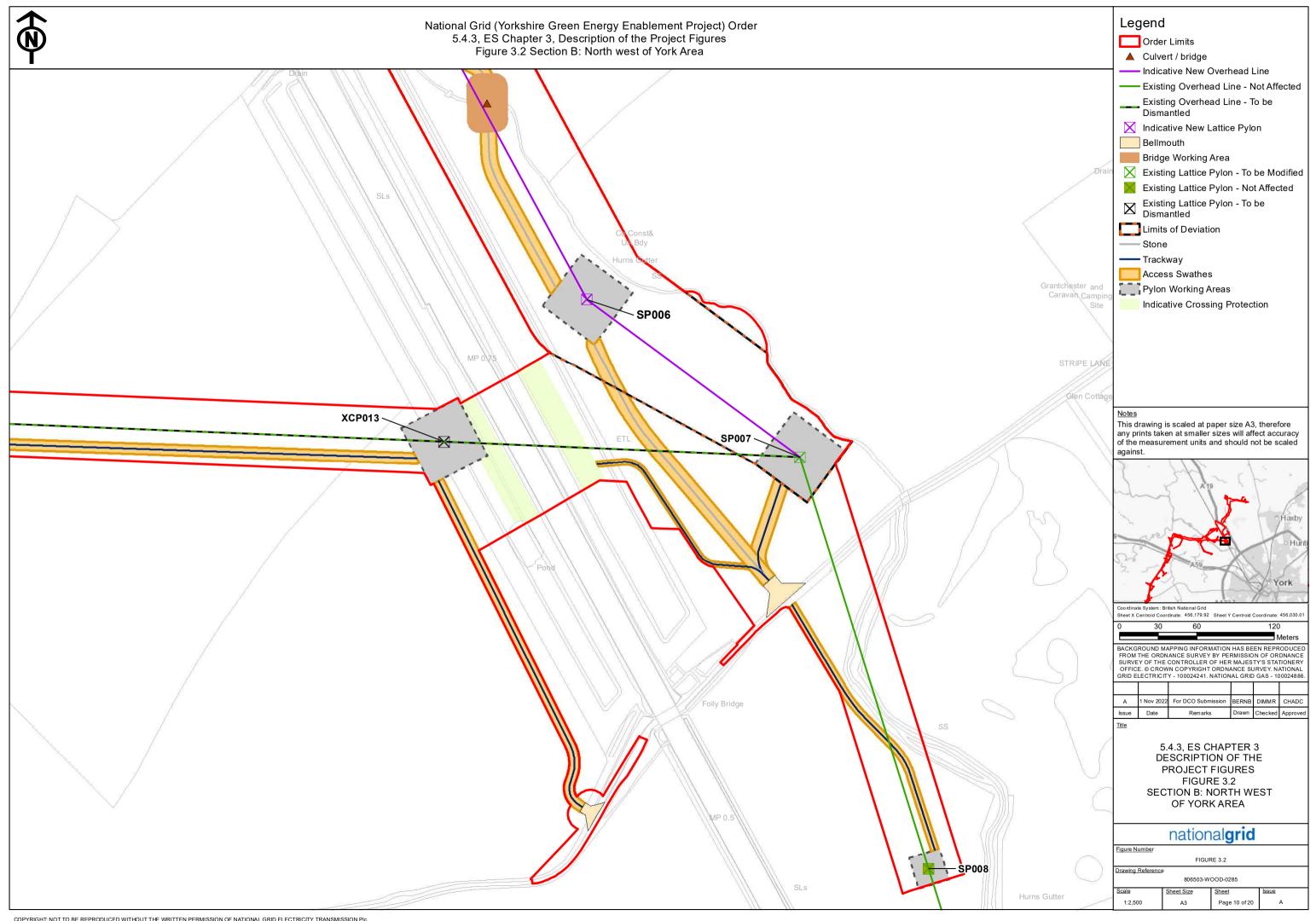


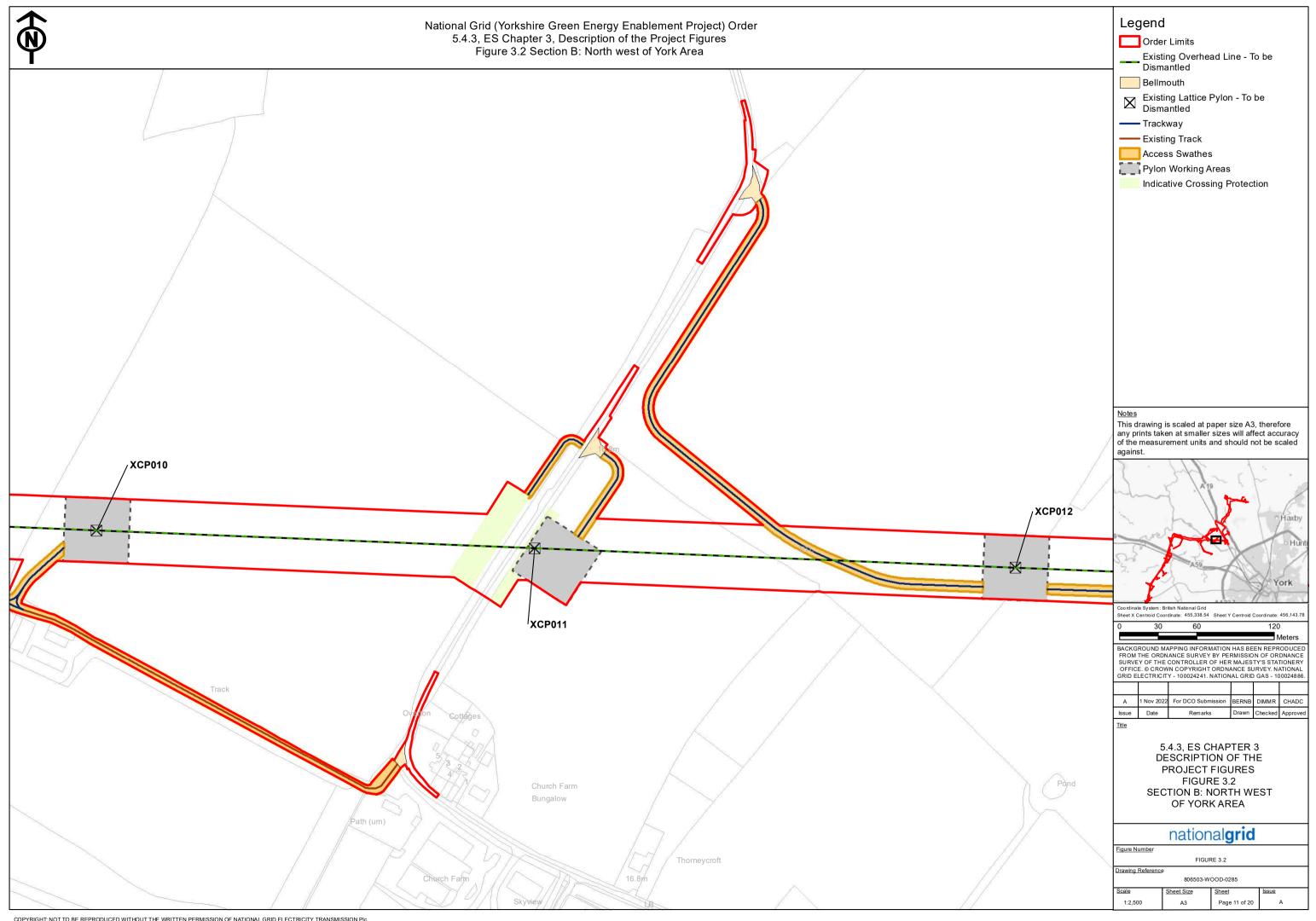


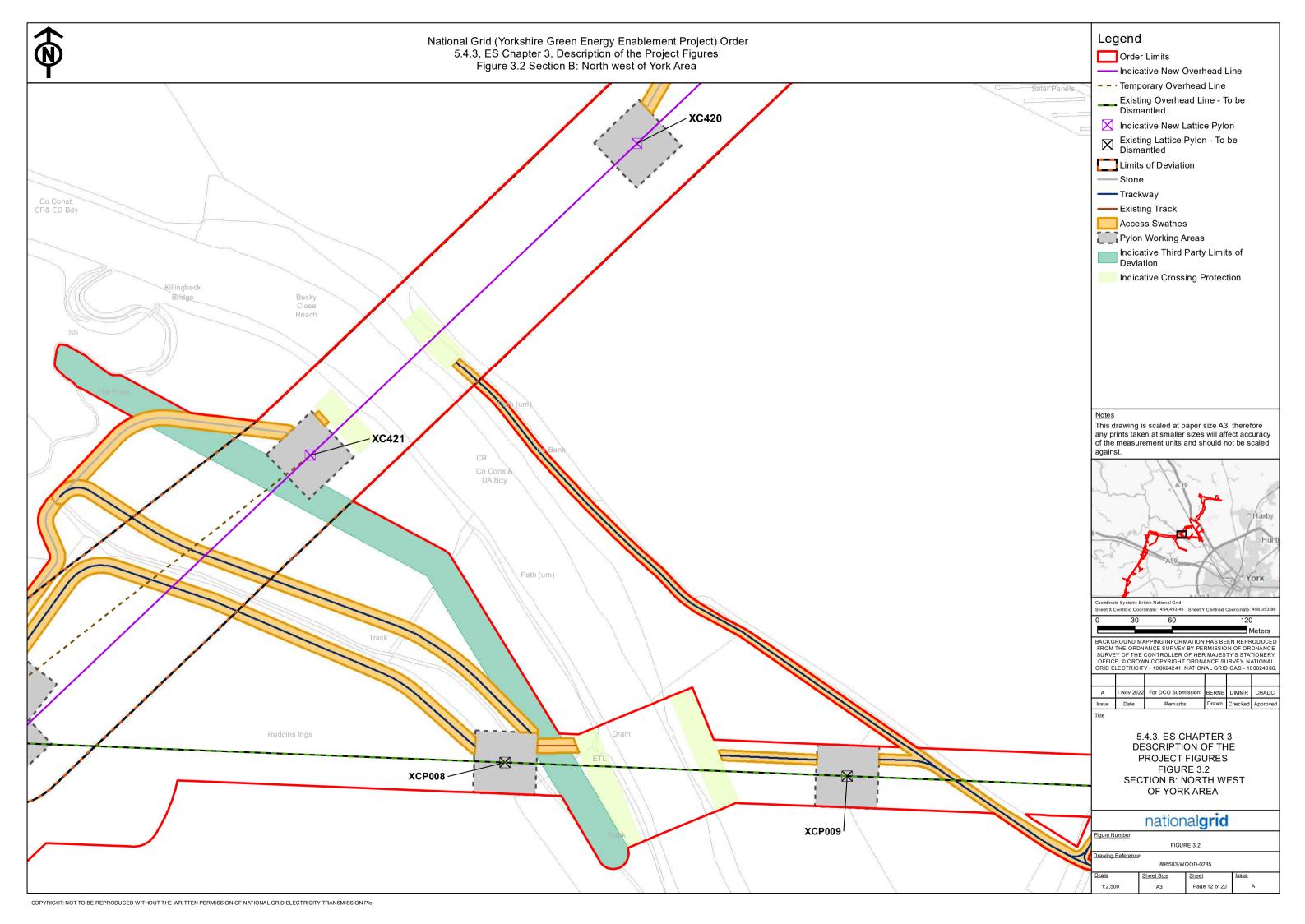


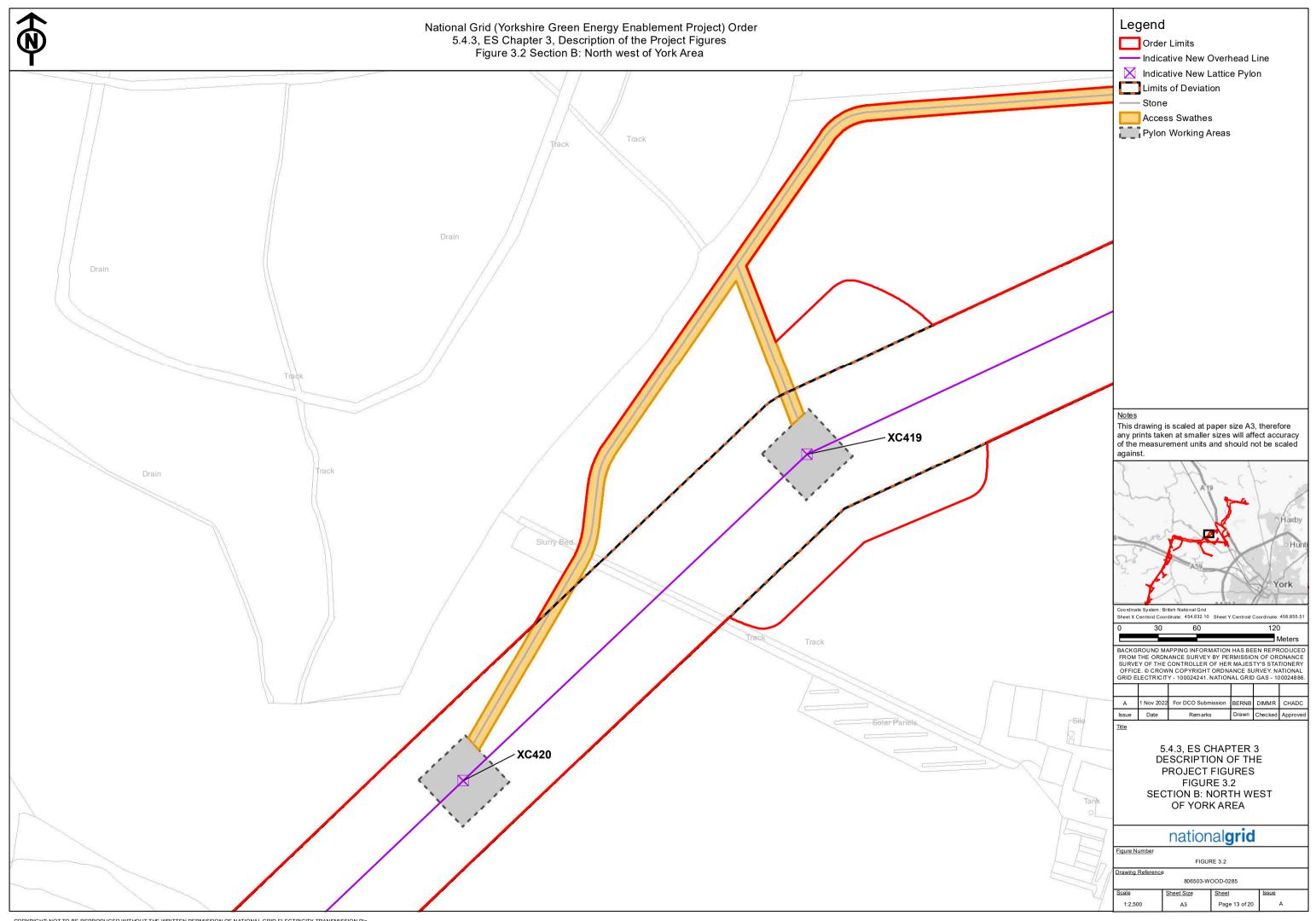


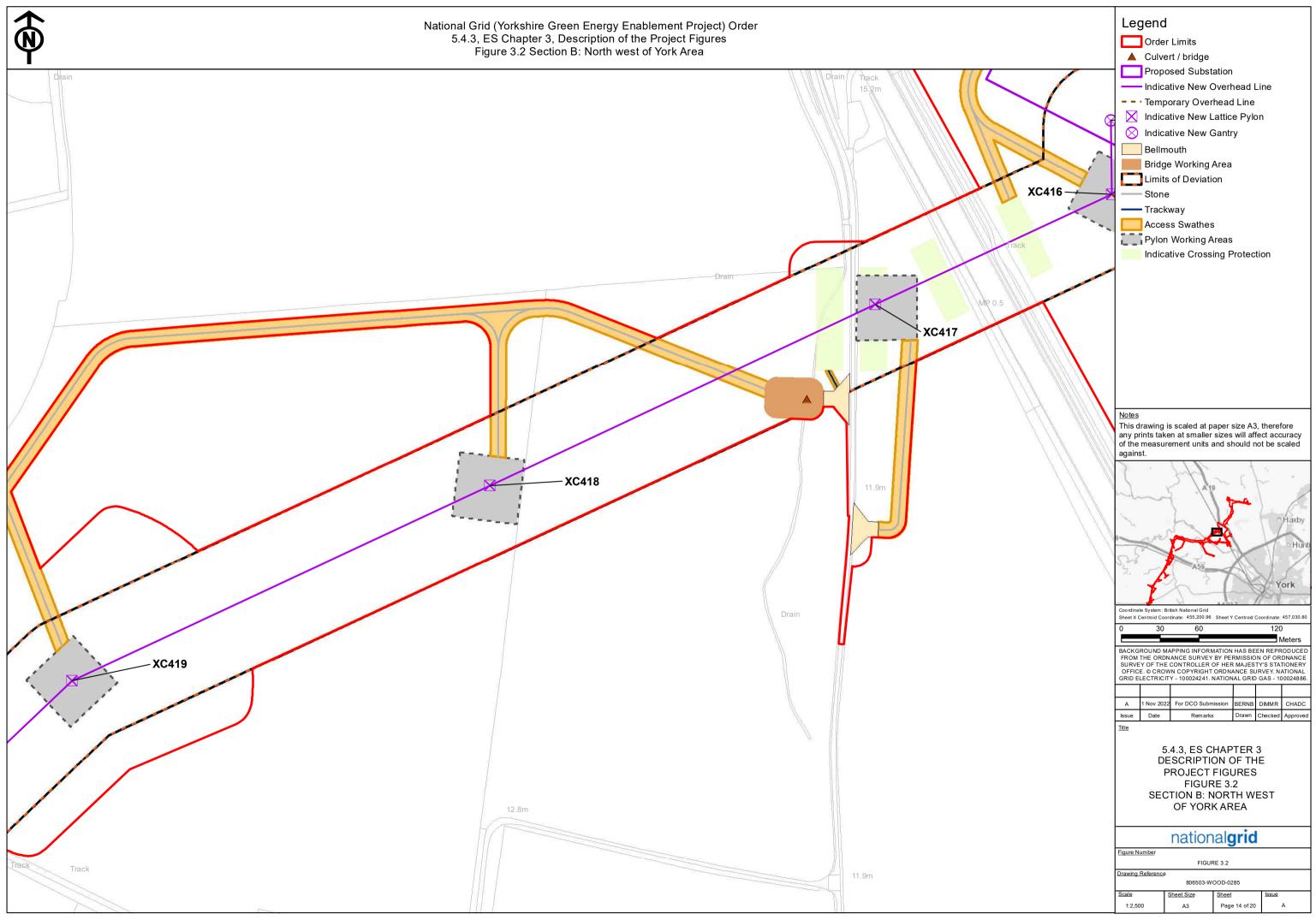


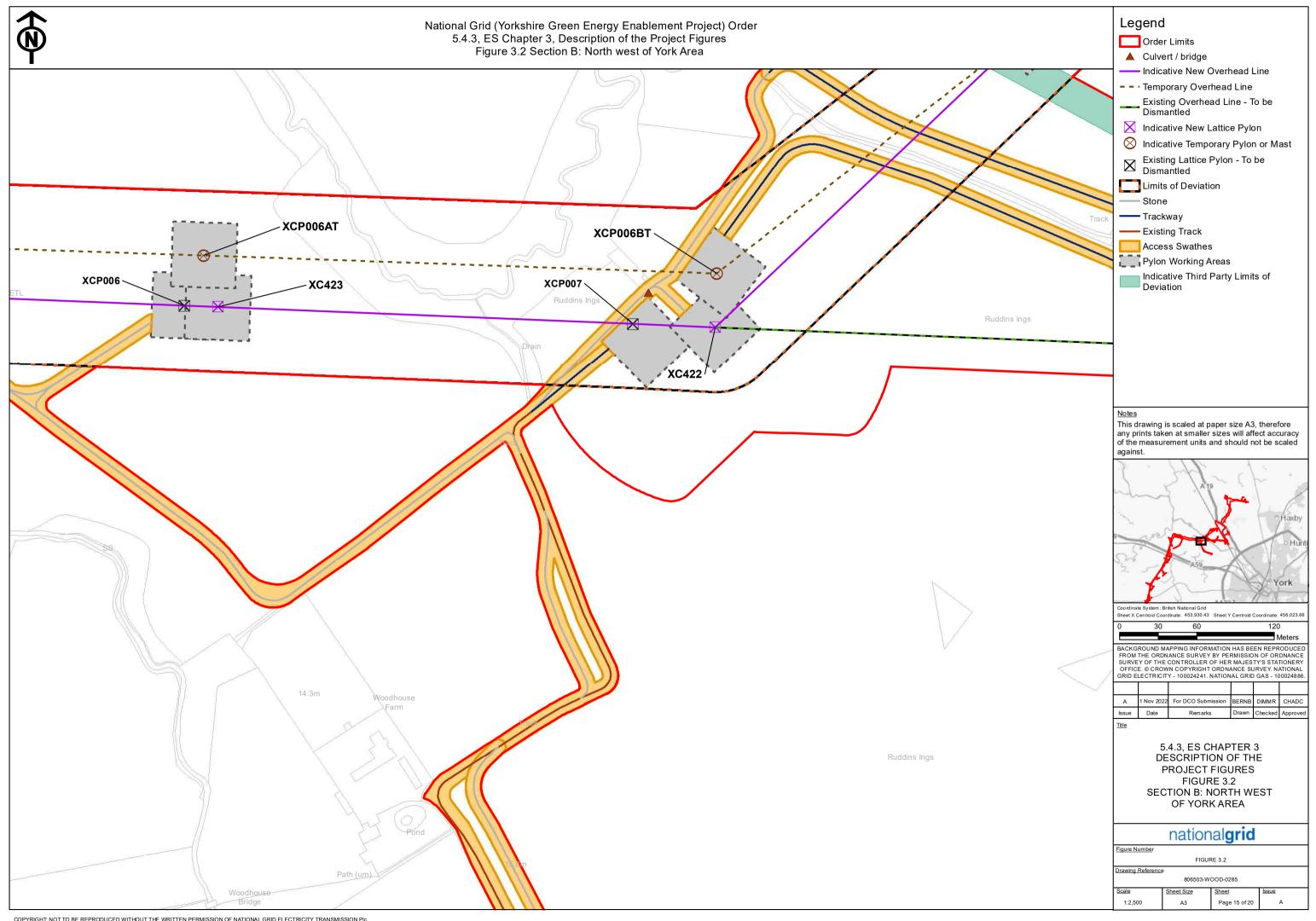






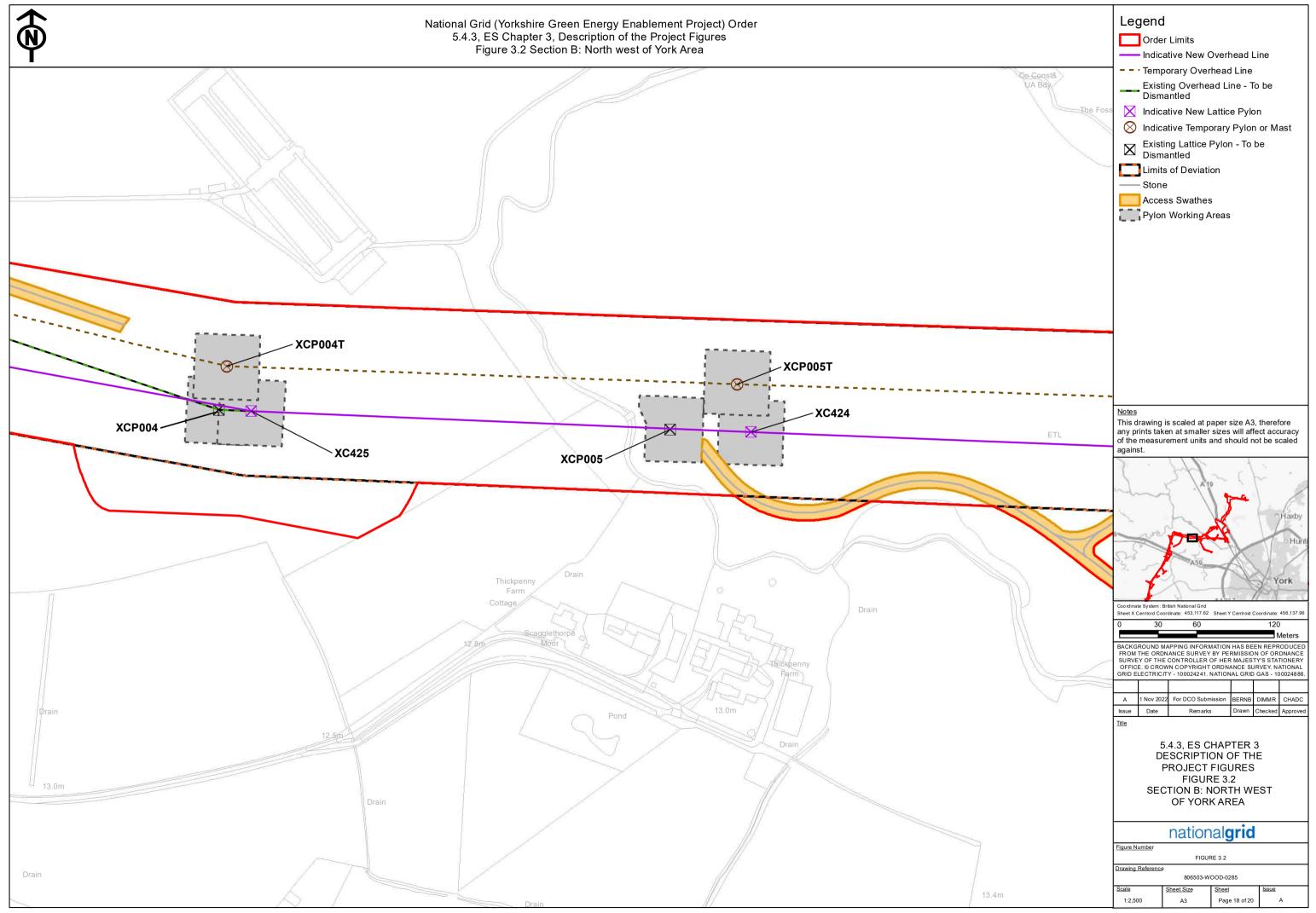


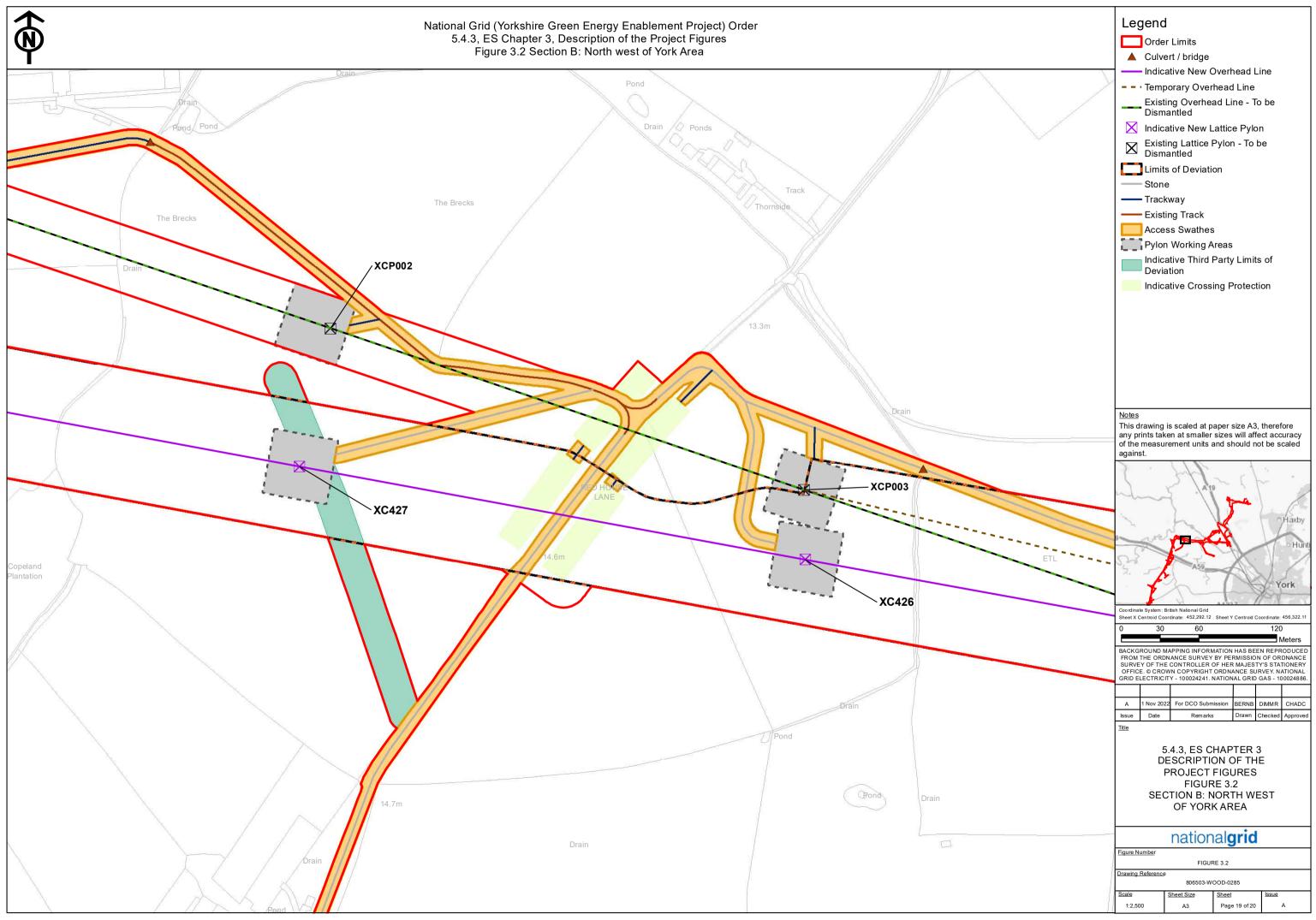


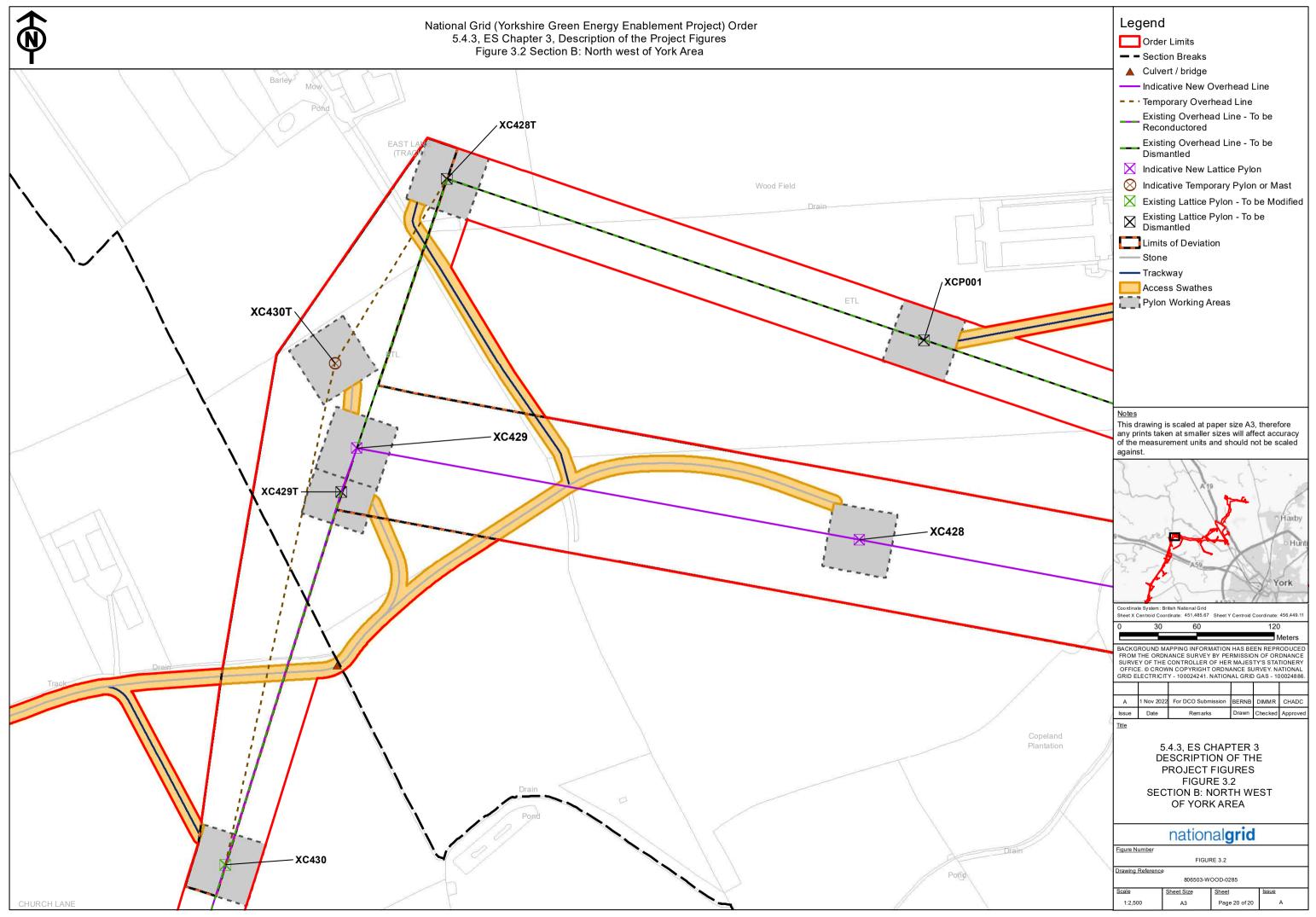


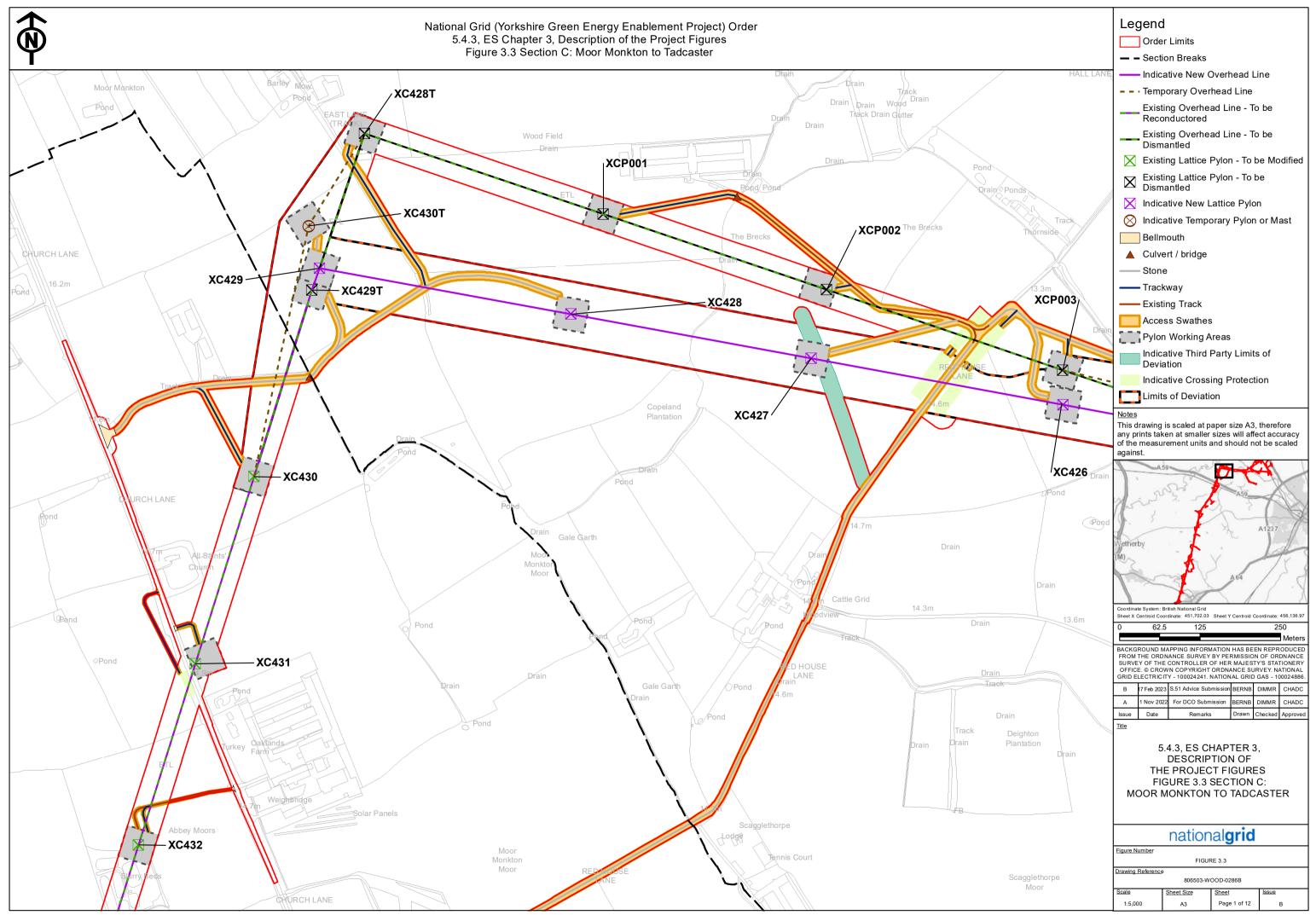


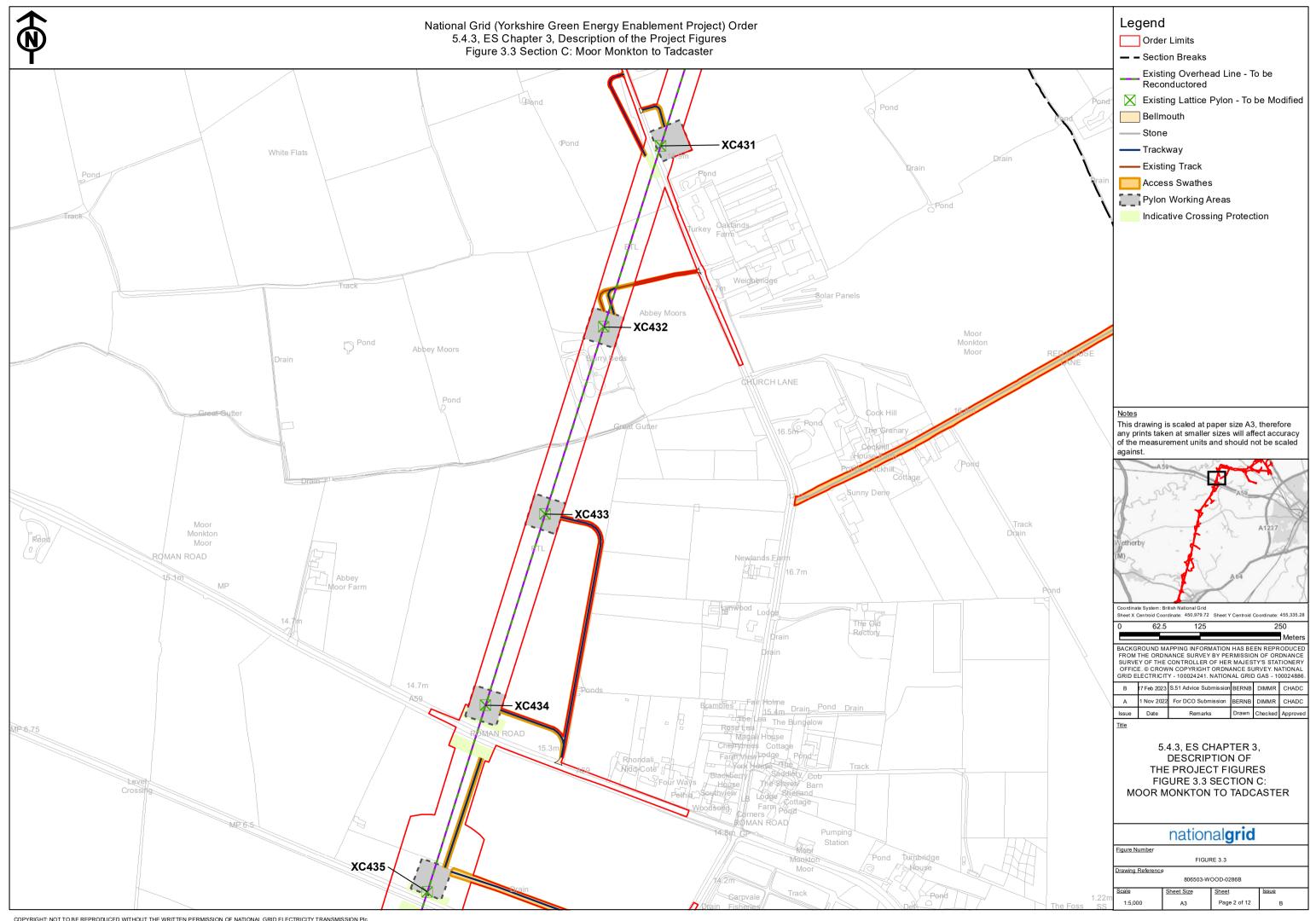


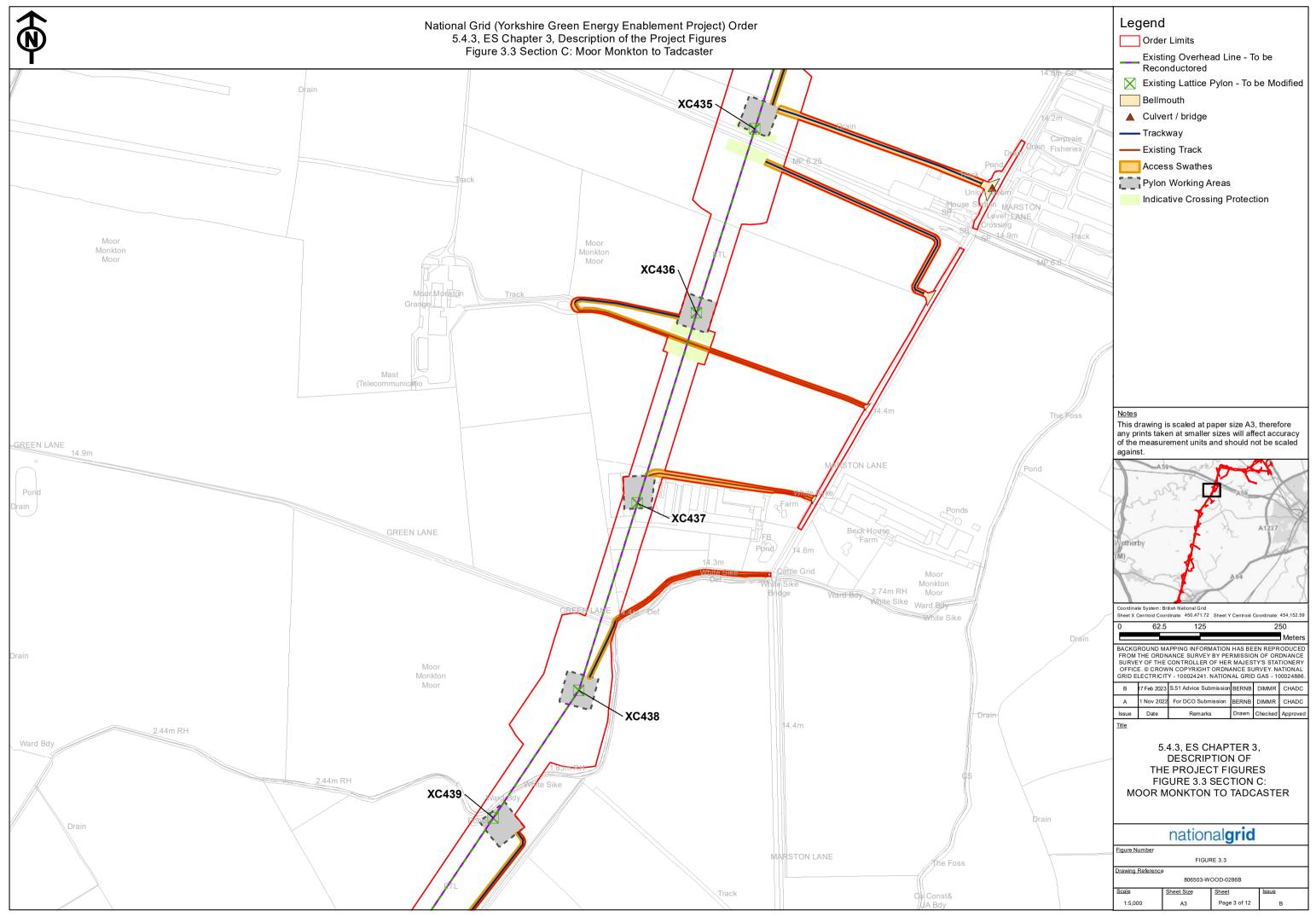


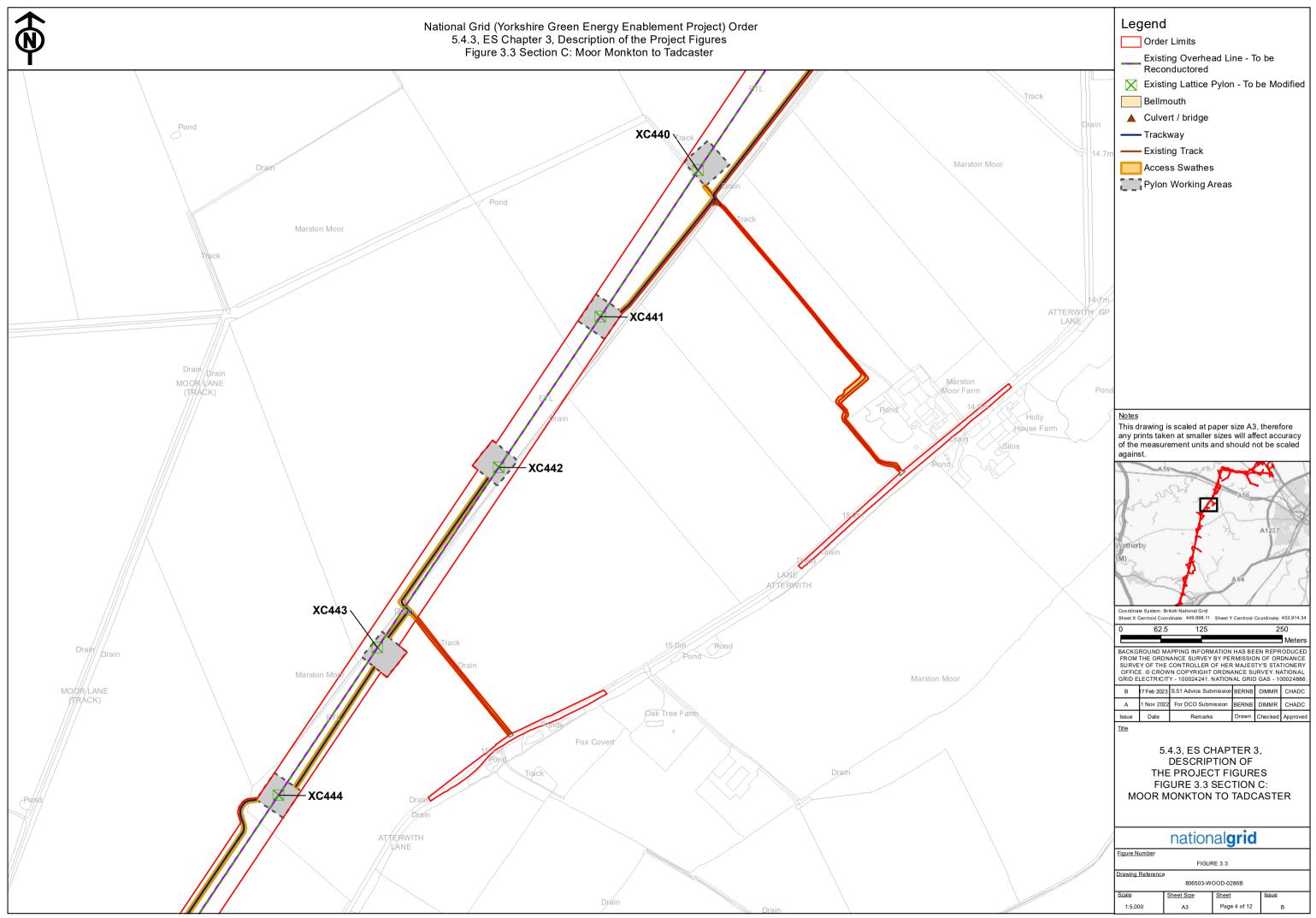


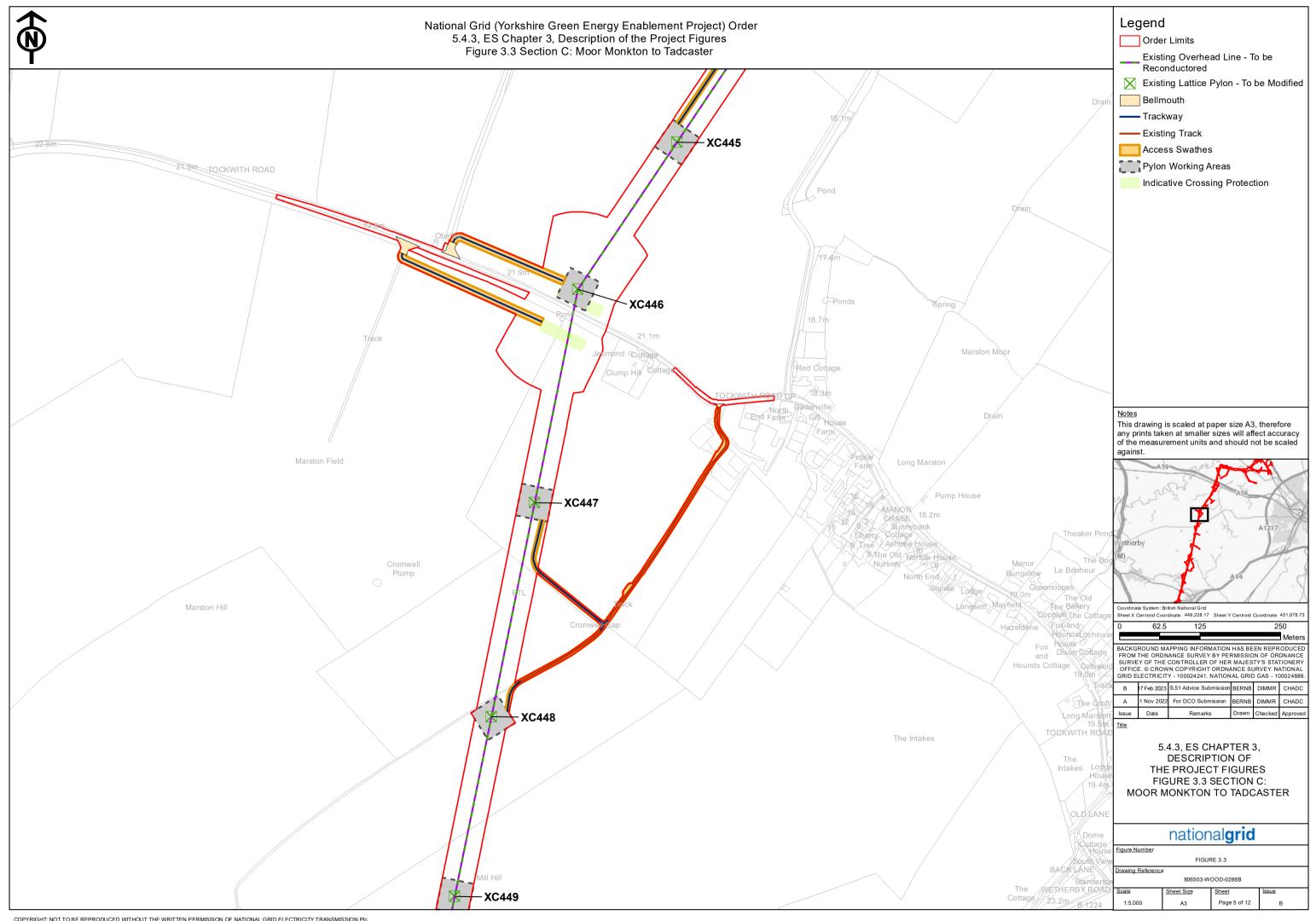


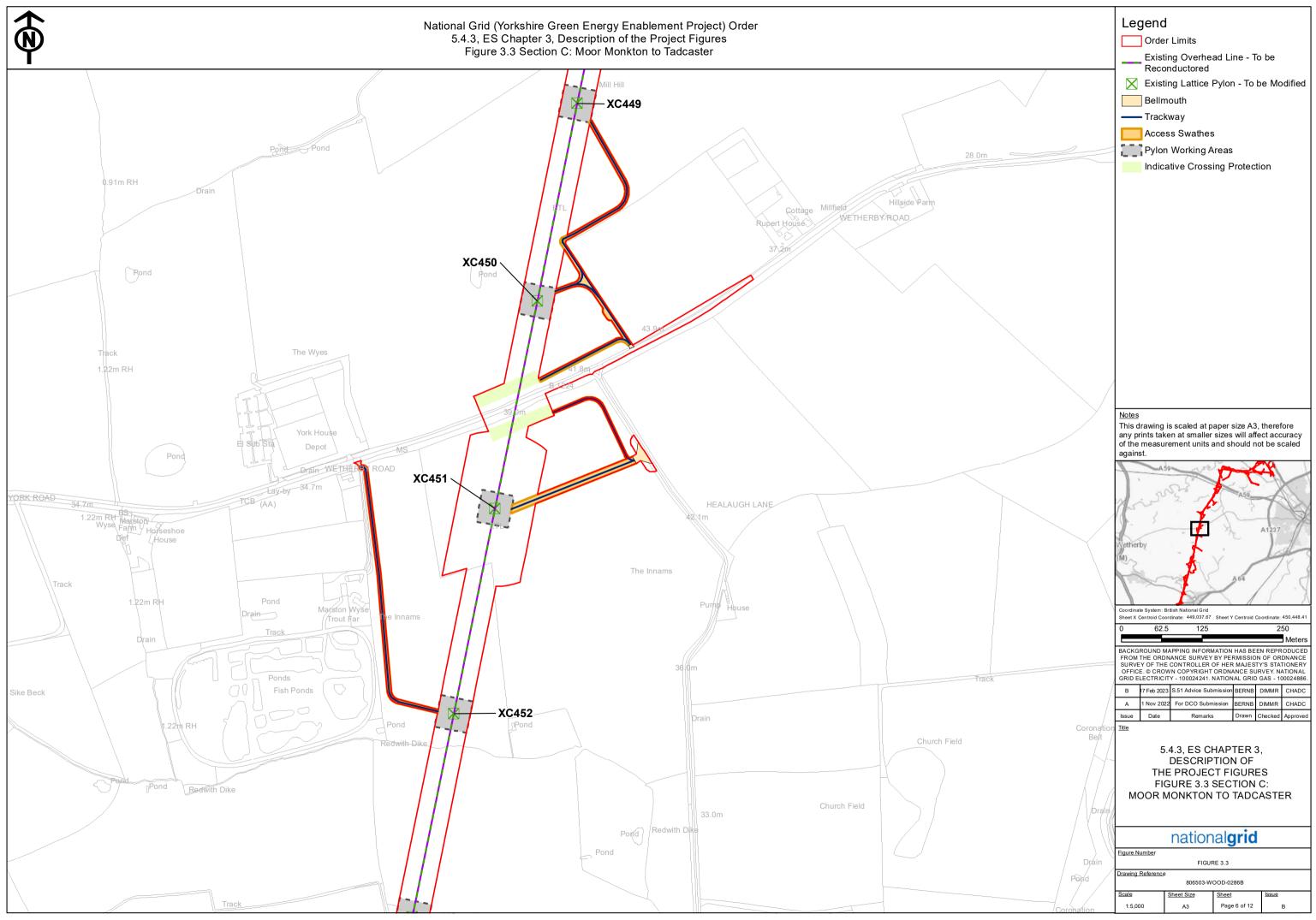


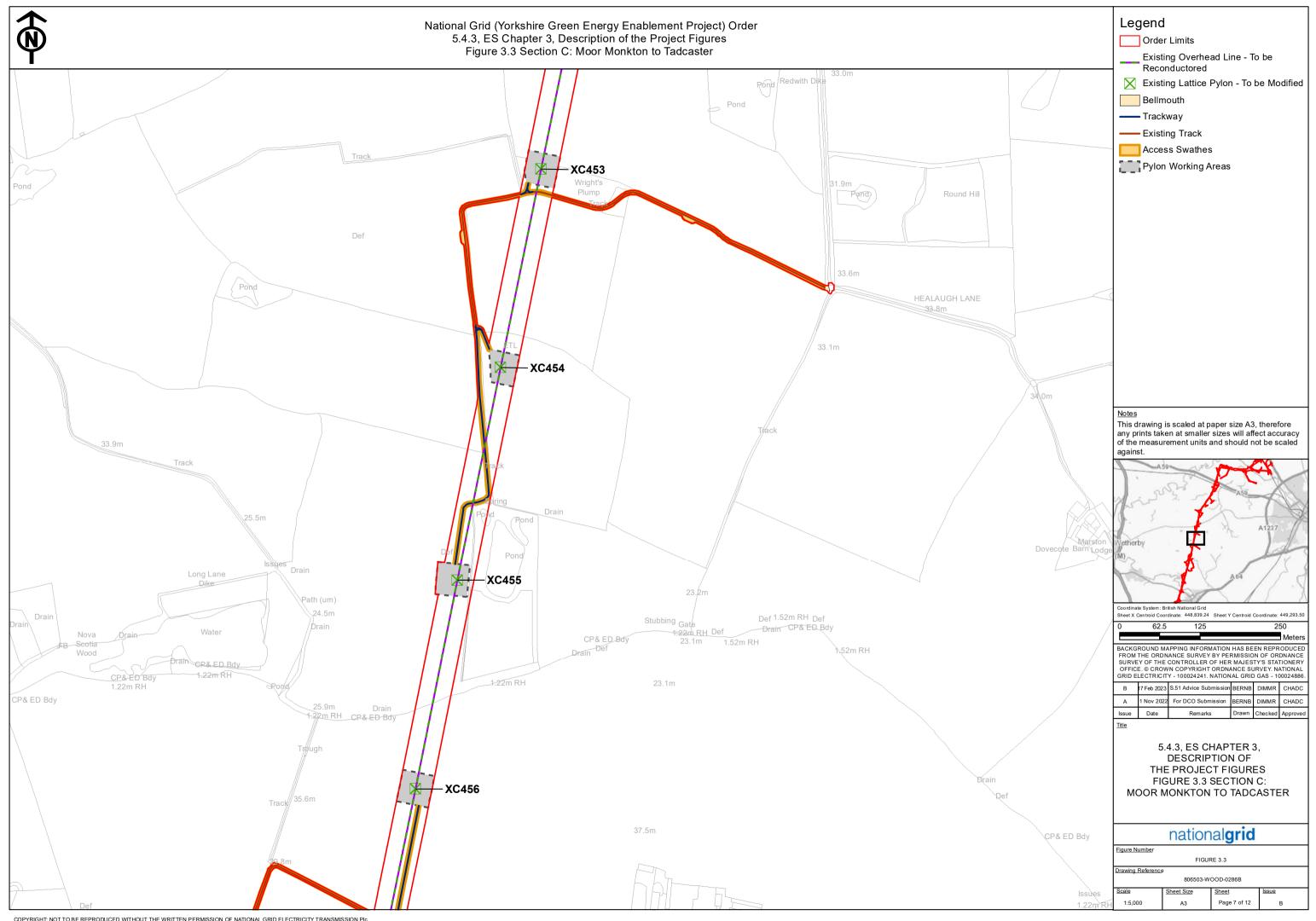


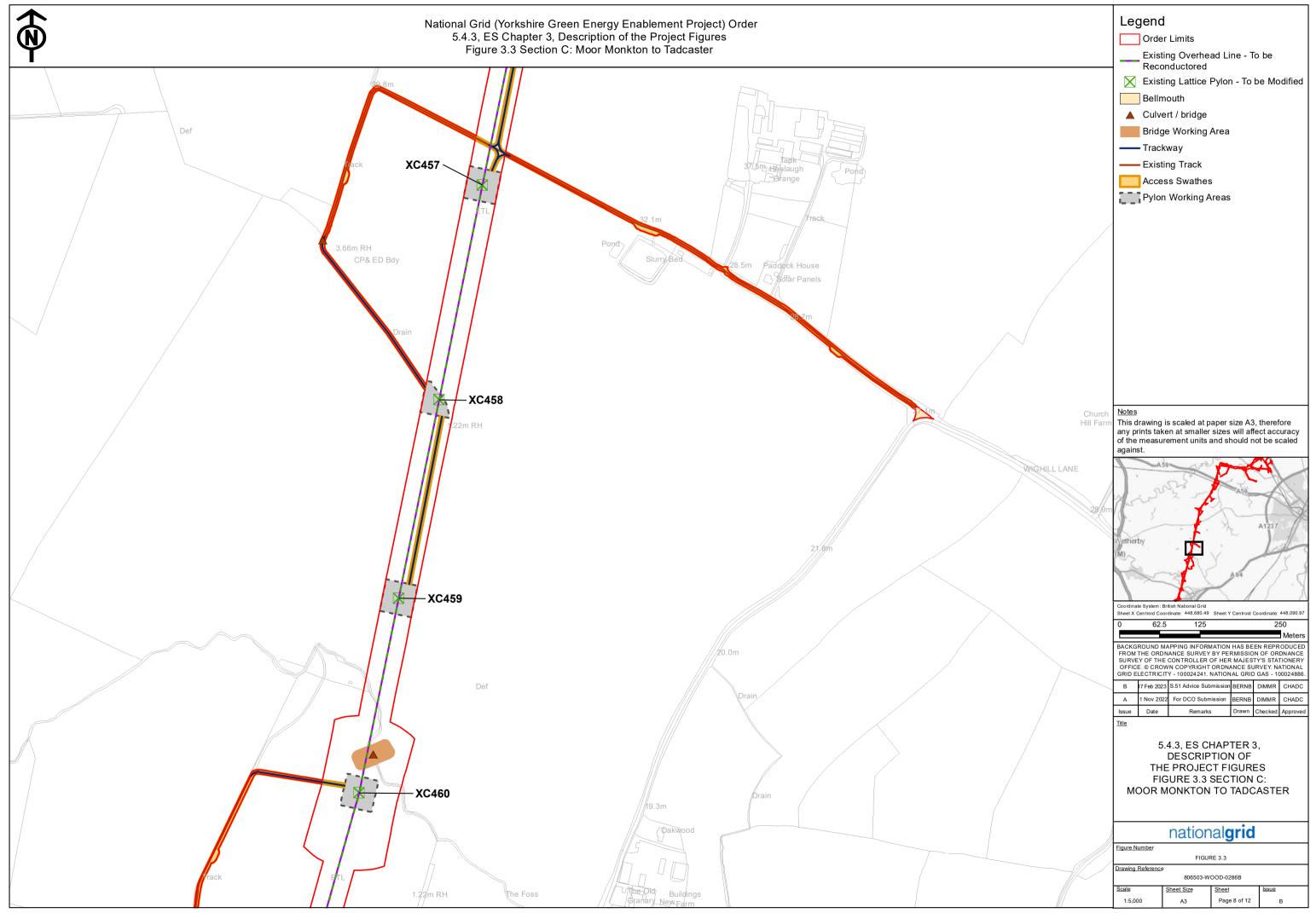


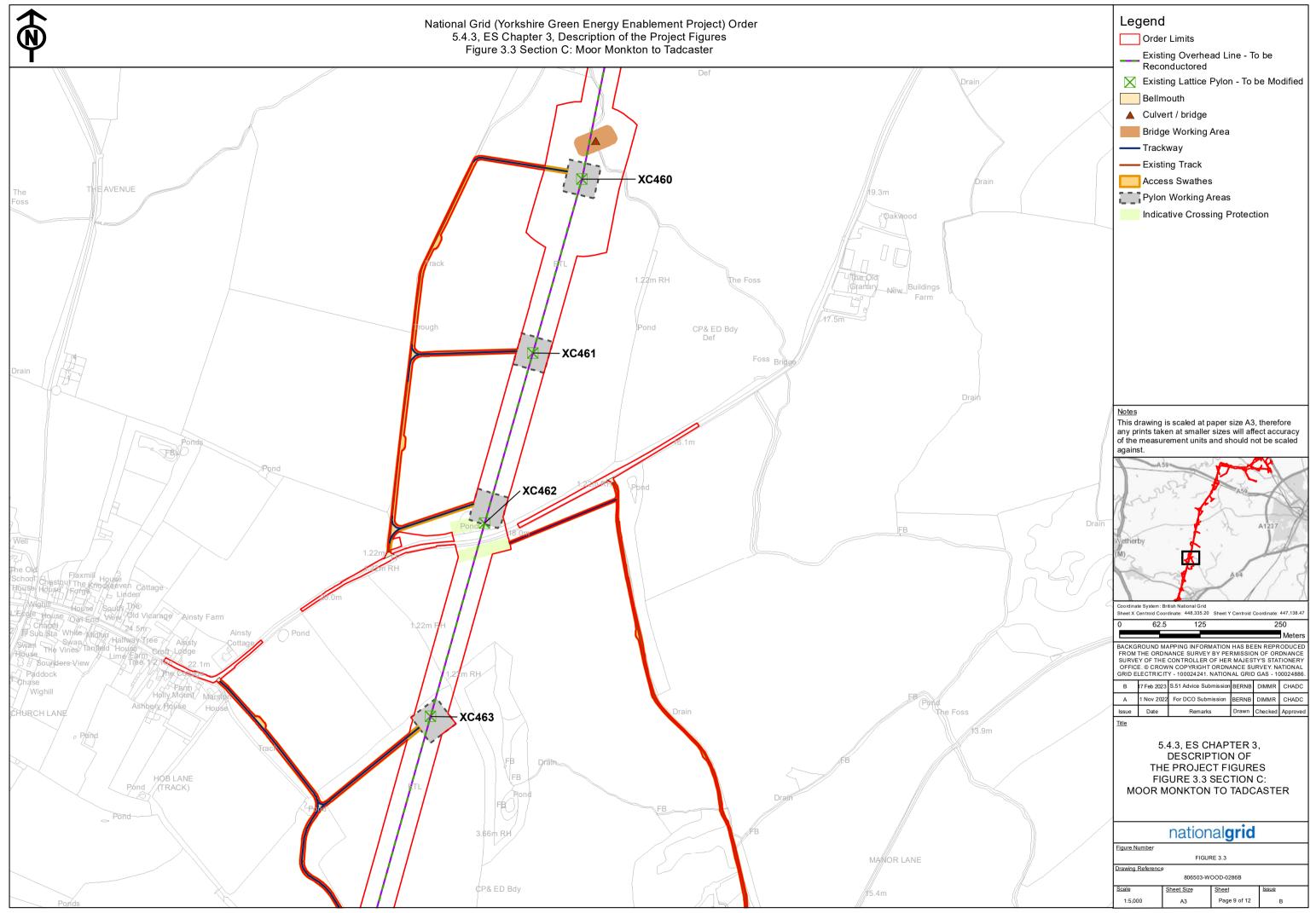


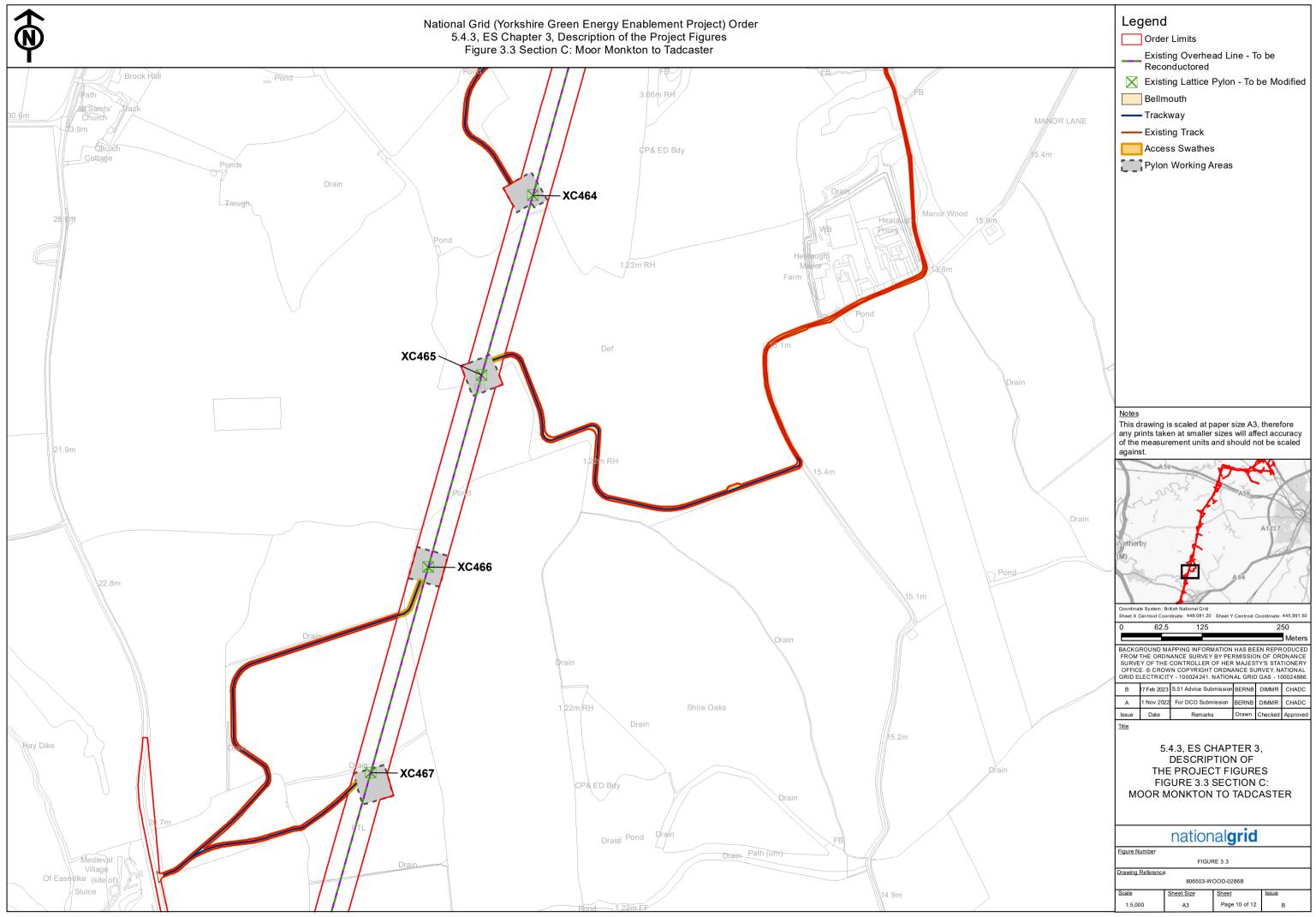


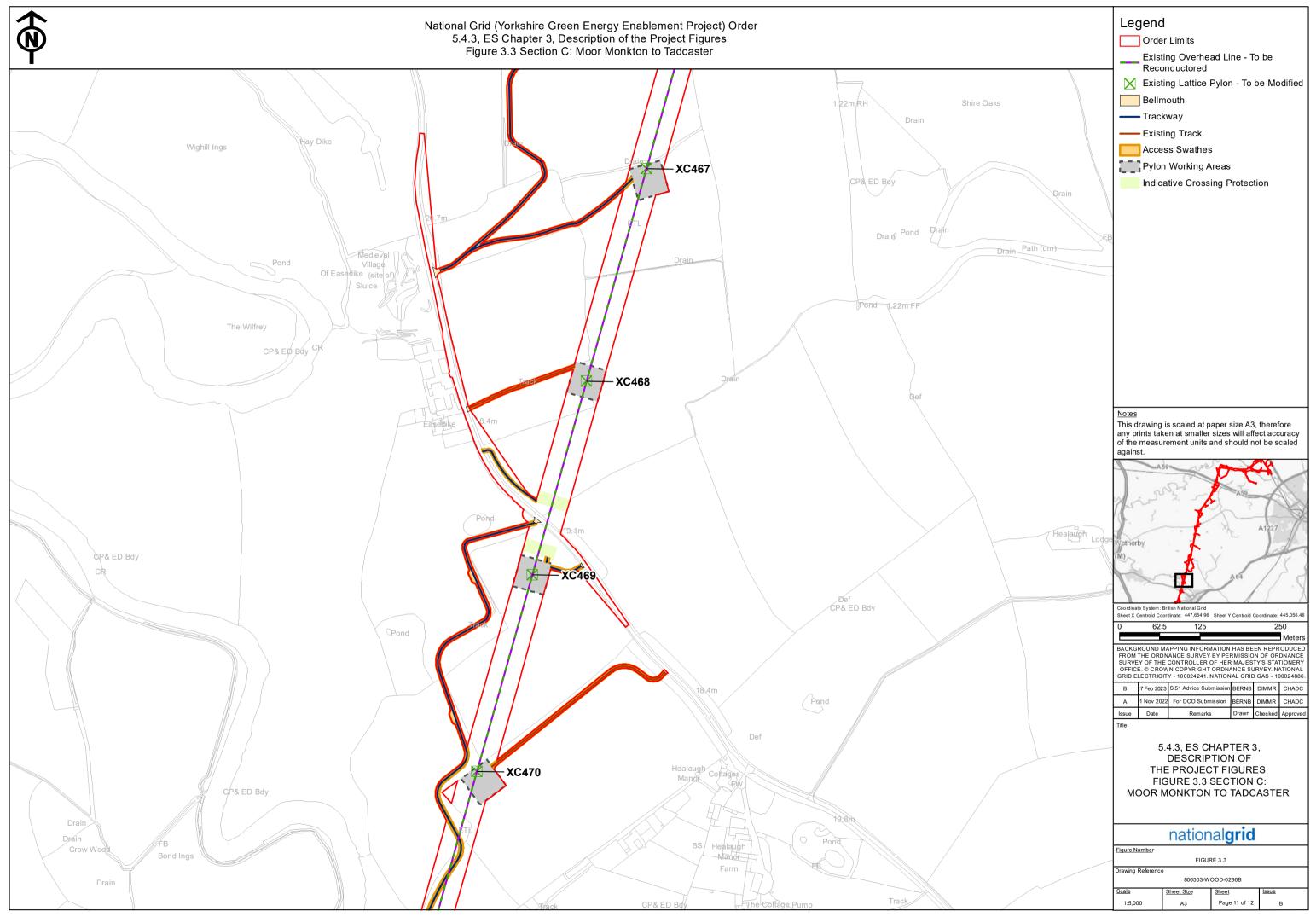


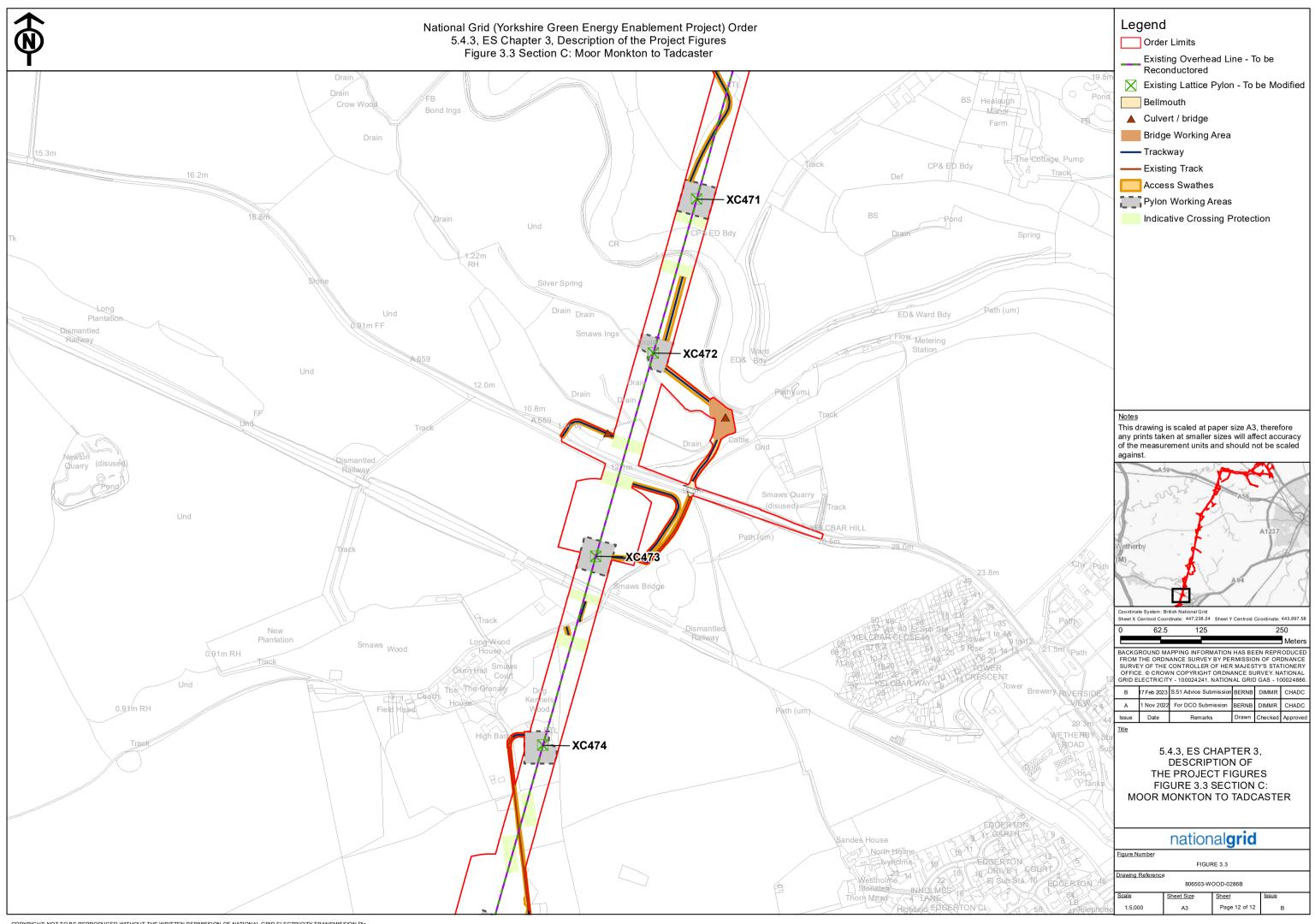


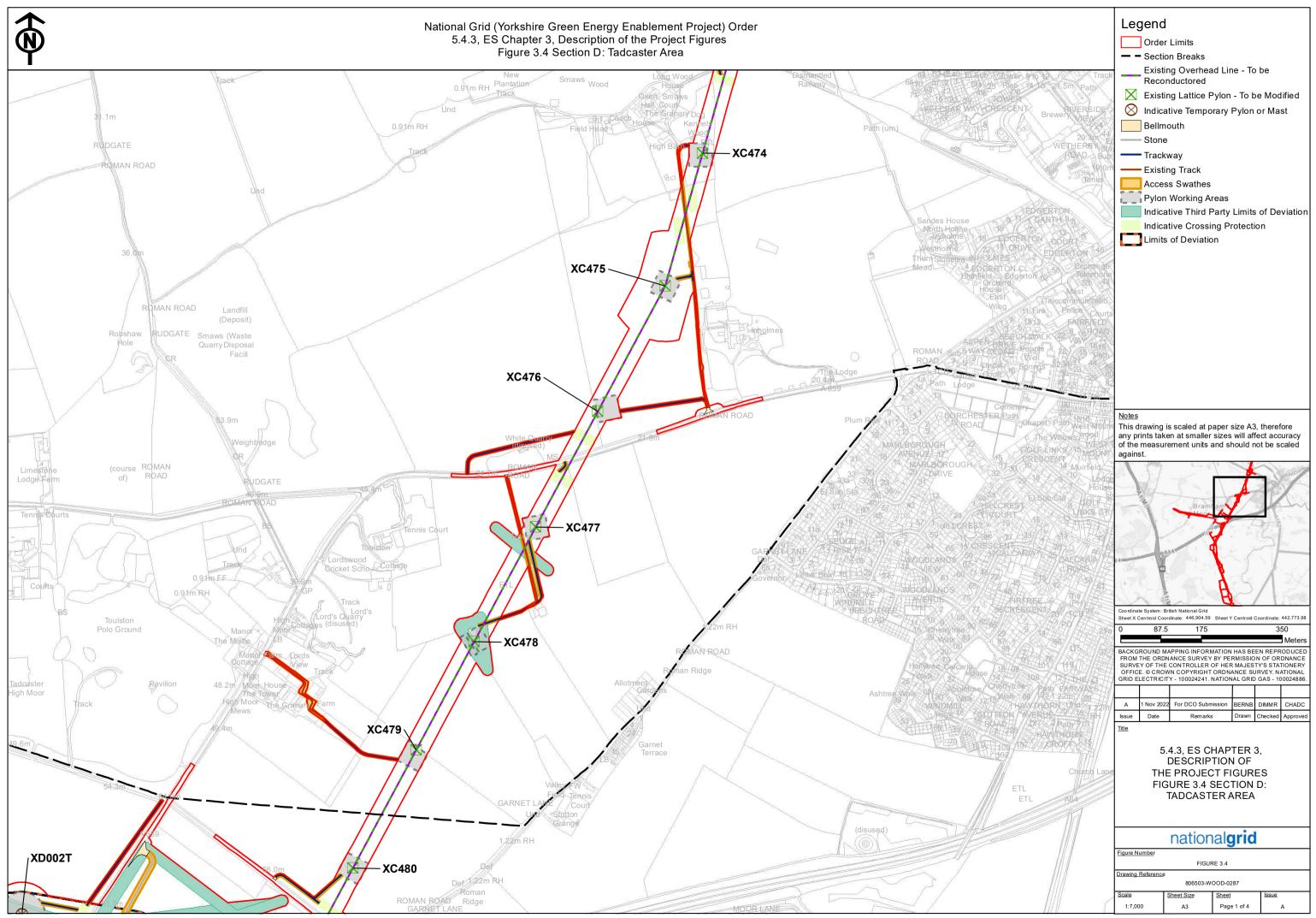


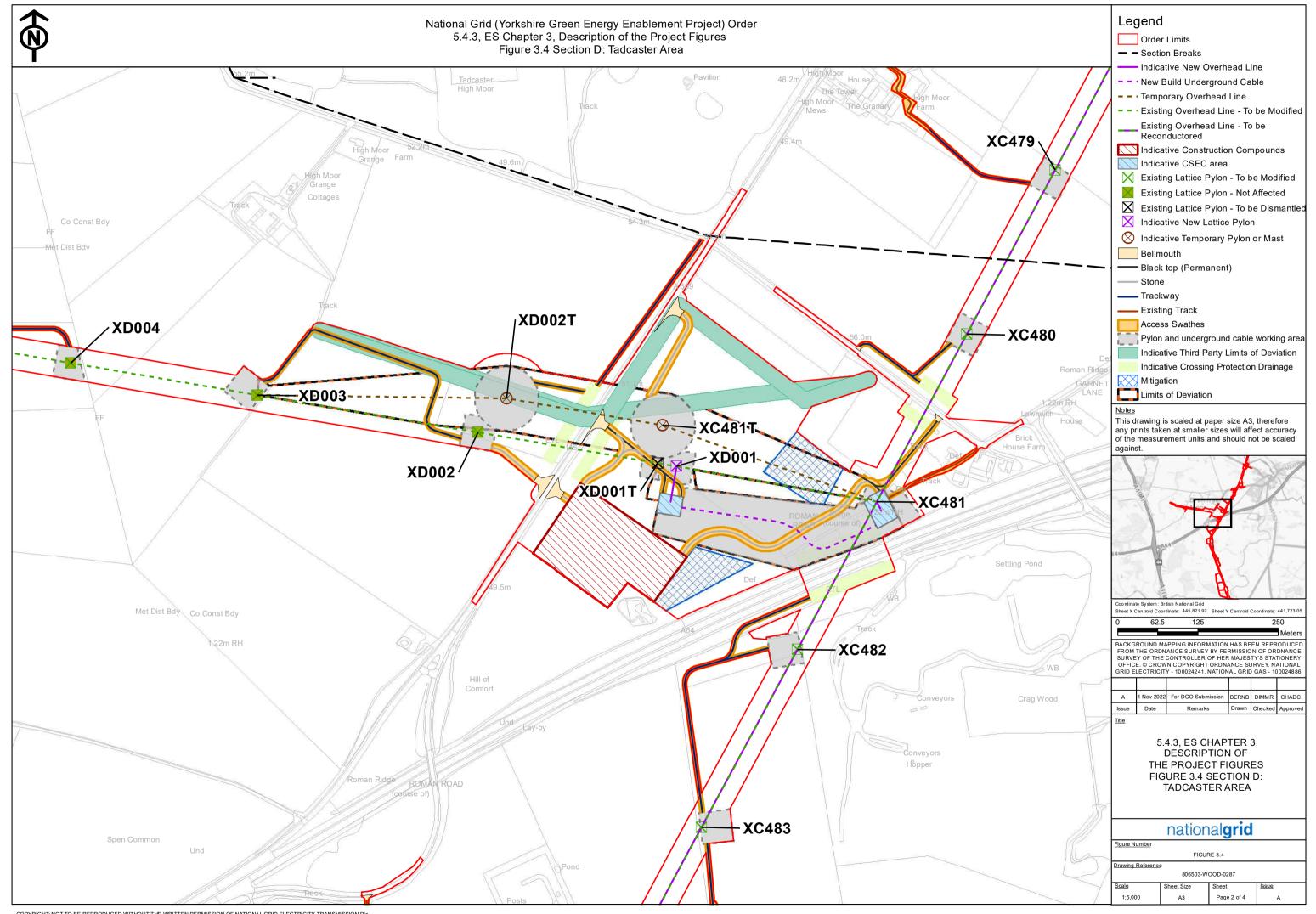


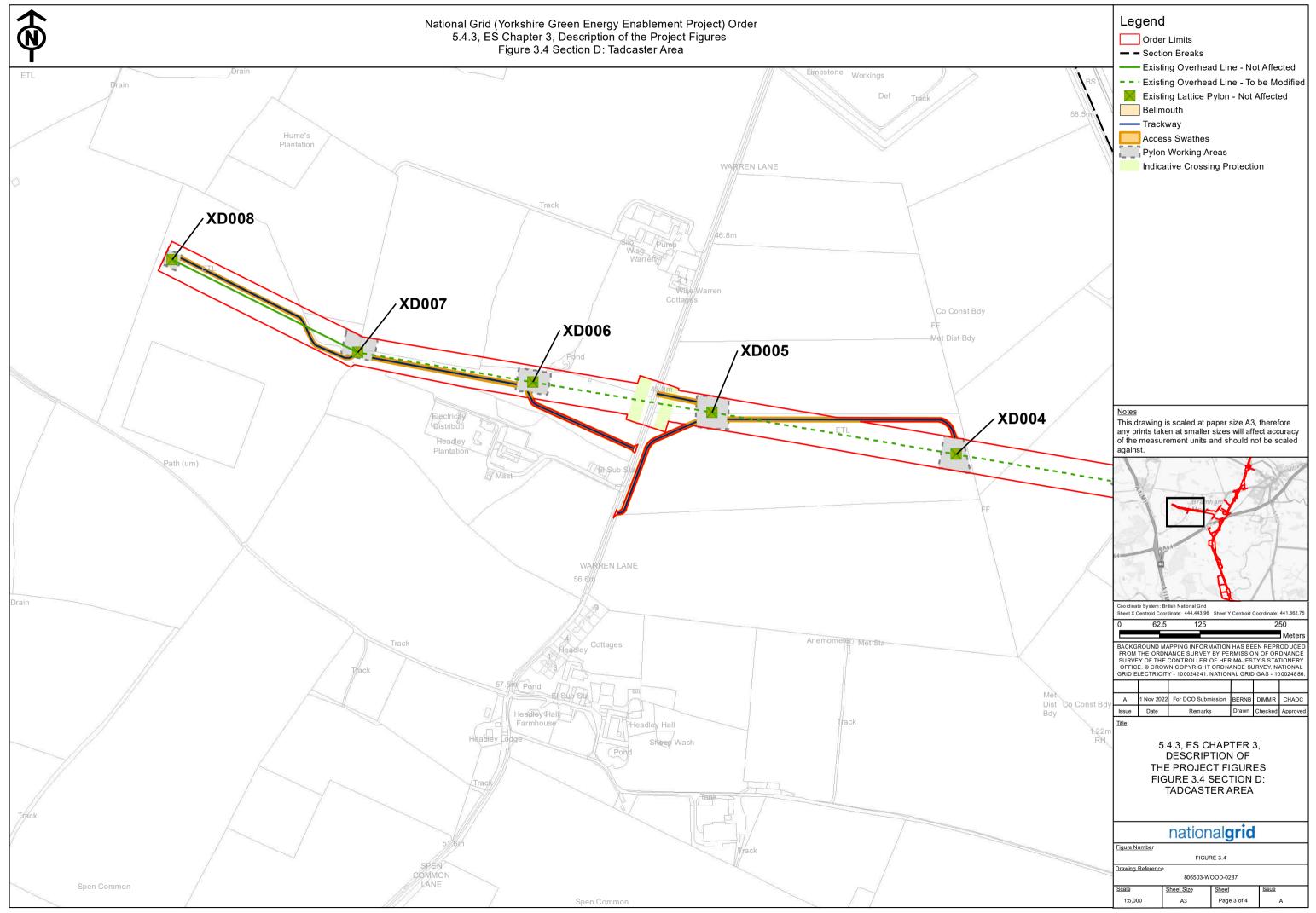


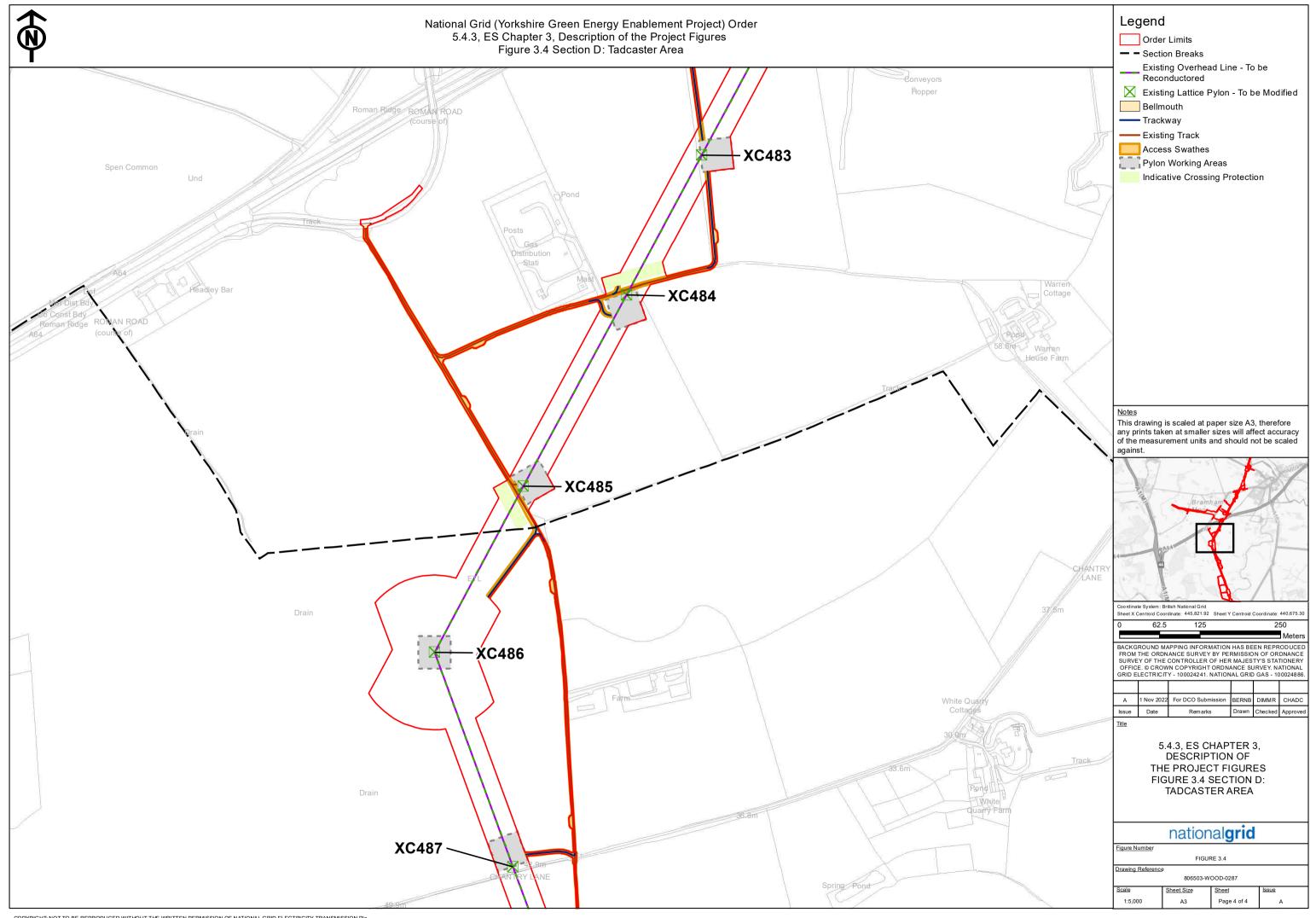


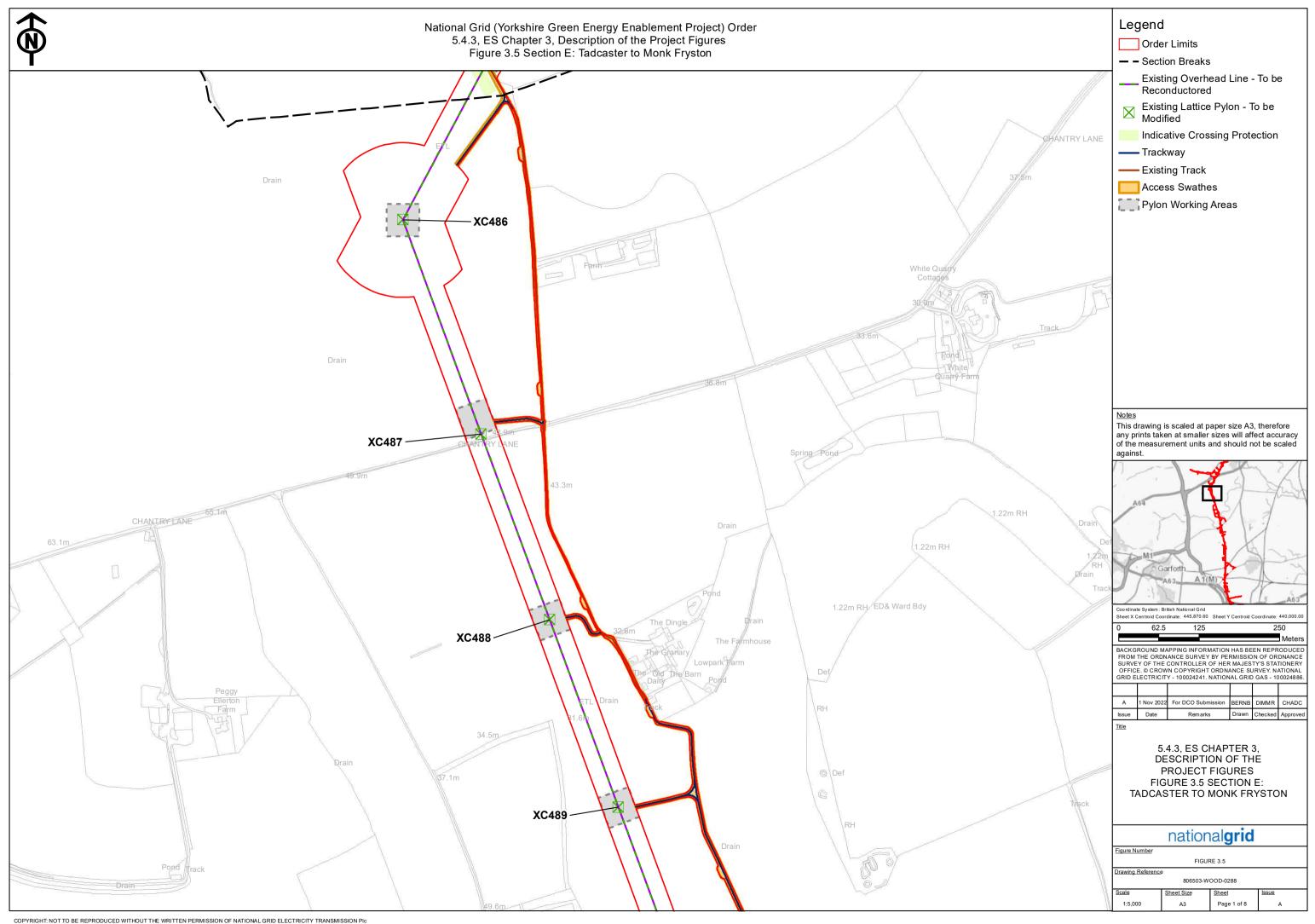


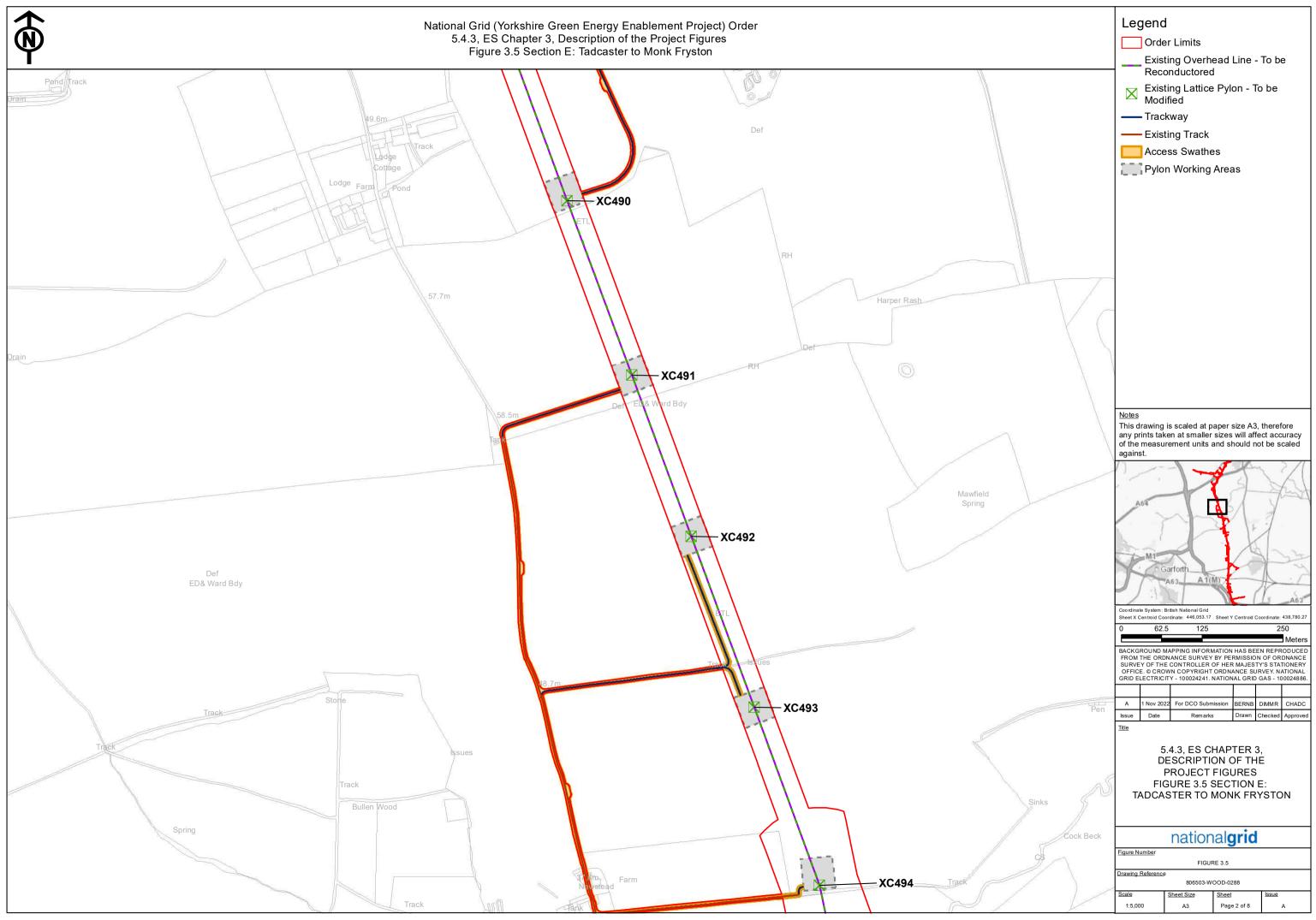


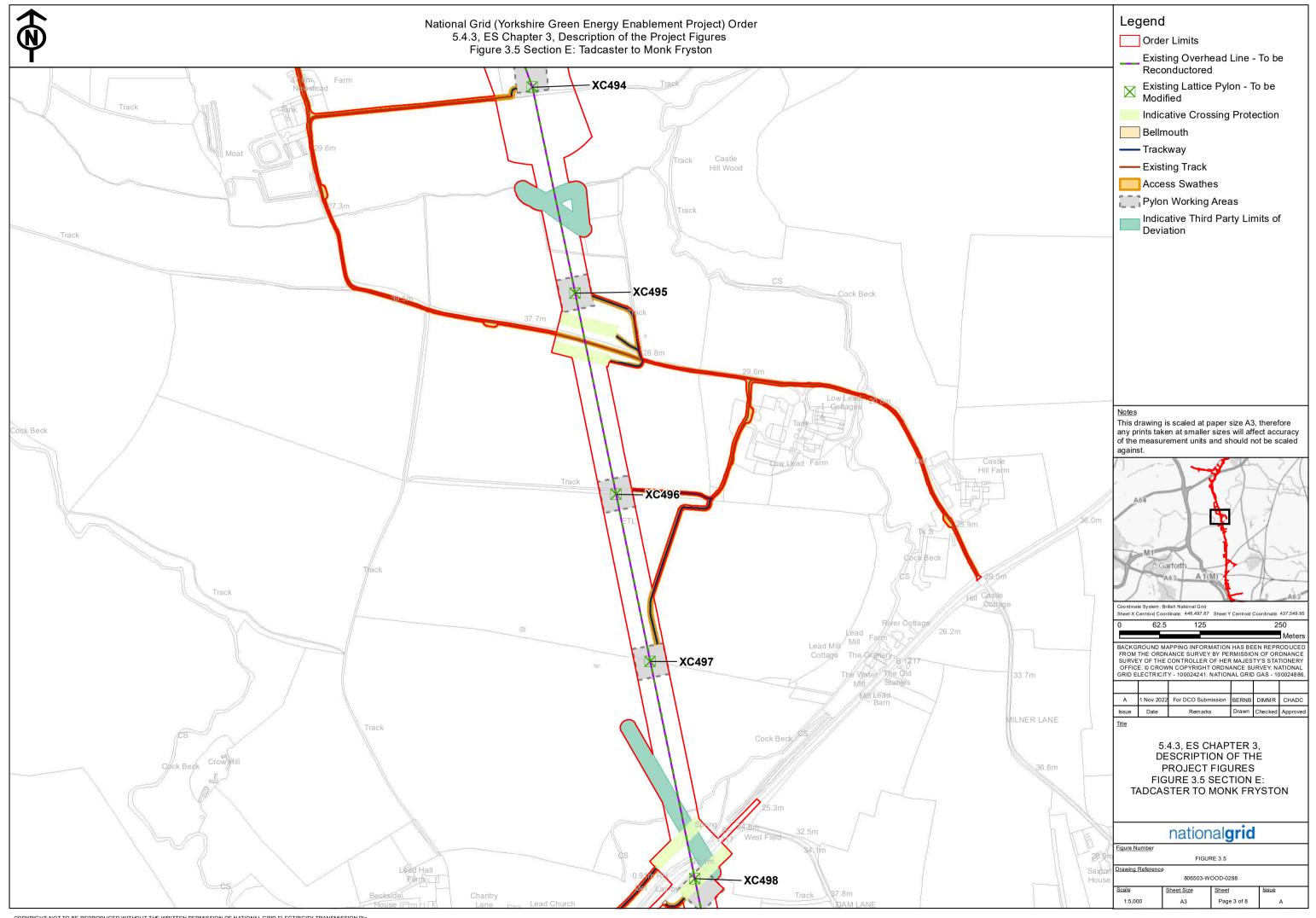


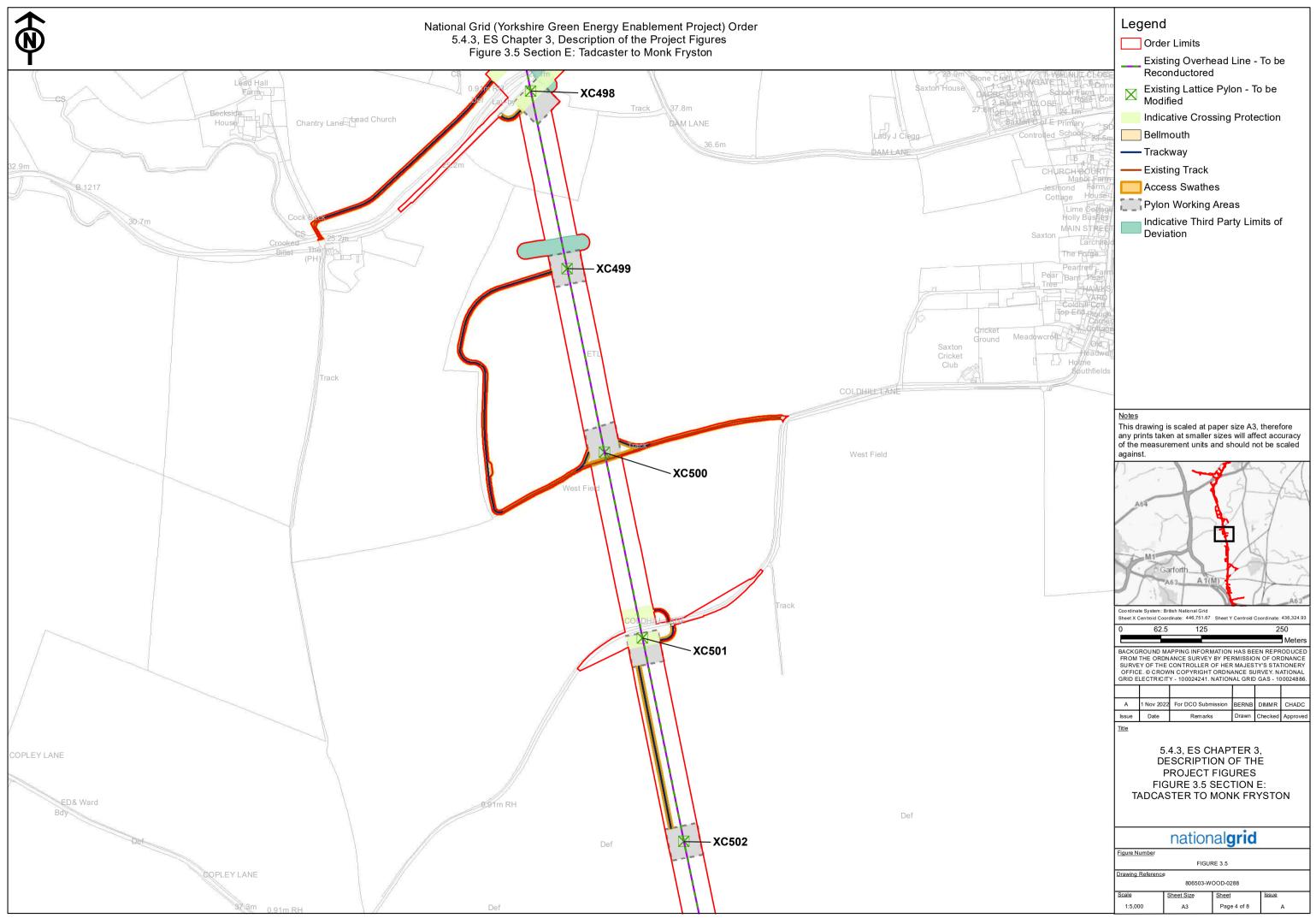


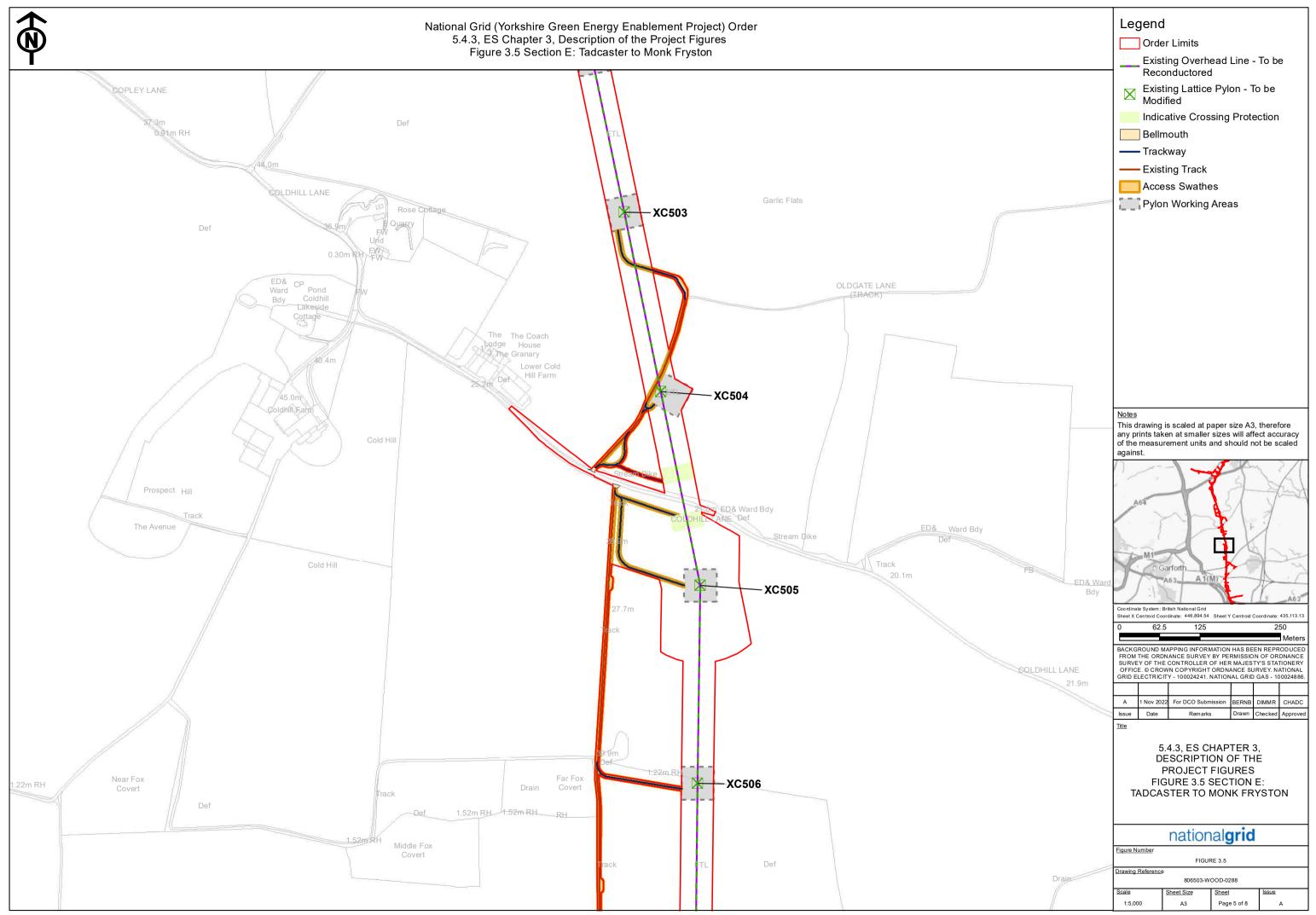


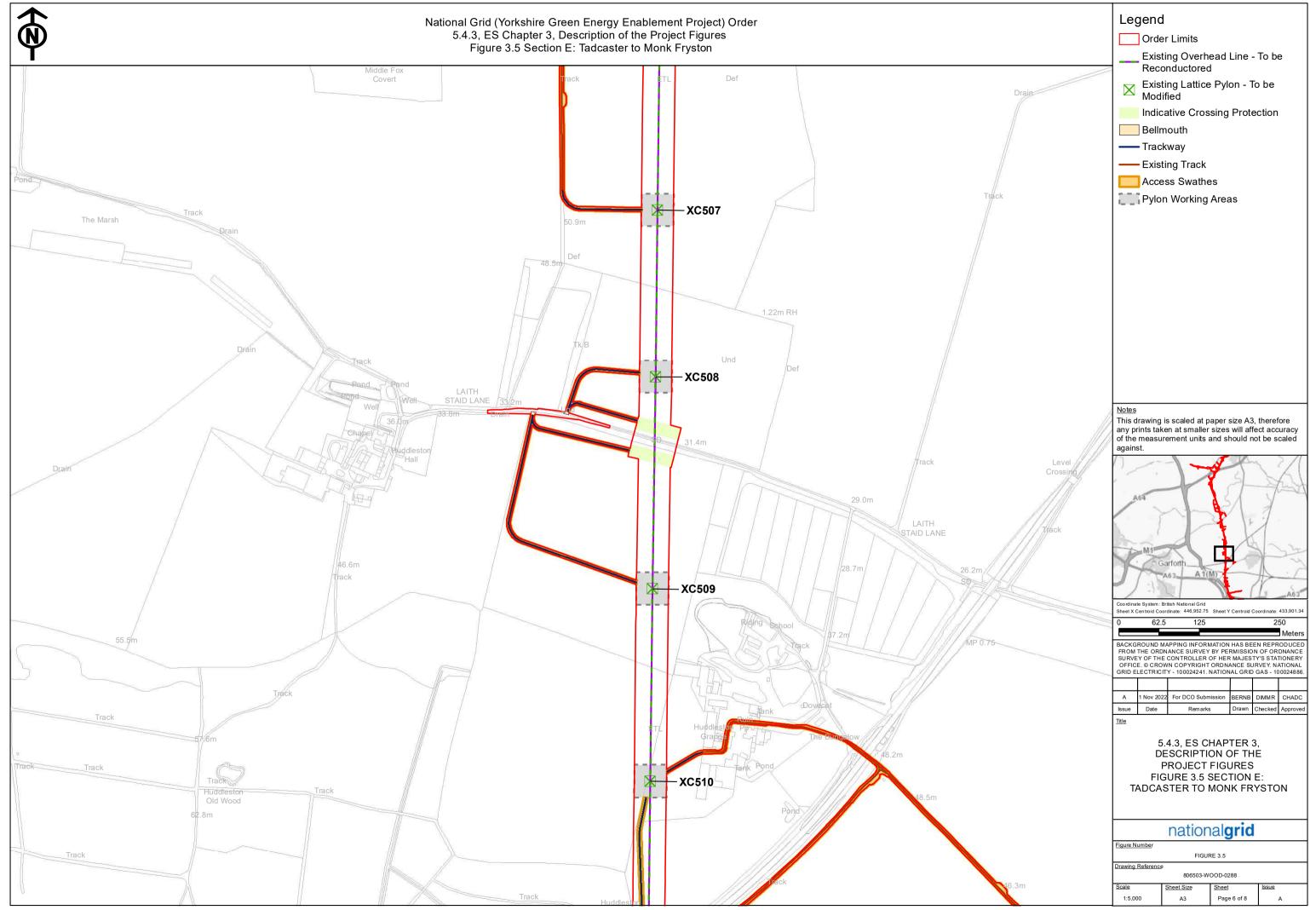


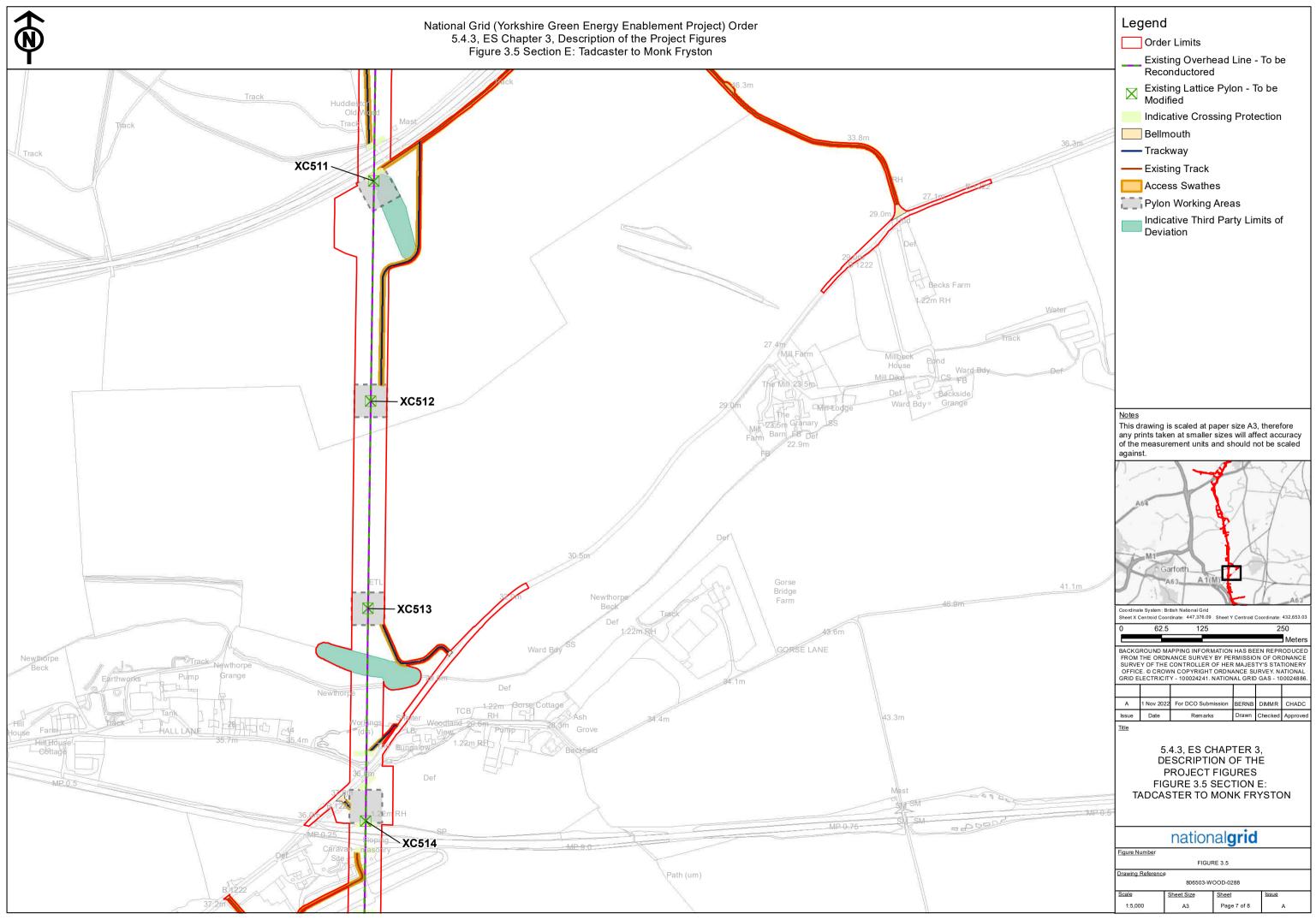


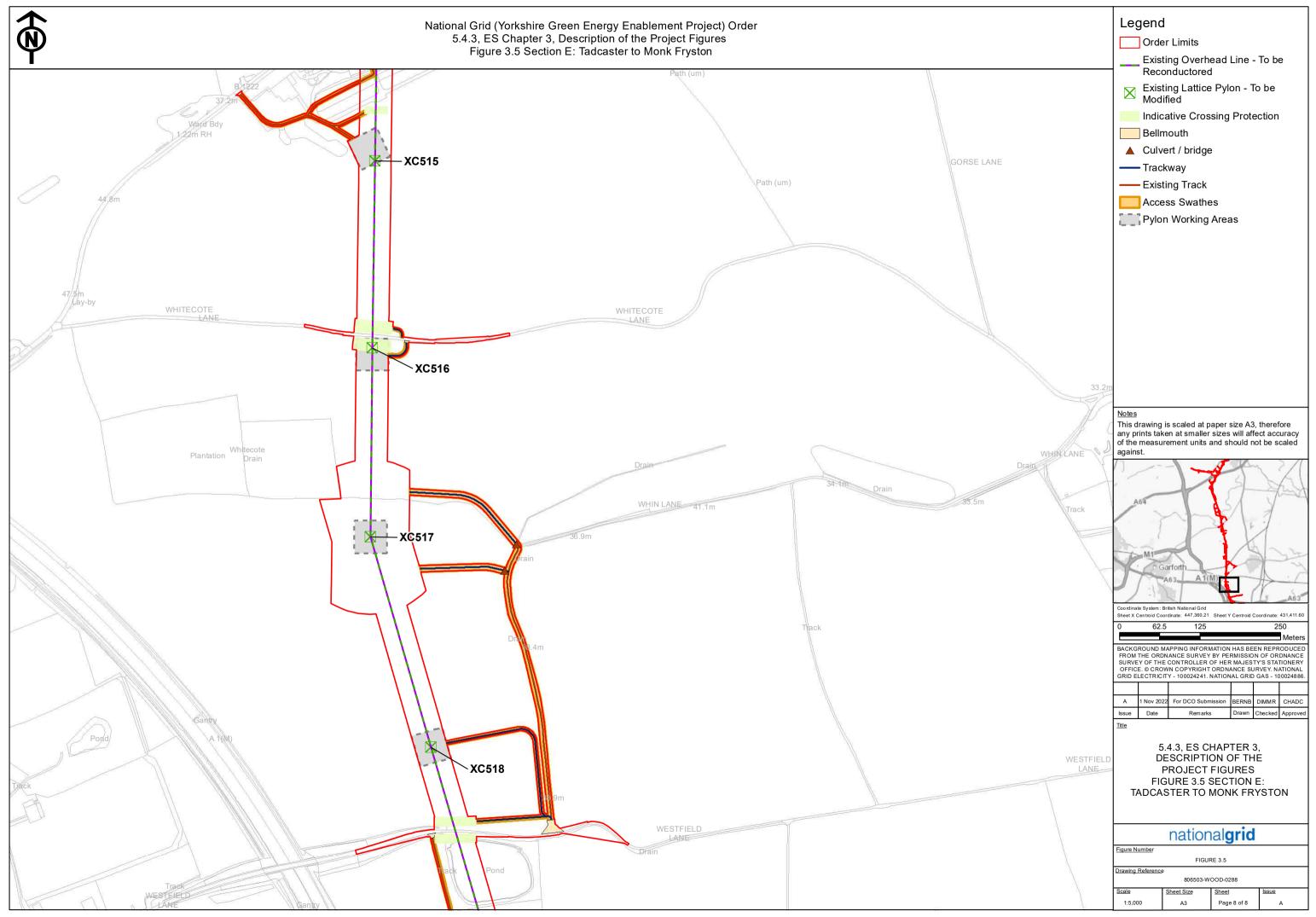


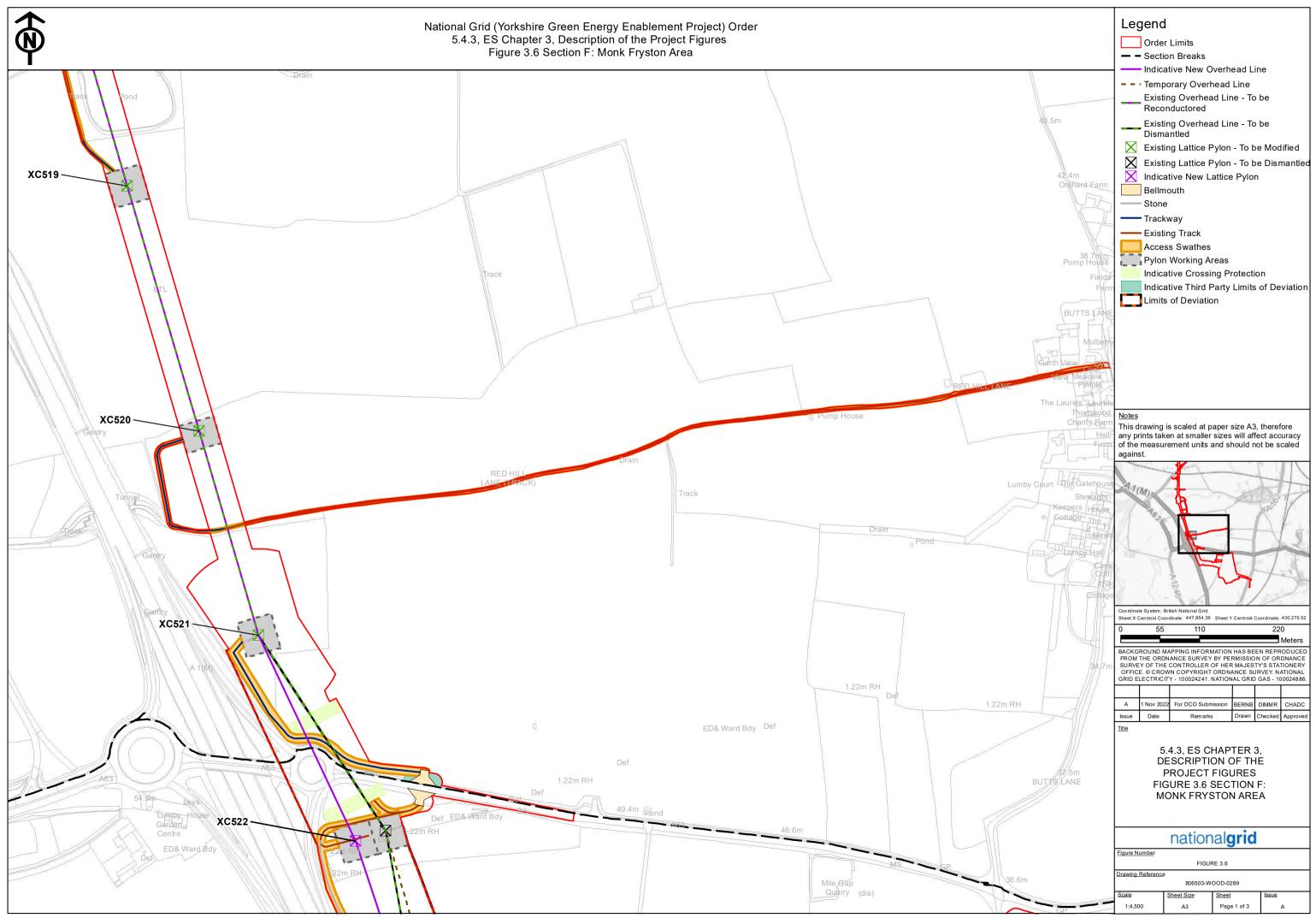


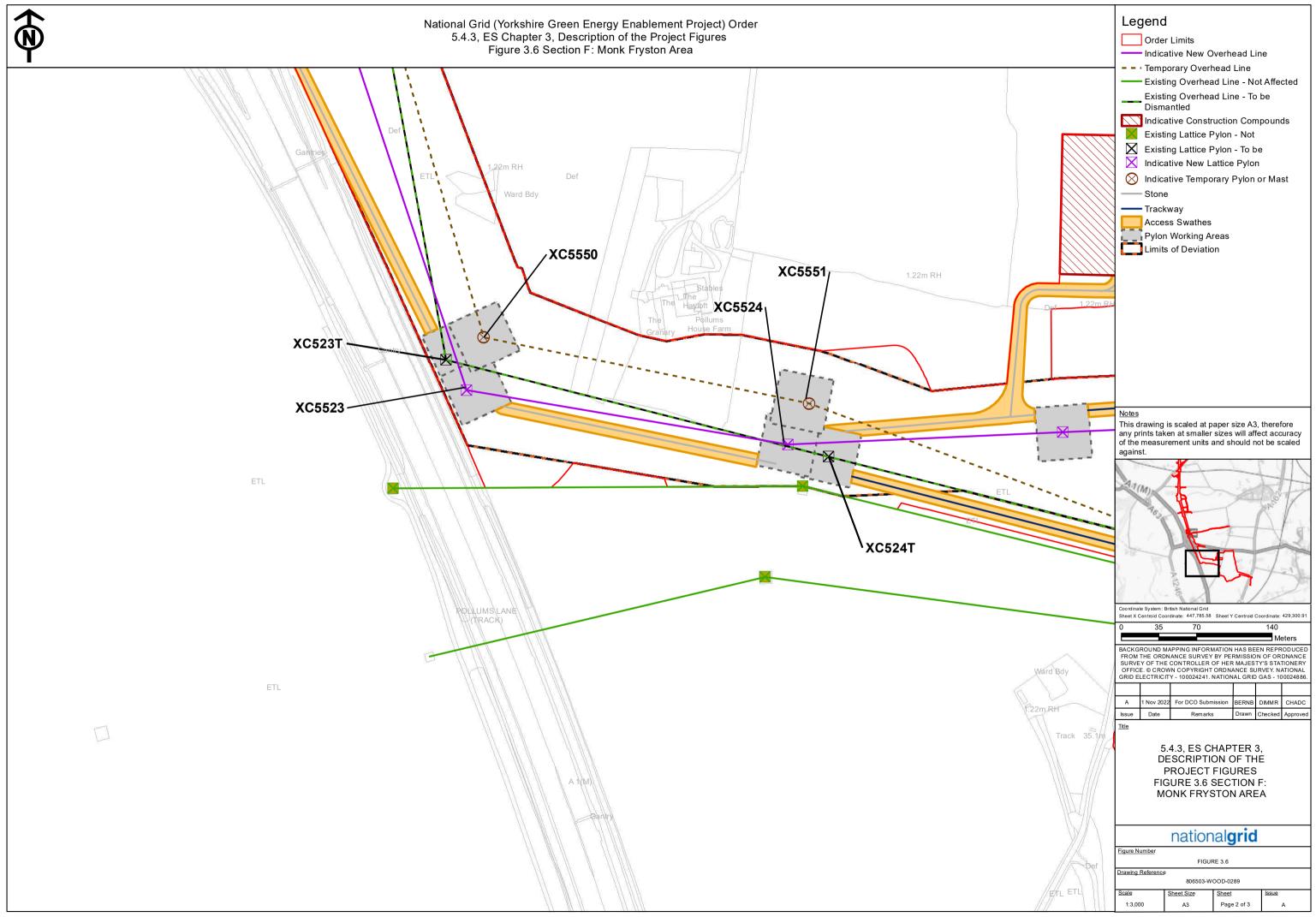


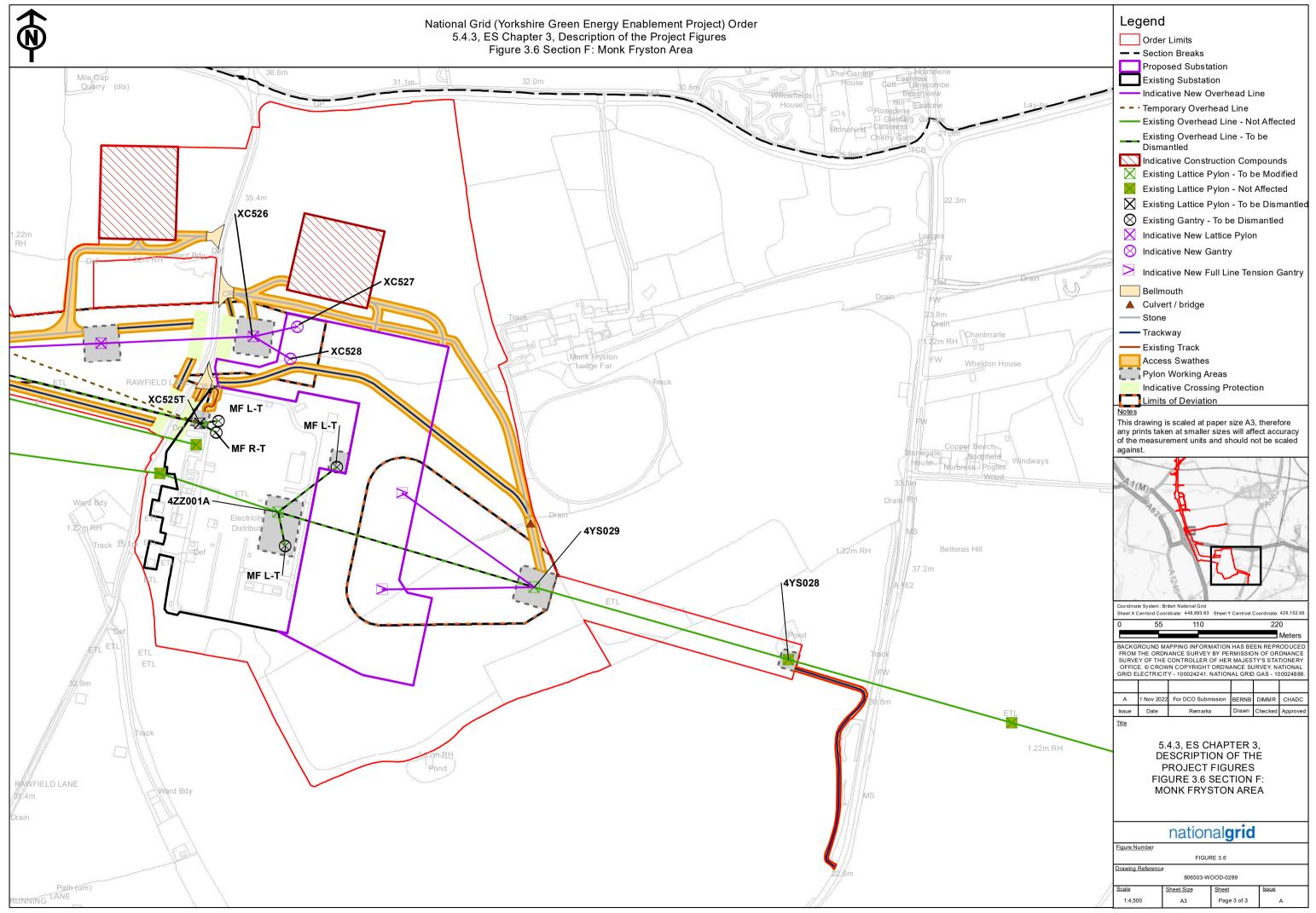














## Mitigation Planting

M/Halflandan na a a davel	
Wildflower meadow	Carrage Name
Species	Common Name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Agrostis capillaris	
Anthoxanthum odoratum	Sweet Vernal-grass
Briza media	Quaking oatgrass
Carex flacca	Glaucous sedge
Centaurea nigra	Common Knapweed
Cynosurus cristatus	Crested Dog's-tail
Festuca rubra	Red Fescue
Filipendula ulmaria	Meadowsweet
Geranium pratense	Meadow Crane's-bill
Knautia arvensis	Field Scabious
Leontodon hispidus	Bristly hawkbit
Leucanthemum vulgare	Ox-eye daisy
Lotus corniculatus	Common Bird's-foot-trefoil
Malva moschata	Musk-mallow
Plantago lanceolata	Ribwort Plantain
Primula veris	Cowslip
Ranunculus acris	Meadow Buttercup
Ranunculus bulbosus	Bulbous Buttercup
Rhinanthus minor	Yellow-rattle
Rumex acetosa	Common sorrel
Silaum silaus	Pepper saxifrage
Tirsetum flavescens	Yellow oatgrass
Vicia cracca	Tufted Vetch

Woodland Edge plant	ing 1m ctrs	
Species	Specification	%
Acer campestre	Transplant : 1+1 : BR	
Cornus sanguinea	Transplant : 1+1 : BR	
Corylus avellana	Transplant : 1+1 : BR	10%
Crataegus monogyna	Transplant : 1+1 : BR	40%
Prunus spinosa	Transplant : 1+1 : BR	
Rhamnus cathartica	Transplant : 1+1 : BR	
Rosa arvensis	Transplant : 1+1 : BR	2%
Rosa canina	Transplant : 1+1 : BR	
Salix caprea	Transplant : 1+1 : BR	3%
Salix viminalis	Transplant : 1+1 : BR	3%

Woodland 2m ctrs		la /
Species	Specification	%
Acer campestre	Transplant : 1+1 : BR	6%
Alnus glutinosa	Transplant : 1+1 : BR	4%
Betula pendula	Transplant : 1+1 : BR	4%
Betula pubescens	Transplant : 1+1 : BR	2%
Carpinus betulus	Transplant : 1+1 : BR	19%
Cornus sanguinea	Transplant : 1+1 : BR	1%
Corylus avellana	Transplant : 1+1 : BR	3%
Crataegus monogyna	Transplant : 1+1 : BR	5%
Euonymus europaeus	Transplant : 1+1 : BR	1%
llex aquifolium	1 yr : Container grown : C2 : Full pot	
Ligustrum vulgare	Transplant : 1+1 : BR	2%
Populus tremula	Transplant : 1+1 : BR	3%
Prunus avium	Transplant: 1+1: BR	9%
Prunus padus	Transplant : 1+1 : BR	3%
Prunus spinosa	Transplant : 1+1 : BR	3%
Quercus petraea	Transplant : 1+1 : BR	9%
Rhamnus cathartica	Seedling: 1+0: BR	1%
Rosa canina	Seedling: 1+0: BR	2%
Rubus fruticosus	Seedling: 1+0: BR	1%
Salix cinerea	Seedling: 1+0: BR	1%
Salix fragilis	Seedling: 1+0: BR	1%
Sambucus nigra	Transplant : 1+1 : BR	1%
Sorbus aria	Transplant : 1+1 : BR	8%
Sorbus aucuparia	Transplant : 1+1 : BR	6%
Taxus baccata	1 yr : Container grown : C2 : Full pot	2%
Viburnum lantana	Transplant : 1+1 : BR	1%

Hedge Reinforcement		
Species	Specification	%
Acer campestre		13%
Carpinus betulus	Transplant : 1+2 : BR	5%
Corylus avellana	Transplant : 1+2 : BR	10%
Euonymus europaeus	Transplant : 1+2 : BR	10%
llex aquifolium	2 yr : Container grown : C2 branched	2%
Prunus avium	Transplant : 1+2 : BR	5%
Prunus spinosa	Transplant : 1+2 : BR	50%
Rosa canina	Transplant : 1+2 : BR	3%
Taxus baccata	Transplant : 1+2 : BR	2%

Specification

Heavy Std : 3X : 12-14cmg : 350-425 cm : Clear stem 175-200cm : BR : 5 brks

Heavy Std: 3X: 12-14cmg: 350-425 cm: Clear stem 175-200cm: BR: 5 brks 35

Hedgerow Trees

Quercus robur

Carpinus betulus

Species

#### SOFTWORKS SPECIFICATION

#### Soils

All soil handling and storage to be undertaken in accordance with the following British Standards and industry Codes of practice:

BS 1377: 1990 Soils for Civil Engineering Purposes

BS 8601: 2013 Specification for Subsoil and Requirements for Use

BS 3882: 2015 Specification for Topsoil

Contractor to check the locations of all underground services, existing and proposed, prior any earthworks. Potential conflicts must be raised immediately with the site/project manager.

Separate topsoil and subsoil when storing. Do not compact or mishandle. Stripping and storage must be undertaken in appropriate weather conditions.

Mounds and bunds to be formed of clean parent subsoil prior to topsoil placement.

Wildflower meadow areas to be formed of subsoil only: rip subsoils with tine to 150mm and grade to a medium tilth, free of peaks, hollows and debris. Blade grade to fine tilth and restrict access.

After spreading, topsoil is to be cultivated and blade graded. Remove large stones and other material (advance screening is recommended). Use a light roller to firm surface without compaction.

Form grass levels in advance of creating tree pits.

In all cases, the soil profile is to be maintained when replacing.

#### Planted Stock

Planted stock quality, handling, and storage operations to comply with BS 8545: 2014, and HTA 'Plant Handling'. Trees and hedges to be planted in accordance with BS 8545.

Living stock must be planted within 48 hours of delivery. Bare root stock must be kept undercover in nursery bags or heeled into ground overnight. Reject desiccated roots.

All planted stock to be healthy, vigorous, free from pests and diseases, suitably hardened off for the proposed situation of planting, and lifted at a time in accordance with good nursery practice. Stock to have a well-formed, fibrous root system and be free from perennial weeds.

Native species must be British provenance.

All planted stock to comply with the Plant Schedule. Variations must be agreed by the project manager prior to placing order.

#### **Planting Operations**

Planting to be undertaken in appropriate weather conditions, between October and March.

Setting out and planting density to follow the Planting Plan/Schedule.

Existing hedgerows to be reinforced as required to form a robust habitat corridor and visual screen. Hedge line to be planted with forestry transplants at 5 plants/m<sup>2</sup> in two staggered rows or equivalent infill planting.

Standard trees to be incorporated into hedge line where possible (i.e. without conflict with existing or proposed services)

to increase the number of hedgerow trees with varied spacing to achieve an average density of 1 tree for every 10m of hedgerow length.

Hedge line rows to be 40-45cm apart. Species to be randomly distributed throughout the hedge line.

#### Tree Planting

Root systems to be thoroughly soaked prior to planting.

Trees 6-8 centimetres girth (cmg) and over to be pit planted. Pits to be excavated to twice the diameter of the root system, deep enough for the full rooting system. Trees must not be planted too deep.

Base to be punctured without breaking up soil. Scarify sides of pit in heavy clay soils.

Tree to be located upright and central within the pit. Fit irrigation pipe to root system with capped inlet just proud of finished level. Back-fill with excavated material, maintaining the soil profile. Firm without compacting.

Shrubs, small trees, and feathers to be pit planted. Excavate pit to twice the diameter of the container, deep enough for the full rooting system. Do not plant too deep.

Base to be punctured without breaking up soil. Scarify sides of pit in heavy clay soils. Stock to be located upright and central within the pit. Back-fill with excavated material. Incorporate 30% organic matter such as peat-free compost. Firm without compacting.

# Bare Root Forestry Stock (<80cm high)

Dip seedlings and small transplants in rooting hormone prior to planting. Slot or L notch-plant, and heel in upright.

Large transplants to be trench or pit planted, incorporating 30% organic matter into parent soil. Ensure root flare sits at surface. Firm without compacting.

## **Support and Protection**

Support trees up to heavy standard size (12-14cmg) with a single 75mm dia. stake. Fix to the stake with a soft buckle tree tie.

Feathered trees (and larger conifers) to be protected with 1000mm high x 80-110mm diam. proprietary biodegradable mesh tree guard and supported with a 30x30mm treated softwood timber stake.

Support smaller forestry stock with 12-24lb/100 bamboo cane and 450 x 38mm clear, unperforated, biodegradable spiral guards.

Larger forestry stock to be supported with 30x30mm treated softwood timber stake and protected with min. 750mm high x 200mm dia. biodegradable shrub shelters.

# **Grass Seeding**

Areas must be seeded with the approved seed mix as specified. Any deviations or substitutions must be agreed with the project manager in advance of ordering.

Seed from early March to late June.

## Notes

- 1. ALL DIMENSIONS ARE INDICATED IN METRES (m) UNLESS NOTED OTHERWISE
- THIS DRAWING IS SCALED AT PAPER SIZE A2, THEREFORE
   ANY PRINTS TAKEN AT SMALLER SIZES WILL AFFECT
   ACCURACY OF THE MEASUREMENT UNITS AND SHOULD
   NOT BE SCALED AGAINST.

Α	01/11/2022	FOR DCO SUBMISSION	RH	NF	RD
Issue	Date	Remarks	Drawn	Checked	Approved

Title

5.4.3 ES Chapter 3:
Description of the Project
Figure 3.10 Outline Landscape Mitigation Strategy
(Overton): Plant Schedule and Specification

# national**grid**

Application Number EN02002

National Grid Drawing Reference

 Scale
 Sheet Size
 Sheet
 Issue

 N.T.S
 A2
 SHEET 2 OF 2
 A



# Schedule of Mitigation Planting

Hedge Reinforcement	planting	
Species	Specification	%
Acer campestre	Transplant : 1+1 : BR	2%
Cornus sanguinea	Transplant : 1+1 : BR	10%
Crataegus monogyna	Transplant : 1+1 : BR	55%
llex aquifolium	1 yr : Container grown : C2 : Full pot	5%
Malus sylvestris	Transplant : 1+1 : BR	2%
Prunus cerasifera	Transplant : 1+1 : BR	2%
Prunus spinosa	Transplant : 1+1 : BR	20%
Salix caprea	Transplant : 1+1 : BR	2%
Taxus baccata	Transplant : 1+1 : BR	2%

Native Scrub		
Species Specification		%
Acer campestre	Transplant: 1+1: BR	5%
Cornus sanguinea	Transplant: 1+1: BR	15%
Crataegus monogyna	Transplant: 1+1: BR	60%
Prunus spinosa	Transplant : 1+1 : BR	10%
Sorbus aucuparia	Transplant: 1+1: BR	5%
Viburnum opulus	Transplant: 1+1: BR	5%

Wildflower Meadow Seeding
wildilower Meadow Seeding
Wildlie Wedger Codaing

Wildflower Meadow Seed	aingi
Species	Common Name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Anthoxanthum odoratum	Sweet Vernal-grass
Anthyllis vulneraria	Kidney Vetch
Betonica officinalis	Purple betony
Briza media	Quaking oatgrass
Bromopsis erecta	Erect Brome
Centaurea nigra	Common Knapweed
Centaurea scabiosa	Greater Knapweed
Cynosurus cristatus	Crested Dog's-tail
Festuca ovina	Sheep's-fescue
Festuca rubra	Red Fescue
Filipendula vulgaris	Dropwort
Galium album	Hedge bedstraw
Galium verum	Lady's Bedstraw
Hippocrepis comosa	Horseshoe vetch
Leontodon hispidus	Bristly hawkbit
Leucanthemum vulgare	Ox-eye daisy
Lotus corniculatus	Common Bird's-foot-trefoil
Origanum vulgare	Wild Marjoram
Plantago lanceolata	Ribwort Plantain
Poterium sanguisorba	Salad burnet
Primula veris	Cowslip
Prunella vulgaris	Selfheal
Ranunculus acris	Meadow Buttercup
Rumex acetosa	Common sorrel
Scabiosa columbaria	Small scabious
Silene vulgaris	Bladder campion
Tirsetum flavescens	Yellow oatgrass
Vicia cracca	Tufted Vetch

## Hedgerow Trees

1 5		I
Species	Specification	%
Quercus robur	Heavy Std: 3X: 12-14cmg: 350-425 cm: Clear stem 175-200cm: BR: 5 brks	65
Carpinus betulus	Heavy Std: 3X: 12-14cmg: 350-425 cm: Clear stem 175-200cm: BR: 5 brks	35

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All planted stock to comply with the Plant Schedule. Variations must be agreed by the project manager prior to placing order.

## **Planting Operations**

Planting to be undertaken in appropriate weather conditions, between October and March.

Setting out and planting density to follow the Planting Plan/Schedule.

Existing hedgerows to be reinforced as required to form a robust habitat corridor and visual screen. Hedge line to be planted with forestry transplants at 5 plants/ $m^2$  in two staggered rows or equivalent infill planting.

Standard trees to be incorporated into hedge line where possible (i.e. without conflict with existing or proposed services)

to increase the number of hedgerow trees with varied spacing to achieve an average density of 1 tree for every 10m of hedgerow length.

Hedge line rows to be 40-45cm apart. Species to be randomly distributed throughout the hedge line.

# Tree Planting

Root systems to be thoroughly soaked prior to planting.

Trees 6-8 centimetres girth (cmg) and over to be pit planted. Pits to be excavated to twice the diameter of the root system, deep enough for the full rooting system. Trees must not be planted too deep.

Base to be punctured without breaking up soil. Scarify sides of pit in heavy clay soils.

Tree to be located upright and central within the pit. Fit irrigation pipe to root system with capped inlet just proud of finished level. Back-fill with excavated material, maintaining the soil profile. Firm without compacting.

Shrubs, small trees, and feathers to be pit planted. Excavate pit to twice the diameter of the container, deep enough for the full rooting system. Do not plant too deep.

Base to be punctured without breaking up soil. Scarify sides of pit in heavy clay soils. Stock to be located upright and central within the pit. Back-fill with excavated material. Incorporate 30% organic matter such as peat-free compost. Firm without compacting.

## Bare Root Forestry Stock (<80cm high)

Dip seedlings and small transplants in rooting hormone prior to planting. Slot or L notch-plant, and heel in upright.

Large transplants to be trench or pit planted, incorporating 30% organic matter into parent soil. Ensure root flare sits at surface. Firm without compacting.

## **Support and Protection**

Support trees up to heavy standard size (12-14cmg) with a single 75mm dia. stake. Fix to the stake with a soft buckle tree tie.

Feathered trees (and larger conifers) to be protected with 1000mm high x 80-110mm diam. proprietary biodegradable mesh tree guard and supported with a 30x30mm treated softwood timber stake.

Support smaller forestry stock with 12-24lb/100 bamboo cane and 450 x 38mm clear, unperforated, biodegradable spiral guards.

Larger forestry stock to be supported with 30x30mm treated softwood timber stake and protected with min. 750mm high x 200mm dia. biodegradable shrub shelters.

## **Grass Seeding**

Areas must be seeded with the approved seed mix as specified. Any deviations or substitutions must be agreed with the project manager in advance of ordering.

Seed from early March to late June.

Refer to Soils specification above for ground preparation.

Seed in two perpendicular directions at the specified rate. In high predation areas lightly rake surface and erect tickertape. Restrict pedestrian access.

## Notes

1. ALL DIMENSIONS ARE INDICATED IN METRES (m) UNLESS NOTED OTHERWISE

THIS DRAWING IS SCALED AT PAPER SIZE A2, THEREFORE
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 NOT BE SCALED AGAINST.

Α	01/11/2022	FOR DCO SUBMISSION	RH	NF	RD
Issue	Date	Remarks	Drawn	Checked	Approved

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5.4.3 ES Chapter 3:
Description of the Project
FIGURE 3.11: Outline Landscape Mitigation Strategy
(Tadcaster): Plant Schedule and Specification

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# Figure 3.12 Outline Landscape Mitigation Strategy (Monk Fryston) Plant Schedule and Specification

## Mitigation Planting

Wildflower meadow	
Species	Common Name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Anthoxanthum odoratum	Sweet Vernal-grass
Anthyllis vulneraria	Kidney Vetch
Betonica officinalis	Purple betony
Briza media	Quaking oatgrass
Bromopsis erecta	Erect Brome
Centaurea nigra	Common Knapweed
Centaurea scabiosa	Greater Knapweed
Cynosurus cristatus	Crested Dog's-tail
Festuca ovina	Sheep's-fescue
Festuca rubra	Red Fescue
Filipendula vulgaris	Dropwort
Galium album	Hedge bedstraw
Galium verum	Lady's Bedstraw
Hippocrepis comosa	Horseshoe vetch
Leontodon hispidus	Bristly hawkbit
Leucanthemum vulgare	
Lotus corniculatus	Common Bird's-foot-trefoil
Origanum vulgare	Wild Marjoram
Plantago lanceolata	Ribwort Plantain
Poterium sanguisorba	
Primula veris	
Prunella vulgaris	Selfheal
Ranunculus acris	Meadow Buttercup
Scabiosa columbaria	
Silene vulgaris	
Tirsetum flavescens	
Vicia cracca	Tufted Vetch

Specification

Aesculus hippocastanum Transplant : 1+1 : BR

Transplant : 1+1 : BR

Transplant: 1+1: BR

Transplant : 1+1 : BR

Transplant : 1+1 : BR

Fransplant : 1+1 : BR

Transplant : 1+1 : BR

Transplant: 1+1: BR

Transplant: 1+1: BR

Transplant : 1+1 : BR 2%

Transplant : 1+1 : BR 6%

Transplant : 1+1 : BR 10%

Transplant : 1+1 : BR 2%

Transplant : 1+1 : BR 5%

Transplant : 1+1 : BR|15%

Transplant : 1+1 : BR|5%

Transplant : 1+1 : BR 3%

Transplant: 1+1: BR 2%

Pseudotsuga menziesii | 1 yr : Container grown : C2 : Full pot | 4%

Specification

Crataegus monogyna Transplant: 1+1: BR 50%

1 yr : Container grown : C2 : Full pot 2%

1 yr : Container grown : C2 : Full pot 8%

4%

16%

27%

4%

6%

2%

Woodland planting 2m ctrs

Species

Acer campestre

Betula pendula

llex aquifolium

Populus alba

Quercus robur

Salix alba

Species

Pinus sylvestris

Prunus cerasifera

Sorbus aucuparia

Woodland Edge planting 1m ctrs

Taxus baccata

Acer campestre

Cornus sanguinea

Corylus avellana

Malus sylvestris

Prunus spinosa

Sambucus nigra

Taxus baccata

Salix caprea

Prunus cerasifera

Corylus avellana

Acer platanoides

Acer pseudoplatanus

Crataegus monogyna

Hedge reinforcement		
Species		%
Acer campestre	Transplant : 1+1 : BR	2%
Cornus sanguinea	Transplant : 1+1 : BR	10%
Crataegus monogyna	Transplant : 1+1 : BR	55%
Ilex aquifolium	1 yr : Container grown : C2 : Full pot	5%
Malus sylvestris	Transplant: 1+1: BR	2%
Prunus cerasifera	Transplant: 1+1: BR	2%
Prunus spinosa	Transplant: 1+1: BR	20%
Salix caprea	Transplant: 1+1: BR	2%
Taxus baccata	Transplant: 1+1: BR	2%

Hedgerow Trees				
Species	Specification	%		
Quercus robur	Heavy Std: 3X: 12-14cmg: 350-425 cm: Clear stem 175-200cm: BR: 5 brks	65		
Carpinus betulus	Heavy Std: 3X: 12-14cmg: 350-425 cm: Clear stem 175-200cm: BR: 5 brks	35		

# SOFTWORKS SPECIFICATION

# Soils

All soil handling and storage to be undertaken in accordance with the following British Standards and industry Codes of practice:

BS 1377: 1990 Soils for Civil Engineering Purposes

BS 8601: 2013 Specification for Subsoil and Requirements for Use

BS 3882: 2015 Specification for Topsoil

Contractor to check the locations of all underground services, existing and proposed, prior any earthworks. Potential conflicts must be raised immediately with the site/project manager.

Separate topsoil and subsoil when storing. Do not compact or mishandle. Stripping and storage must be undertaken in appropriate weather conditions.

Mounds and bunds to be formed of clean parent subsoil prior to topsoil placement.

Wildflower meadow areas to be formed of subsoil only: rip subsoils with tine to 150mm and grade to a medium tilth, free of peaks, hollows and debris. Blade grade to fine tilth and restrict access.

After spreading, topsoil is to be cultivated and blade graded. Remove large stones and other material (advance screening is recommended). Use a light roller to firm surface without compaction.

Form grass levels in advance of creating tree pits.

In all cases, the soil profile is to be maintained when replacing.

## **Planted Stock**

Planted stock quality, handling, and storage operations to comply with BS 8545: 2014, and HTA 'Plant Handling'. Trees and hedges to be planted in accordance with BS 8545.

Living stock must be planted within 48 hours of delivery. Bare root stock must be kept undercover in nursery bags or heeled into ground overnight. Reject desiccated roots.

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# national**grid**

Application Number

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