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Yorkshire Green Energy Enablement (GREEN) Project

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Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

nationalgrid



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Yorkshire GREEN

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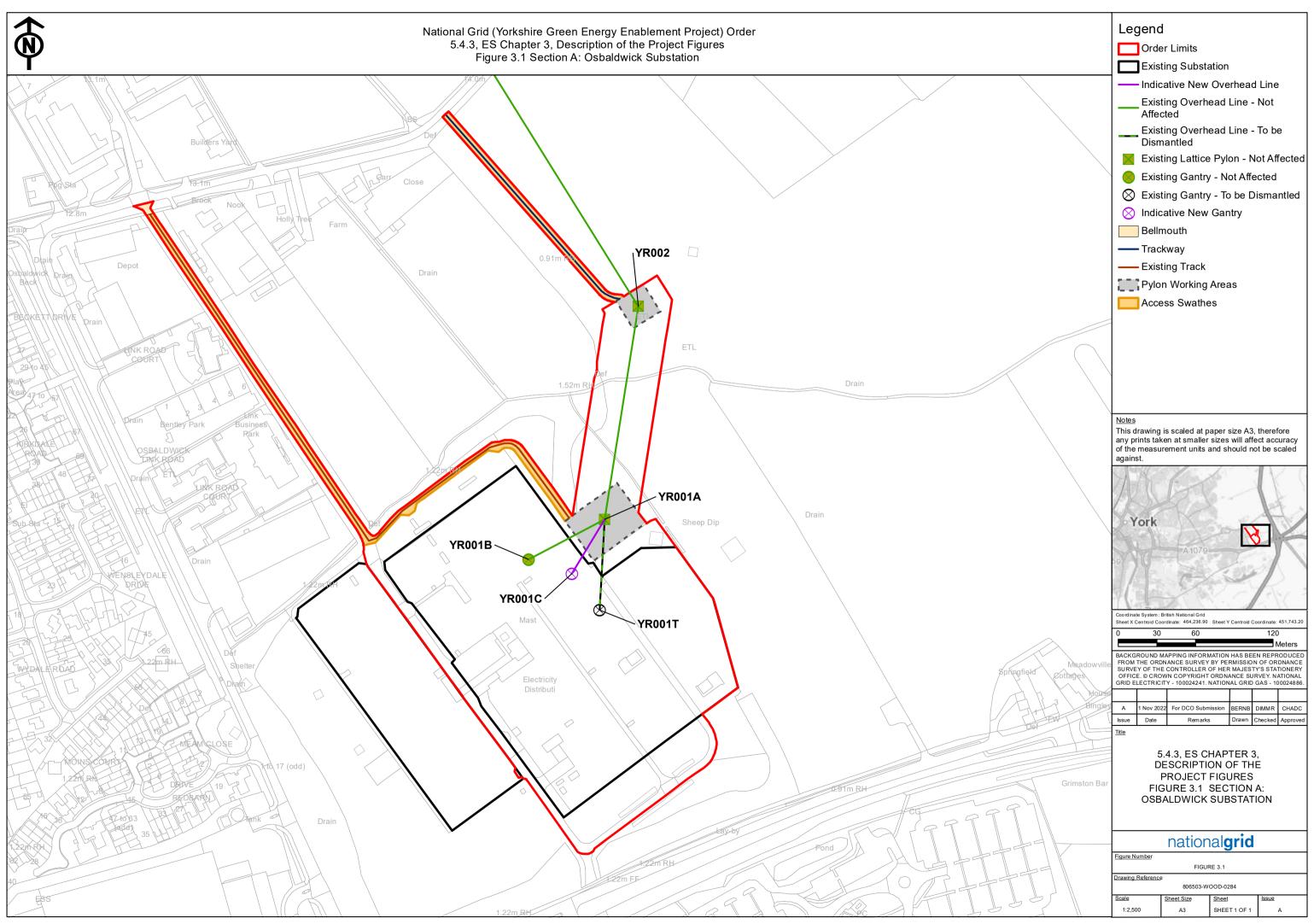
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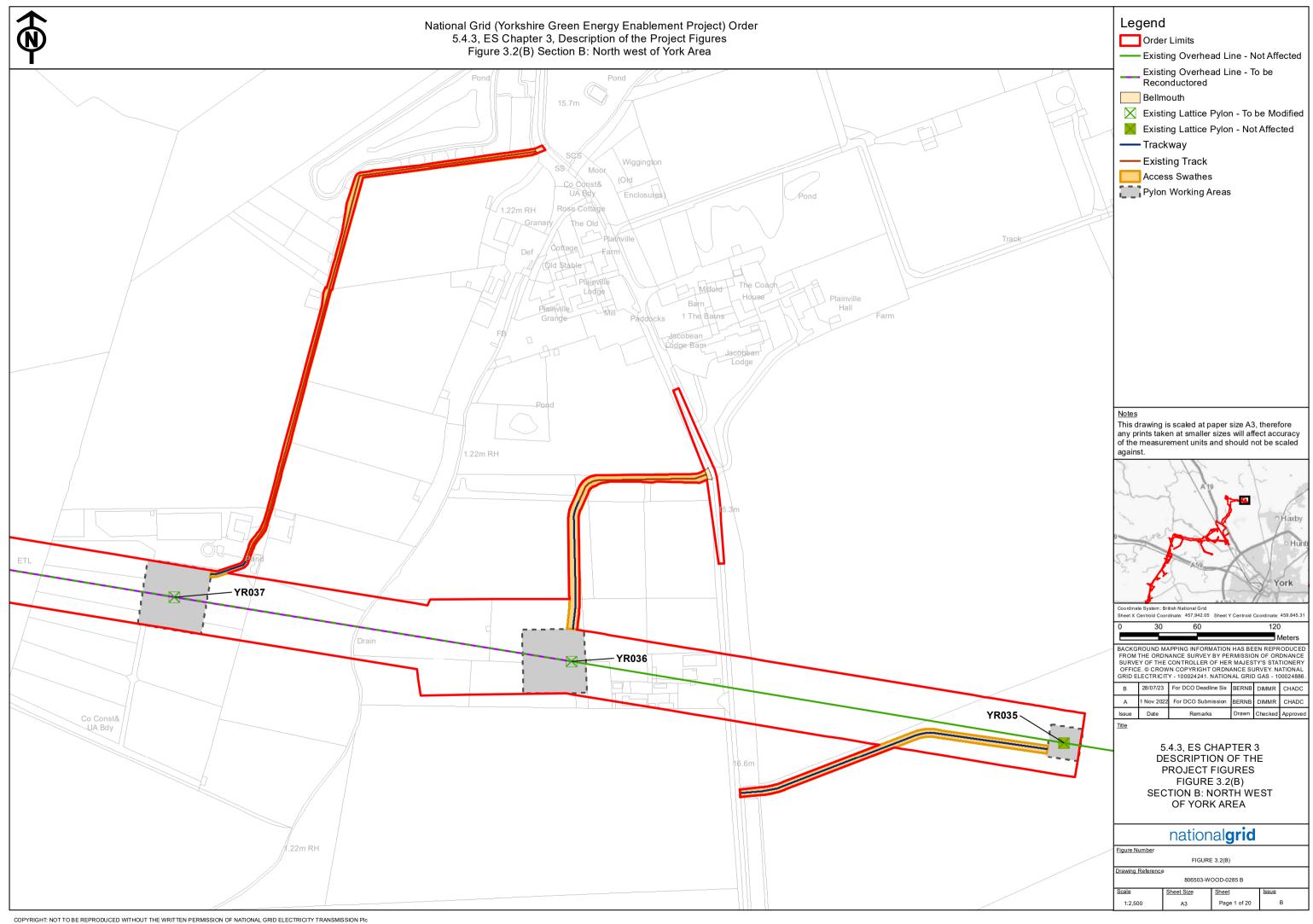
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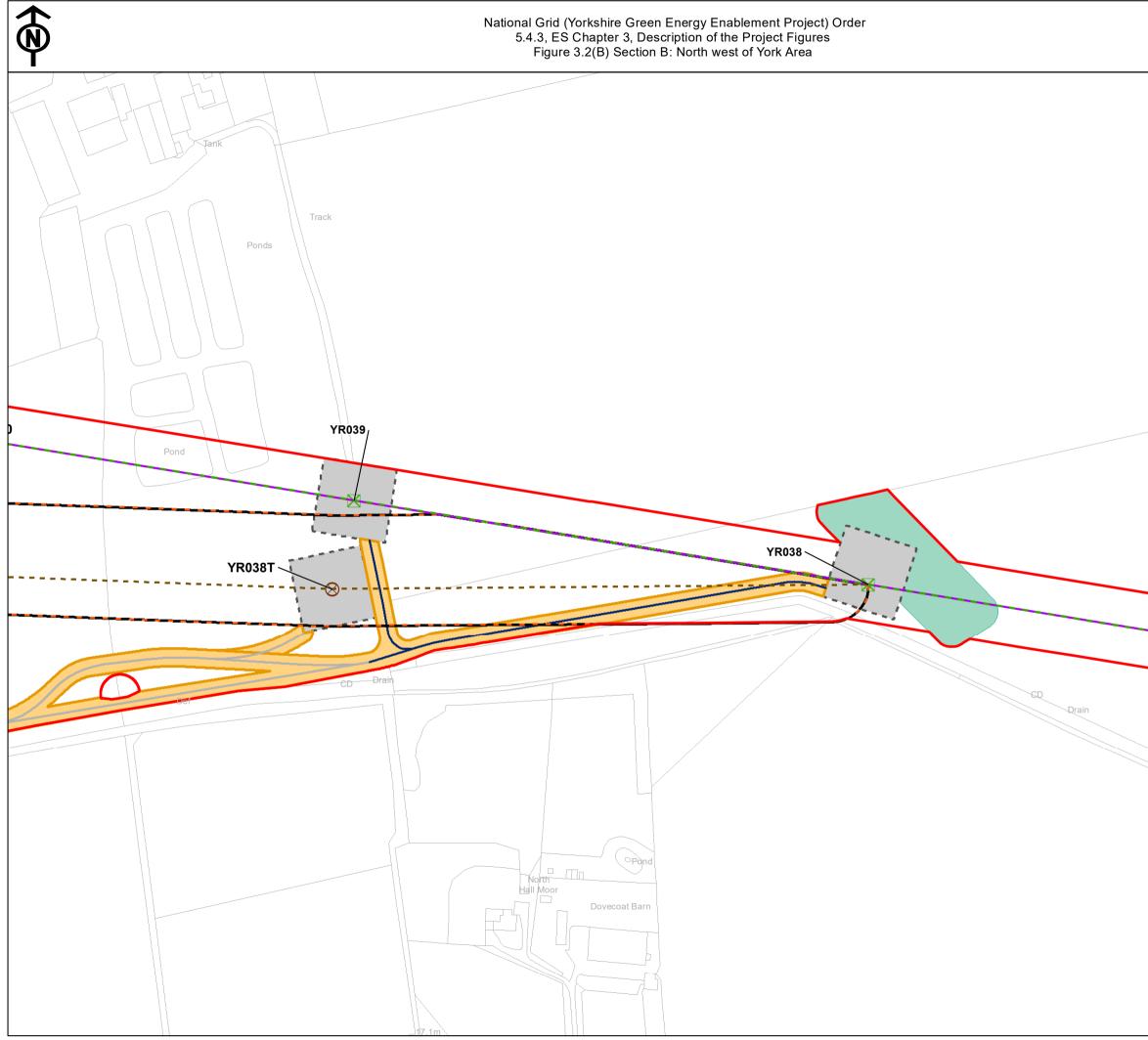
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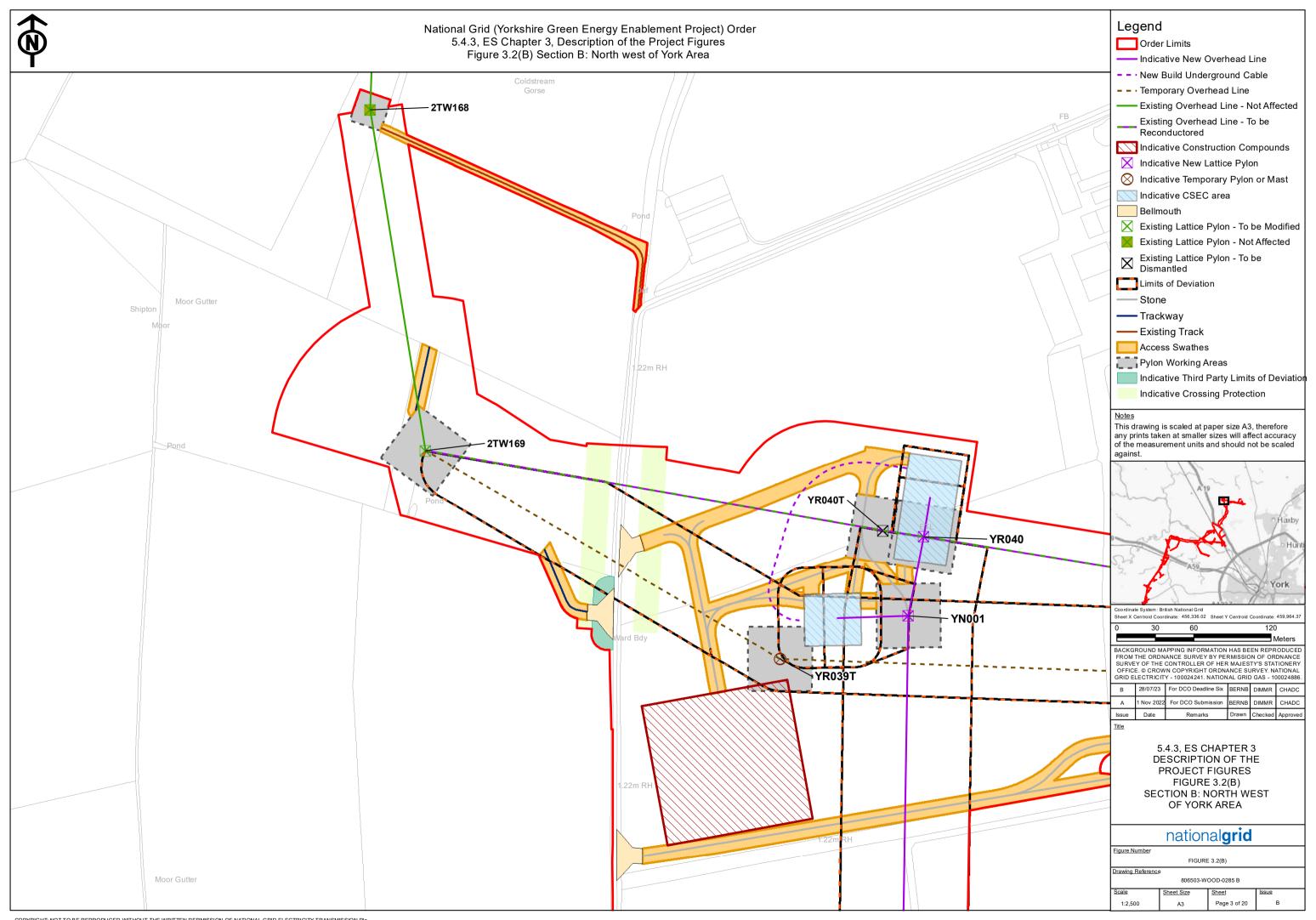
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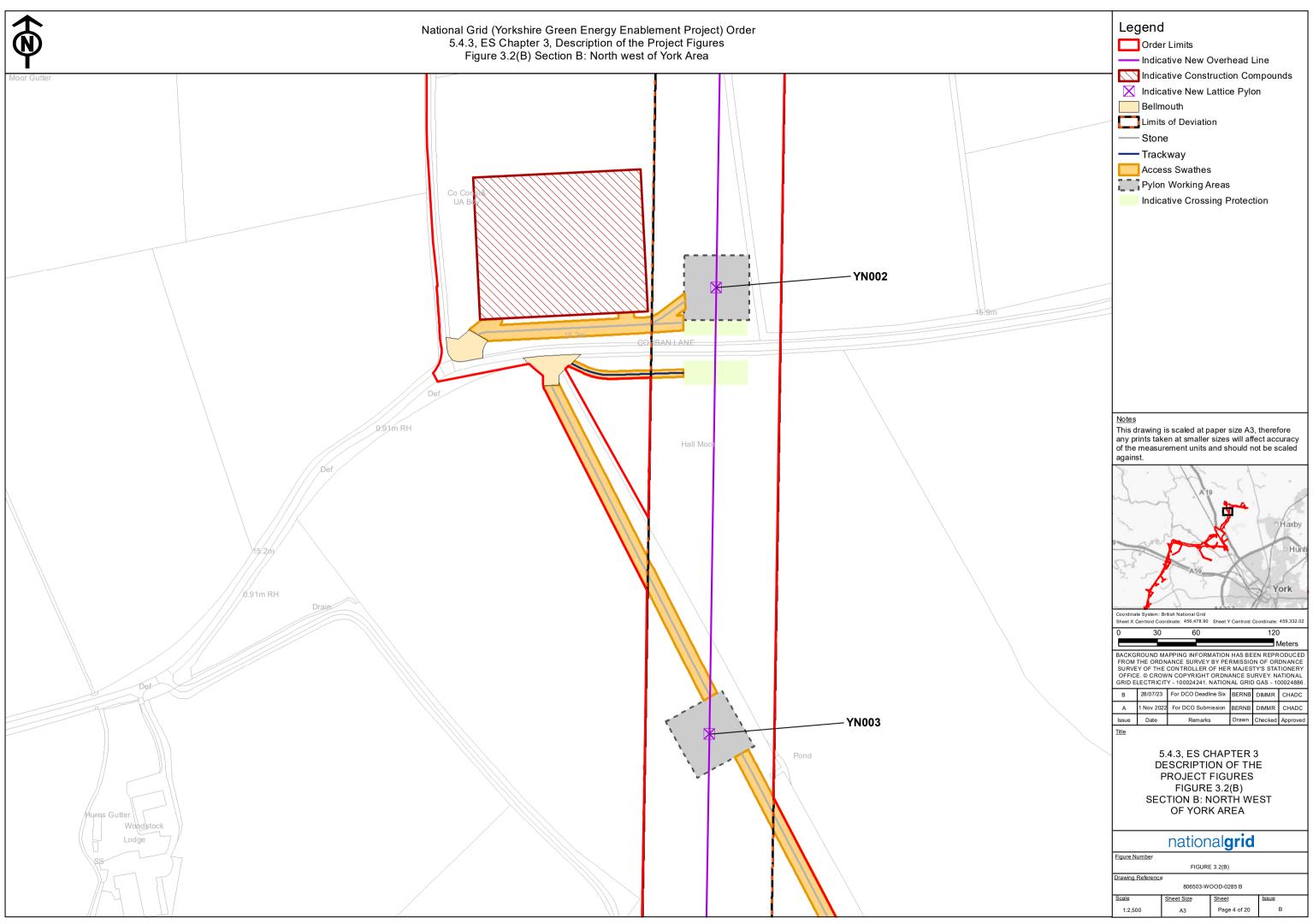


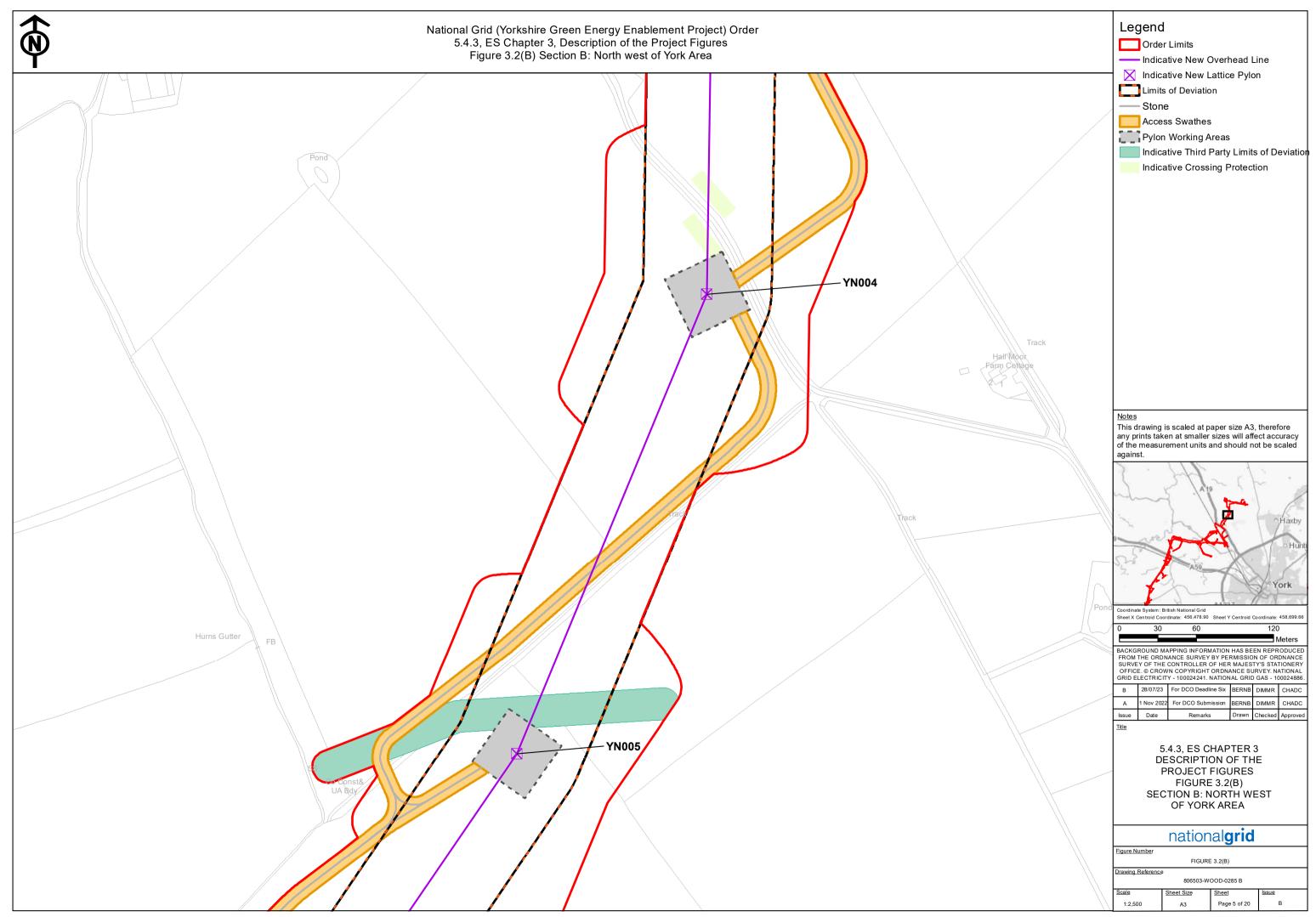


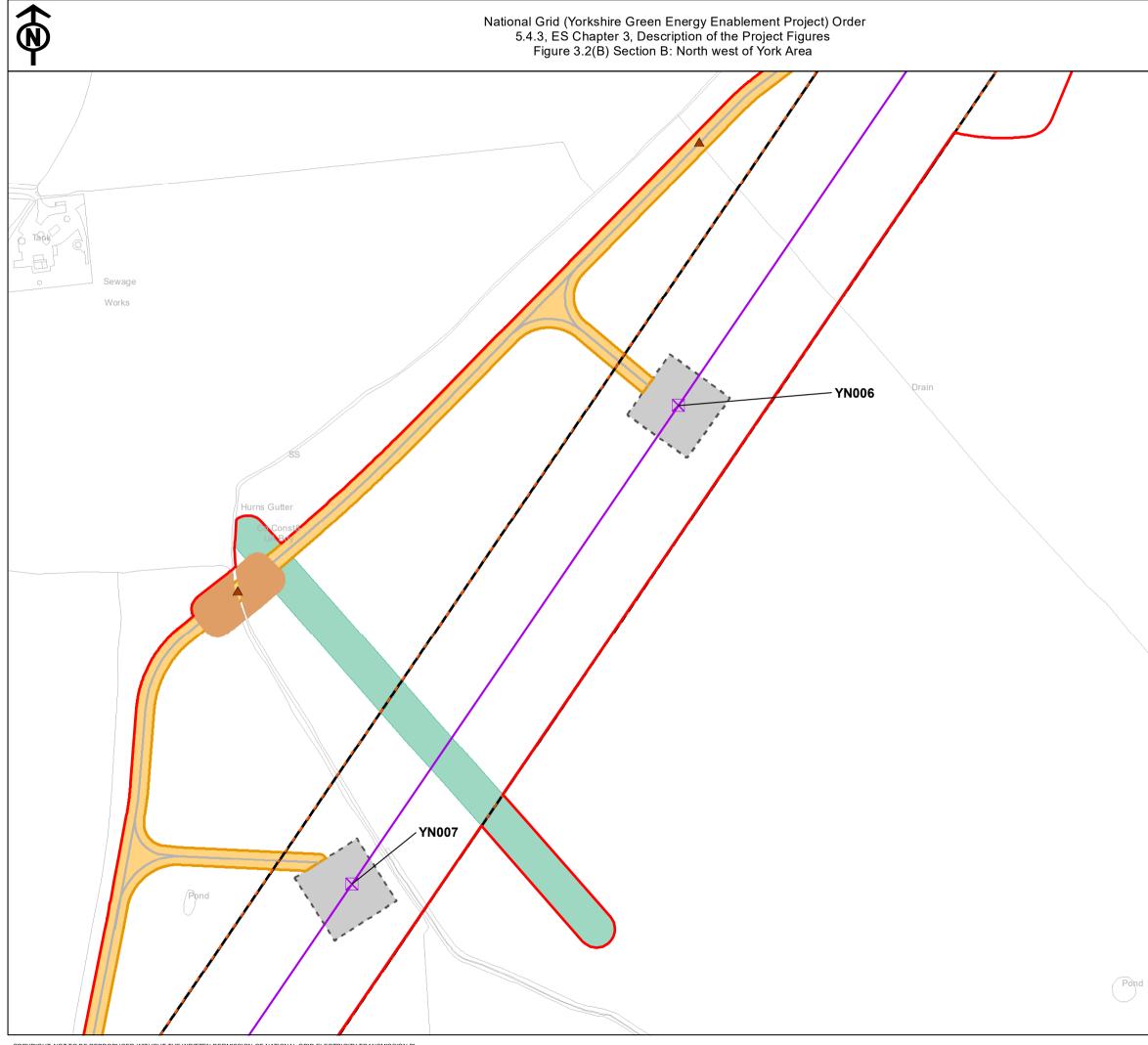


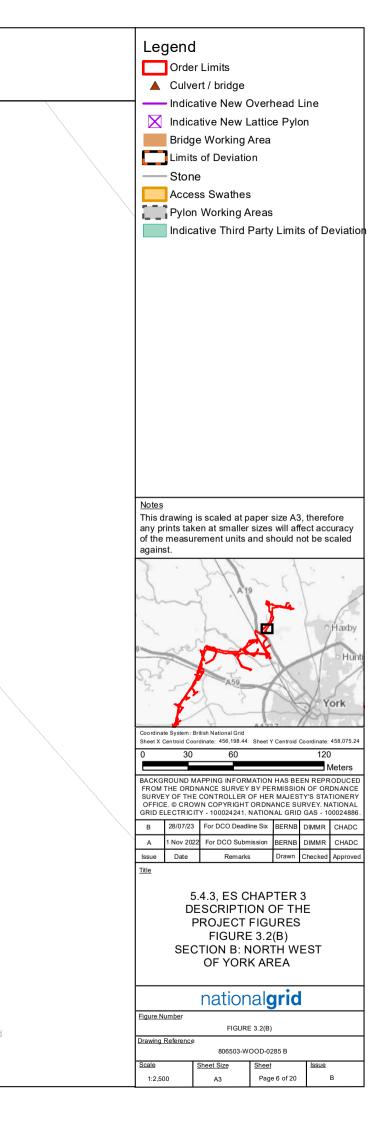
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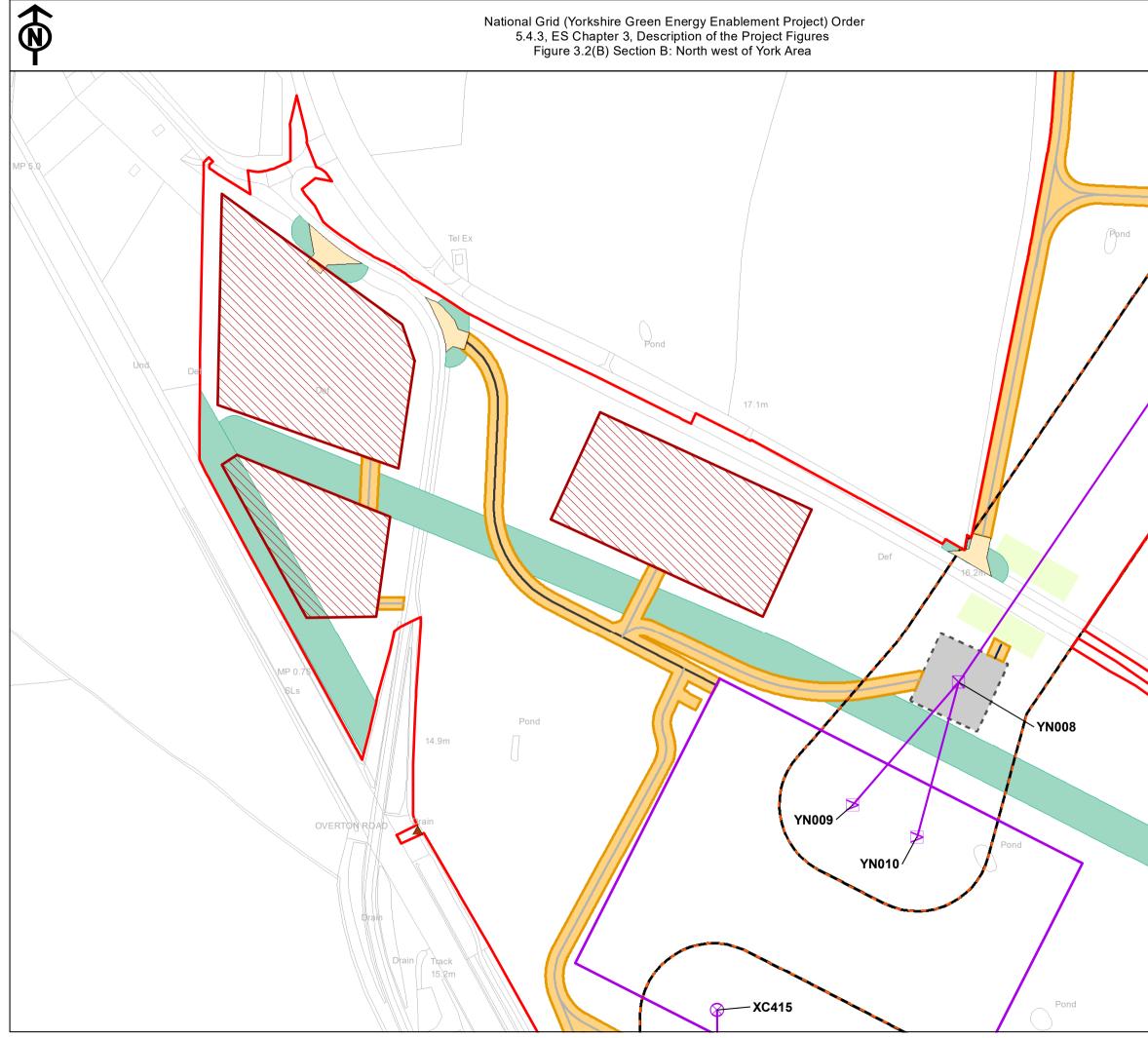




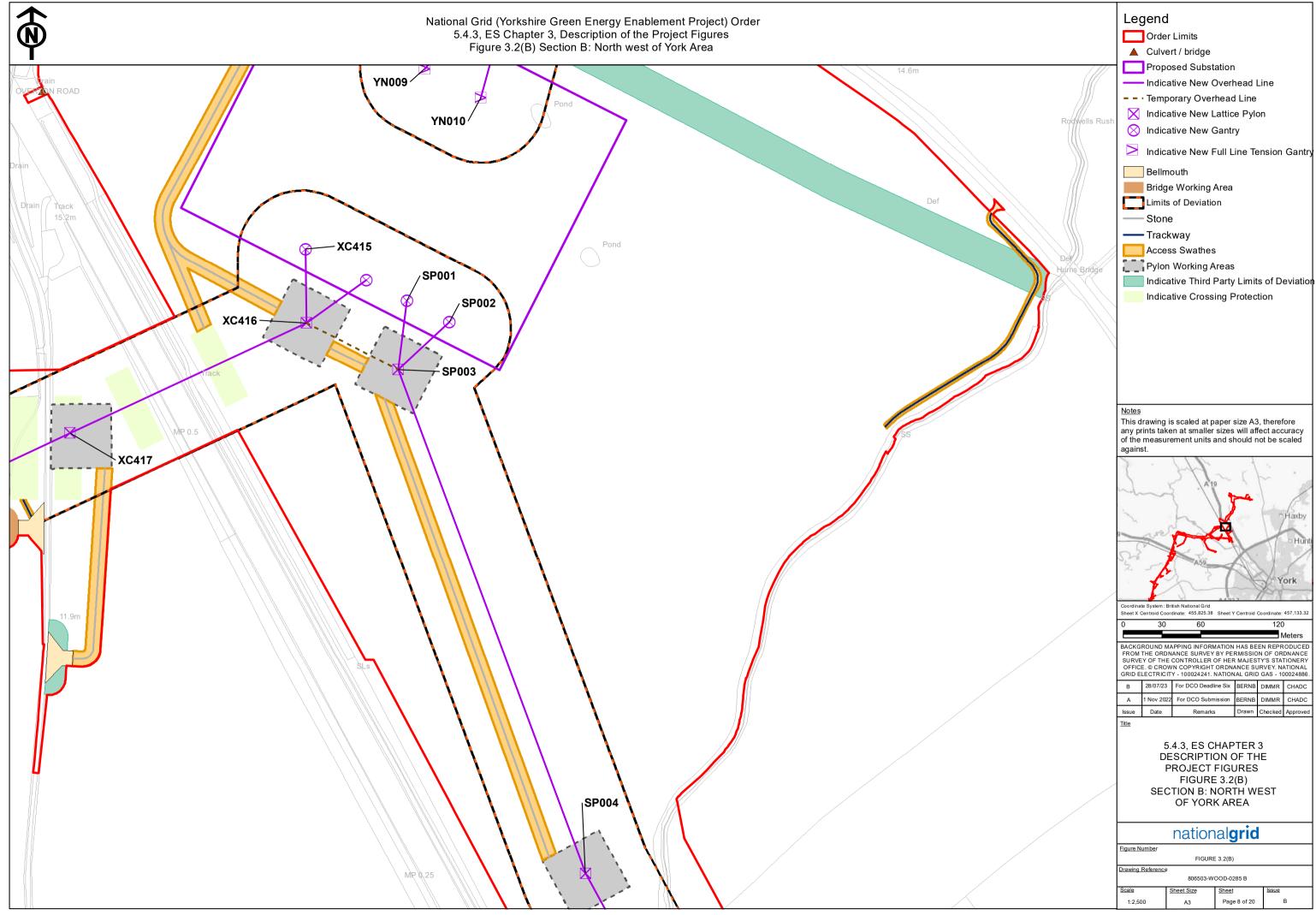


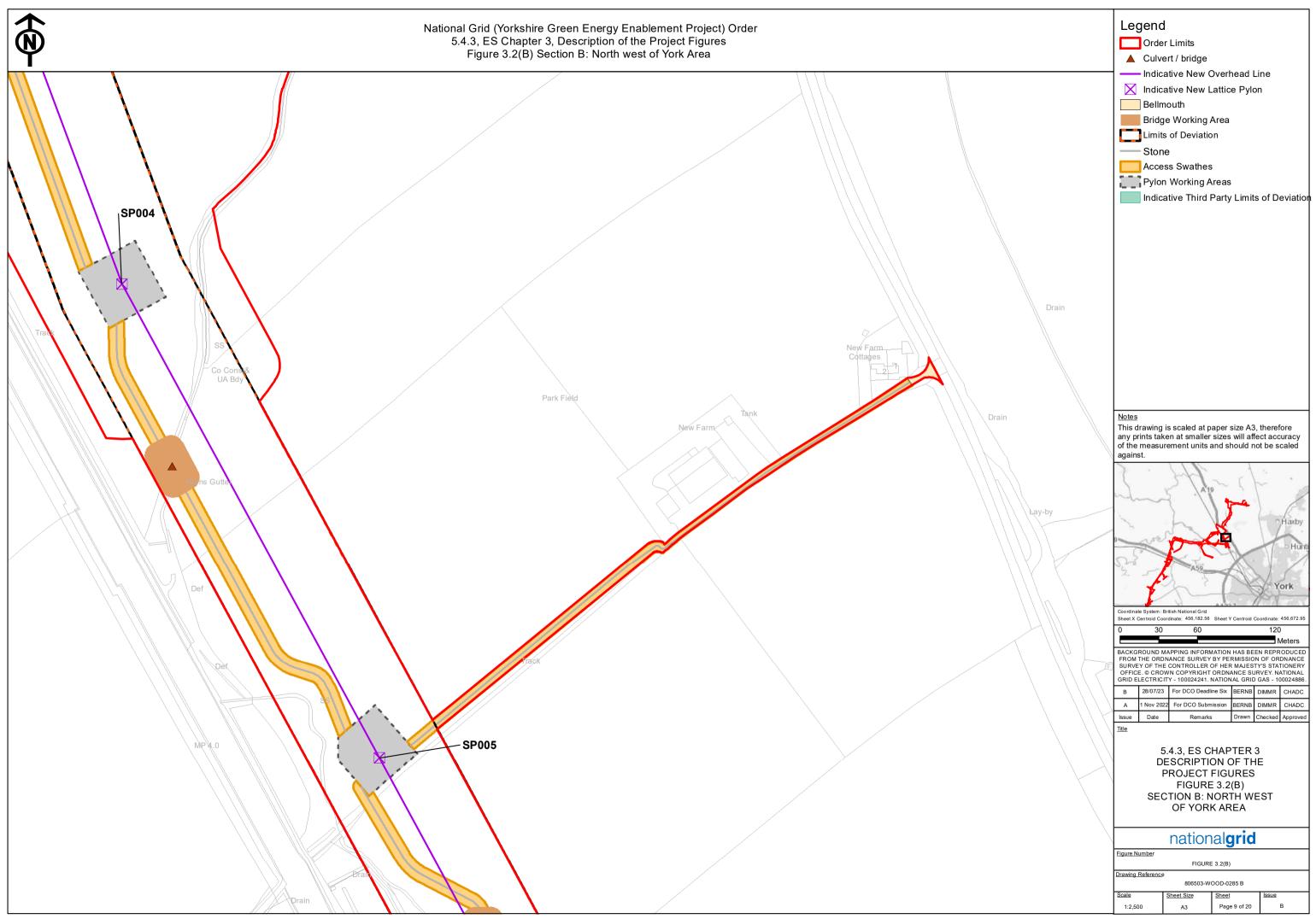


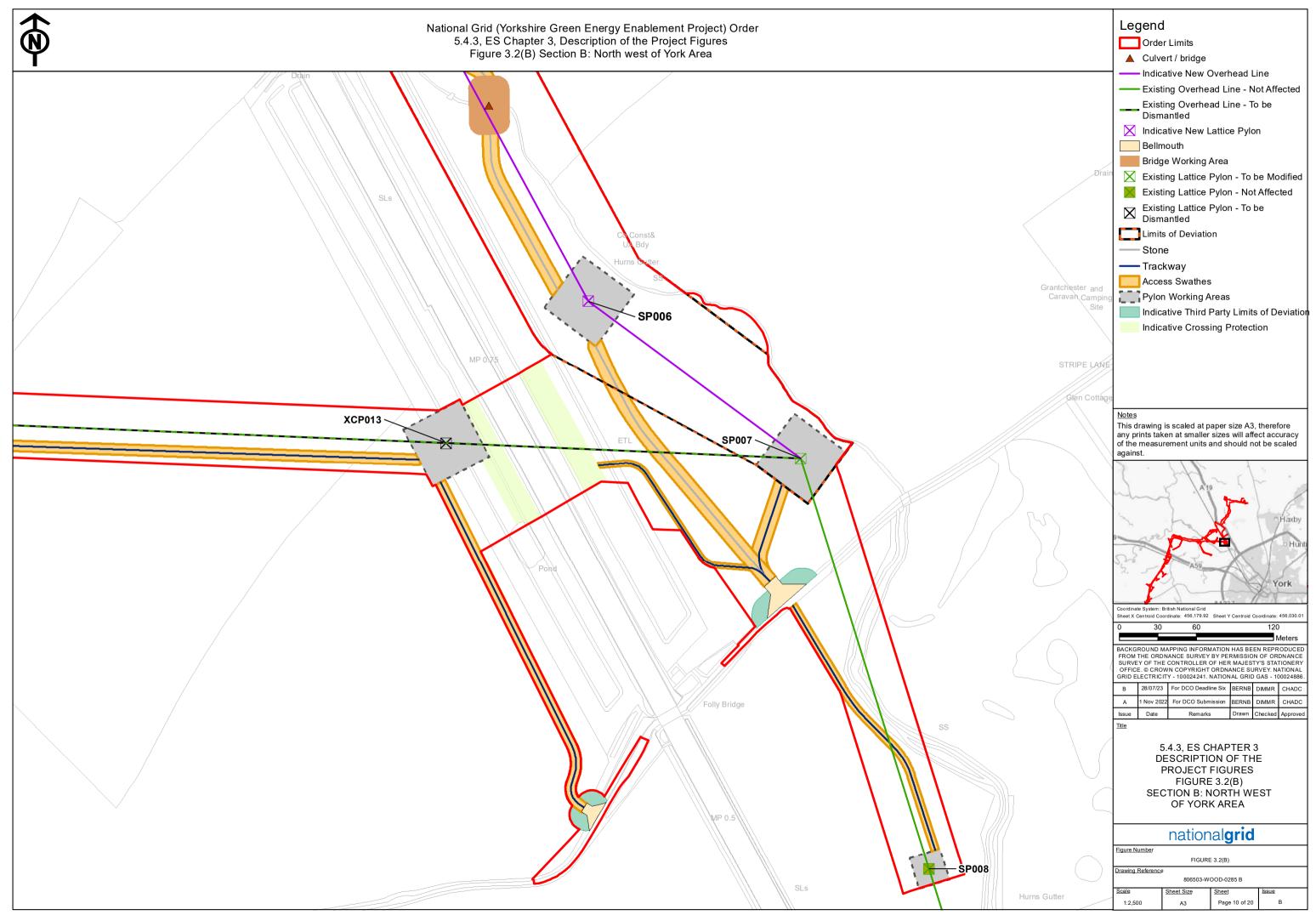


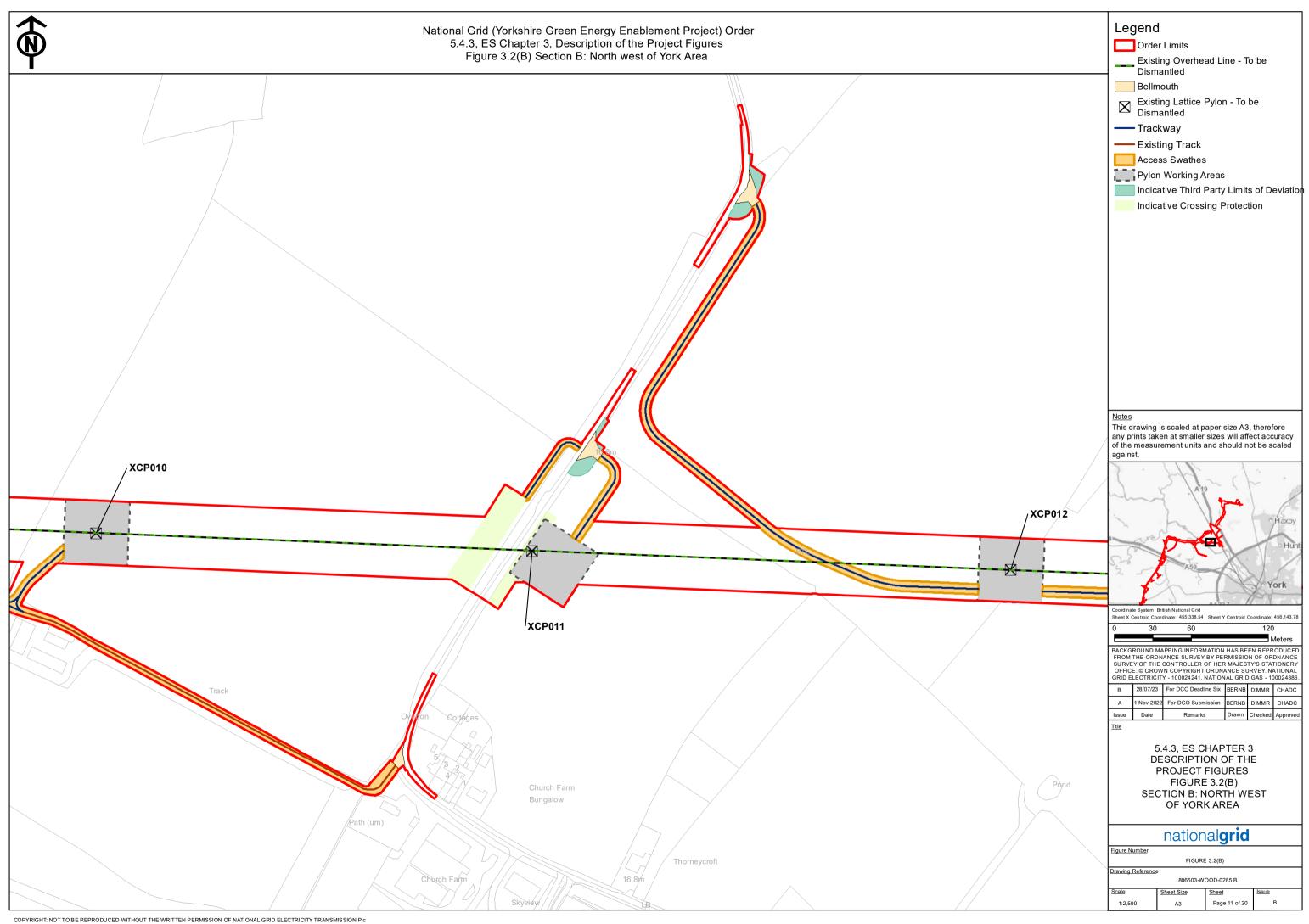


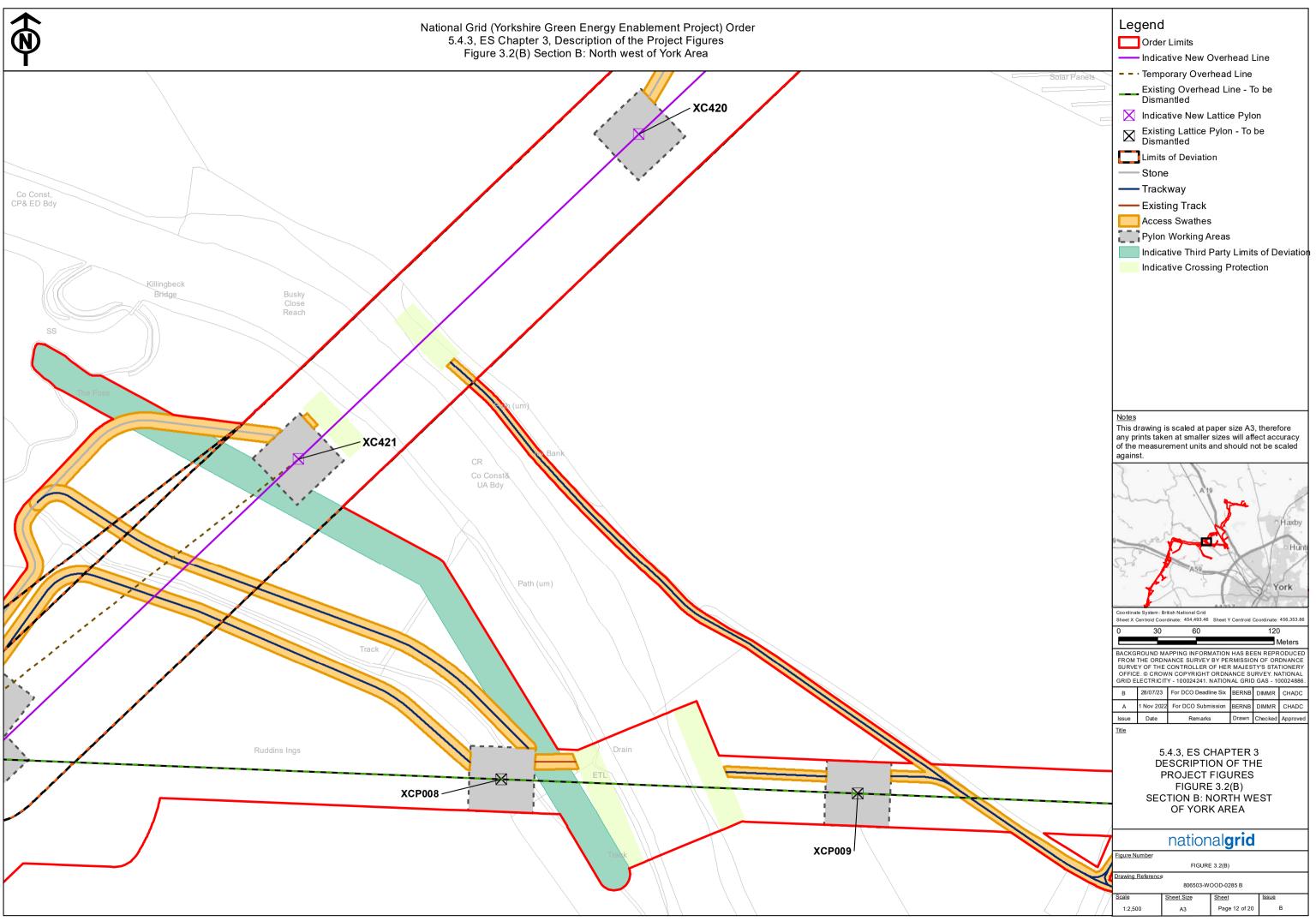
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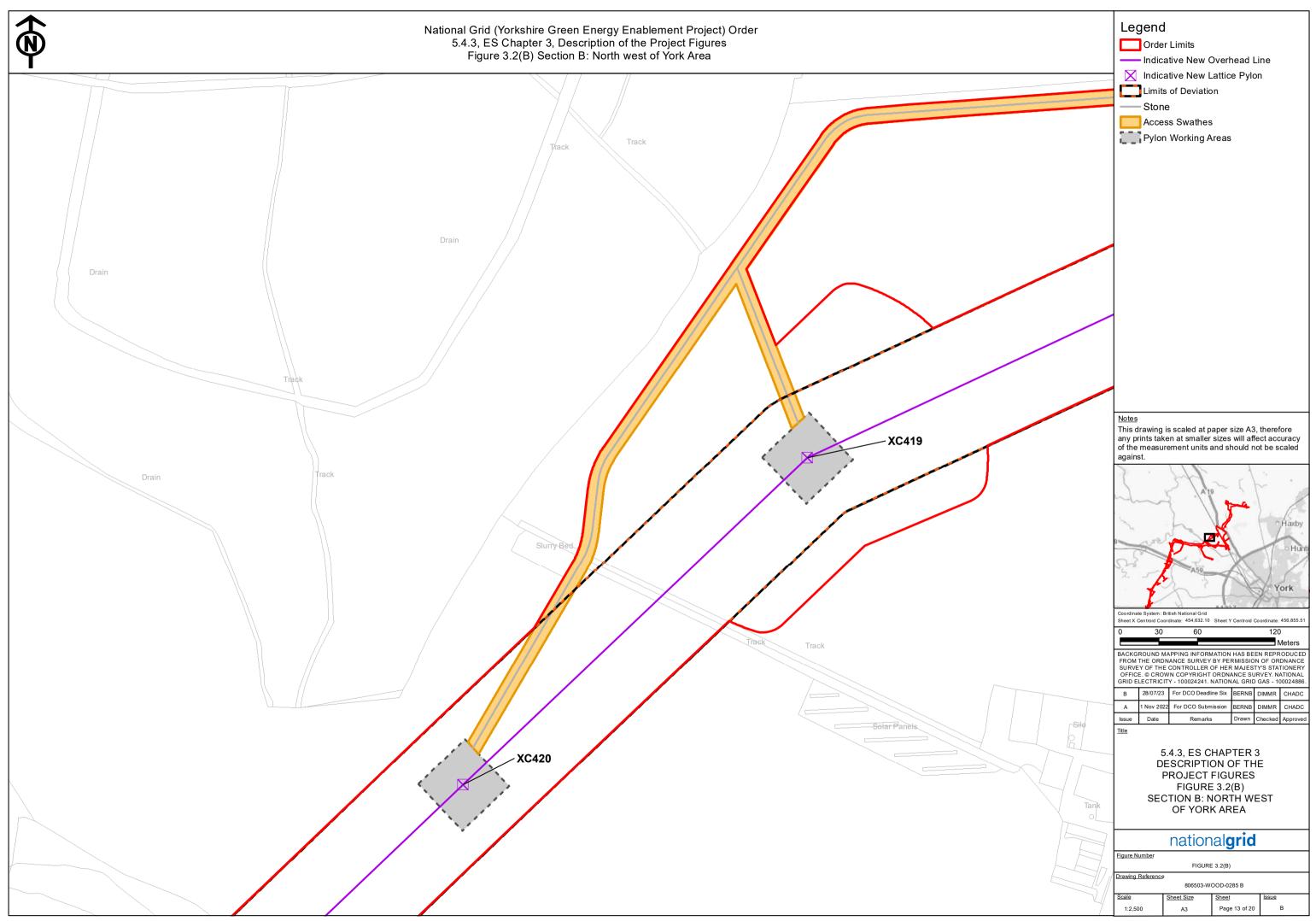


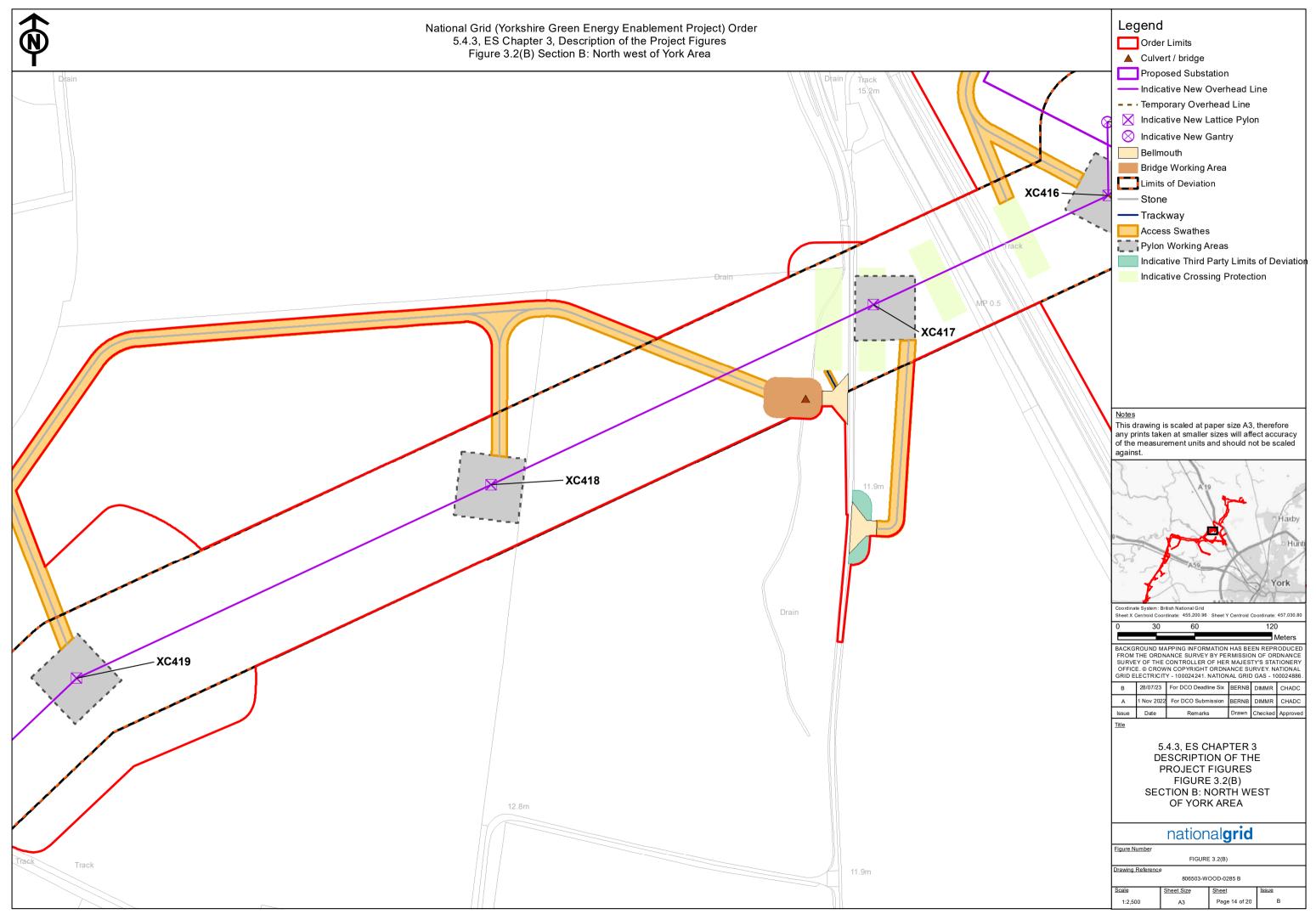


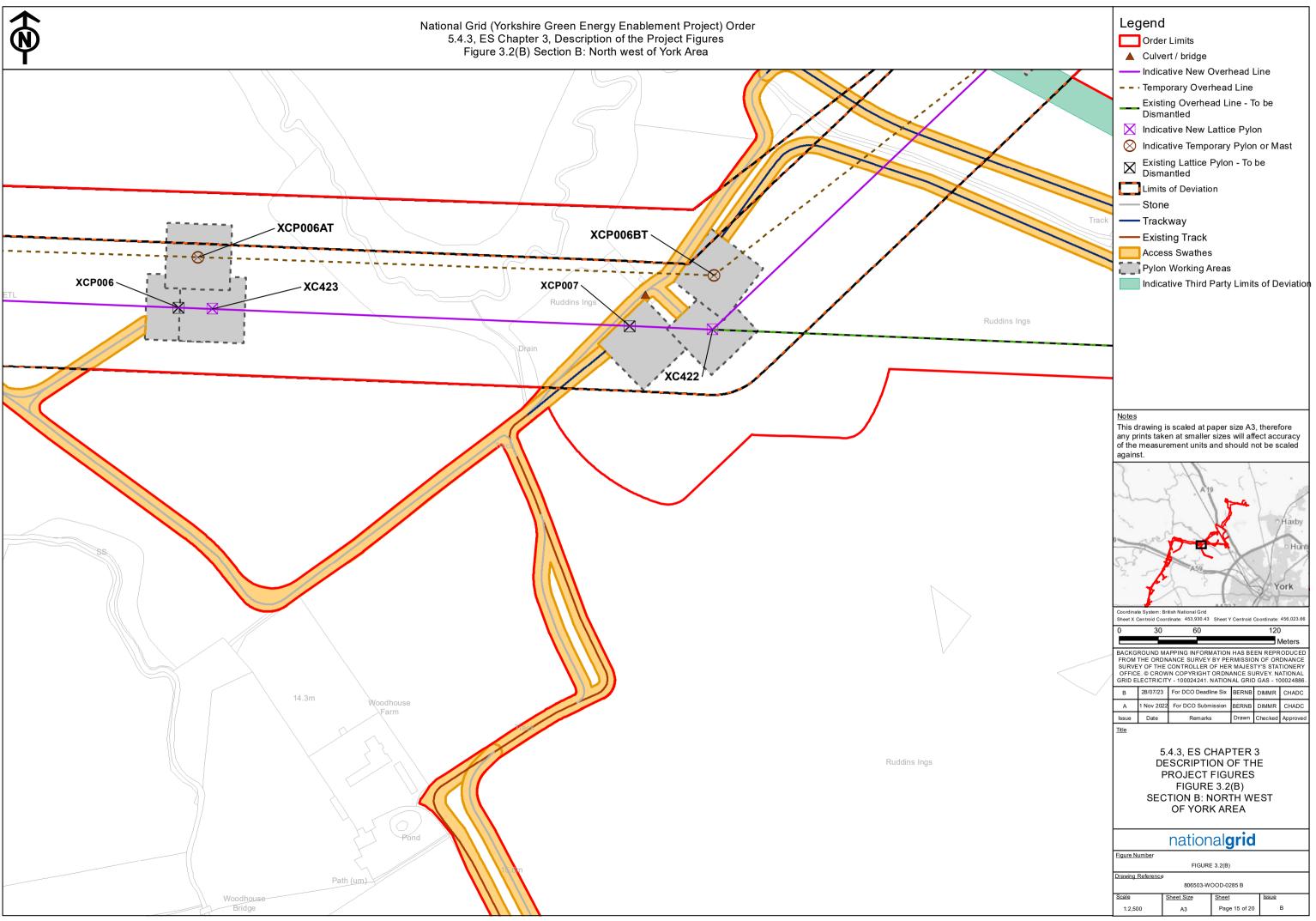


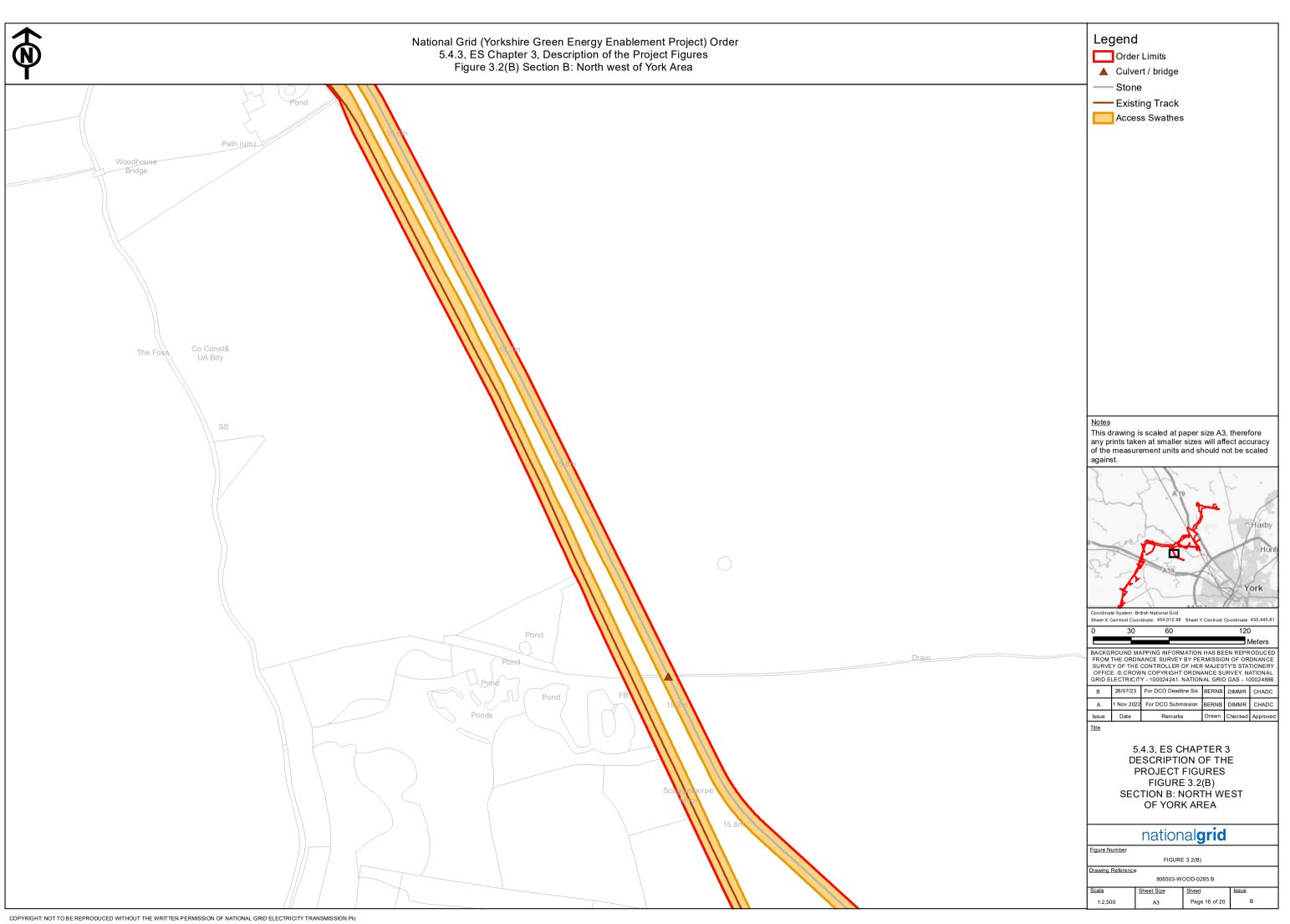


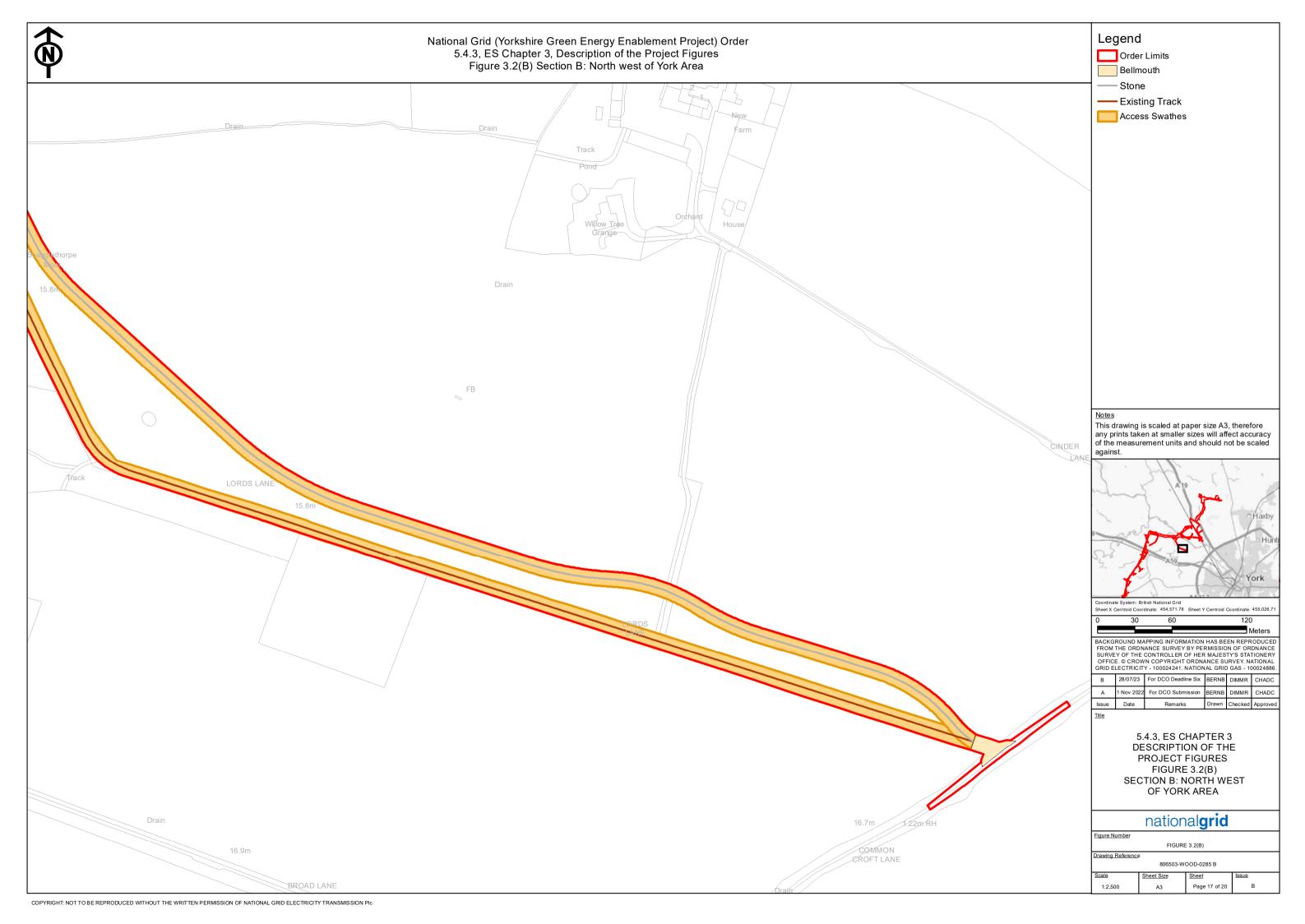


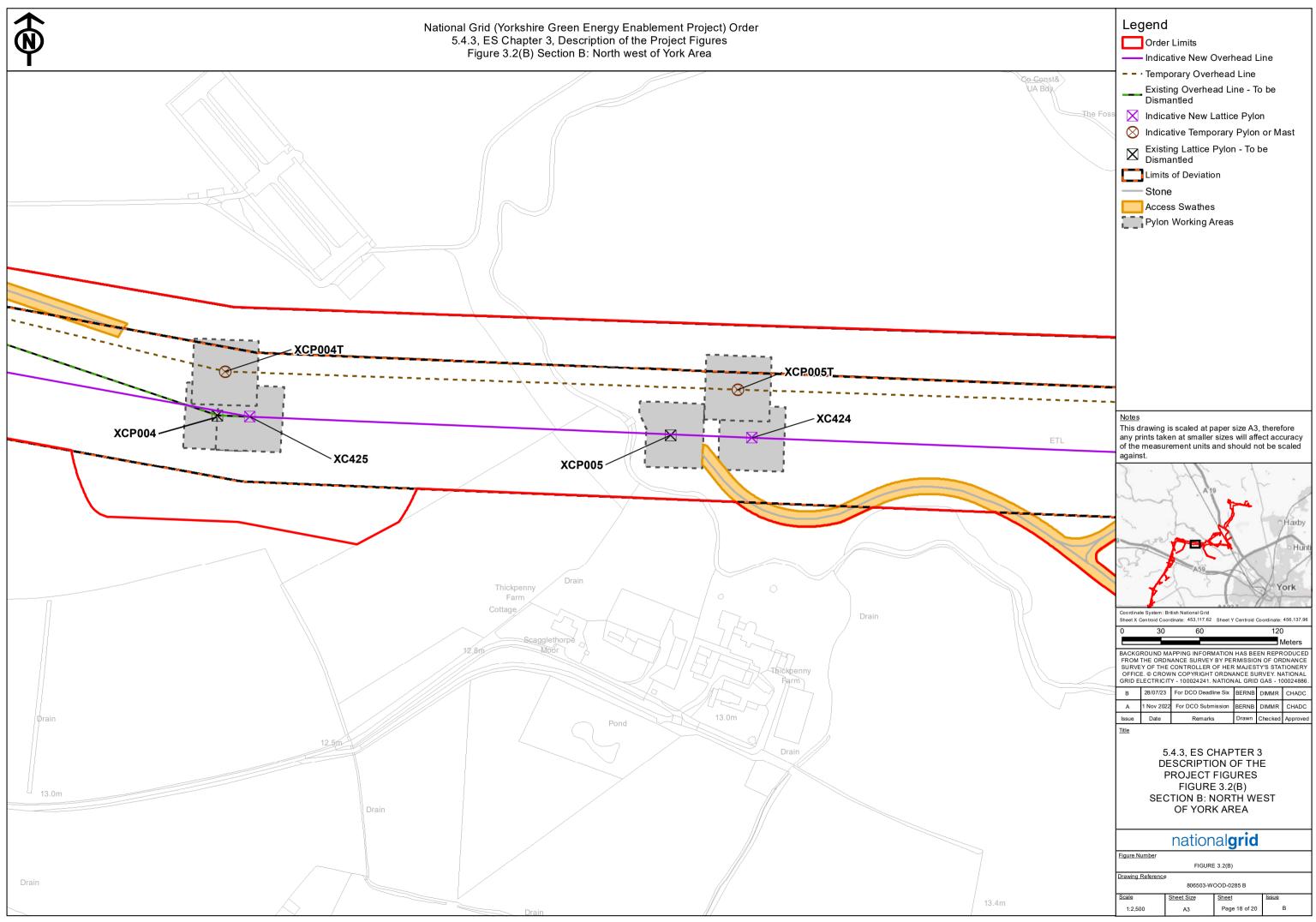


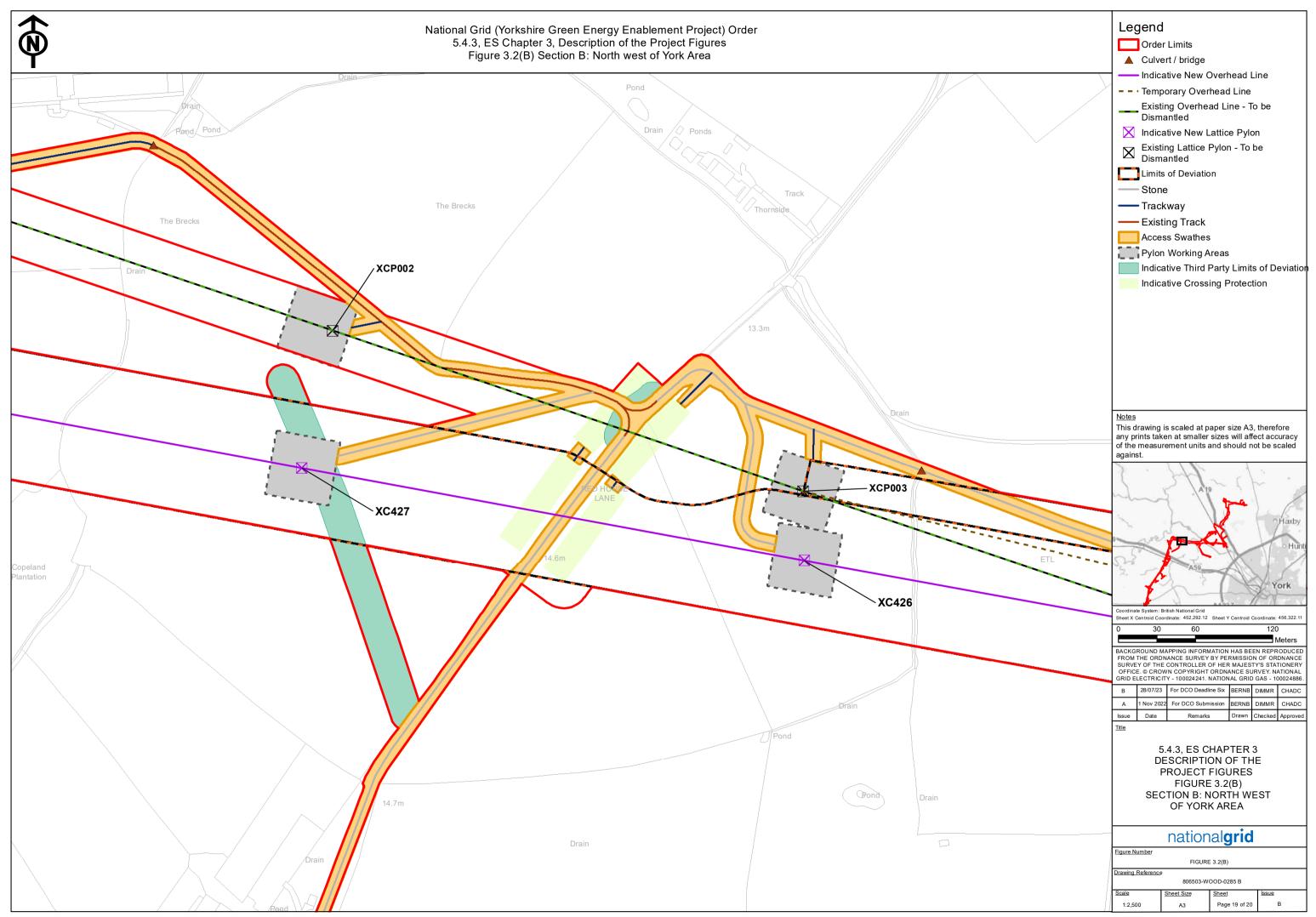


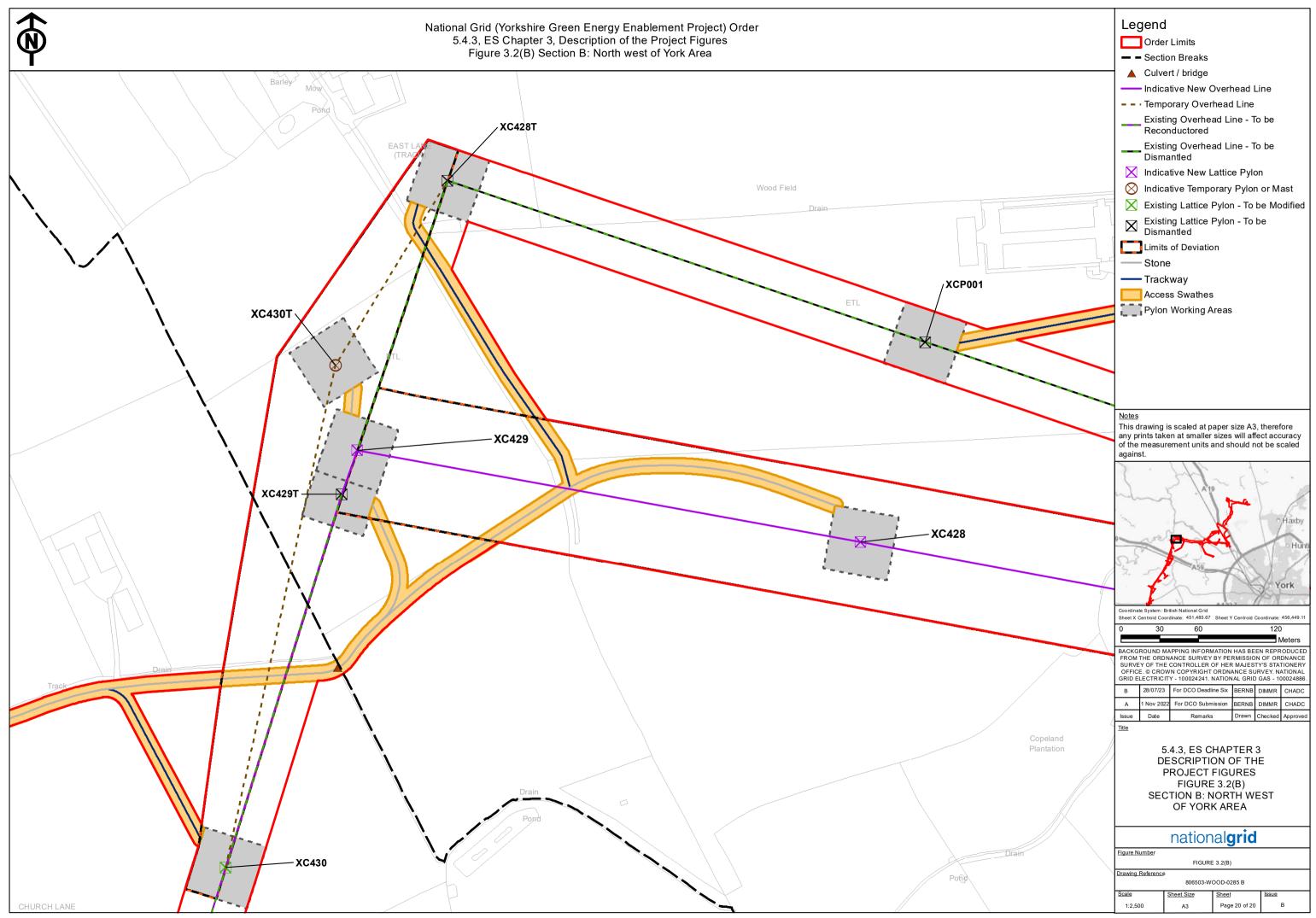


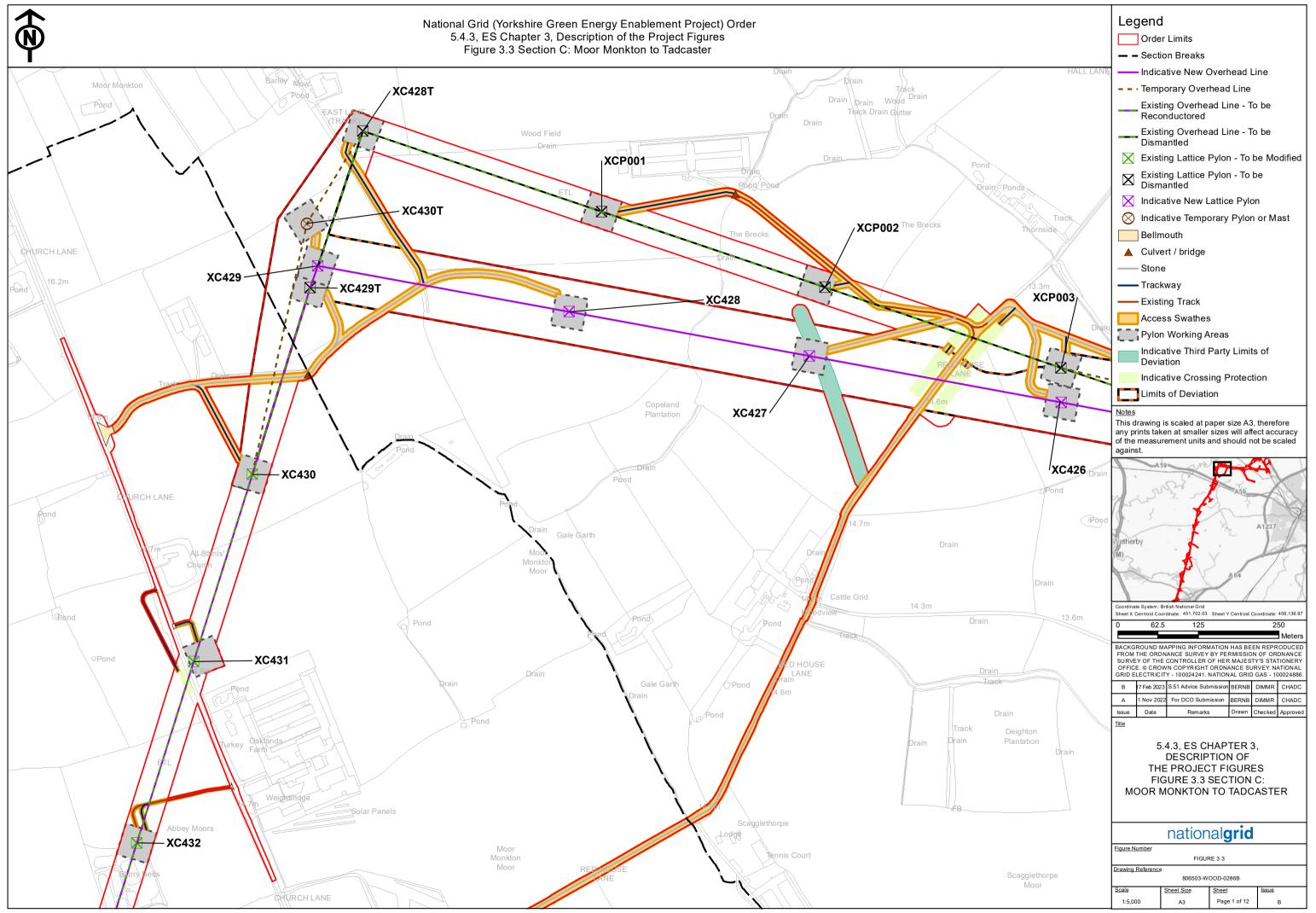




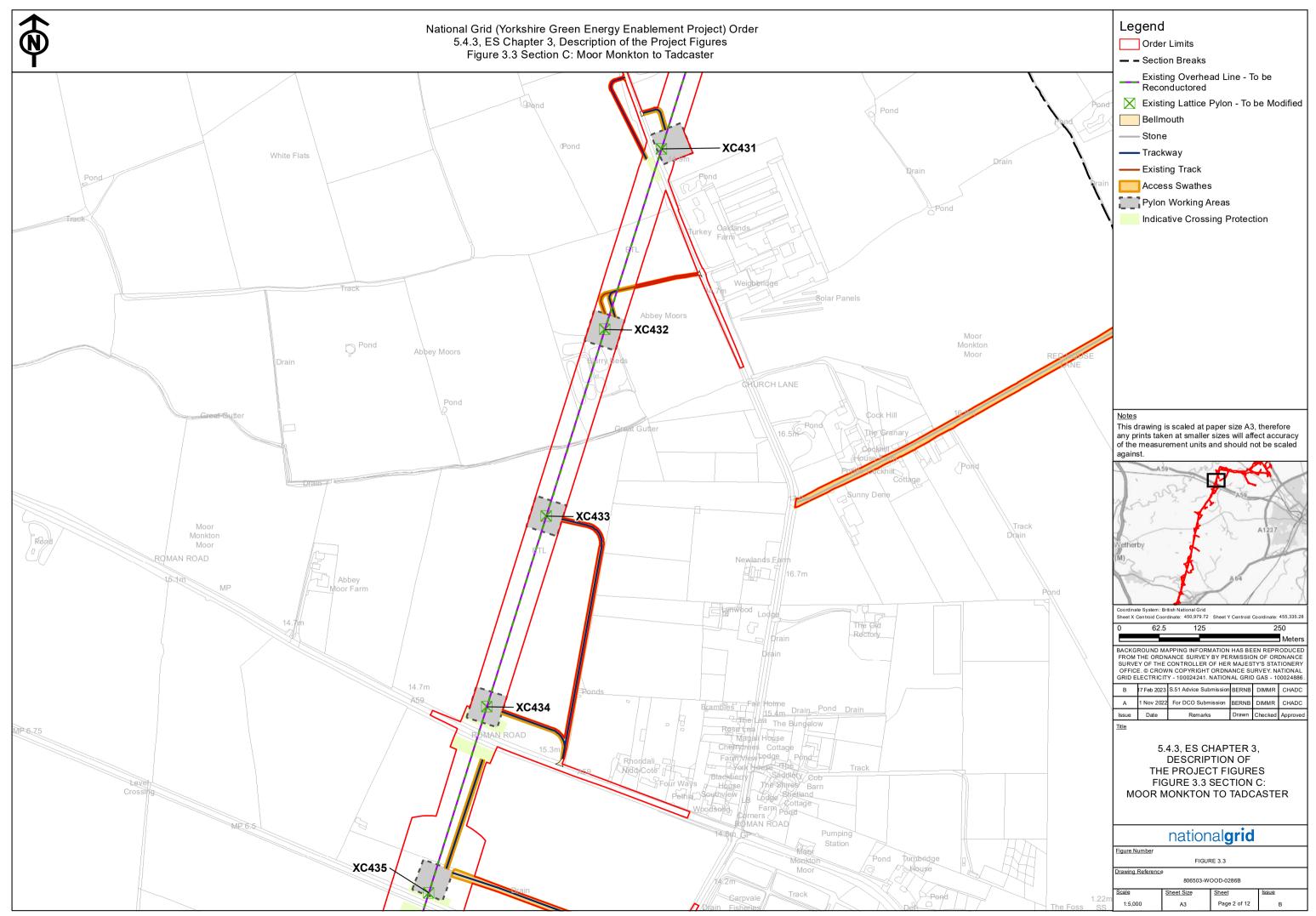


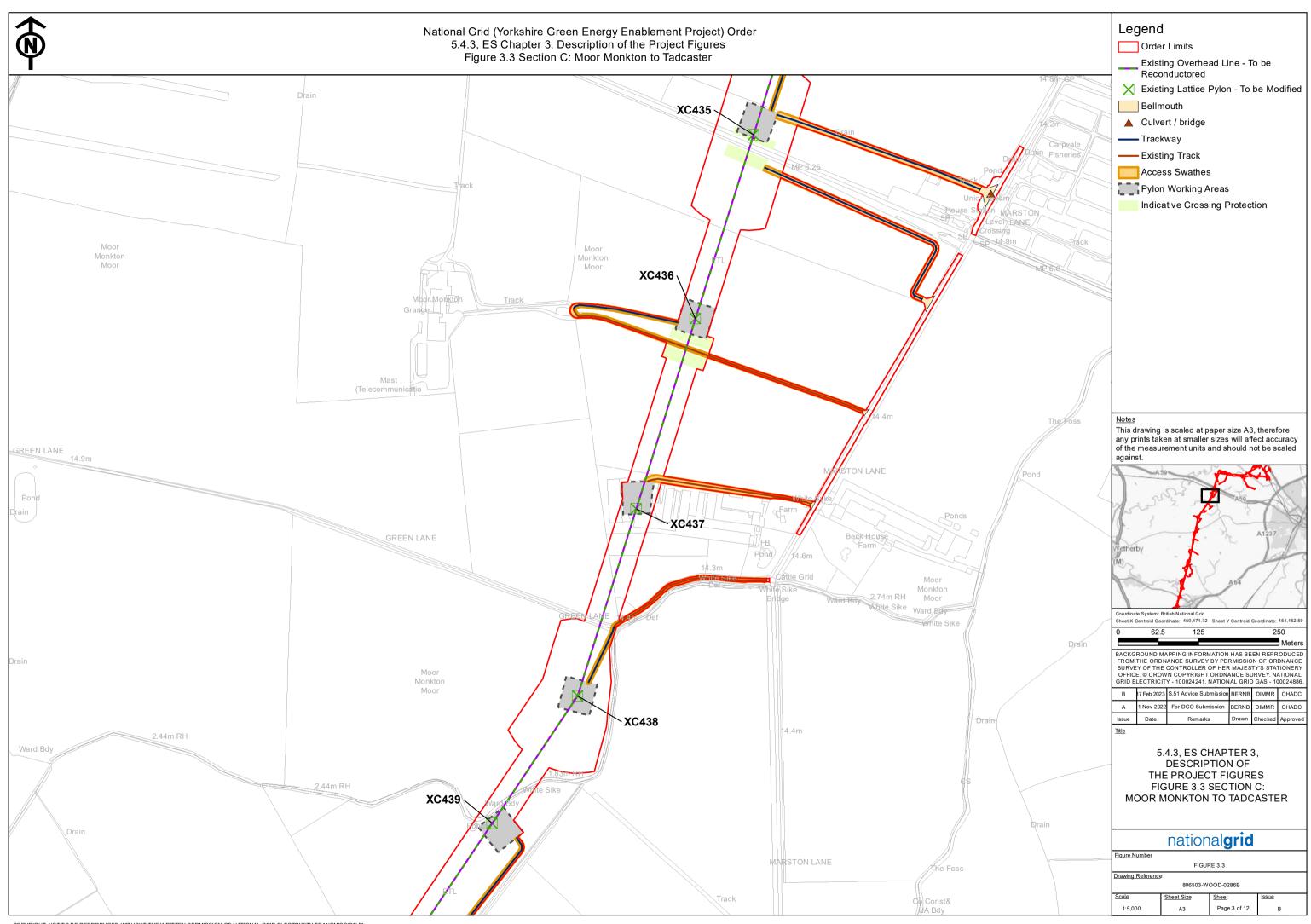


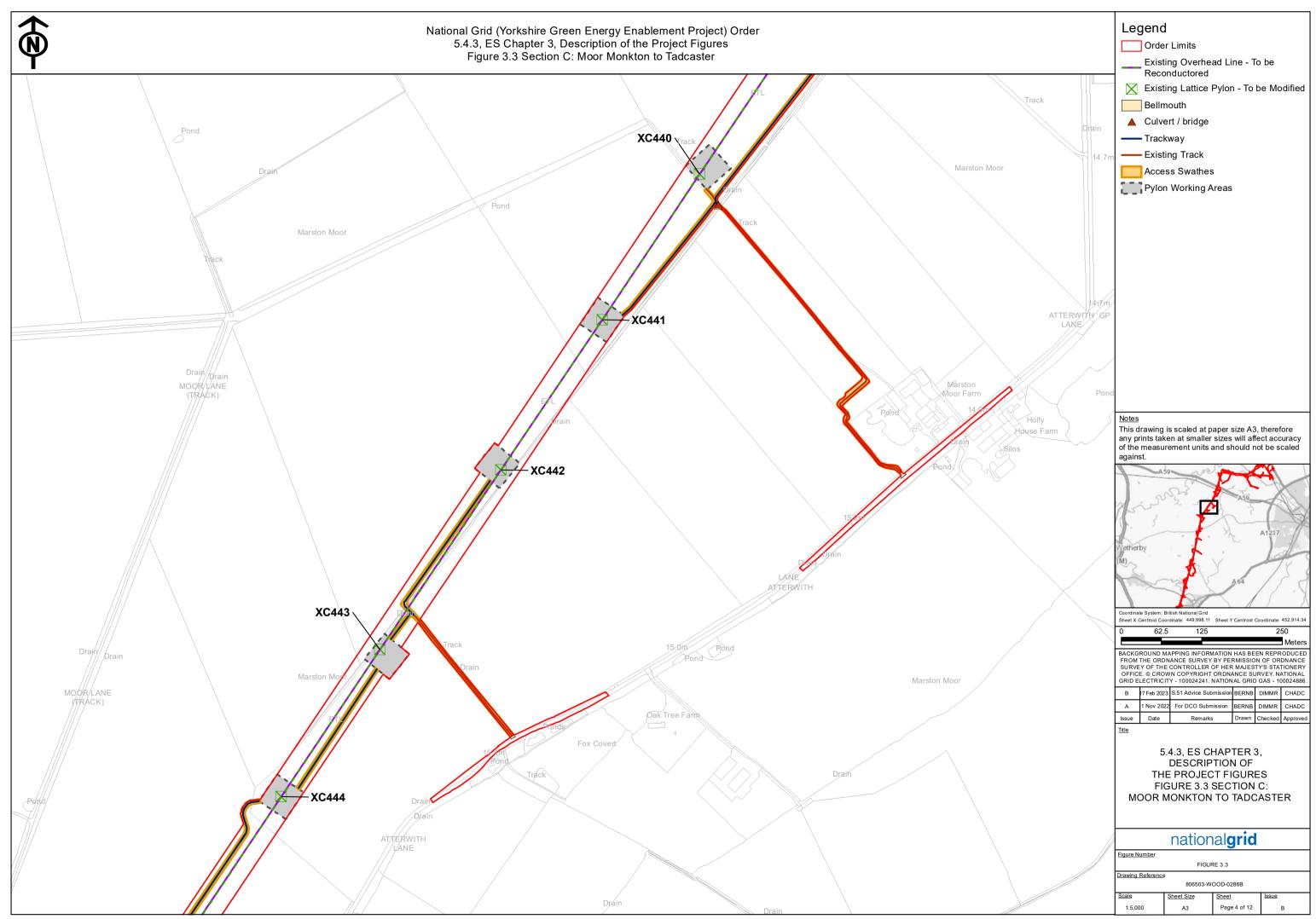


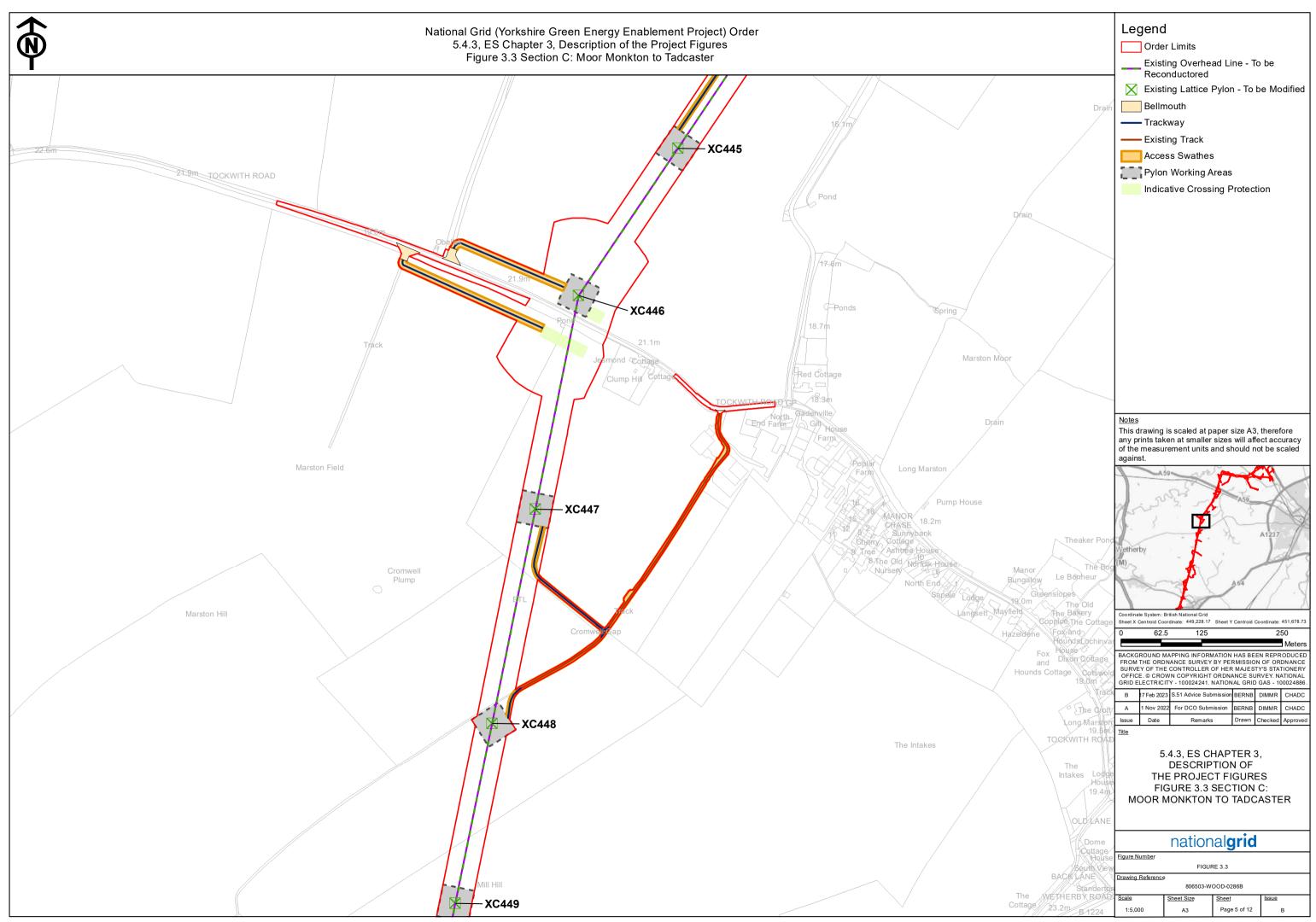


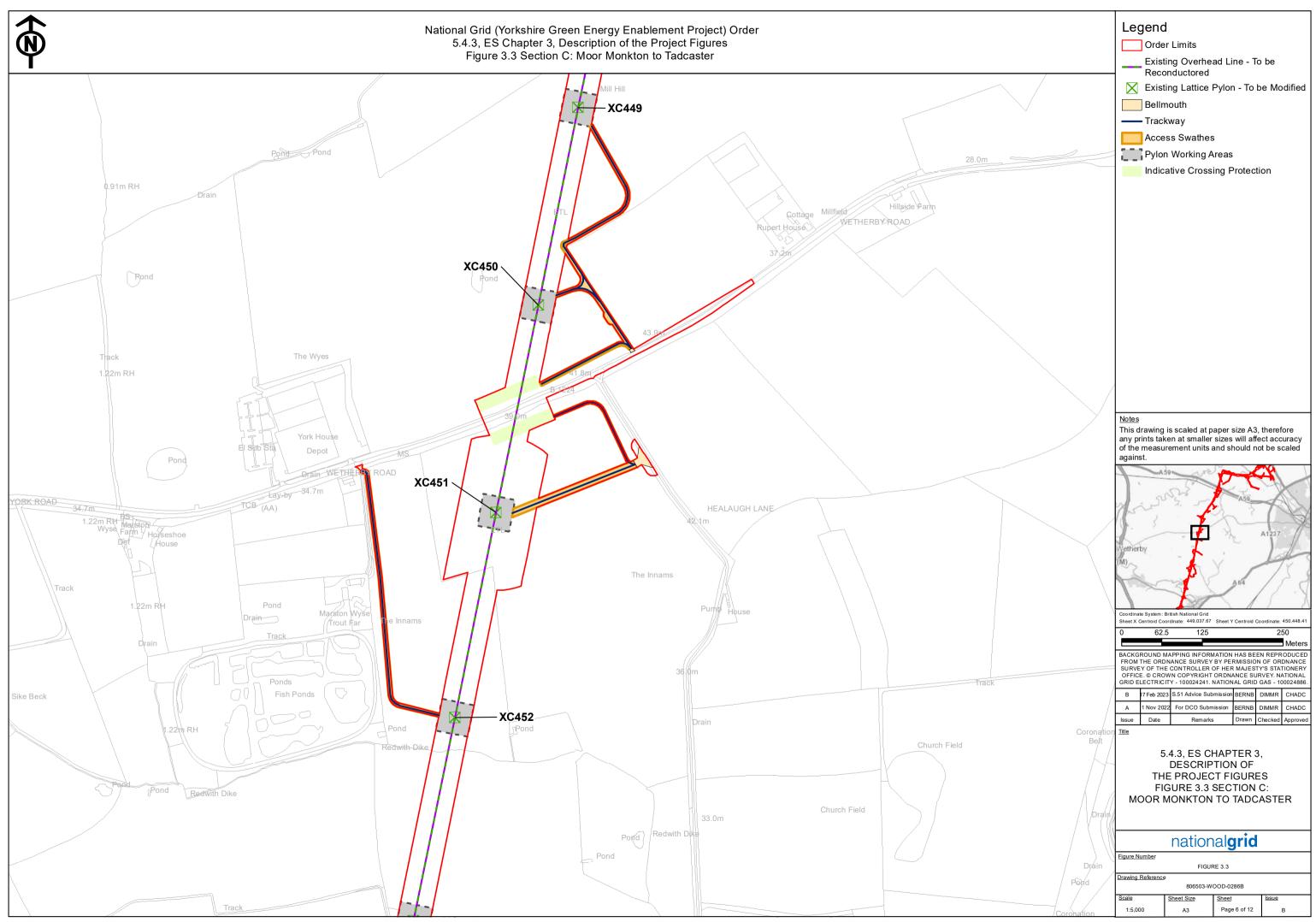
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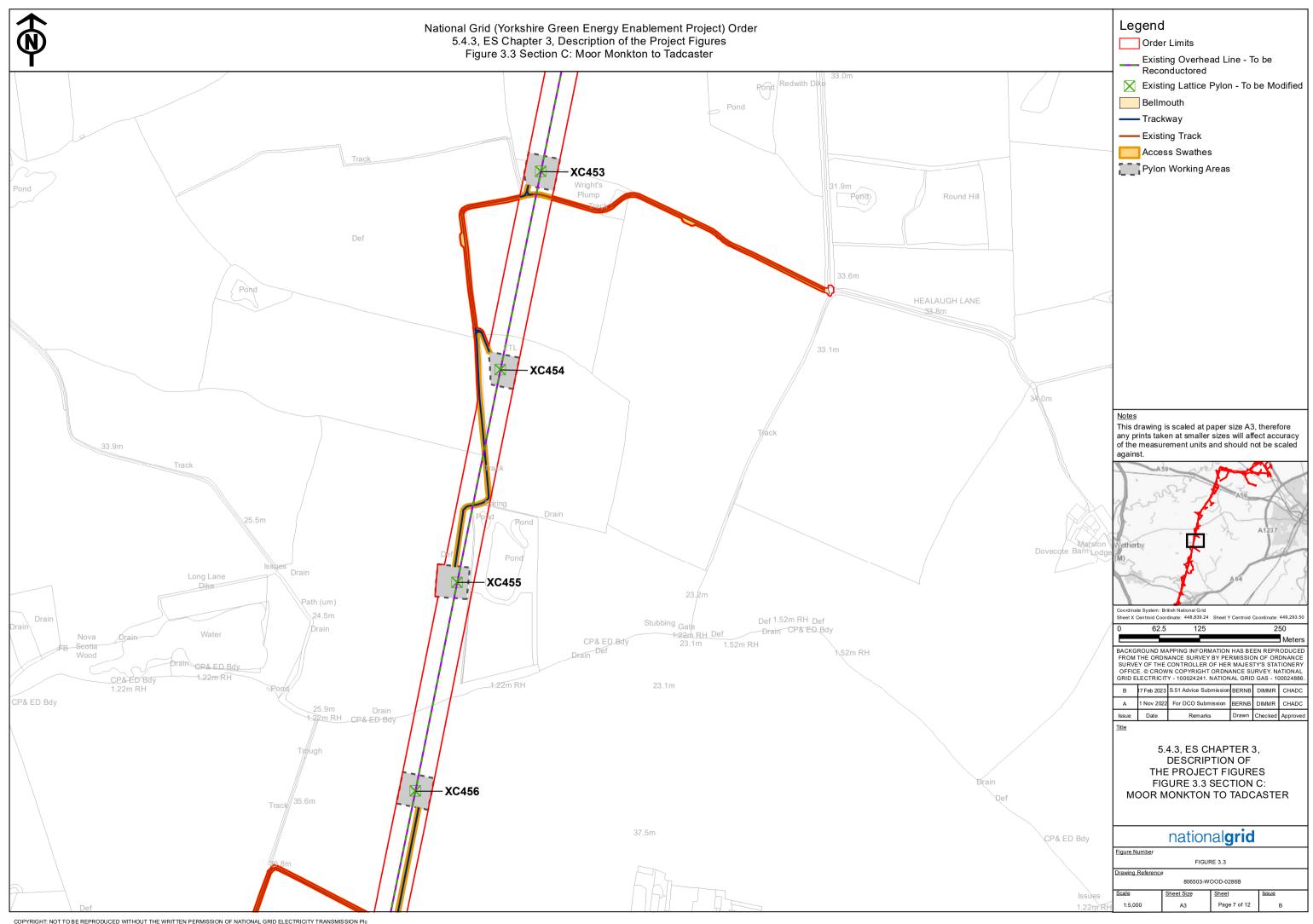


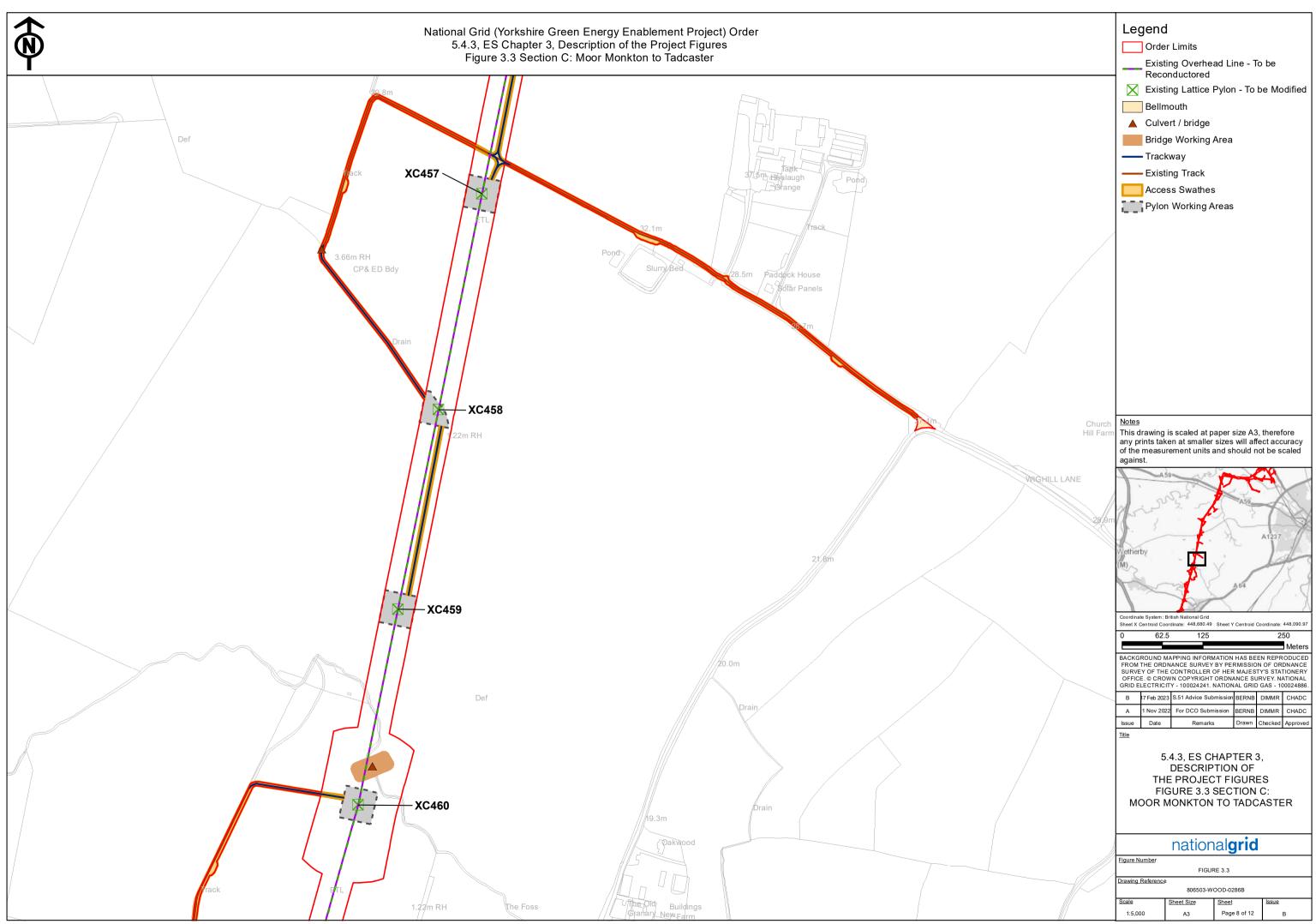


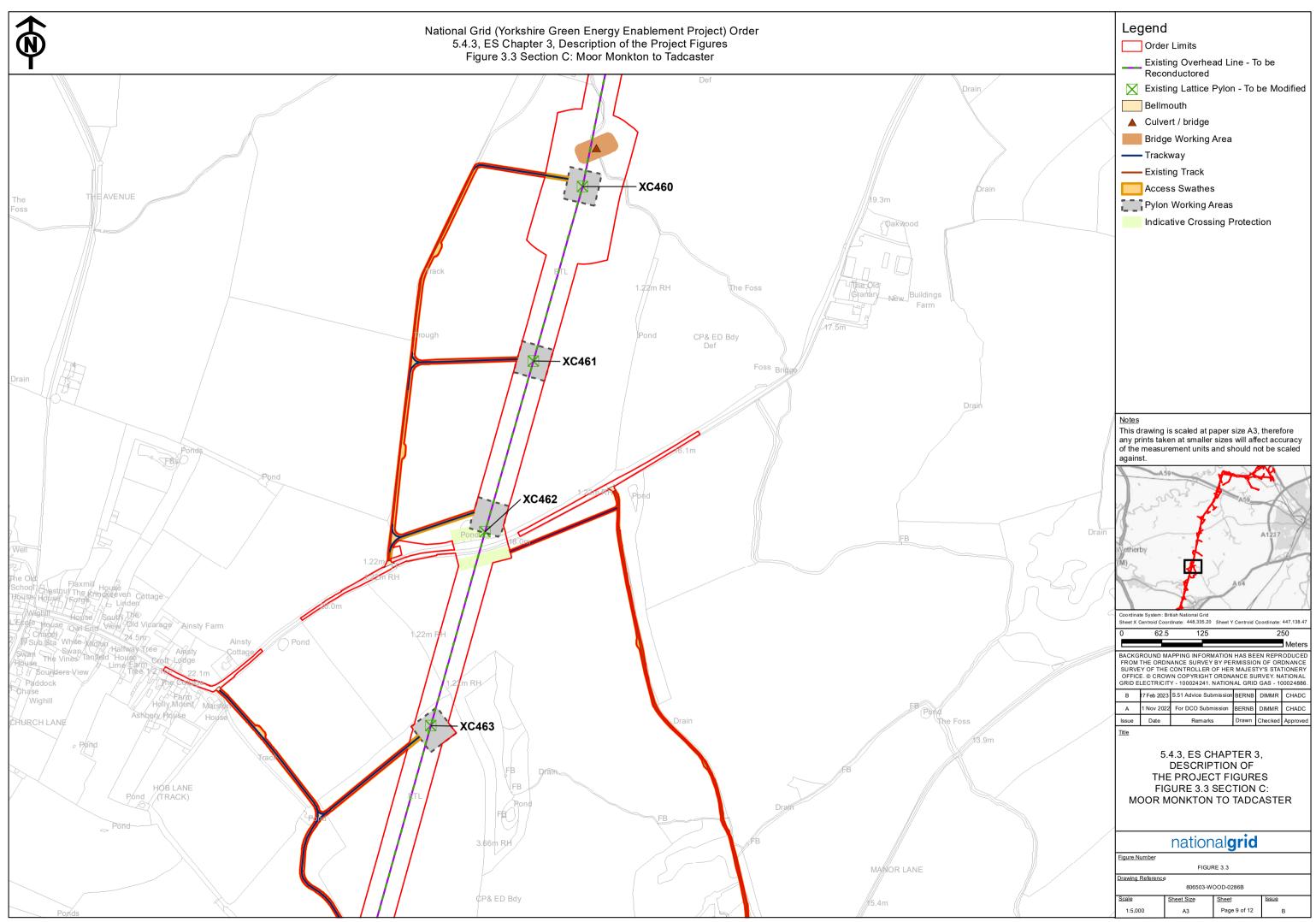


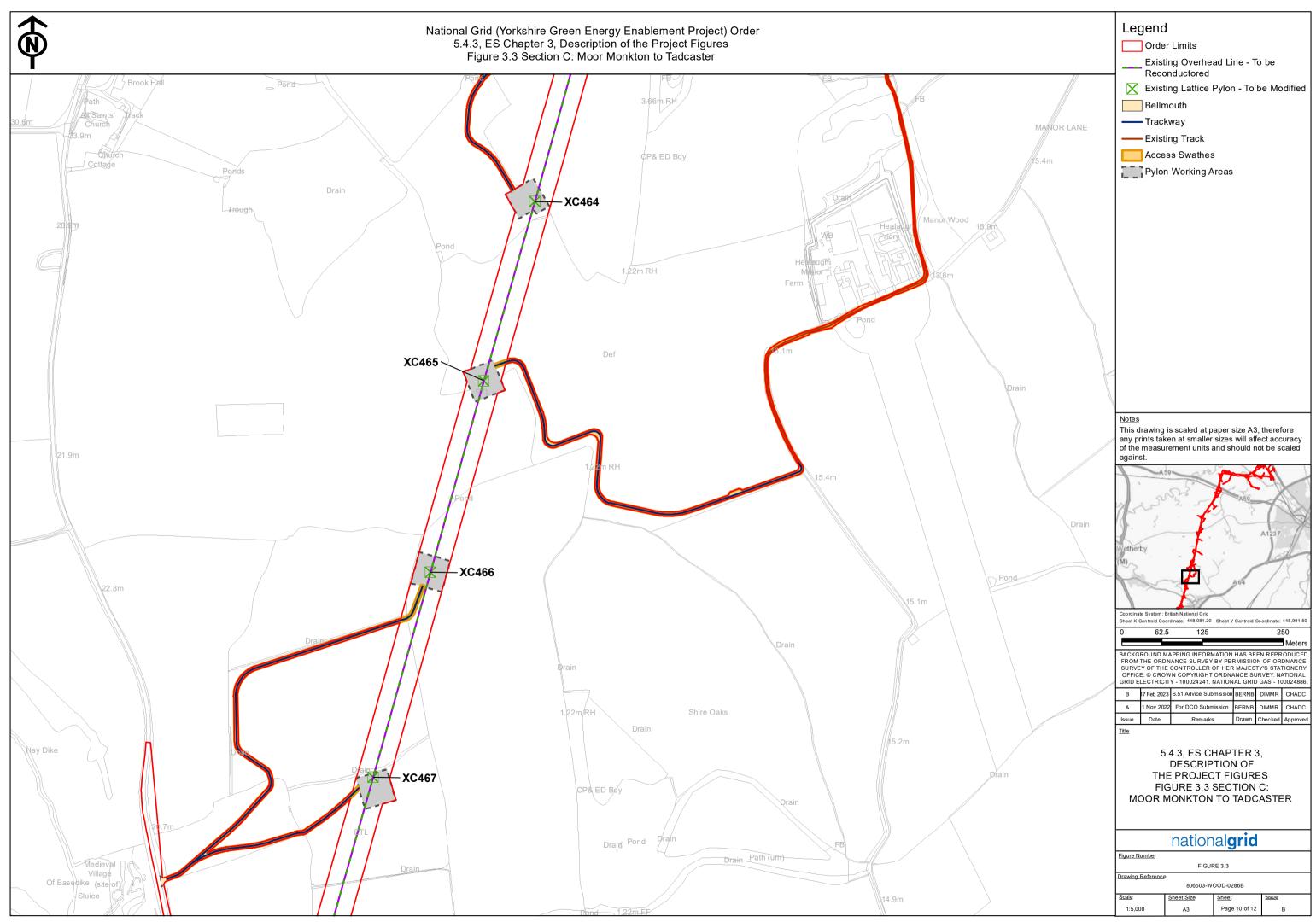




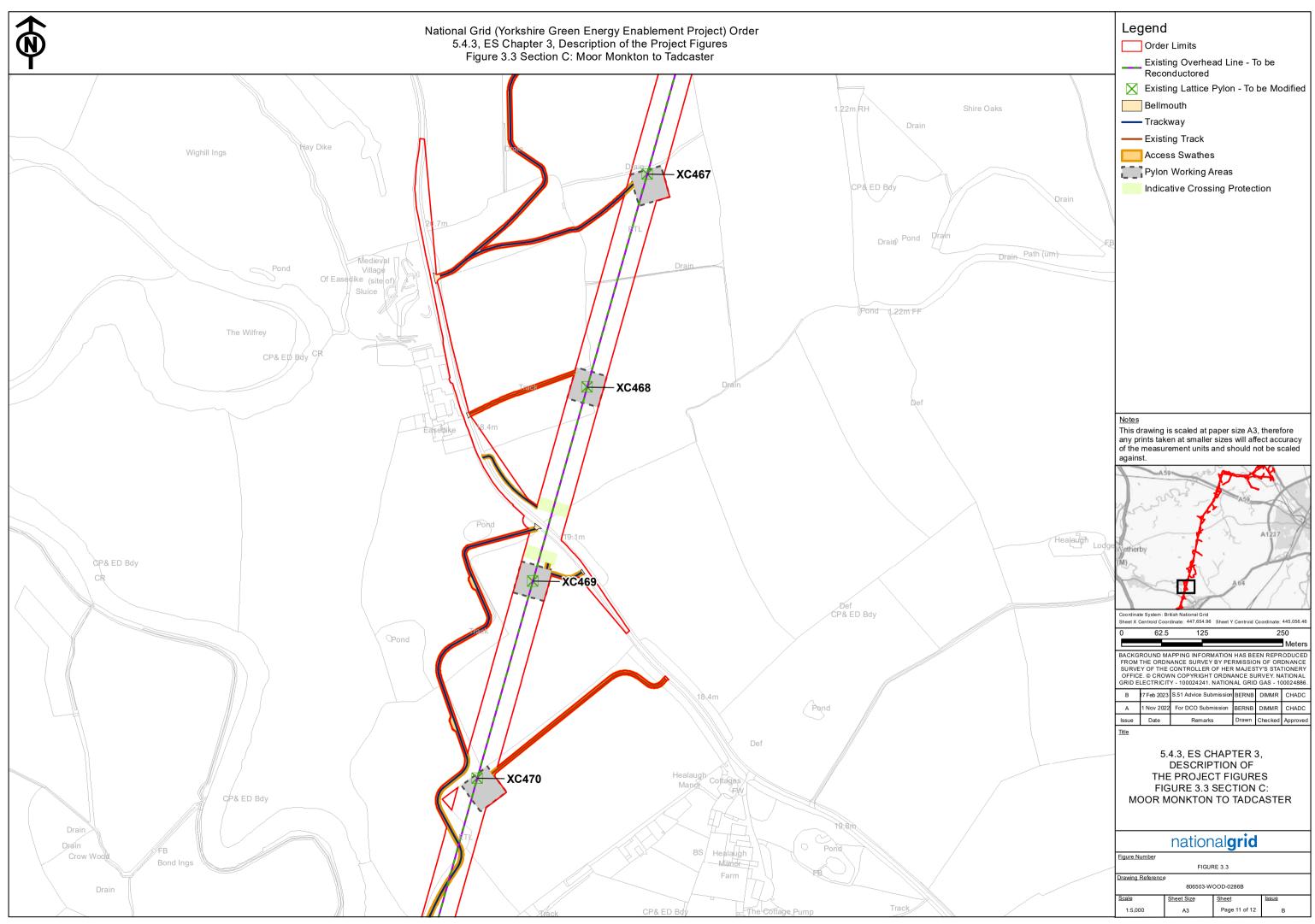




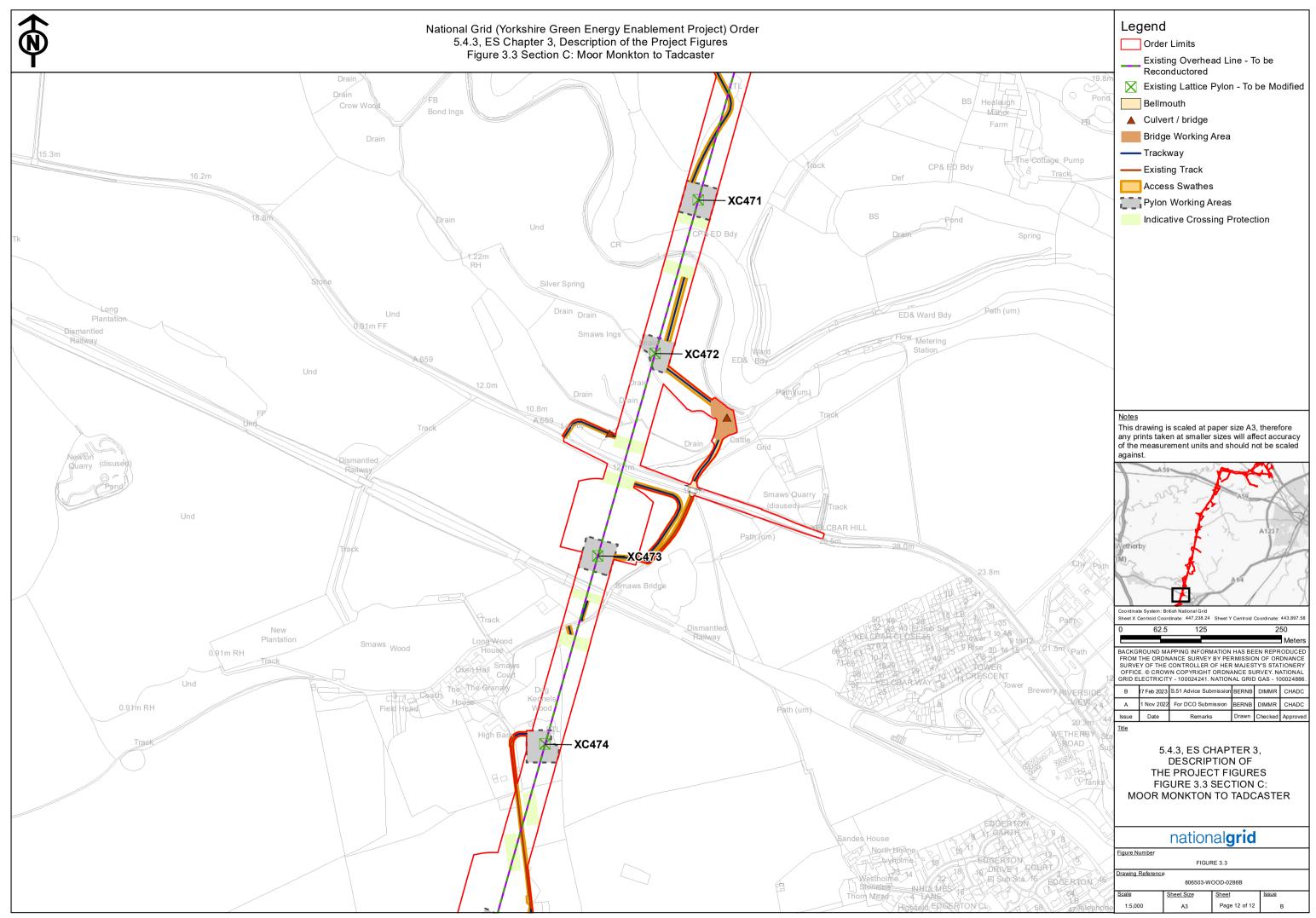


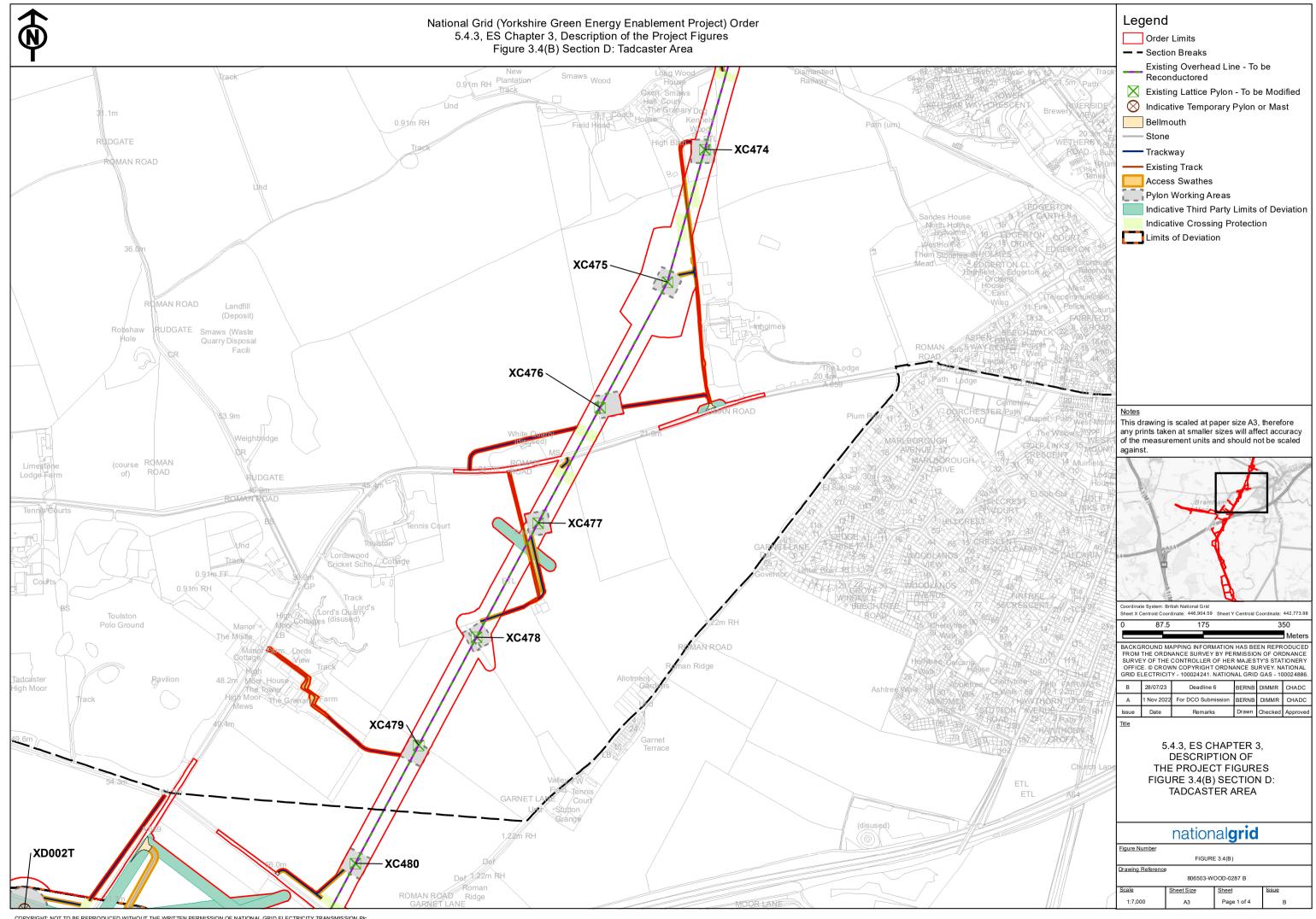


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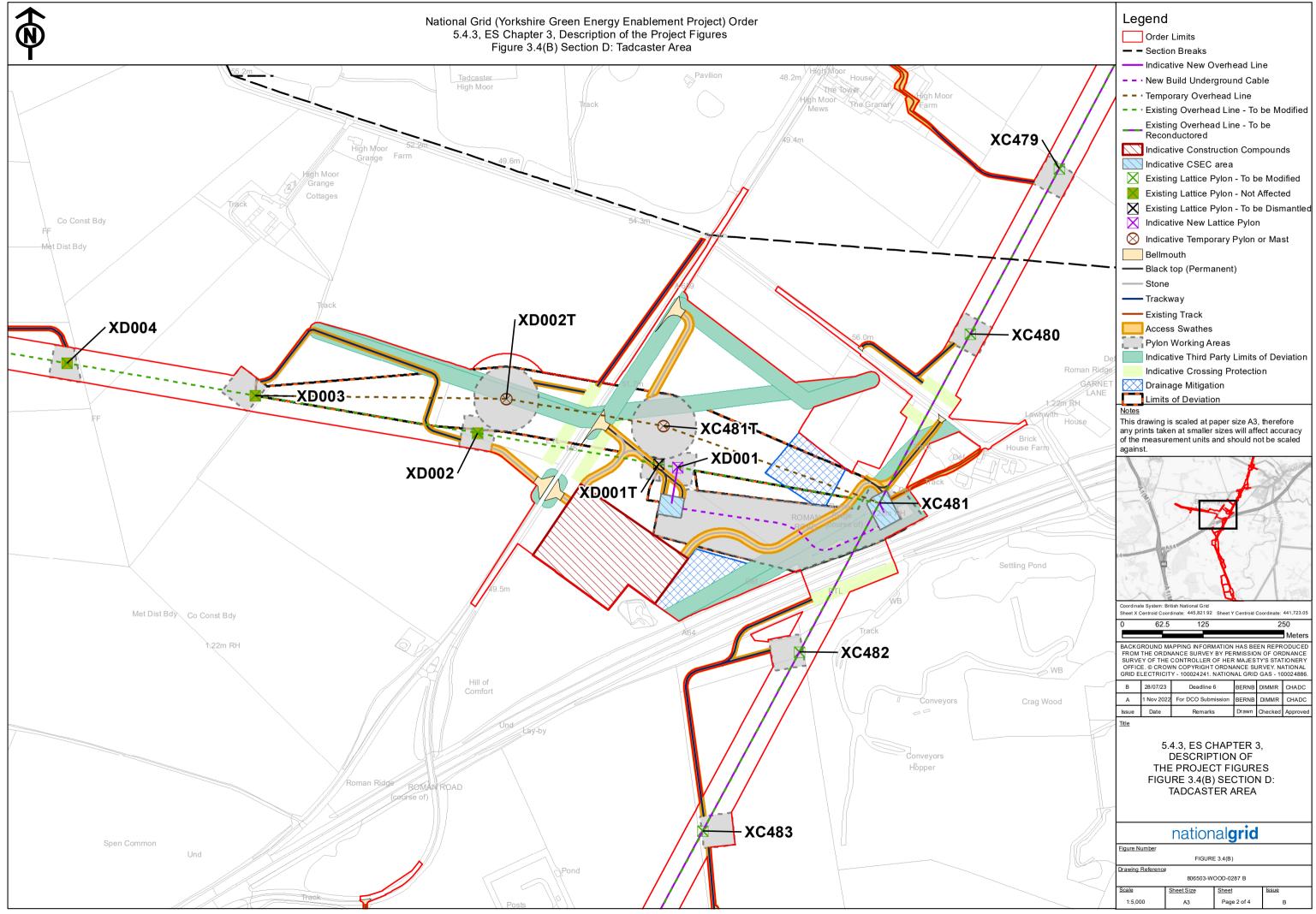


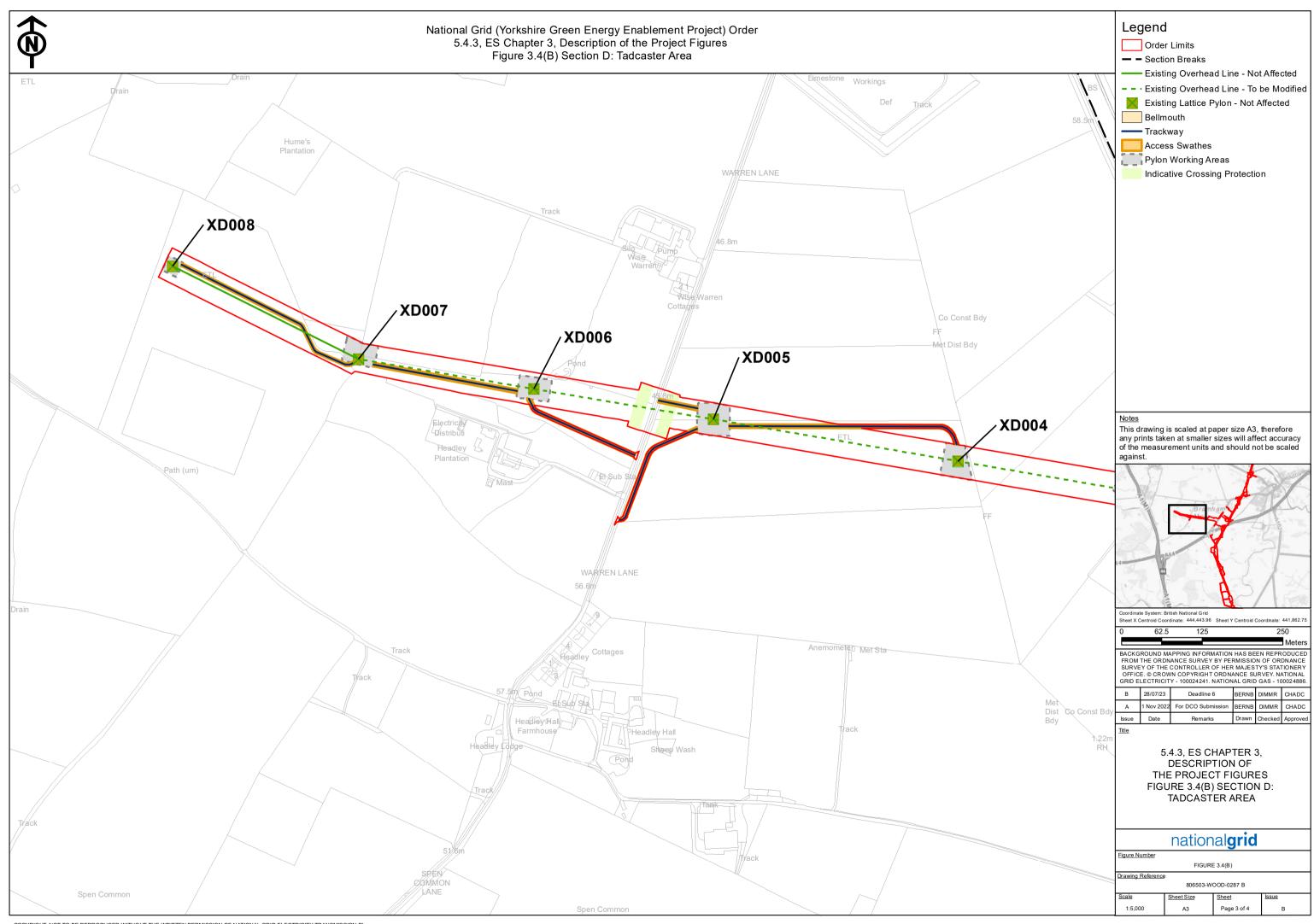
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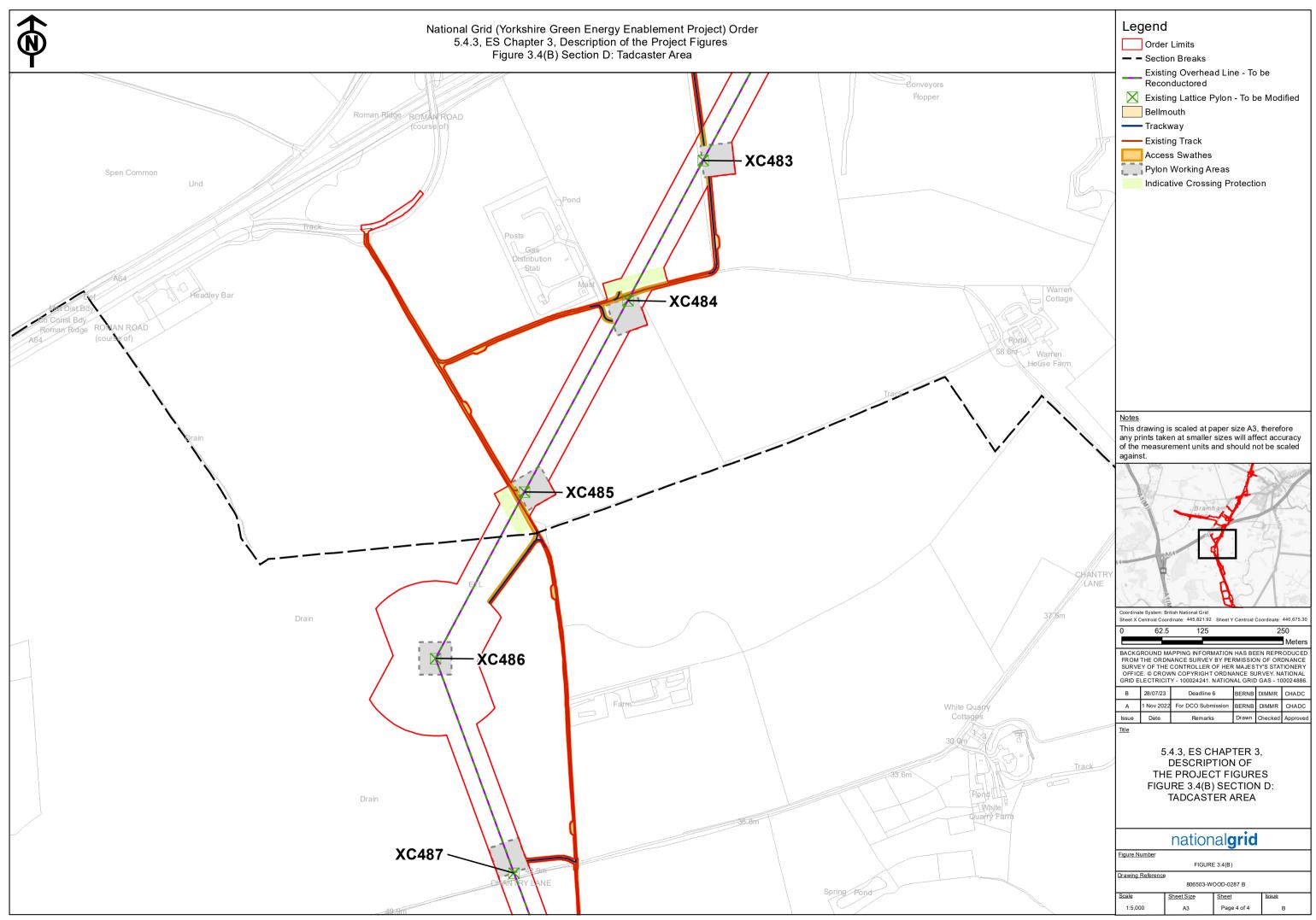


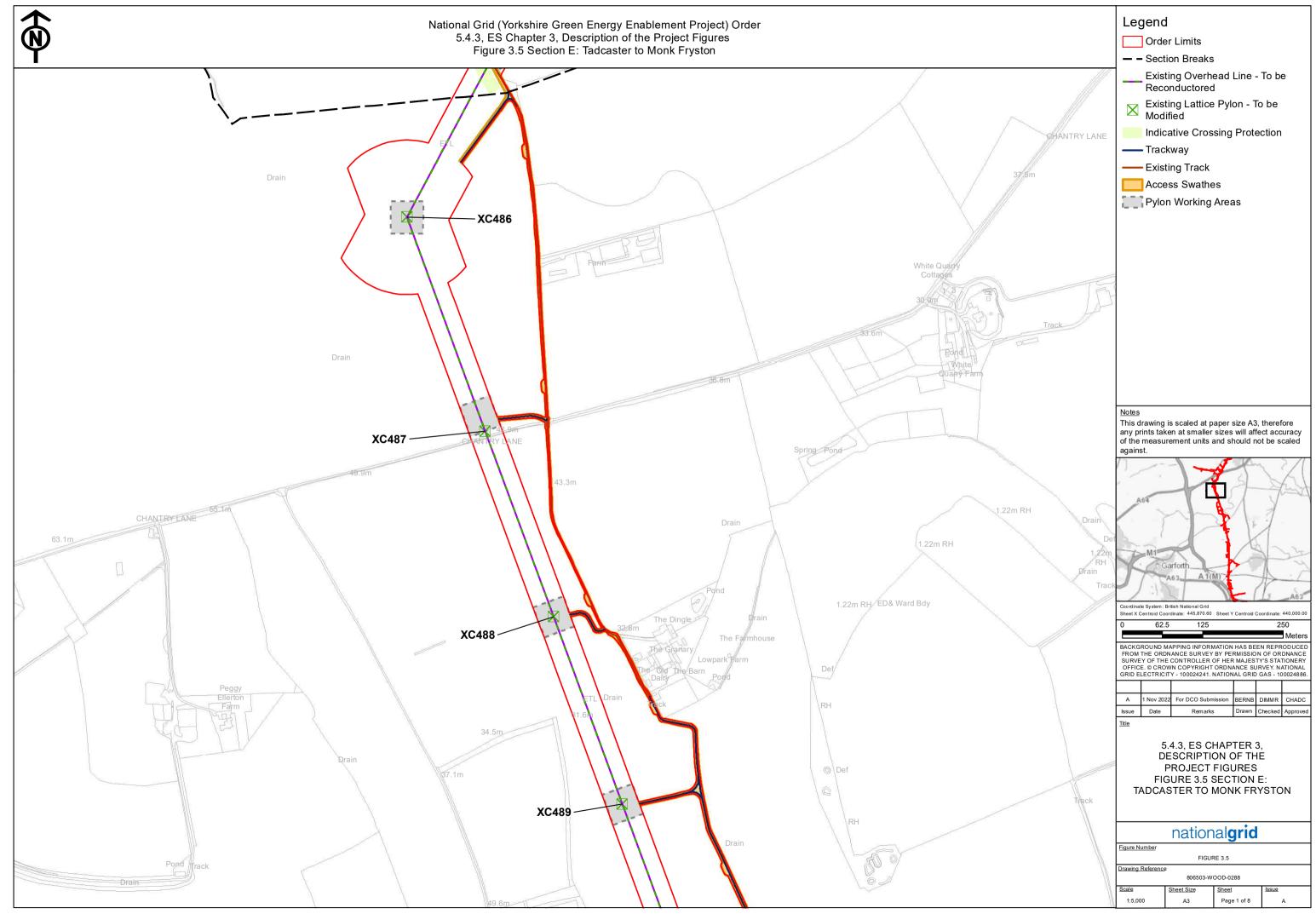
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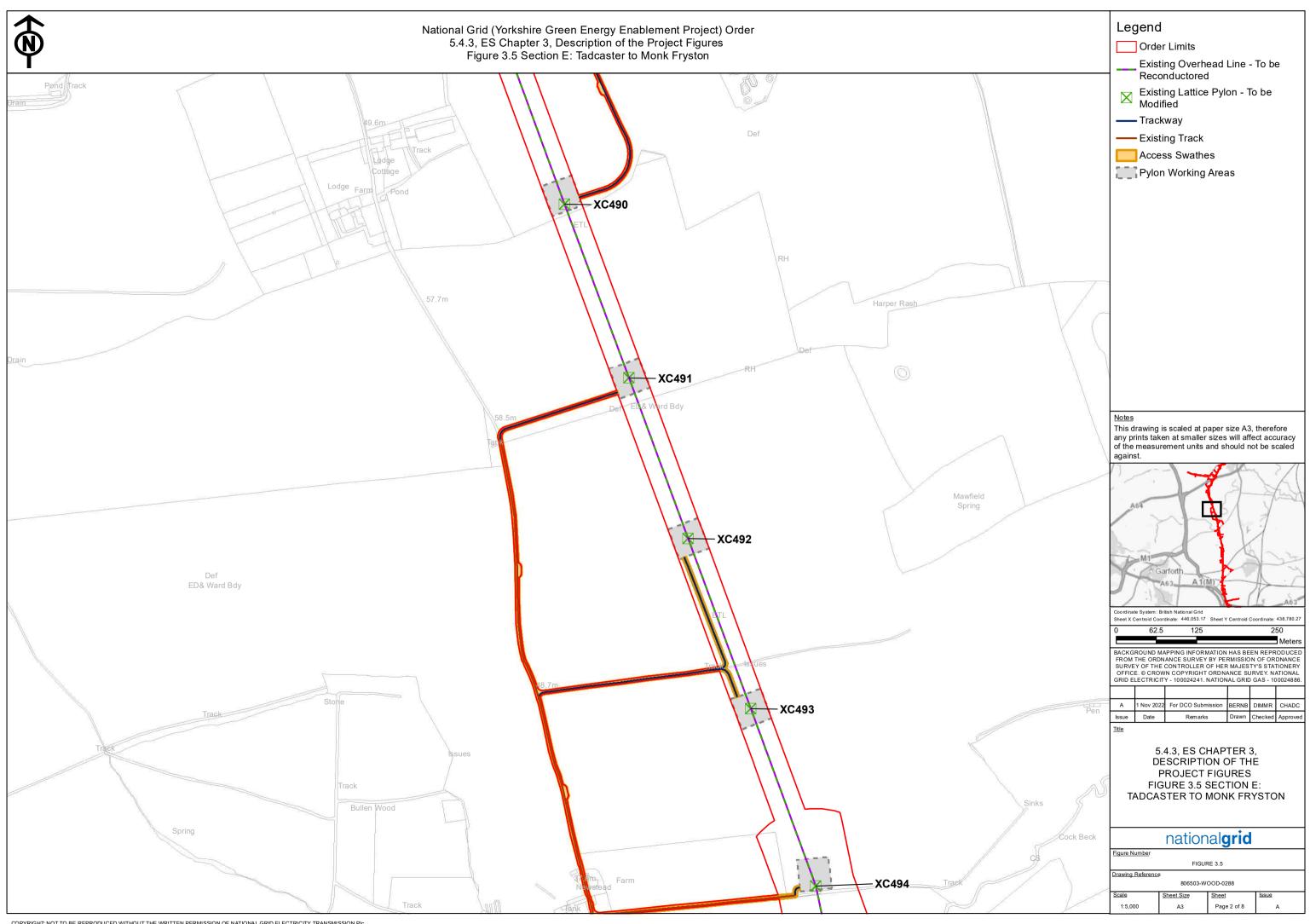




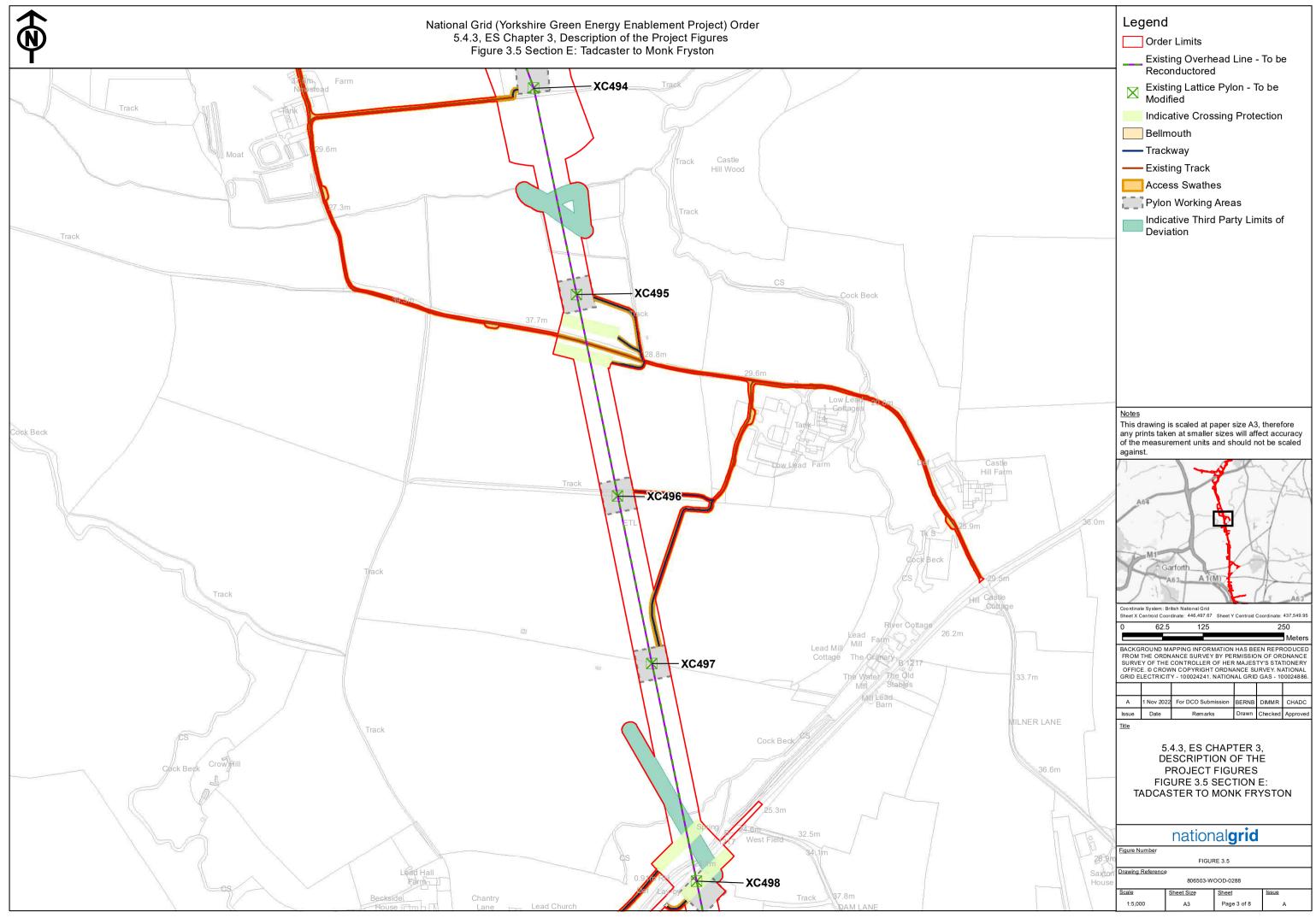
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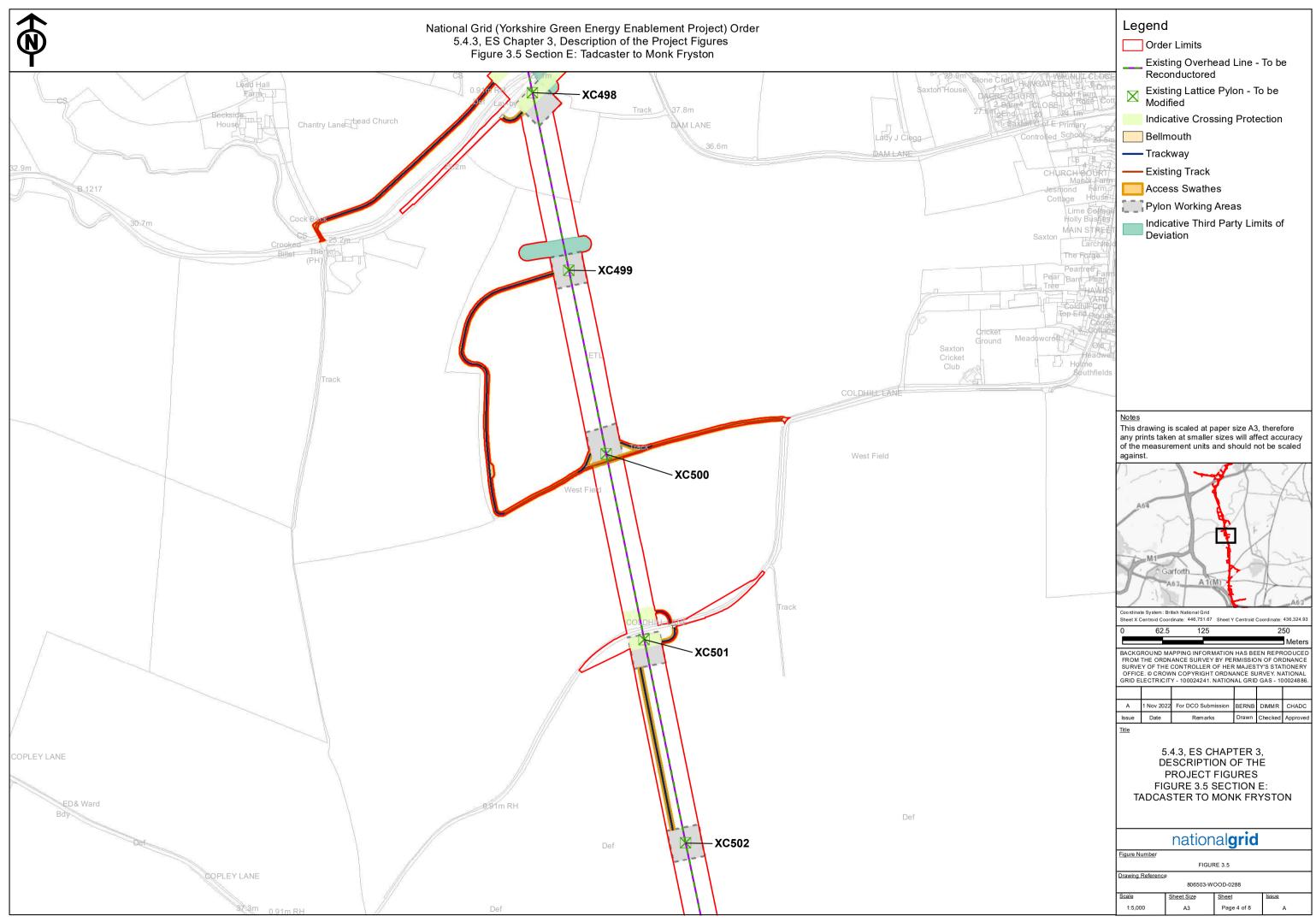




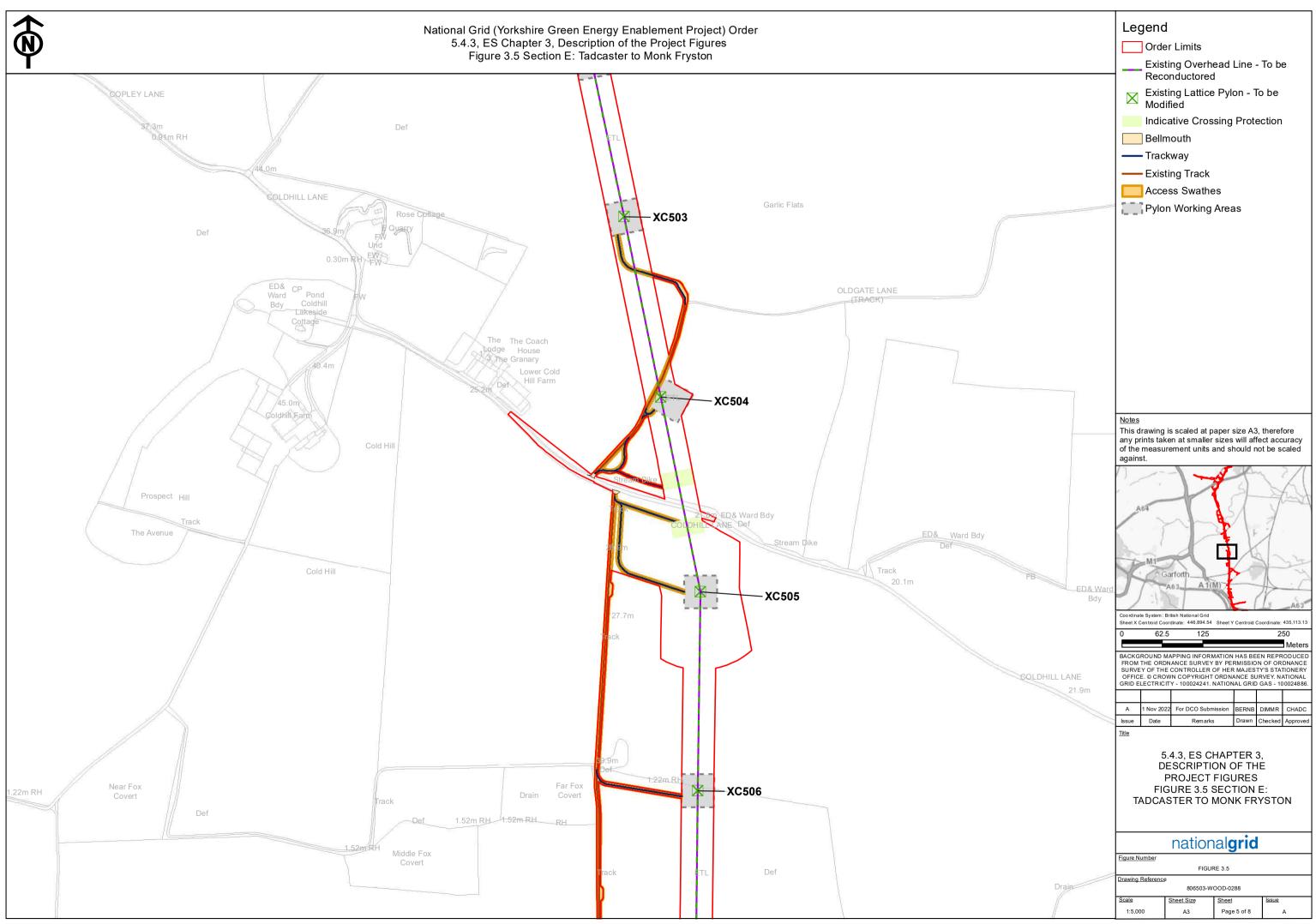


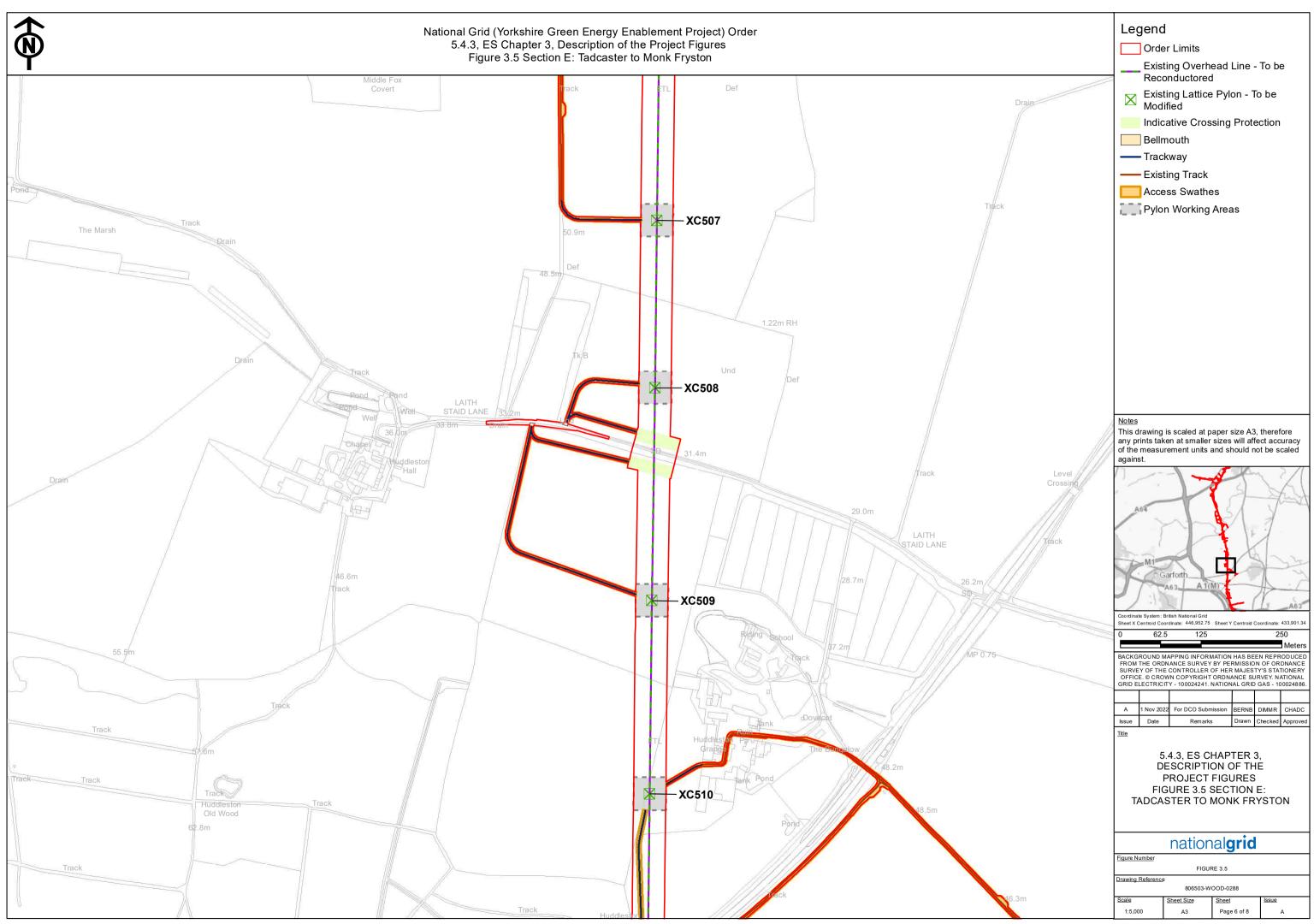
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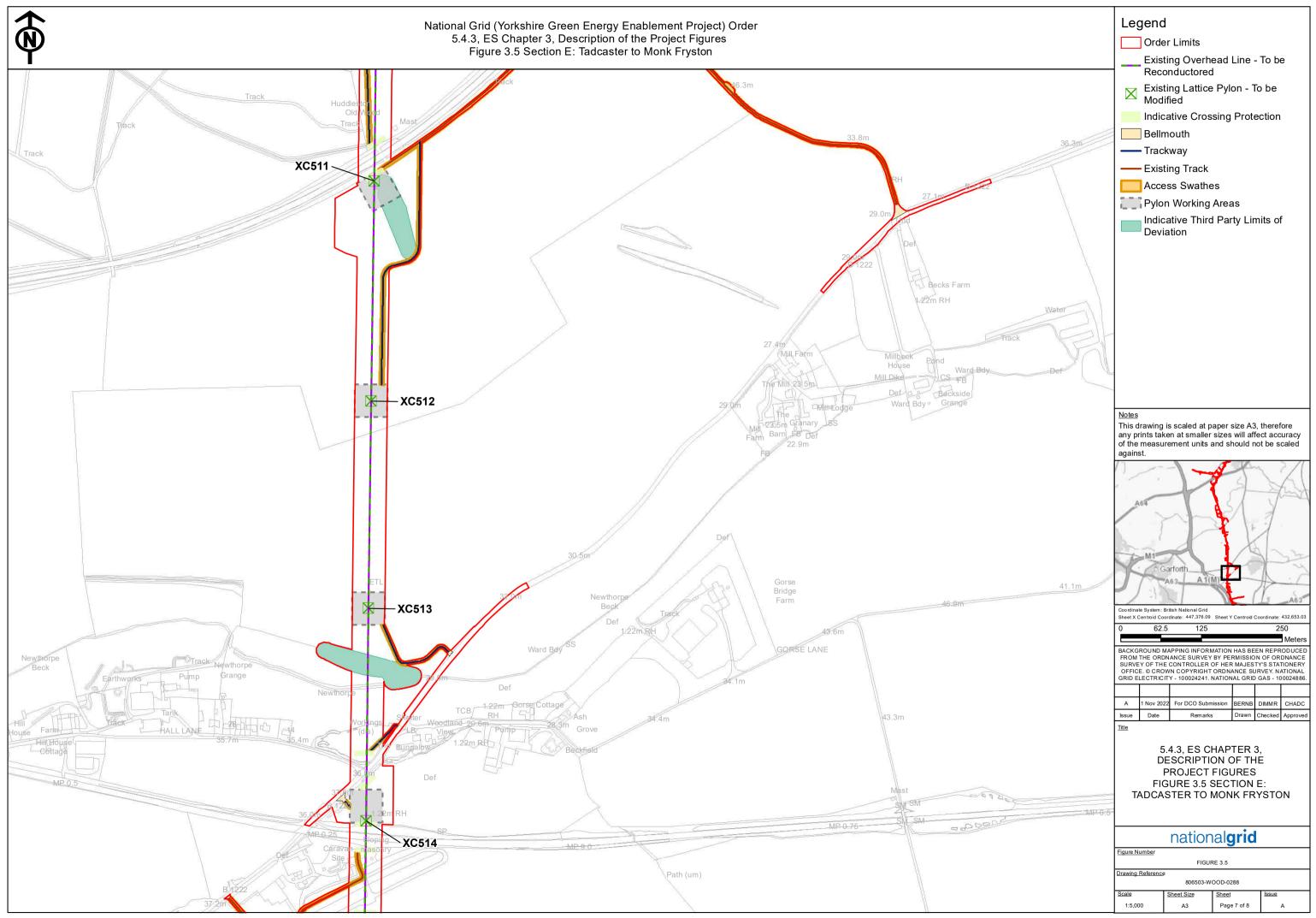


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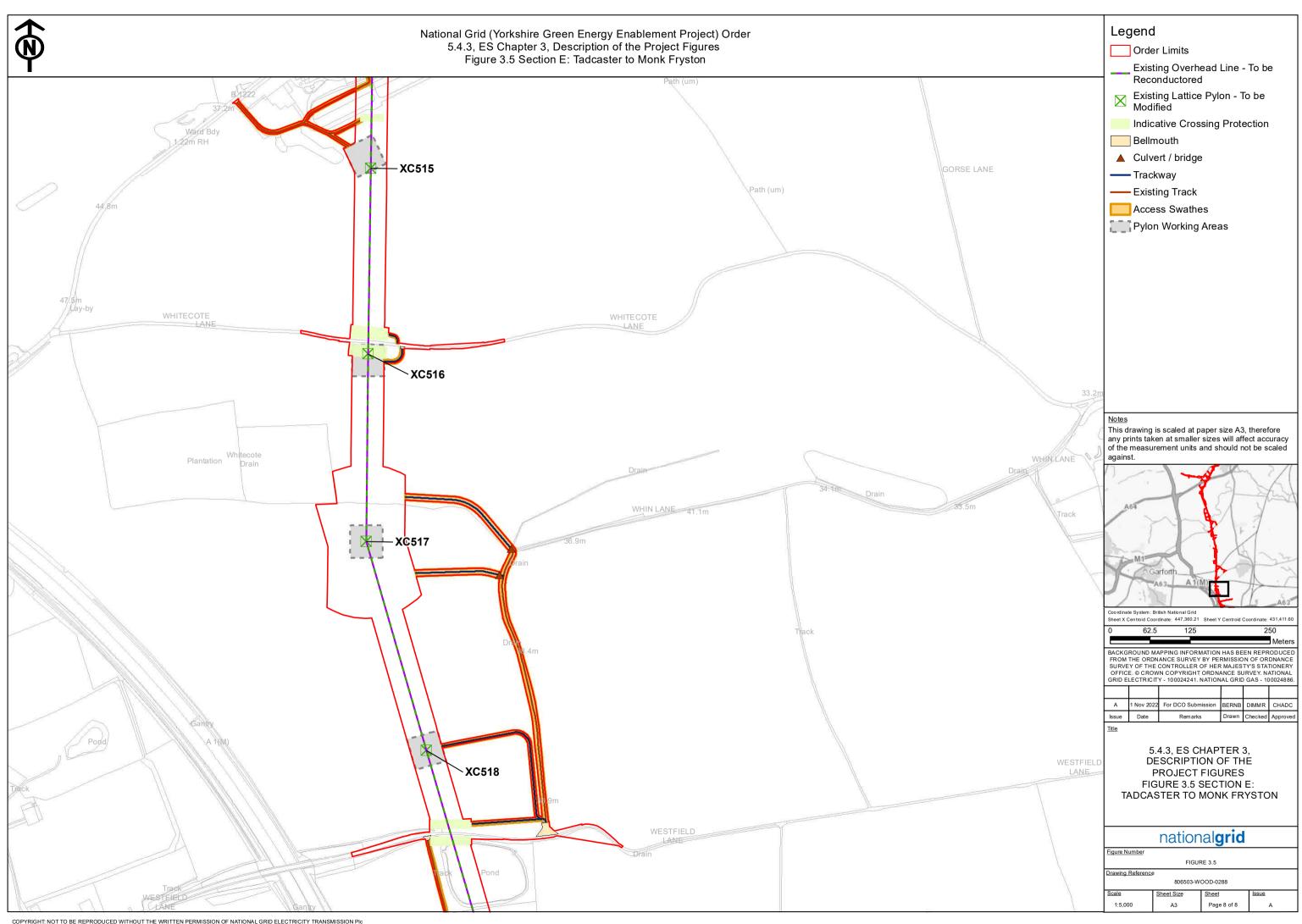




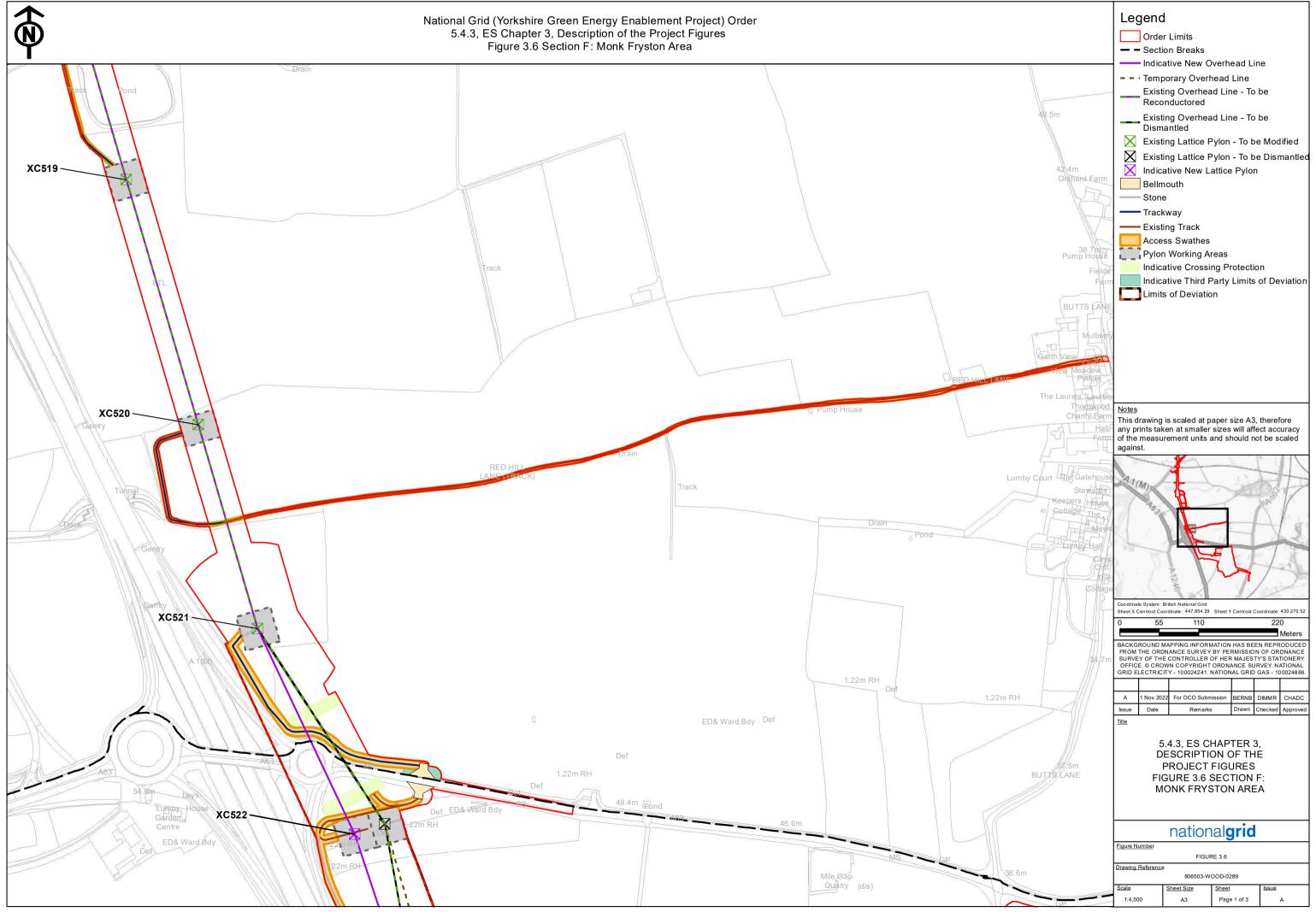
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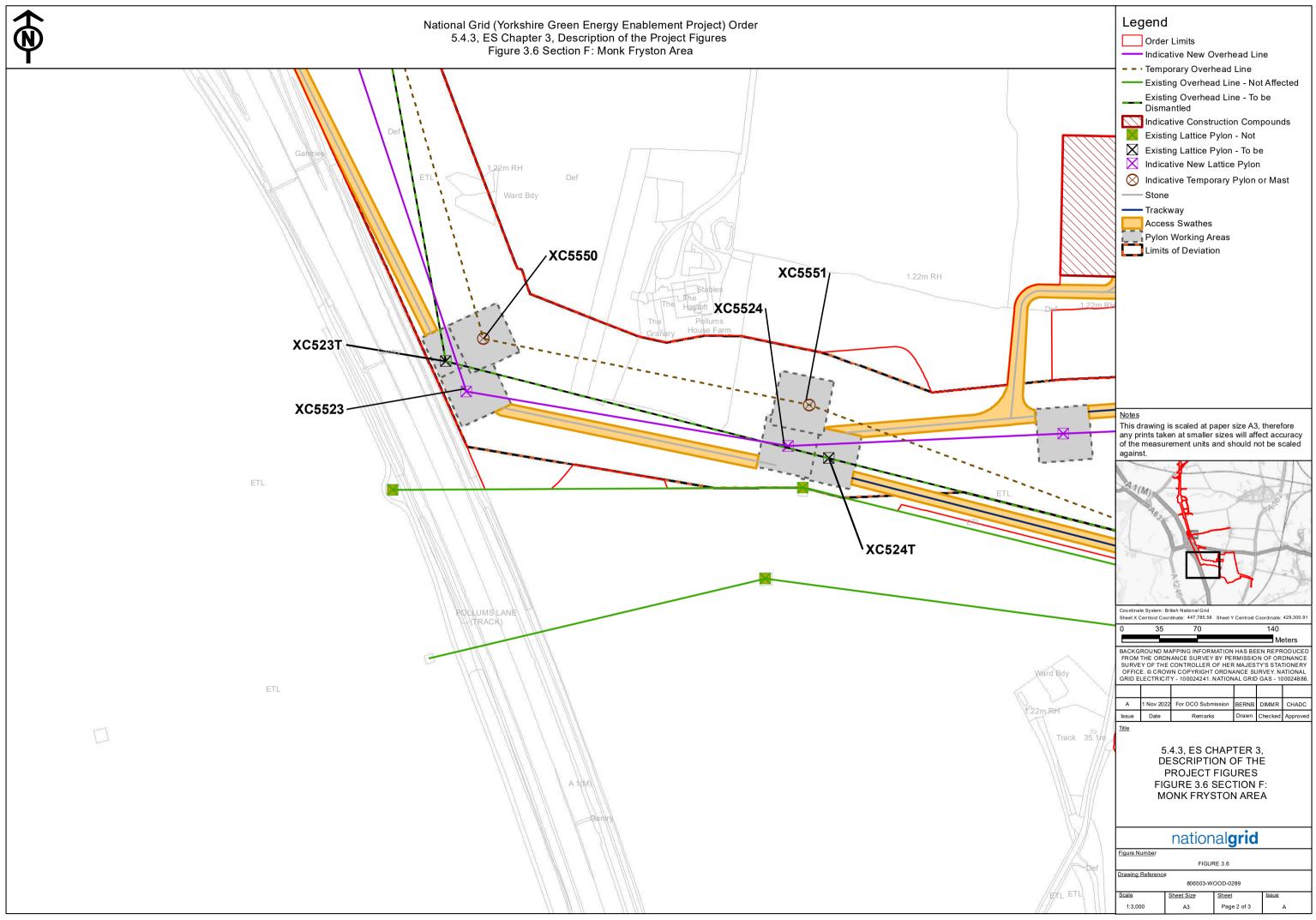
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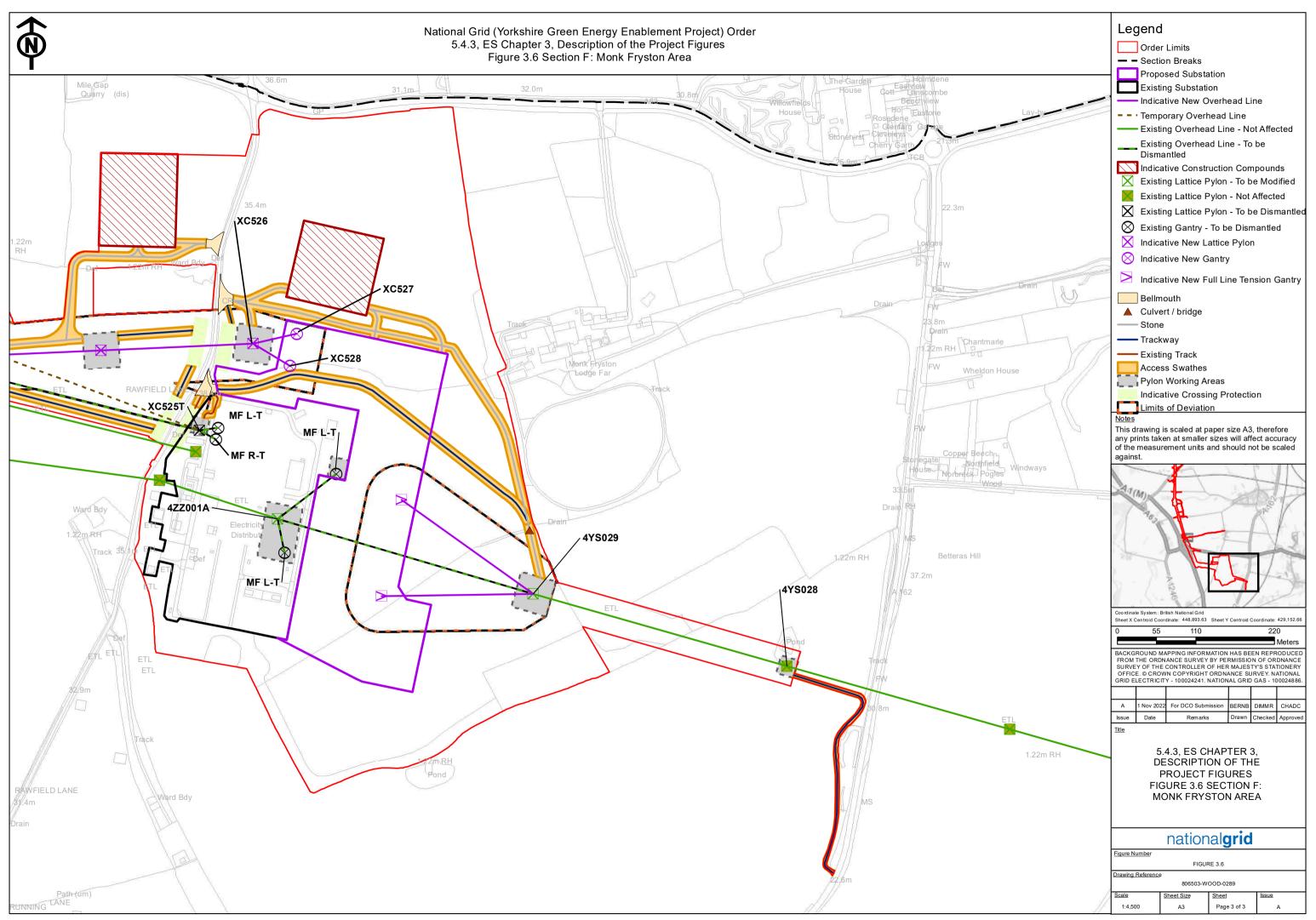


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National Grid (Yorkshire Green Energy Enablement Project) Order 5.4.3 ES Chapter 3: Description of the Project Figure 3.10(B) Outline Landscape Mitigation Strategy (Overton): Plant Schedule and Specification

Mitigation Planting

Wildflower meadow	
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-trefoi
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 planting 1m ctrs

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

Woodland 2m ctrs

Woodiana Em ouo		
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%
Ilex aquifolium	1 yr : Container grown : C2 : Full pot	2%
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		%
Acer campestre	Transplant : 1+2 : BR	13%
Carpinus betulus	Transplant : 1+2 : BR	5%
Corylus avellana	Transplant : 1+2 : BR	10%
Euonymus europaeus	Transplant : 1+2 : BR	10%
Ilex 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%

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

SOFTWORKS SPECIFICATION

Soils

All soil handling and storage to be undertaken in accordance with the Outline Soil Management Plan (Document 5.3.3E) [APP-098] and 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 to 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 a 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 of 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/m₂ in two staggered rows or equivalent infill planting.

Heavy 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.

Heavy Standard trees 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.

Container grown shrubs 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 Transplants

Dip transplants in mycorrhizal fungi rooting gel prior to planting.

Slot or notch-plant, and heel in upright.

Support and Protection

Support Heavy Standard trees (12-14cm) with a single 75mm dia. debris. Fix to the stake with a soft buckle tree tie.

Container grown shrubs to be protected with 1000mm high x200mm diam. proprietary biodegradable mesh shrub guard and supported with a 30x30mm treated softwood timber stake.

Support transplants with 450mm high x 38mm diam. clear, unperforated, biodegradable spiral guards secured with a bamboo cane.

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.

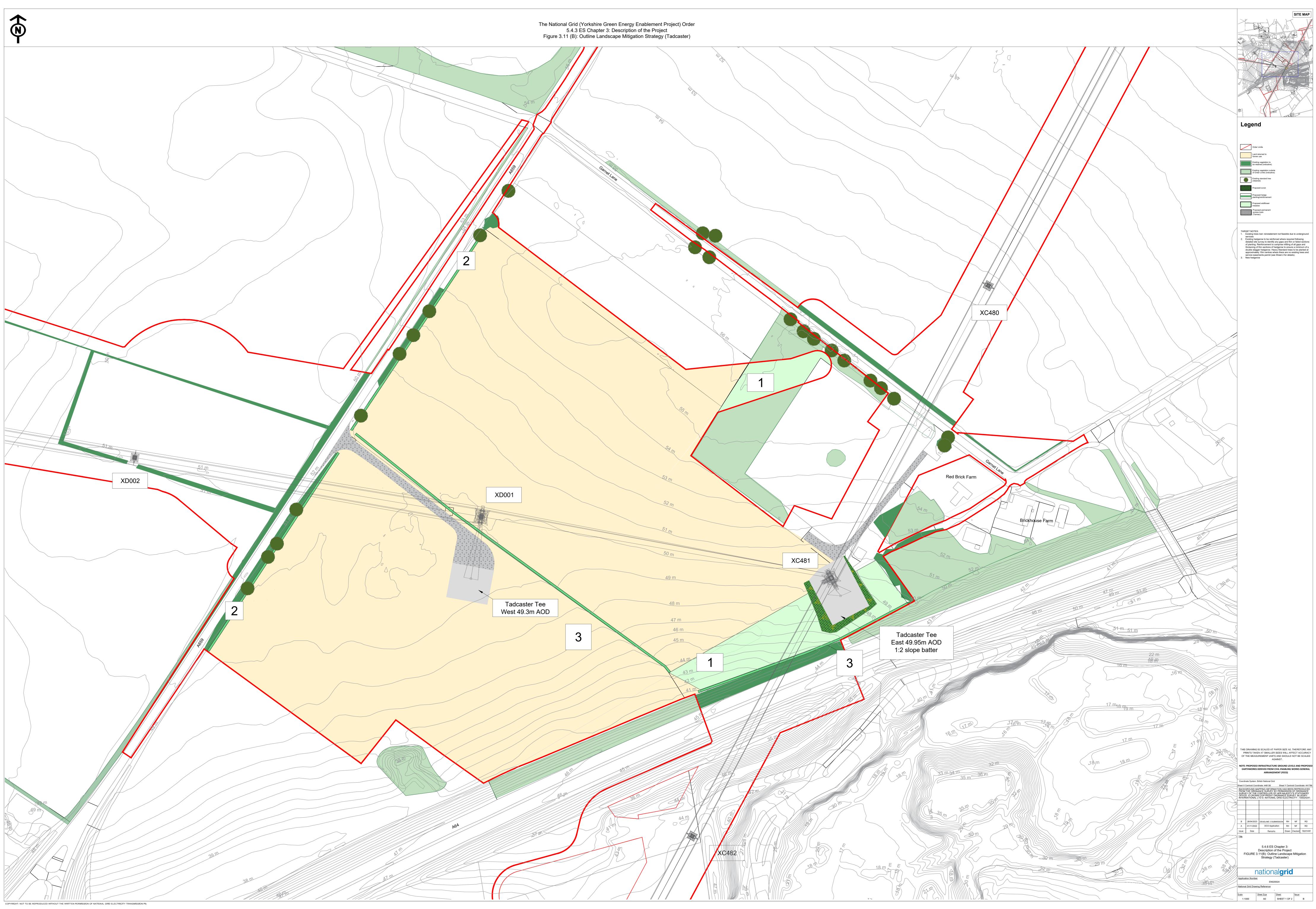
Seed in two perpendicular directions at the specified rate. In high predation areas, lightly rake surface and erect tickertape. Restrict pedestrian access.

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Notes A LL 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.						
В	26/04/2023	DEADLINE 2 SUB	MISSION	RH	NF	RD
A	01/11/2022	FOR DCO SUBN		RH	NF	RD
Issue	Date	Remarks		Drawn	Checked	Approved
5.4.3 ES Chapter 3: Description of the Project Figure 3.10(B) Outline Landscape Mitigation Strategy (Overton): Plant Schedule and Specification						
Applicat	tion Number	natior		grie	d	
EN020024						
Vationa	l Grid Drawir	ng Reference				
cale	5	Sheet Size	Sheet		Issue	

A2 SHEET 2 OF 2

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Schedule of Mitigation Planting

Hedge Reinforcement	planting	
Species	Specification	%
Acer campestre	Transplant : 1+1 : BR	2%
Cornus sanguinea	Transplant : 1+1 : BR	10%
	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

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		
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 Outline Soil Management Plan (Document 5.3.3E) [APP-098] and 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 to 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 a 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 of 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/m2 in two staggered rows or equivalent infill planting.

Heavy 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.

Heavy Standard trees 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.

Container grown shrubs 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 Transplants

Dip transplants in mycorrhizal fungi rooting gel prior to planting.

Slot or notch-plant, and heel in upright.

Support and Protection

Support Heavy Standard trees (12-14cm) with a single 75mm dia. debris. Fix to the stake with a soft buckle tree tie.

Container grown shrubs to be protected with 1000mm high x200mm diam. proprietary biodegradable mesh shrub guard and supported with a 30x30mm treated softwood timber stake.

Support transplants with 450mm high x 38mm diam. clear, unperforated, biodegradable spiral guards secured with a bamboo cane.

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.

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

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В	26/04/2023	DEADLINE 2 SUBMISSION	RH	NF	RD
A	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 3.11(B): Outline Landscape Mitigation Strategy (Tadcaster): Plant Schedule and Specification

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lational Grid Drawing Reference					
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N.T.S	A2	SHEET 2 OF 2	В		



Mitigation Planting

Wildflower meadow	
Species	Common Name
Achillea millefolium	Yarrow
Agrimonia eupatoria	Agrimony
Anthoxanthum odoratum	
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	Tuftad Vatab
Vicia cracca	Tufted Vetch

Woodland planting 2m ctrs

Species	Specification	%		
Acer campestre	Transplant : 1+1 : BR	4%		
Acer platanoides	Transplant : 1+1 : BR	6%		
Acer pseudoplatanus	Transplant : 1+1 : BR	6%		
Aesculus hippocastanum	Transplant : 1+1 : BR	4%		
Betula pendula	Transplant : 1+1 : BR	16%		
Corylus avellana	Transplant : 1+1 : BR	2%		
Crataegus monogyna	Transplant : 1+1 : BR	2%		
llex aquifolium	1 yr : Container grown : C2 : Full pot	2%		
Pinus sylvestris	1 yr : Container grown : C2 : Full pot	8%		
Populus alba	Transplant : 1+1 : BR	5%		
Prunus cerasifera	Transplant : 1+1 : BR	2%		
Pseudotsuga menziesii	1 yr : Container grown : C2 : Full pot	4%		
Quercus robur	Transplant : 1+1 : BR	27%		
Salix alba	Transplant : 1+1 : BR	4%		
Sorbus aucuparia	Transplant : 1+1 : BR	6%		
Taxus baccata	Transplant : 1+1 : BR	2%		

Woodland Edge planting 1m ctrs

Species	Specification	%		
Acer campestre	Transplant : 1+1 : BR	2%		
Cornus sanguinea	Transplant : 1+1 : BR	6%		
Corylus avellana	Transplant : 1+1 : BR	10%		
Crataegus monogyna	Transplant : 1+1 : BR	50%		
Malus sylvestris	Transplant : 1+1 : BR	2%		
Prunus cerasifera	Transplant : 1+1 : BR	5%		
Prunus spinosa	Transplant : 1+1 : BR	15%		
Salix caprea	Transplant : 1+1 : BR	5%		
Sambucus nigra	Transplant : 1+1 : BR	3%		
Taxus baccata	Transplant : 1+1 : BR	2%		

Hedge reinforcement

Species	Specification	%
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

0		
Species	Specification	%
Quercus robur	Heavy Std : 3X : 12-14cmg : 350-425 cm : Clear stem 175-200cm : BR : 5 brks	65
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Notes

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Issue	Date	Remarks	Drawn	Checked	Approved
Title					

5.4.3 ES Chapter 3:
Description of the Project
Figure 3.12(B): Outline Landscape Mitigation Strateg
(Monk Fryston): Plant Schedule and Specification

national grid				
Application Number				
EN020024				
National Grid Drawing Reference				
N/A				
scale	Sheet Size	Sheet	Issue	
N.T.S	A2	SHEET 2 OF 2	В	

National Grid plc National Grid House, Warwick Technology Park, Gallows Hill, Warwick. CV34 6DA United Kingdom

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