

M25 junction 28 improvement scheme TR010029

2.8 Engineering drawings and sections

APFP Regulation 5(2)(o) and Regulation 6(2)
Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M25 junction 28 improvement scheme Development Consent Order 202[x]

2.8 ENGINEERING DRAWINGS AND SECTIONS

Regulation Number:	Regulation 5(2)(o) and Regulation 6(2)(a) and 6(2)(b)
Planning Inspectorate Scheme Reference	TR010029
Application Document Reference	TR010029/APP/2.8
Author:	M25 junction 28 scheme, Project Team, Highways England

Version	Date	Status of Version
2	30 June 2021	Deadline 9, final version
1	April 2021	Deadline 5, incorporated changes 1-4
0	May 2020	Application issue

Table of contents

Chapter	Pages
1. Introduction	4
2. Schedule of plans included in this application document	5

1. Introduction

1.1.1 Highways England (the “Applicant”) has applied to the Secretary of State for a Development Consent (“DCO”) to authorise a scheme for alterations to the M25 junction 28 (the “Scheme”). The application is submitted to the Planning Inspectorate (the “Inspectorate”) in accordance with section 37 of the Planning Act 2008 (the “2008 Act”).

1.1.2 This document comprises part of the suite of application documents and is submitted in compliance with Regulations 5(2)(o), 6(2)(a) and 6(2)(b) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009, which require:

5(2)(o) ‘any other plans, drawings and sections necessary to describe the proposals for which development is sought, showing details of design, external appearance, and the preferred layout of buildings or structures, drainage, surface water management, means of vehicular and pedestrian access, any car parking to be provided, and means of landscaping’.

6(2) ‘If the application is for highway related development or for the construction or alteration of a railway, it must be accompanied by section drawings to suitable horizontal and vertical scales, which show, by reference to Ordnance Survey or Chart datum

(a) the levels of the proposed works, including in particular and where relevant

- (i) ground levels;*
- (ii) the height of every proposed bridge, viaduct, aqueduct, embankment and elevated guideway;*
- (iii) the depth of every proposed cutting and tunnel;*
- (iv) the levels of the bed of any tidal waters or inland waterway in which it is proposed that any works should be situated;*
- (v) the height of every structure or device (including a cable, but not catenary and related equipment) intended to be erected above, on or below the surface of, or on or beneath the bed of tidal waters or an inland waterway; and*
- (vi) drainage outfall details for highways.*

(b) a cross section of every intended tunnel and any altered gradient of a carriageway or a way forming part of a guided transport system on either side of every level crossing, bridge, tunnel or underpass which would carry the carriageway or way or through which it would pass.’

1.1.3 This document should be read alongside and is informed by other application documents, in particular, Schedule 1 to the draft DCO (application document TR010029/APP/3.1) (which lists the works for which consent is sought) and the Works plans (REP6-003) and the Scheme layout plans (REP5-006).

2. Schedule of plans included in this application document

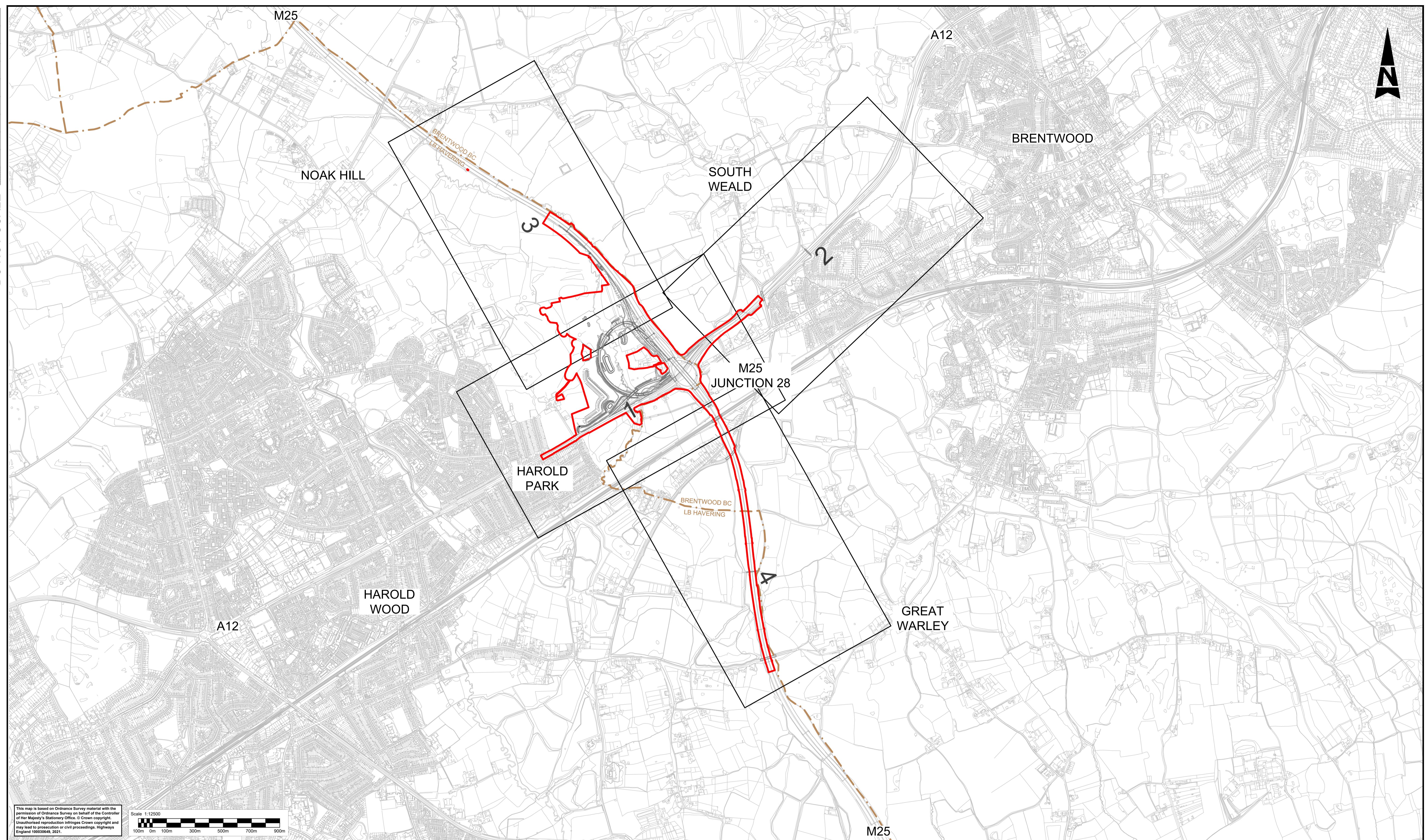
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Engineering sections Typical cross sections key plan Regulations 5(2)(o) and 6(2)	TR010029/APP/2.8	2
Engineering sections Regulations 5(2)(o) and 6(2) Section location plan Sheet 1 of 4	TR010029/APP/2.8	2
Engineering sections Regulations 5(2)(o) and 6(2) Section location plan Sheet 2 of 4	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Section location plan Sheet 3 of 4	TR010029/APP/2.8	2
Engineering sections Regulations 5(2)(o) and 6(2) Section location plan Sheet 4 of 4	TR010029/APP/2.8	1
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 1 of 7	TR010029/APP/2.8	2
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 2 of 7	TR010029/APP/2.8	2
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 3 of 7	TR010029/APP/2.8	2
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 4 of 7	TR010029/APP/2.8	1
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Document title	Document number	Version
Sheet 5 of 7		
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 6 of 7	TR010029/APP/2.8	1
Engineering sections Typical cross sections Regulations 5(2)(o) and 6(2) Sheet 7 of 7	TR010029/APP/2.8	0
Longitudinal section Regulations 5(2)(o) and 6(2) Key plans	TR010029/APP/2.8	2
Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 1 of 4	TR010029/APP/2.8	2
Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 2 of 4	TR010029/APP/2.8	0
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Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 2 of 10	TR010029/APP/2.8	0
Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 3 of 10	TR010029/APP/2.8	0
Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 4 of 10	TR010029/APP/2.8	0
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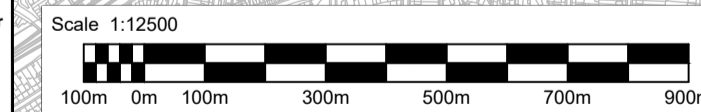
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Sheet 6 of 10		
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Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 9 of 10	TR010029/APP/2.8	1
Longitudinal section Regulations 5(2)(o) and 6(2) Sheet 10 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Alder Wood bridge Sheet 1 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Duck Wood bridge Sheet 2 of 10	TR010029/APP/2.8	1
Engineering sections Regulations 5(2)(o) and 6(2) Grove bridge Sheet 3 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Grove Farm underpass Sheet 4 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Maylands bridge Sheet 5 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Proposed ads cantilever gantry at CH 530 Sheet 6 of 10	TR010029/APP/2.8	0
Engineering sections Regulations 5(2)(o) and 6(2) Gantry at CH 740 Sheet 7 of 10	TR010029/APP/2.8	0

Document title	Document number	Version
Engineering sections Regulations 5(2)(o) and 6(2) Gantry at CH 1806 Sheet 8 of 10	TR010029/APP/2.8	0
Engineering section Regulations 5(2)(o) and 6(2) Typical headwall Sheet 9 of 10	TR010029/APP/2.8	0
Engineering section Regulations 5(2)(o) and 6(2) Typical headwall Sheet 10 of 10	TR010029/APP/2.8	0

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LEGEND:

2 SHEET NUMBER FOR WORKS IN THIS AREA

DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY

LOCAL AUTHORITY BOUNDARY

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: **DCO EXAMINATION**

Status: **A4**

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Working on behalf of
highways
england

Project Title: **M25 junction 28 improvement scheme**

Drawing Title: **ENGINEERING SECTIONS
TYPICAL CROSS SECTIONS KEY PLAN
REGULATION 5(2)(o) AND 6(2)**

Client: **highways england**

Drawing Number: **TR010029/APP/2.8**

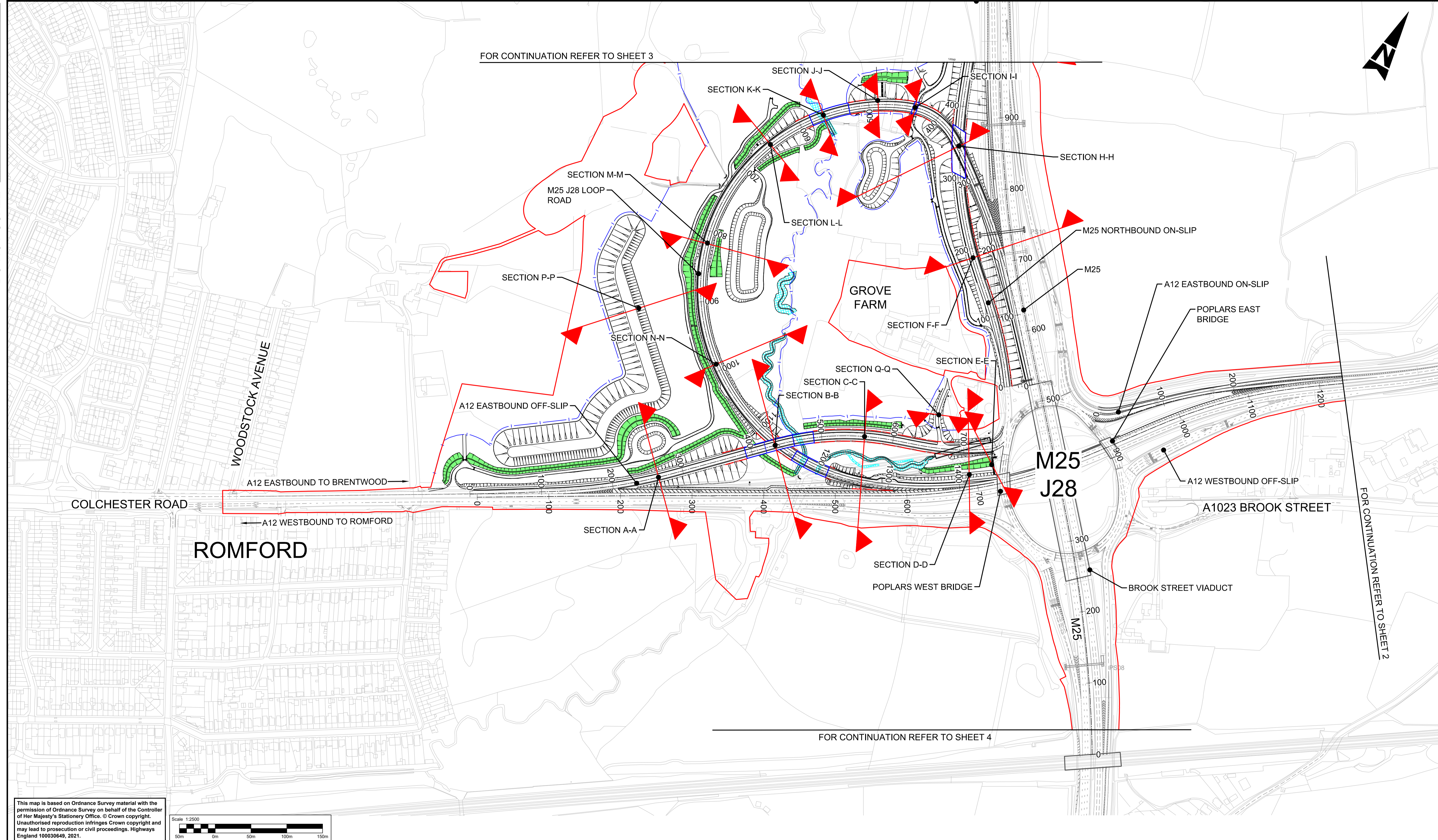
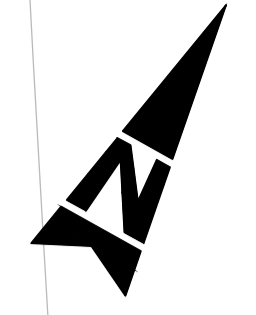
Rev: **2**

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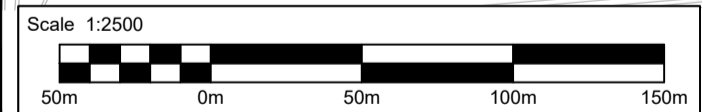
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FOR CONTINUATION REFER TO SHEET 2

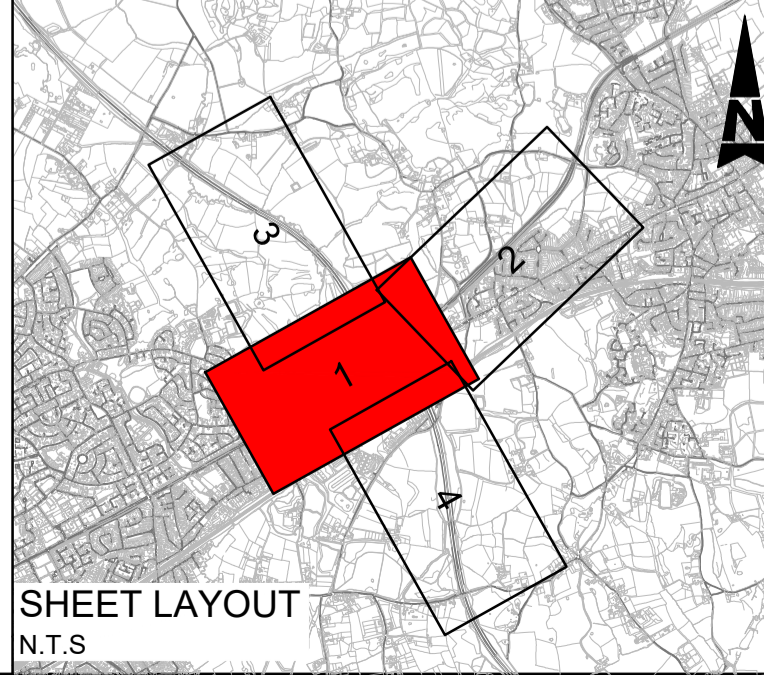
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- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Do not scale from this drawing.
 - For cross sections details refer to the following sheets.
- | | |
|--------------------|--------------------|
| A-A - Sheet 1 of 7 | J-J - Sheet 5 of 7 |
| B-B - Sheet 1 of 7 | K-K - Sheet 5 of 7 |
| C-C - Sheet 2 of 7 | L-L - Sheet 5 of 7 |
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| F-F - Sheet 3 of 7 | O-O - Sheet 6 of 7 |
| G-G - Sheet 4 of 7 | P-P - Sheet 6 of 7 |
| H-H - Sheet 4 of 7 | Q-Q - Sheet 7 of 7 |
| I-I - Sheet 4 of 7 | |

- KEY :**
- Development Consent Order (DCO) boundary
 - Proposed boundary
 - Existing bridge
 - Proposed bridge
 - Proposed retaining wall
 - Typical cross-section
 - Proposed pre-earthwork ditch
 - Realigned watercourse

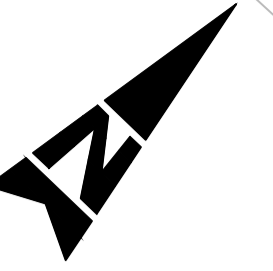


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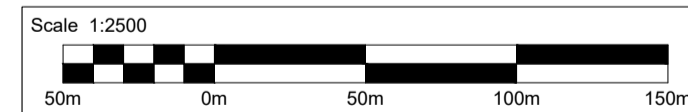
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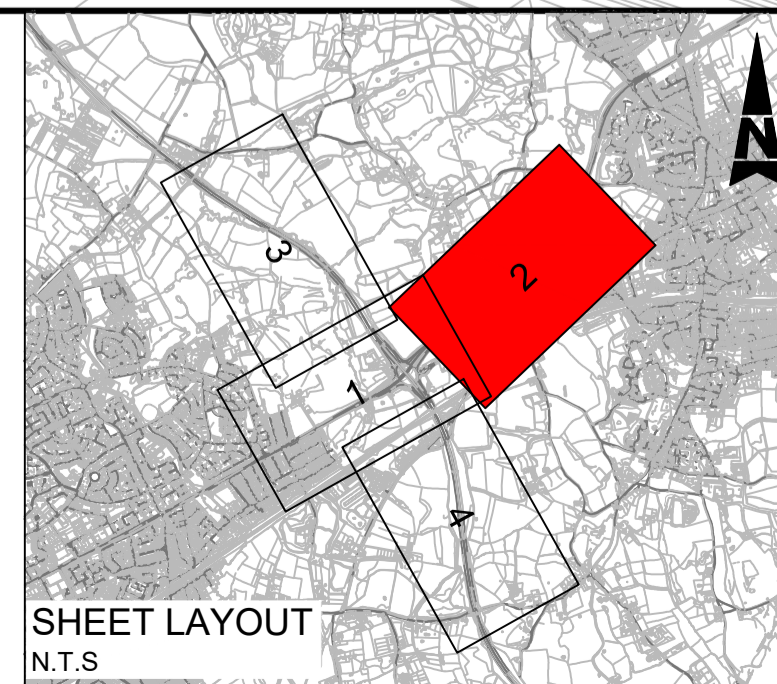
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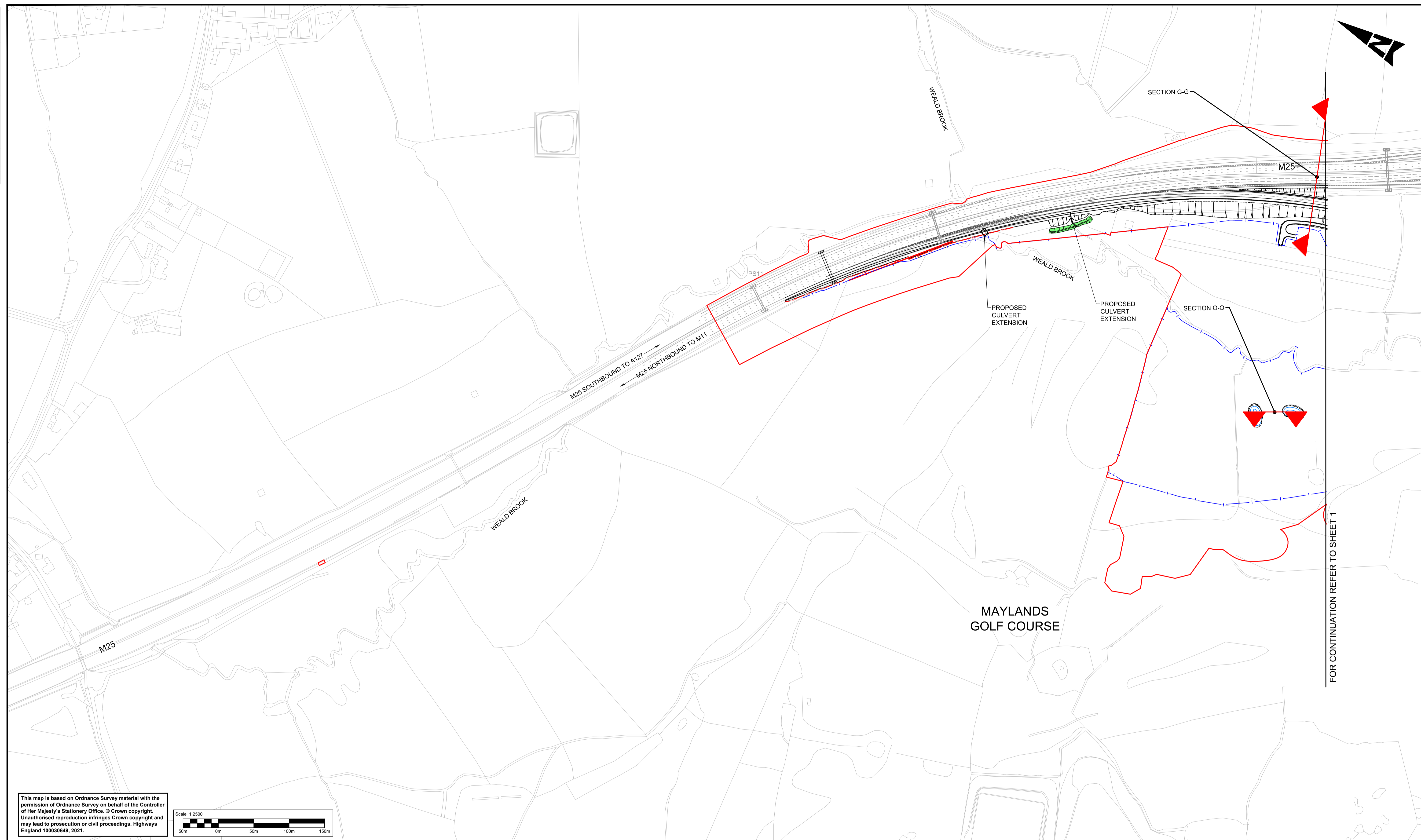
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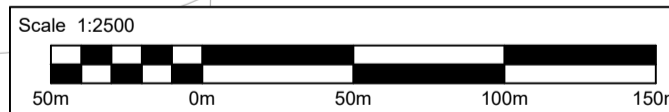
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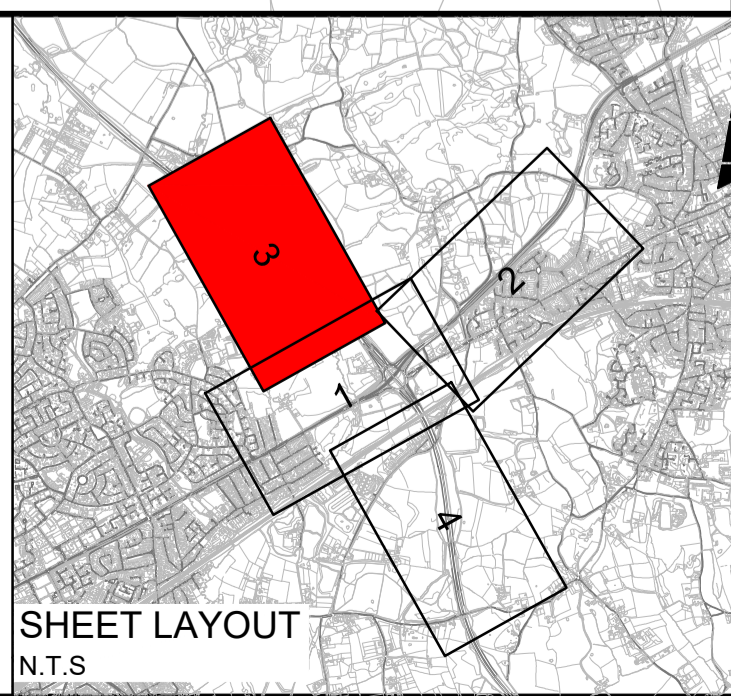
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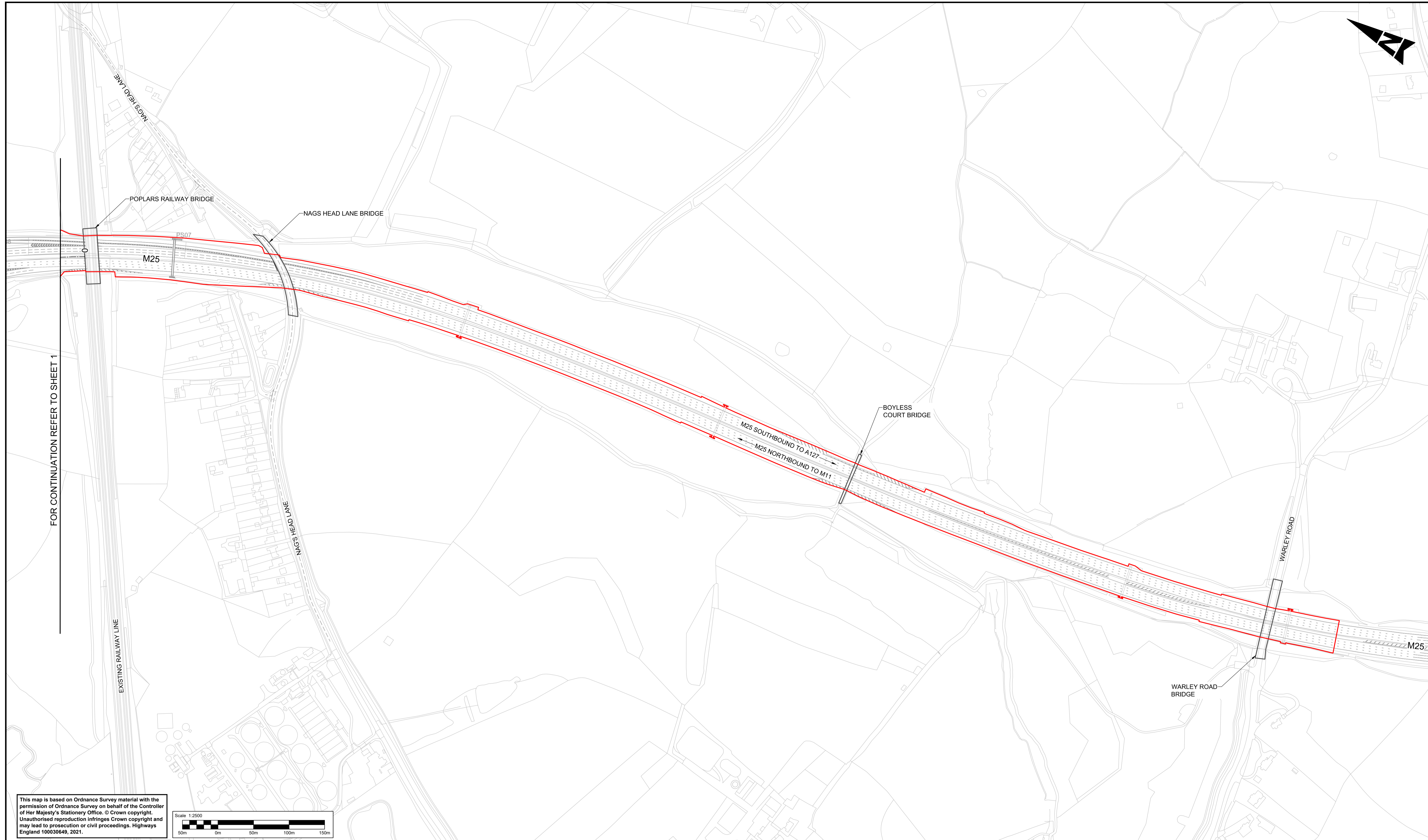


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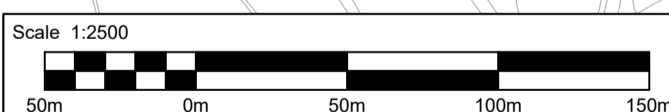
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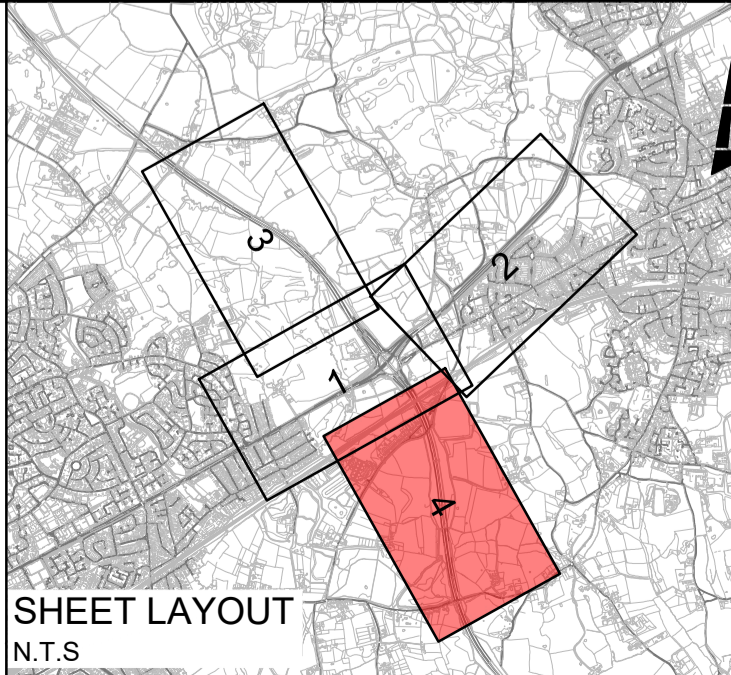
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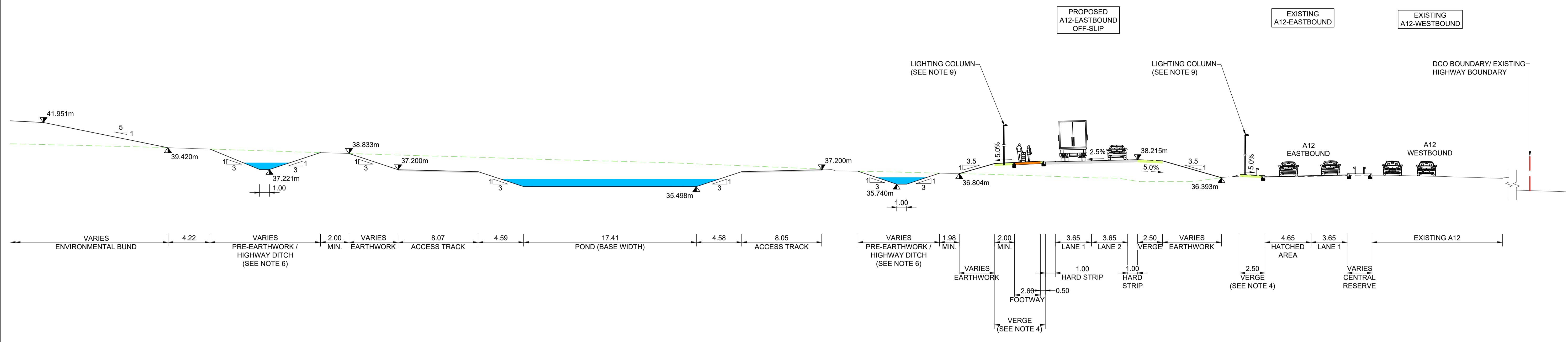


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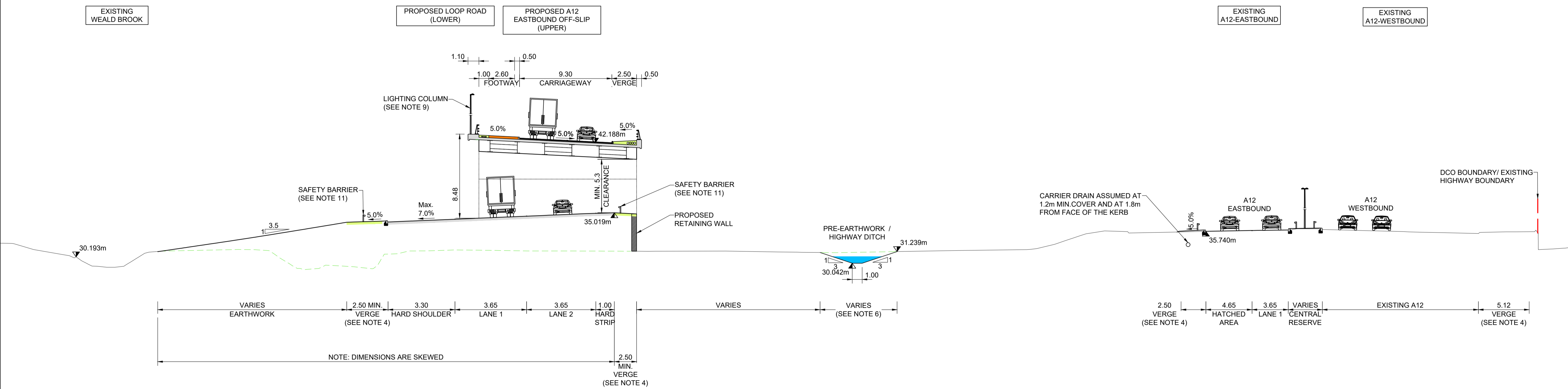
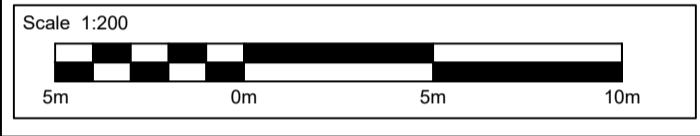
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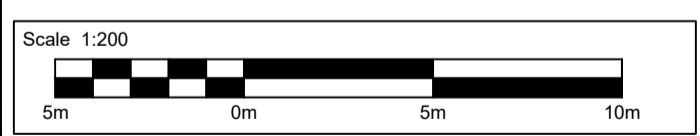
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PROPOSED CROSS-SECTION OF A12 EASTBOUND OFF-SLIP ROAD AT CHAINAGE 260
SECTION A-A



PROPOSED CROSS-SECTION OF A12 EASTBOUND OFF-SLIP ROAD AT CHAINAGE 430
SECTION B-B



- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Refer to Works Plans (Application document reference TR010029/APP/2.3).
 - Cross falls shown are typical.
 - Verge width dimensions will vary to accommodate utilities and road furniture wherever required.
 - Road furniture and protective works are indicative only. All vehicle restraint systems to be confirmed.
 - Drainage details shown are indicative only.
 - Kerbs location to be decided based on drainage requirements wherever necessary.
 - Bridge elements shown are indicative only.
 - Lighting columns shown are indicative only.
 - Utilities plant not shown.
 - Safety barrier type shown is indicative and subject to design development.
 - Existing dimensions are approximate / indicative only.

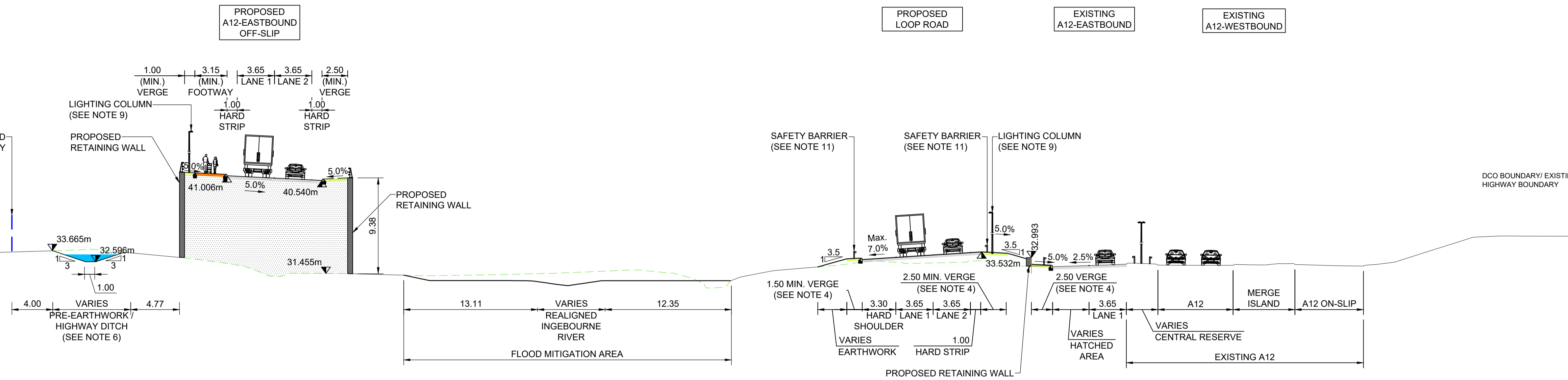
KEY:

- Proposed verge
- Proposed carriageway/access
- Proposed footway
- Proposed ditch/watercourse
- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
- Existing trees removed

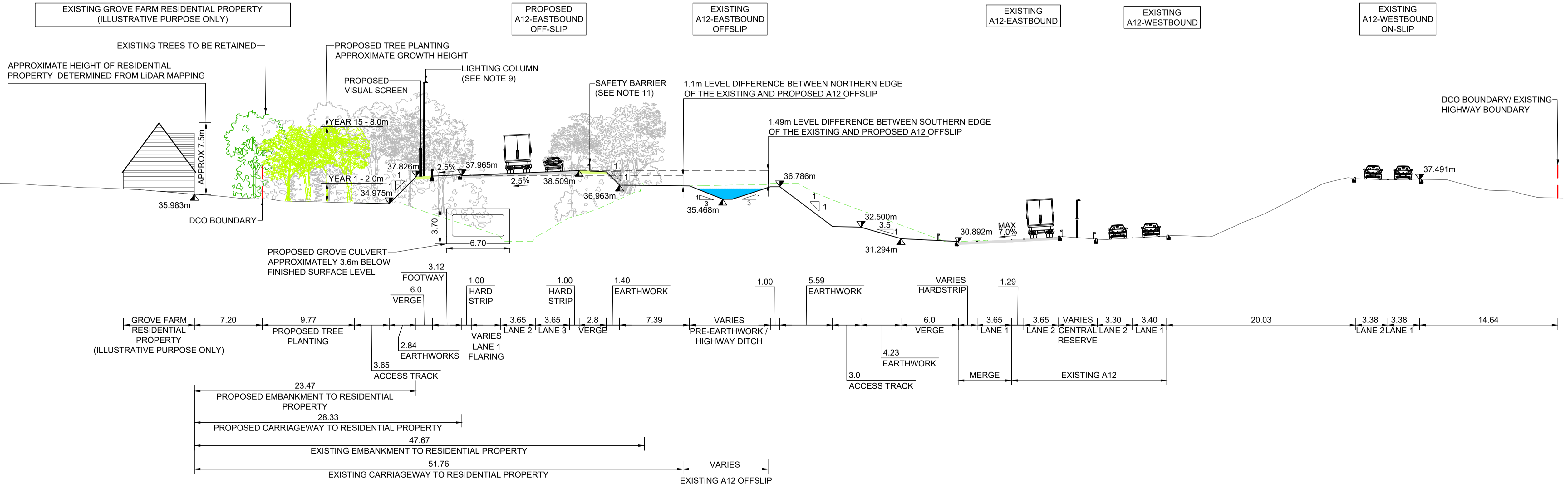
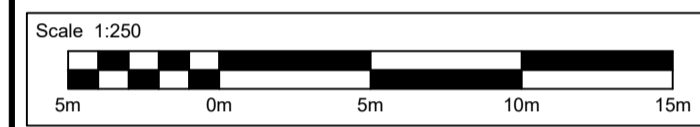
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DO NOT SCALE

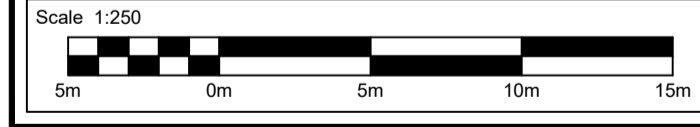
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**PROPOSED CROSS-SECTION OF A12 EASTBOUND OFF-SLIP ROAD AT CHAINAGE 560
SECTION C-C**



**PROPOSED CROSS-SECTION OF A12 EASTBOUND OFF-SLIP ROAD AT CHAINAGE 707
SECTION D-D**



- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Refer to Works Plans (Application document reference TR010029/APP/2.3).
 - Cross falls shown are typical.
 - Verge width dimensions will vary to accommodate utilities and road furniture wherever required.
 - Road furniture and protective works are indicative only. All vehicle restraint systems to be confirmed.
 - Drainage details shown are indicative only.
 - Kerbs location to be decided based on drainage requirements wherever necessary.
 - Bridge elements shown are indicative only.
 - Lighting columns shown are indicative only.
 - Utilities plant not shown.
 - Safety barrier type shown is indicative and subject to design development.
 - Existing dimensions are approximate / indicative only.

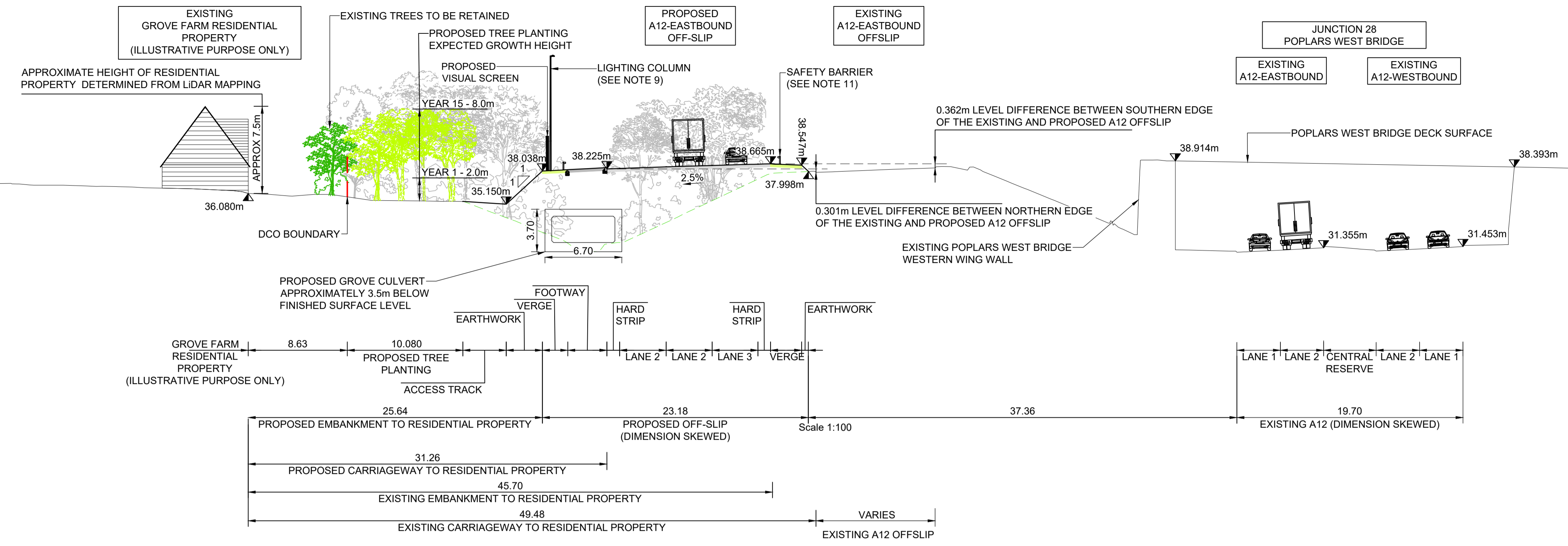
KEY:

- Proposed verge
- Proposed carriageway/access
- Proposed footway
- Proposed ditch/watercourse
- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
- Existing trees removed

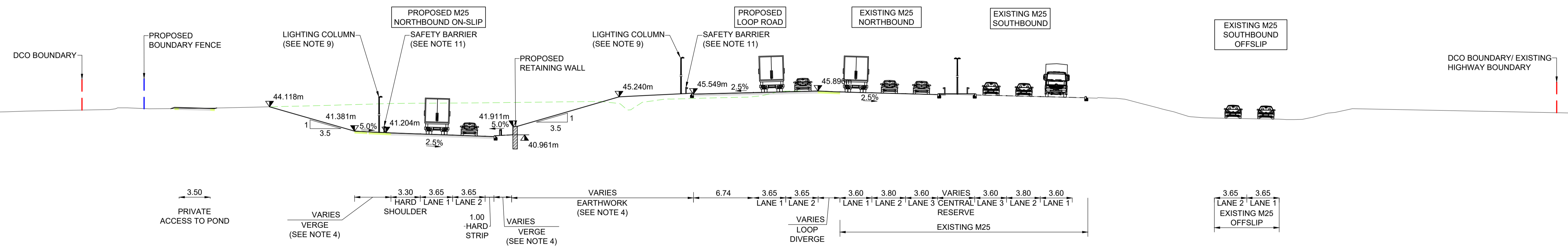
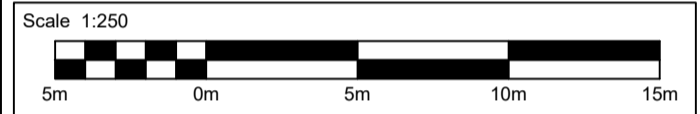
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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date												
Description		<div style="display: flex; align-items: center;"> <div> <p>SNC-LAVALIN ATKINS</p> <p>Member of the SNC-Lavalin Group Copyright © SNC Lavalin (2021)</p> </div> </div>																
Description		<div style="display: flex; align-items: center;"> <div> <p>Working on behalf of</p> <p>highways england</p> </div> </div>																
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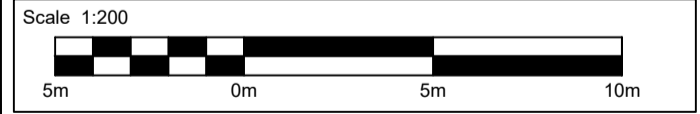
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**EXISTING CROSS-SECTION OF A12 UNDER POPLARS WEST BRIDGE J28
SECTION E-E**



**PROPOSED CROSS-SECTION OF M25 NORTHBOUND ON-SLIP ROAD AT CHAINAGE 190
SECTION F-F**



- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Refer to Works Plans (Application document reference TR010029/APP/2.3).
 - Cross falls shown are typical.
 - Verge width dimensions will vary to accommodate utilities and road furniture wherever required.
 - Road furniture and protective works are indicative only. All vehicle restraint systems to be confirmed.
 - Drainage details shown are indicative only.
 - Kerbs location to be decided based on drainage requirements wherever necessary.
 - Bridge elements shown are indicative only.
 - Lighting columns shown are indicative only.
 - Utilities plant not shown.
 - Safety barrier type shown is indicative and subject to design development.
 - Existing dimensions are approximate / indicative only.

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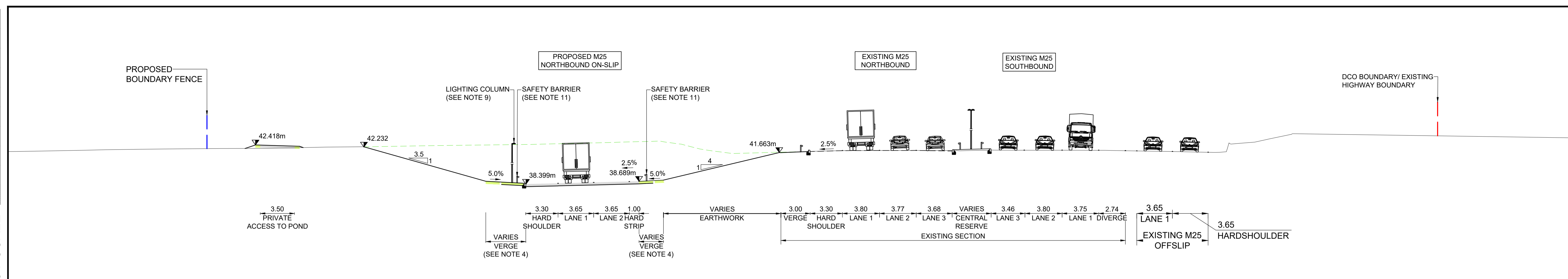
- Proposed verge
- Proposed carriageway/access
- Proposed footway
- Proposed ditch/watercourse
- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
- Existing trees removed

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

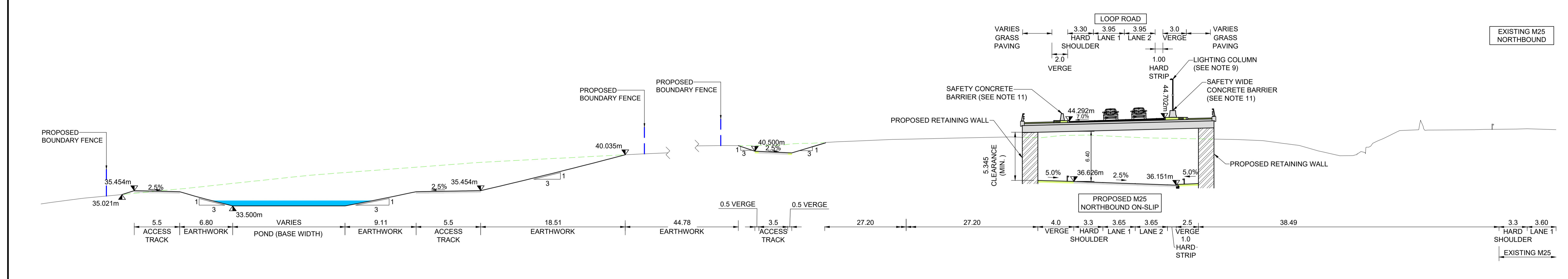
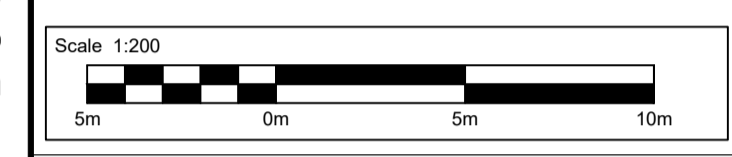
Drawing Suitability		Status		Project Title	
DCO EXAMINATION		A4		M25 junction 28 improvement scheme	
		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com		Drawing Title ENGINEERING SECTIONS TYPICAL CROSS SECTIONS REGULATION 5(2)(o) AND 6(2) SHEET 3 OF 7	
Client		Drawing Number		Rev.	
		TR010029/APP/2.8		2	
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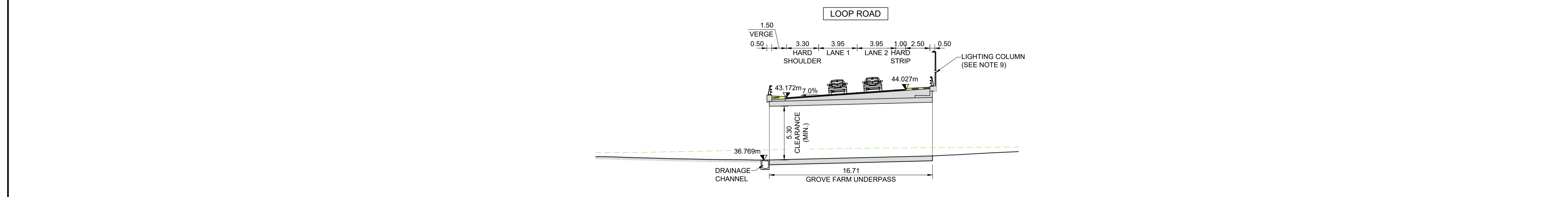
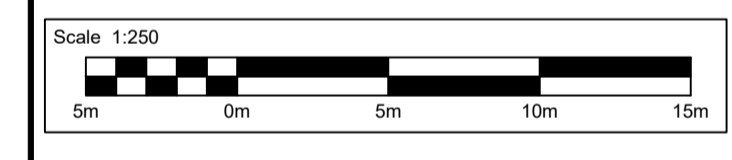
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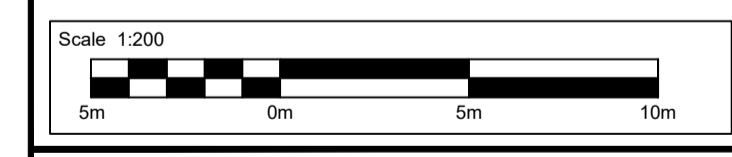
**PROPOSED CROSS-SECTION OF M25 NORTHBOUND ONSLIP AT CHAINAGE 480
SECTION G-G**



**PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 350
SECTION H-H**



**PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 435
SECTION I-I**



- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Refer to Works Plans (Application document reference TR010029/APP/2.3).
 - Cross falls shown are typical.
 - Verge width dimensions will vary to accommodate utilities and road furniture wherever required.
 - Road furniture and protective works are indicative only. All vehicle restraint systems to be confirmed.
 - Drainage details shown are indicative only.
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 - Bridge elements shown are indicative only.
 - Lighting columns shown are indicative only.
 - Utilities plant not shown.
 - Safety barrier type shown is indicative and subject to design development.
 - Existing dimensions are approximate / indicative only.

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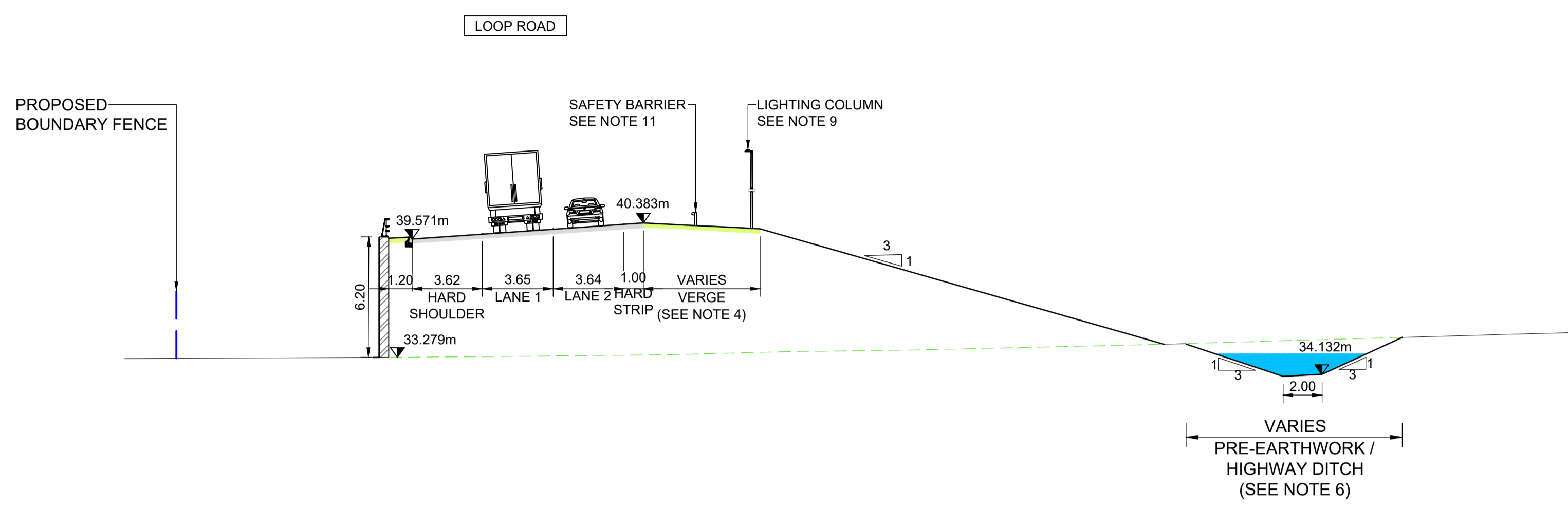
	Proposed verge		Proposed tree planting
	Proposed carriageway/access		Existing trees retained
	Proposed footway		Existing trees removed
	Proposed ditch/watercourse		
	Existing ground level to be modified		
	DCO boundary/ Existing highway boundary		
	Proposed boundary fence		

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

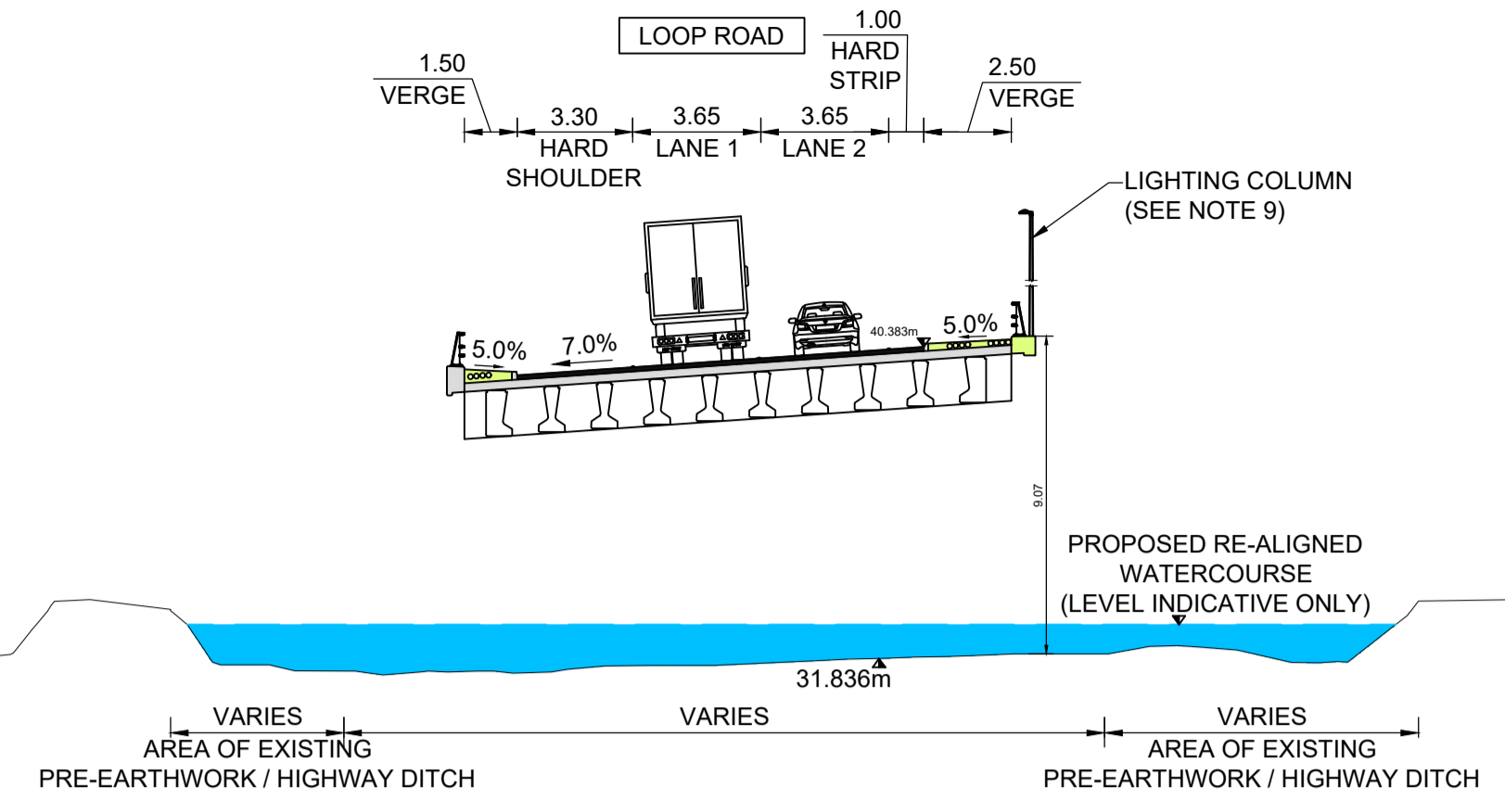
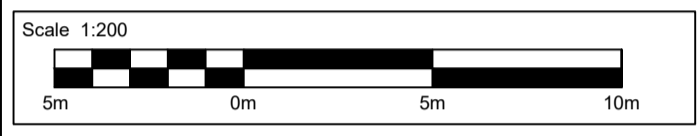
Drawing Suitability DCO EXAMINATION	Status A4	Project Title M25 junction 28 improvement scheme
 Member of the SNC-Lavalin Group Copyright © SNC Lavalin (2021)		Drawing Title ENGINEERING SECTIONS TYPICAL CROSS SECTIONS REGULATION 5(2)(o) AND 6(2) SHEET 4 OF 7
Client Working on behalf of		Drawing Number TR010029/APP/2.8
HE PIN: HE551519		Scale: AS SHOWN Original Size: A1

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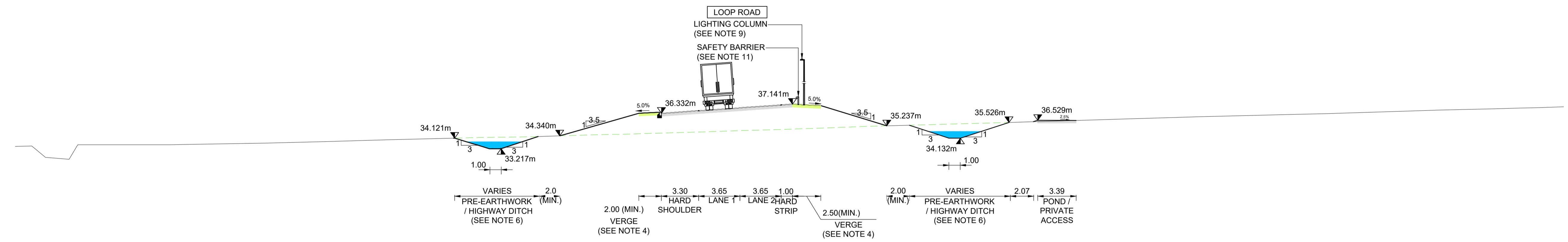
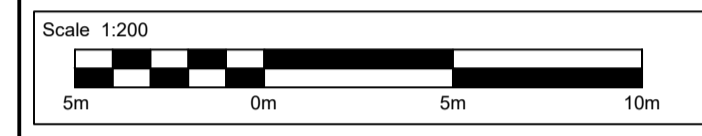
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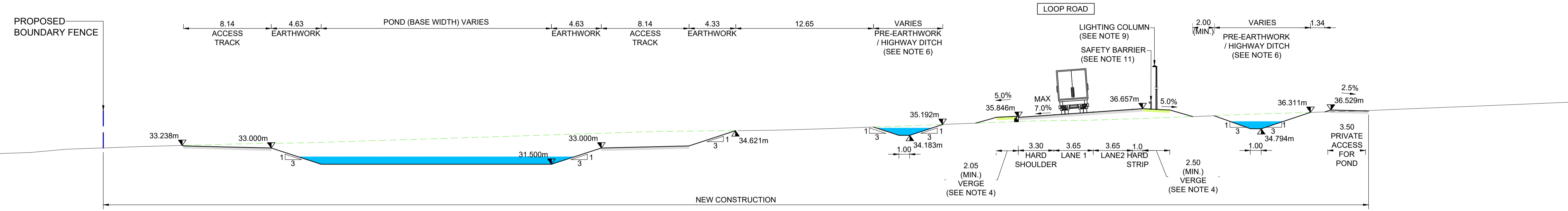
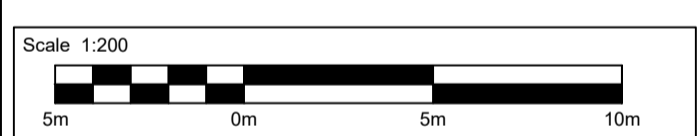
PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 480
SECTION J-J



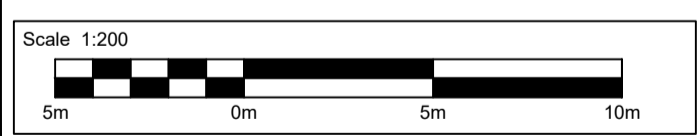
PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 560
SECTION K-K



PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 650
SECTION L-L



PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 820
SECTION M-M



- NOTES:**
- All dimensions are in metres unless otherwise stated.
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KEY:

- Proposed verge
- Proposed carriageway/access
- Proposed footway
- Proposed ditch/watercourse
- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
- Existing trees removed

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: **DCO EXAMINATION**

Status: **A4**

Project Title: **M25 junction 28 improvement scheme**

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Drawing Title: **ENGINEERING SECTIONS
TYPICAL CROSS SECTIONS
REGULATION 5(2)(o) AND 6(2)
SHEET 5 OF 7**

Drawing Number: **TR010029/APP/2.8**

Rev: **1**

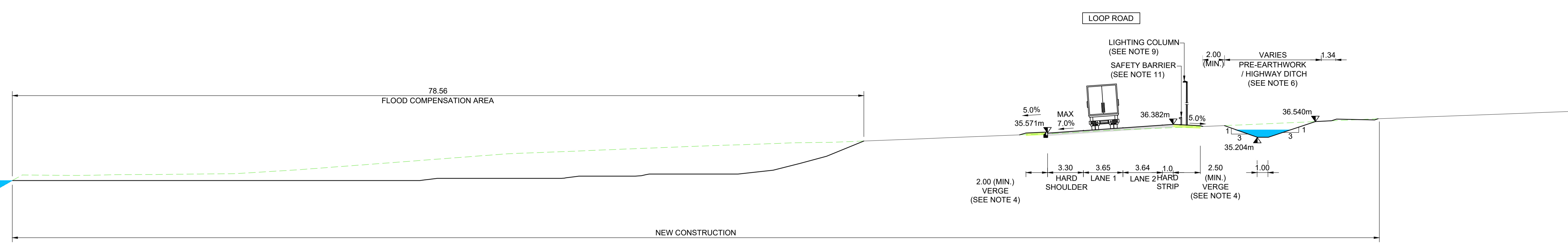
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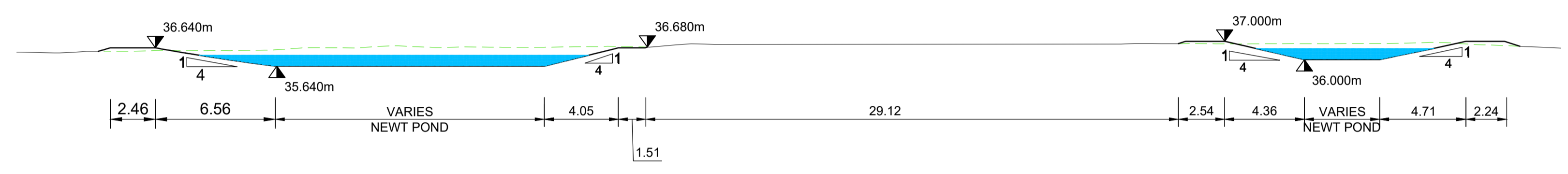
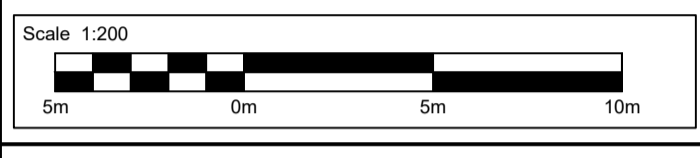
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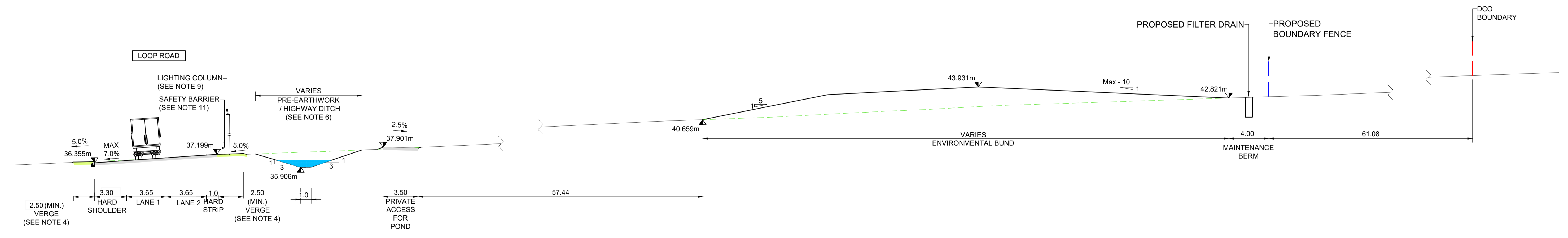
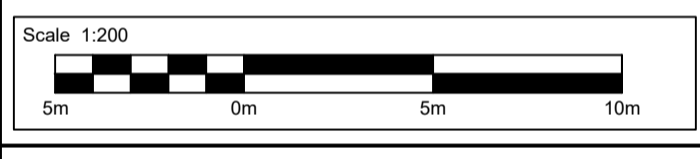
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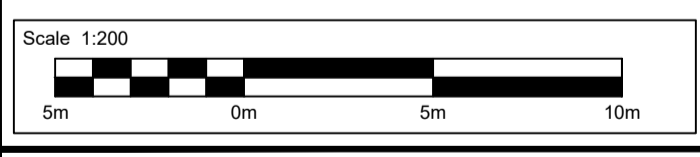
**PROPOSED CROSS-SECTION OF LOOP ROAD AT CHAINAGE 990
SECTION N-N**



**PROPOSED CROSS-SECTION OF NEWT PONDS
SECTION O-O**



**PROPOSED CROSS-SECTION OF ENVIRONMENTAL BUND
SECTION P-P**



- NOTES:**
- All dimensions are in metres unless otherwise stated.
 - Refer to Works Plans (Application document reference TR010029/APP/2.3).
 - Cross falls shown are typical.
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 - Lighting columns shown are indicative only.
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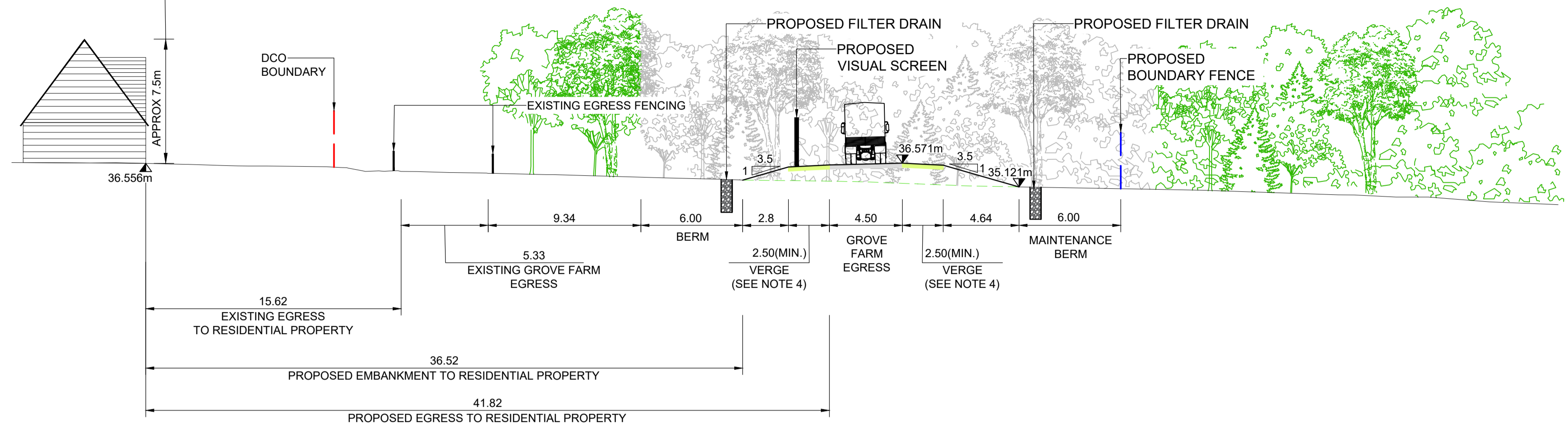
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- Proposed carriageway/access
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- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
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DCO EXAMINATION	A4																																											
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Drawing Title		ENGINEERING SECTIONS TYPICAL CROSS SECTIONS REGULATION 5(2)(o) AND 6(2) SHEET 6 OF 7																																										
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highways england		1																																										
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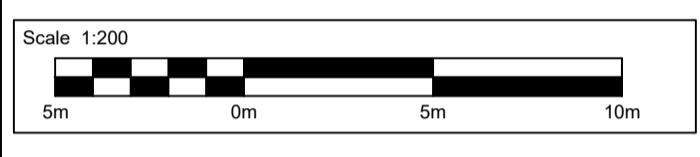
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DETERMINED FROM LIDAR MAPPING



**PROPOSED CROSS-SECTION OF GROVE FARM EGRESS
SECTION Q-Q**



- NOTES:**
- All dimensions are in metres unless otherwise stated.
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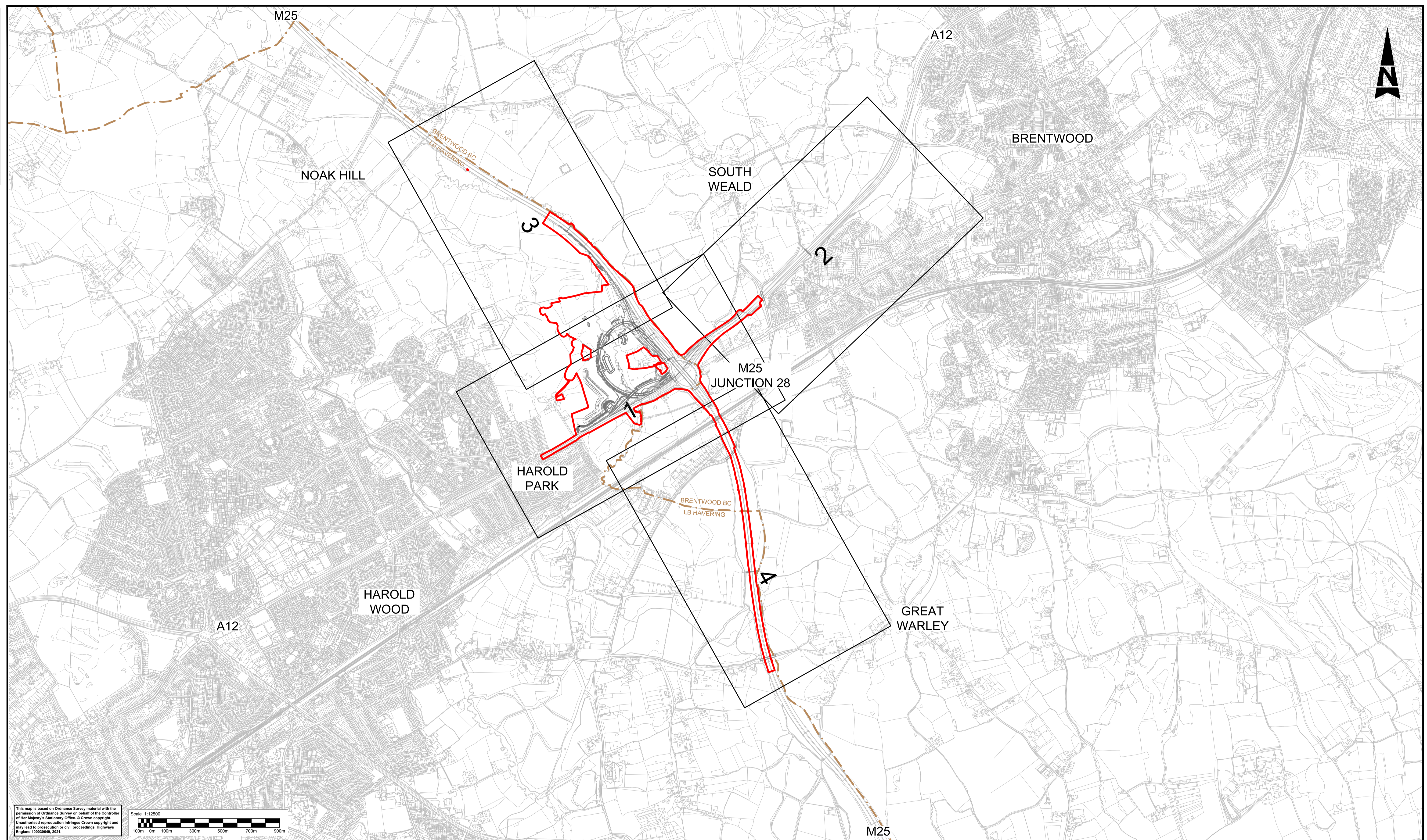
- Proposed verge
- Proposed carriageway/access
- Proposed footway
- Proposed ditch/watercourse
- Existing ground level to be modified
- DCO boundary/ Existing highway boundary
- Proposed boundary fence
- Proposed tree planting
- Existing trees retained
- Existing trees removed

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

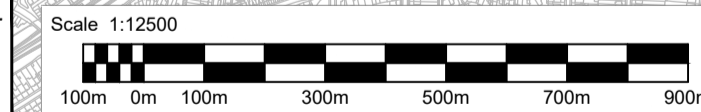
Drawing Suitability	DCO EXAMINATION	Status	A4
		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com	
Client	Working on behalf of		

Project Title	M25 junction 28 improvement scheme		
Drawing Title	ENGINEERING SECTIONS TYPICAL CROSS SECTIONS REGULATION 5(2)(o) AND 6(2) SHEET 7 OF 7		
Drawing Number	TR010029/APP/2.8	Rev:	0
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Millimetres
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- LEGEND:**
- 2 SHEET NUMBER FOR WORKS IN THIS AREA
 - DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
 - LOCAL AUTHORITY BOUNDARY

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: **DCO EXAMINATION**

Status: **A4**

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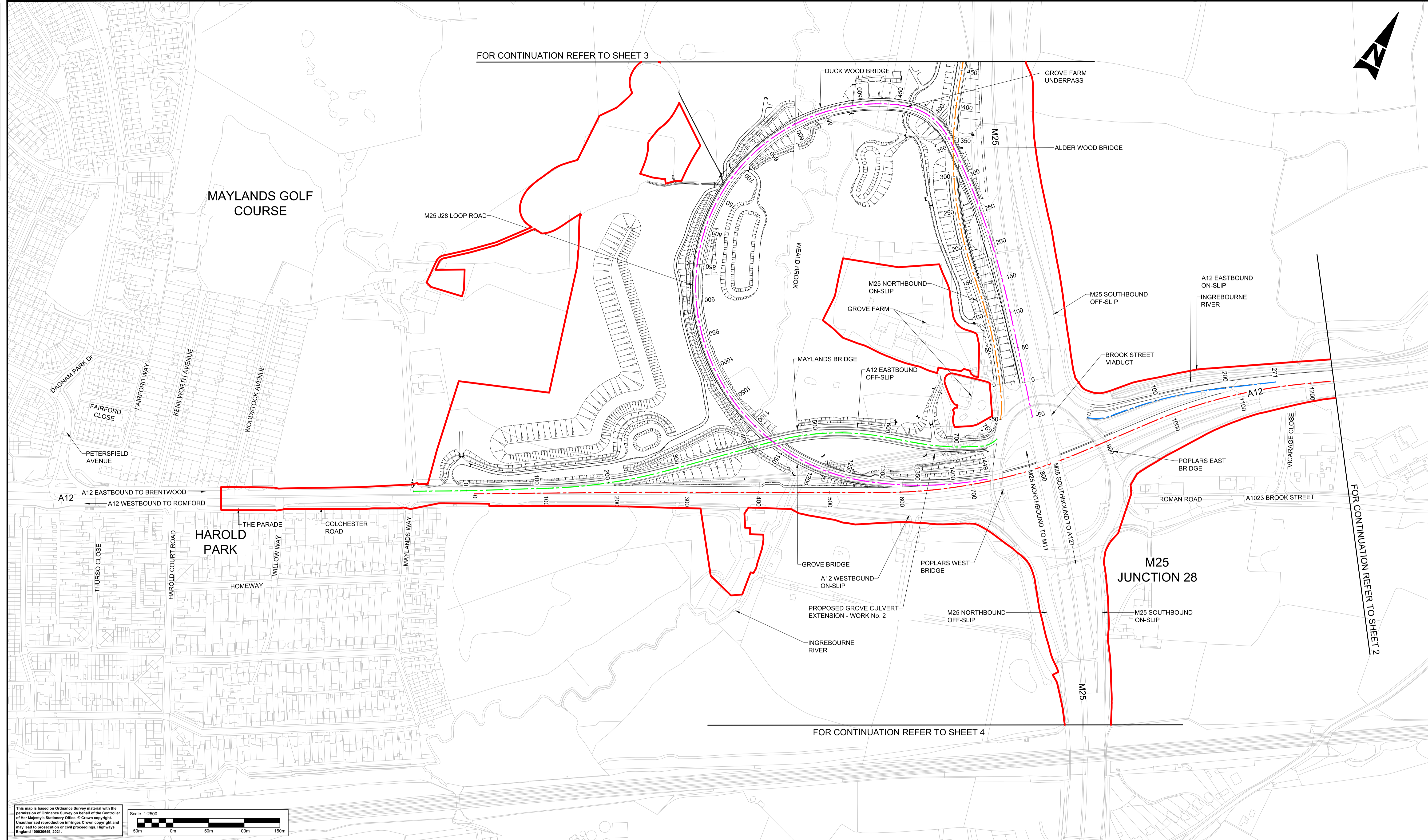
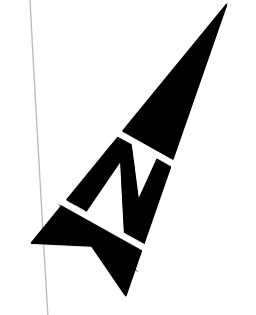
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Project Title	M25 junction 28 improvement scheme	
Drawing Title	LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) KEY PLAN	
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FOR CONTINUATION REFER TO SHEET 3



FOR CONTINUATION REFER TO SHEET 2

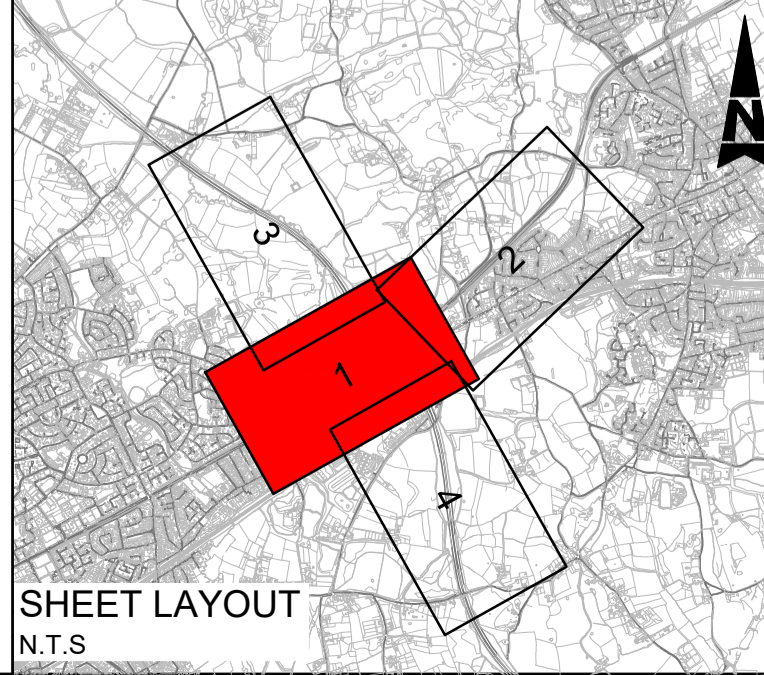
FOR CONTINUATION REFER TO SHEET 4

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Scale 1:2500

- Notes**
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 - These plans should be read in conjunction with the Engineering Section drawings (application document reference TR010029/APP/2.8).

- Legend:**
- Development Consent Order (DCO) boundary
 - Scheme layout (shown for illustrative purposes)
 - A12 Mainline Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 1 to 3
 - A12 Eastbound Off-Slip Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 4 to 5
 - A12 Eastbound On-Slip Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 6
 - M25 Northbound On-Slip Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 7 to 8
 - M25 J28 Loop Road Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 9 to 11



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: DCO EXAMINATION

Status: A4

Project Title: M25 junction 28 improvement scheme

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Client: Working on behalf of **highways england**

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90-96 Victoria Road
Chelmsford
Essex CM1 1QU
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Fax: +44 (0)1245 345010
www.atkinsglobal.com

Drawing Title: LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) SECTION LOCATION PLAN SHEET 1 OF 4

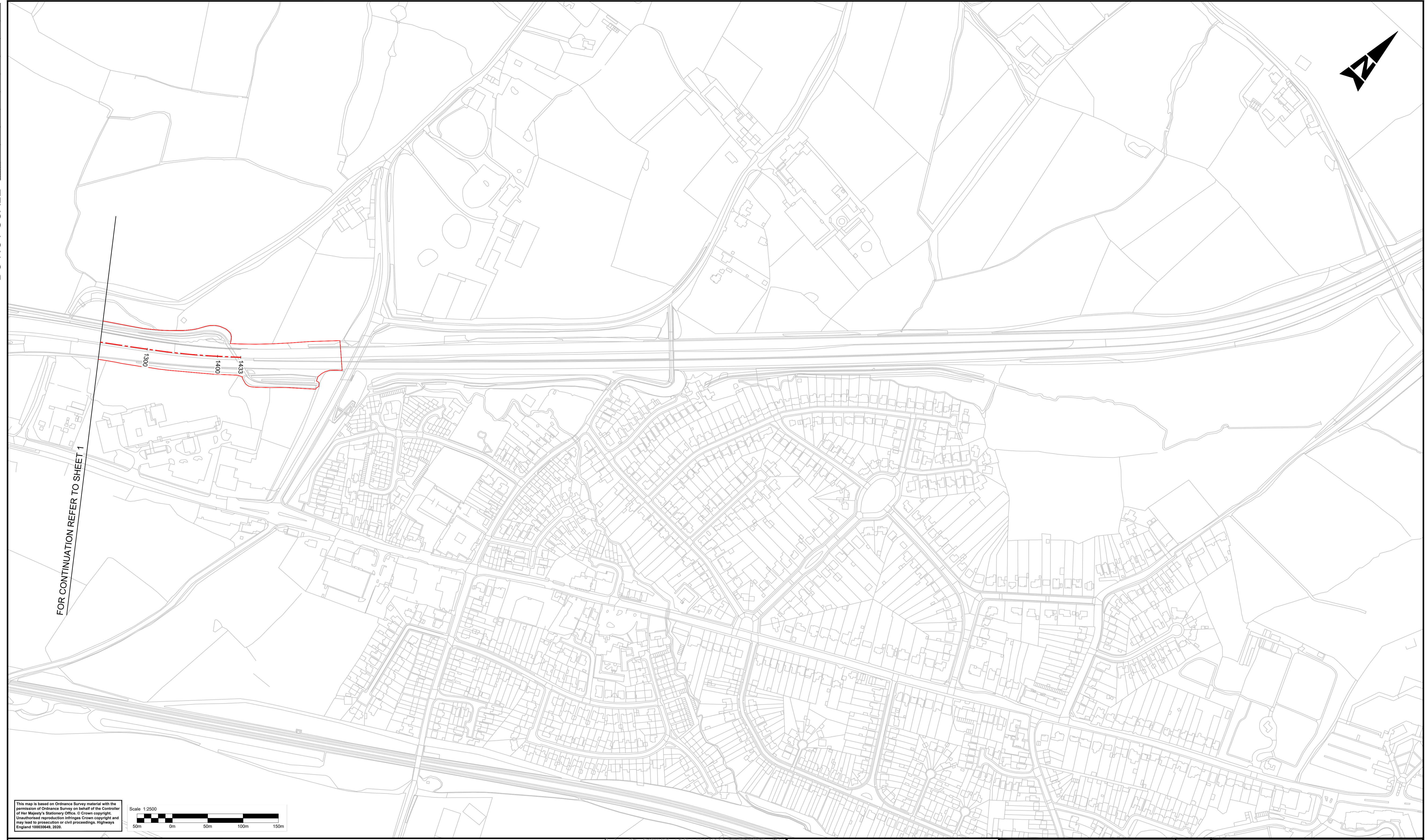
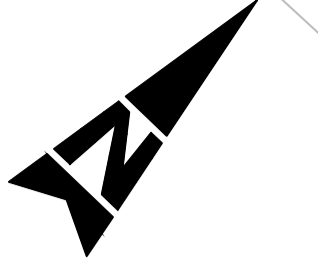
Drawing Number: TR010029/APP/2.8

Rev: 2

HE PIN: HE551519 | Scale: 1:2500 | Original Size: A1

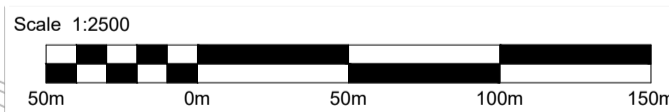
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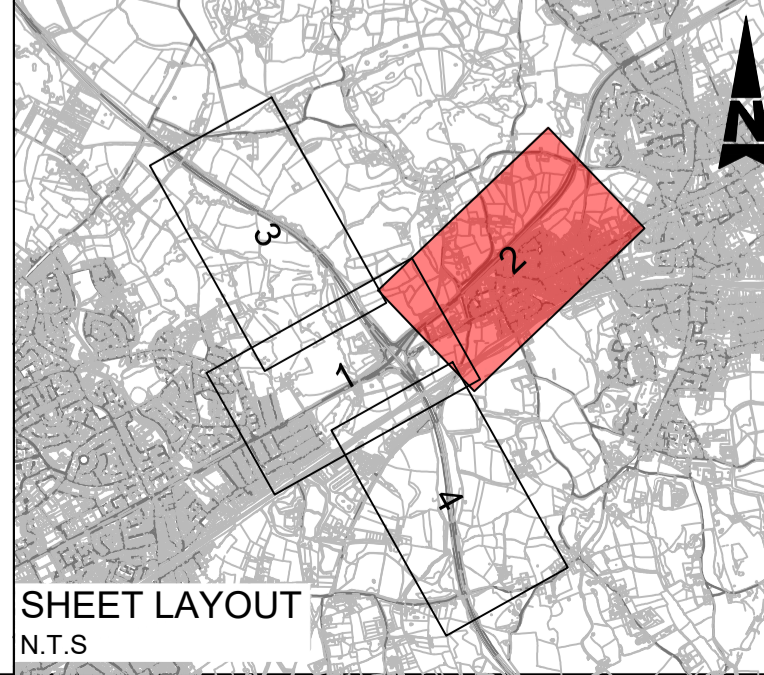
FOR CONTINUATION REFER TO SHEET 1

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- Notes**
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- Legend:**
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 - - - A12 Eastbound On-Slip Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 6
 - - - M25 Northbound On-Slip Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 7 to 8
 - - - M25 J28 Loop Road Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 9 to 11



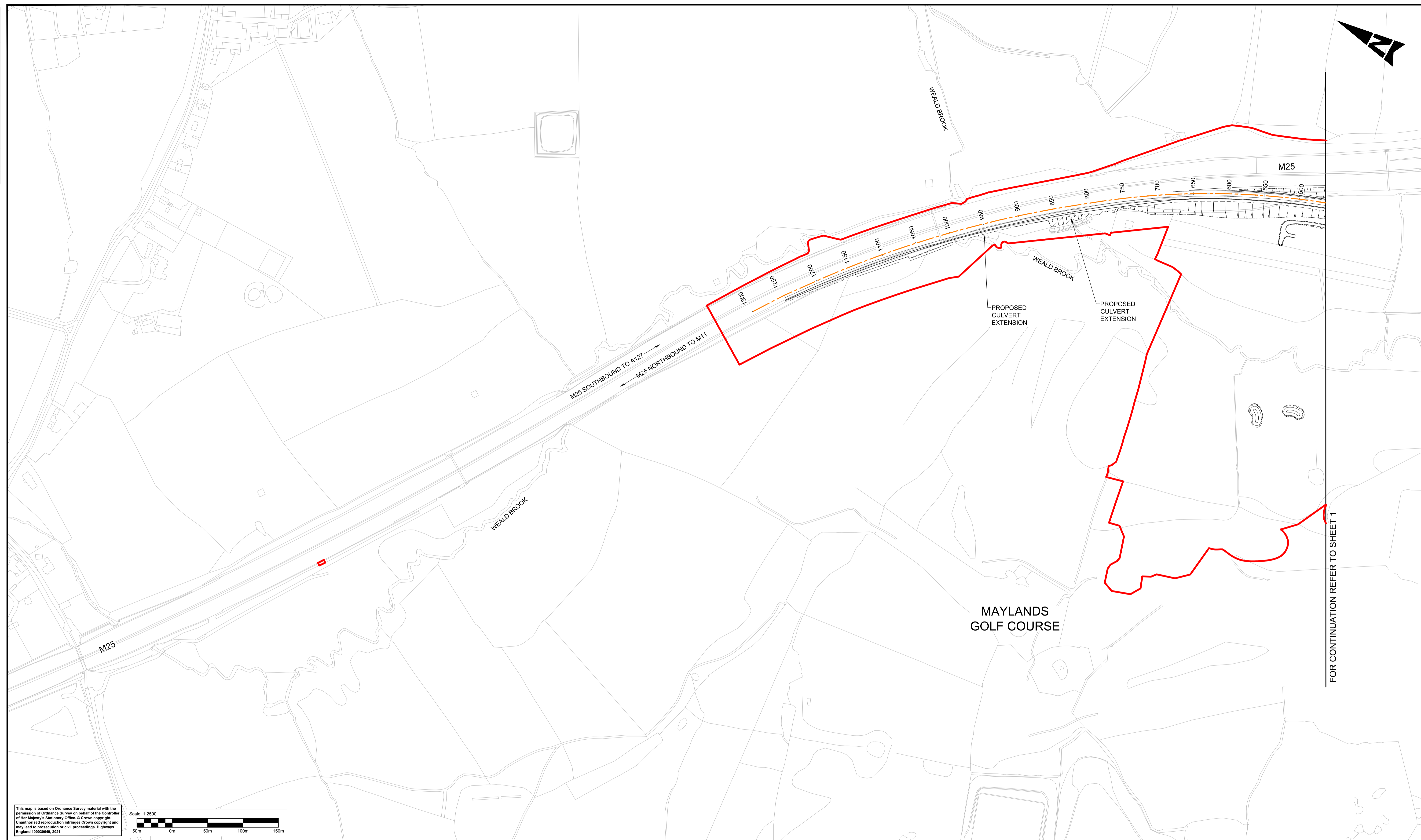
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability	Status	Project Title
DCO APPLICATION	A4	M25 junction 28 improvement scheme
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Client	Working on behalf of	
		Drawing Number TR010029/APP/2.8
HE PIN: HE551519	Scale: 1:2500	Original Size: A1

Drawing Title	Rev.
LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) SECTION LOCATION PLAN SHEET 2 OF 4	0

DO NOT SCALE

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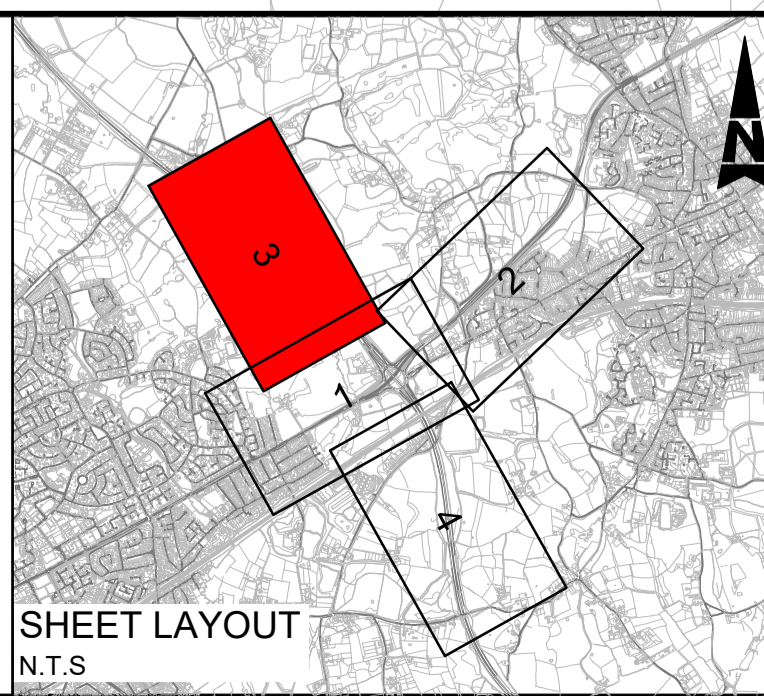
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- Legend:**
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Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Drawing Suitability: DCO EXAMINATION
 Status: A4
 Project Title: M25 junction 28 improvement scheme

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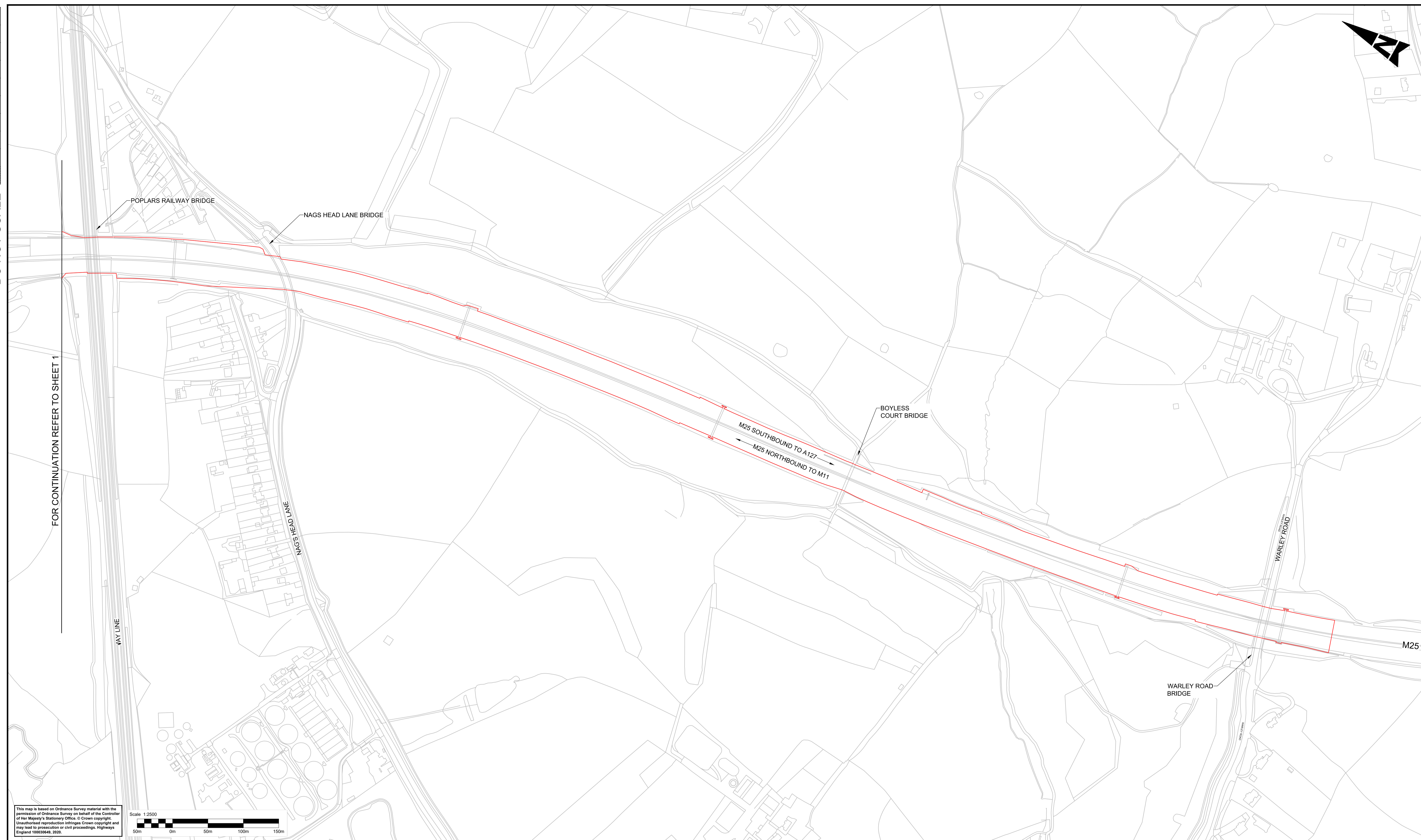
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Drawing Title		LONGITUDINAL SECTION REGULATIONS 5(2)(o) AND 6(2) SECTION LOCATION PLAN SHEET 3 OF 4
Client	Drawing Number	
HE PIN: HE551519	Scale: 1:2500	Original Size: A1

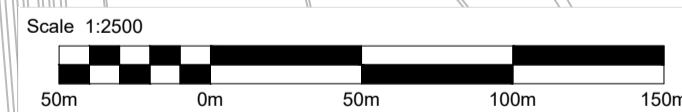
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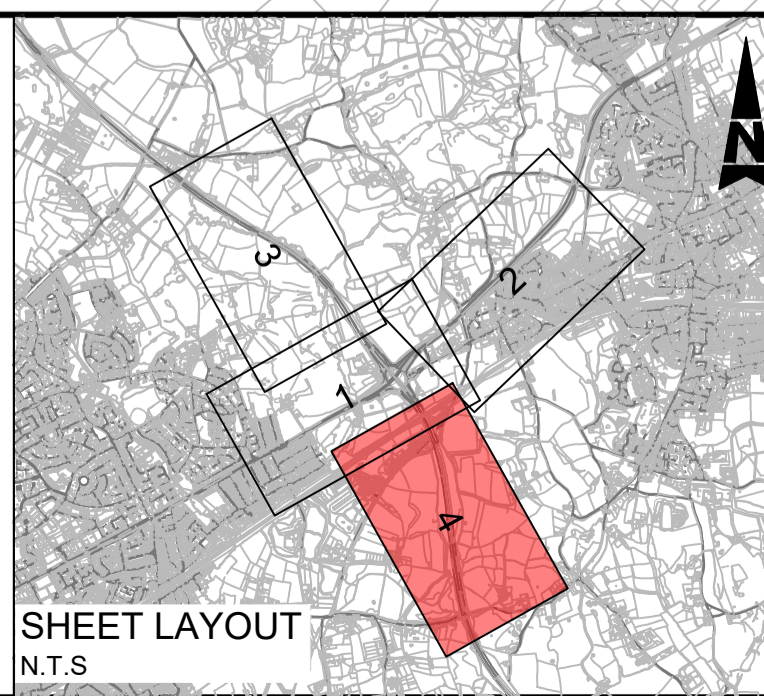
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 - - - M25 J28 Loop Road Chainage - refer to drawing TR010029/APP/2.9 Longitudinal Section sheet 9 to 11



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: DCO APPLICATION

Status: A4

Project Title: M25 junction 28 improvement scheme

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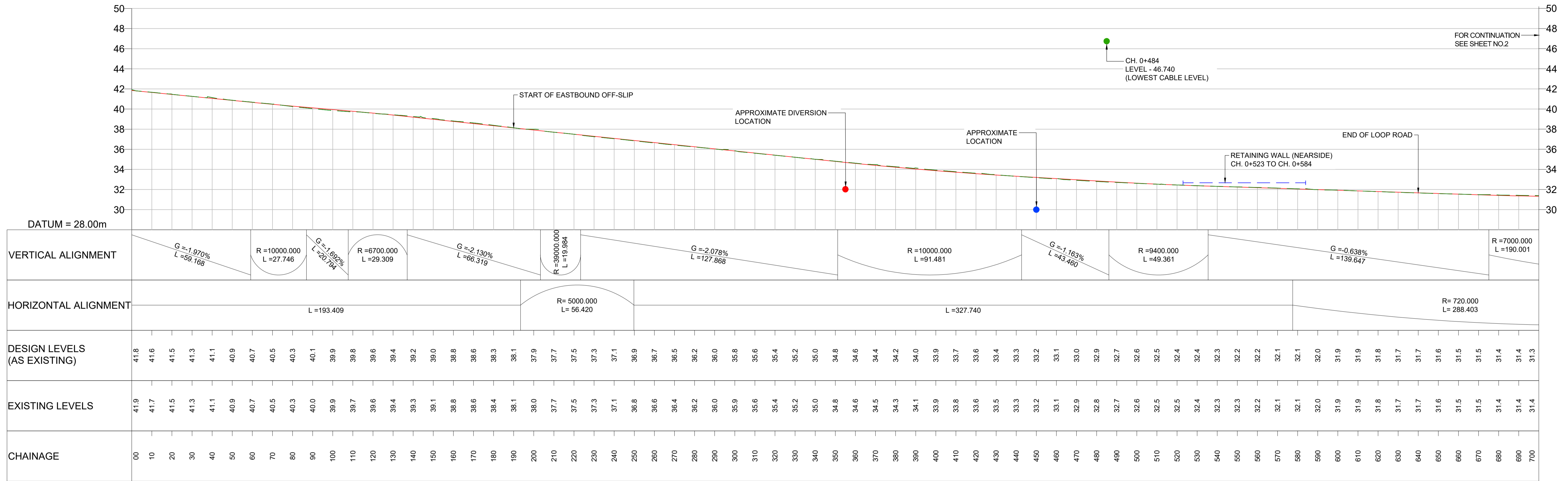
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Drawing Title	LONGITUDINAL SECTION REGULATIONS 5(2)(o) AND 6(2) SECTION LOCATION PLAN SHEET 4 OF 4
Drawing Number	TR010029/APP/2.8
Rev.	0
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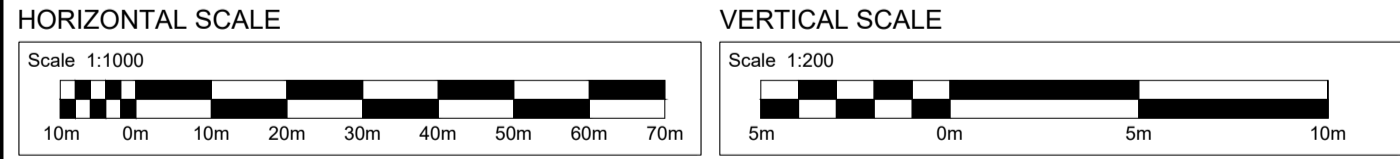
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LONGITUDINAL SECTION A12 MAINLINE (EASTBOUND) (CHAINAGE 00 TO 700)

SCALE = H - 1:1000
V - 1:200



Notes:

- All dimensions are in metres unless otherwise stated. Horizontal and vertical position may vary within the DCO boundary and the Limit of Deviation.
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- Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- ~ ~ ~ Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

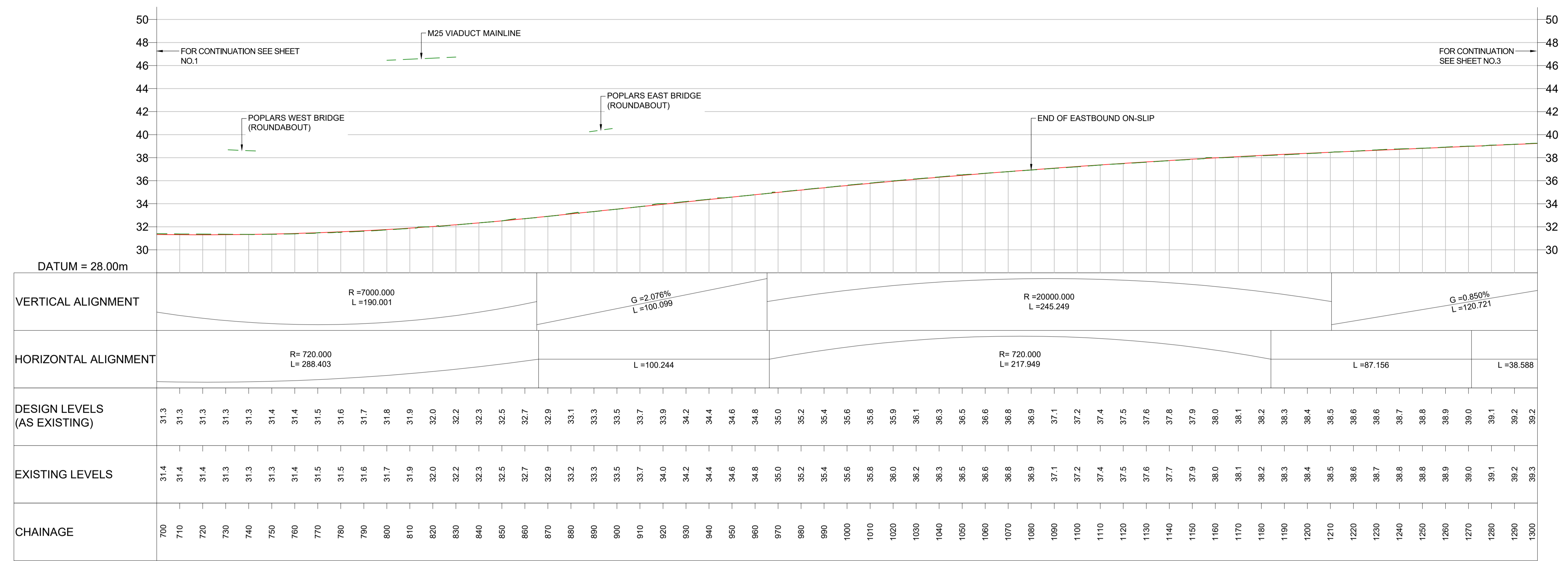
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Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td><td style="font-size: 8px;">Status</td><td style="font-size: 8px;">Revision</td><td style="font-size: 8px;">Drawn</td><td style="font-size: 8px;">Checked</td><td style="font-size: 8px;">Reviewed</td><td style="font-size: 8px;">Authorised</td><td style="font-size: 8px;">Issue Date</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date									<p>Amlyn House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com</p>	
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date											
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Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date											
<p>Client</p> <p>highways england</p>		<p>Drawing Number</p> <p>TR010029/APP/2.8</p>																
<p>HE PIN: HE551519</p>		<p>Scale: AS SHOWN</p>																
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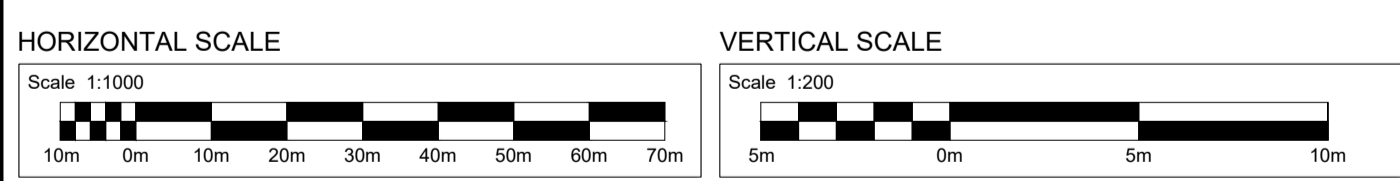
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LONGITUDINAL SECTION A12 MAINLINE (EASTBOUND) (CHAINAGE 700 TO 1300)

SCALE = H - 1:1000
V - 1:200



Notes:

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- Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- ~ ~ ~ Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability	Status	Project Title
DCO APPLICATION	A4	M25 junction 28 improvement scheme
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Client	Drawing Number	Rev.
Working on behalf of	TR010029/APP/2.8	0
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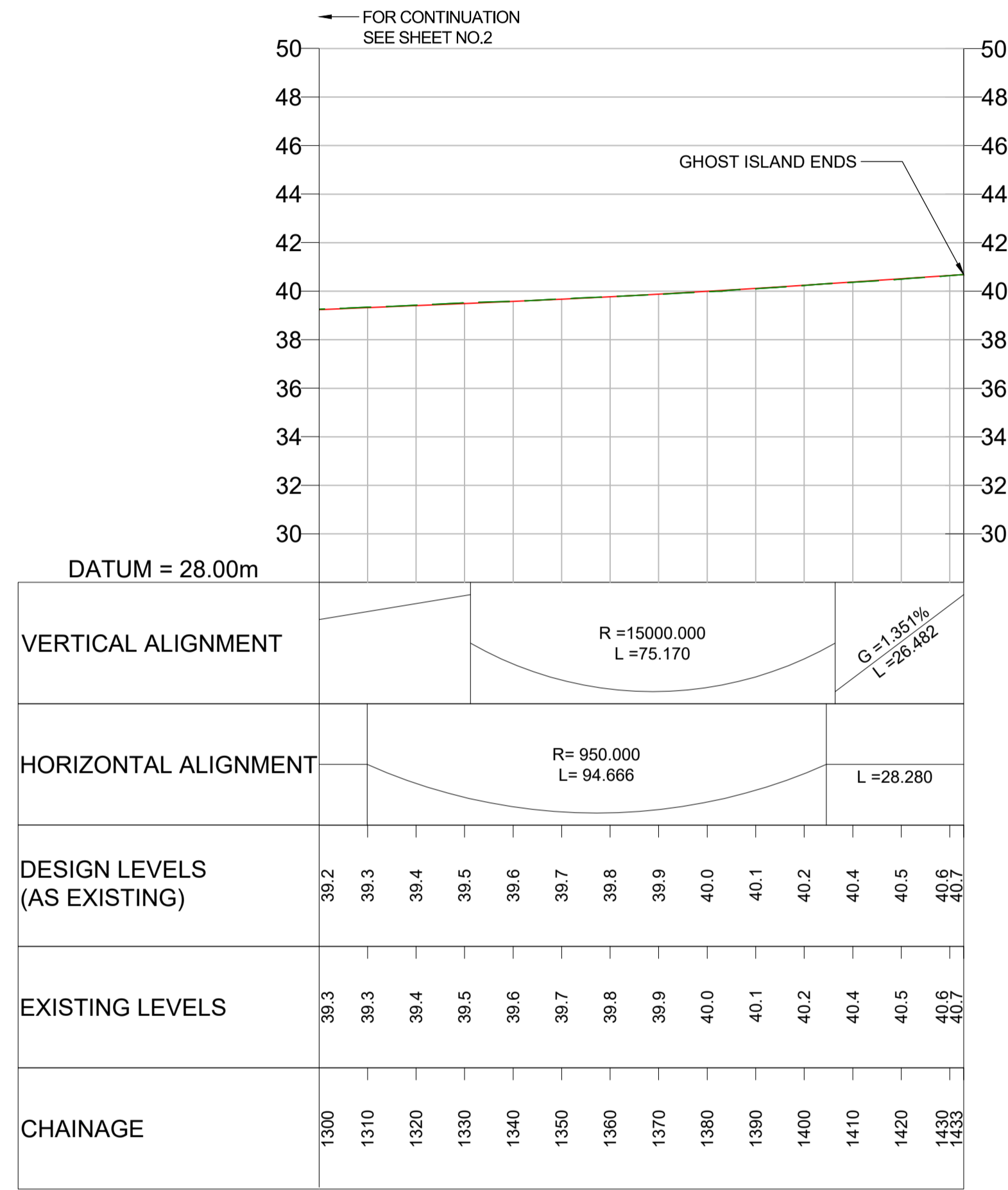
Drawing Title	Drawing Number	Rev.
LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2)	TR010029/APP/2.8	0
SHEET 2 OF 10		

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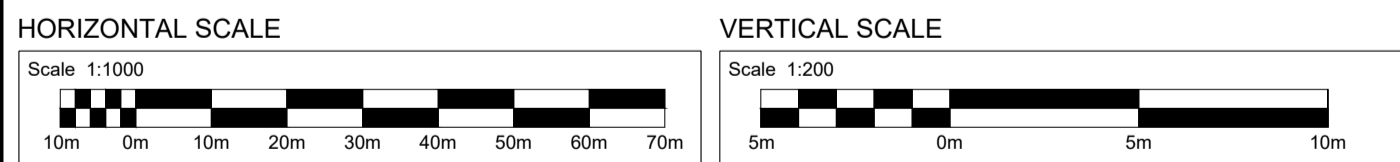
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LONGITUDINAL SECTION A12 MAINLINE (EASTBOUND) (CHAINAGE 1300 TO 1433)

SCALE = H - 1:1000
V - 1:200



Notes:

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Legend

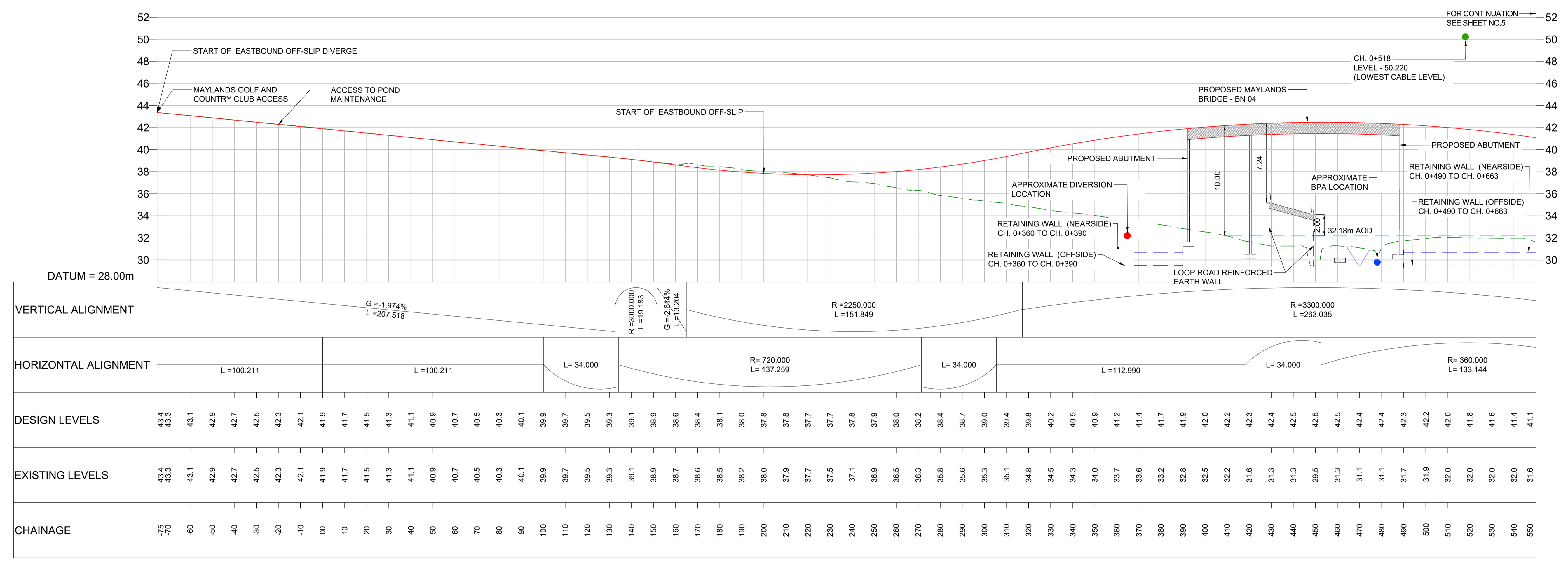
- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

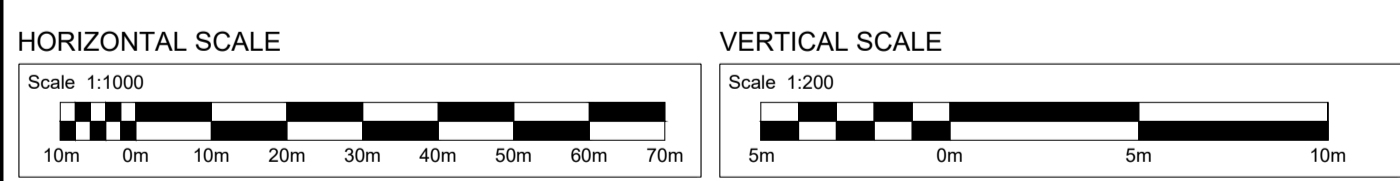
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DCO APPLICATION		A4		M25 junction 28 improvement scheme	
		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com		Drawing Title LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) SHEET 3 OF 10	
Client		Working on behalf of		Drawing Number	
		TR010029/APP/2.8		Rev: 0	
HE PIN: HE551519		Scale: AS SHOWN		Original Size: A1	

DO NOT SCALE

Millimetres



LONGITUDINAL SECTION A12 EASTBOUND OFF-SLIP (CHAINAGE -75 TO 550)
 SCALE = H - 1:1000
 V - 1:200



Notes:

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Legend

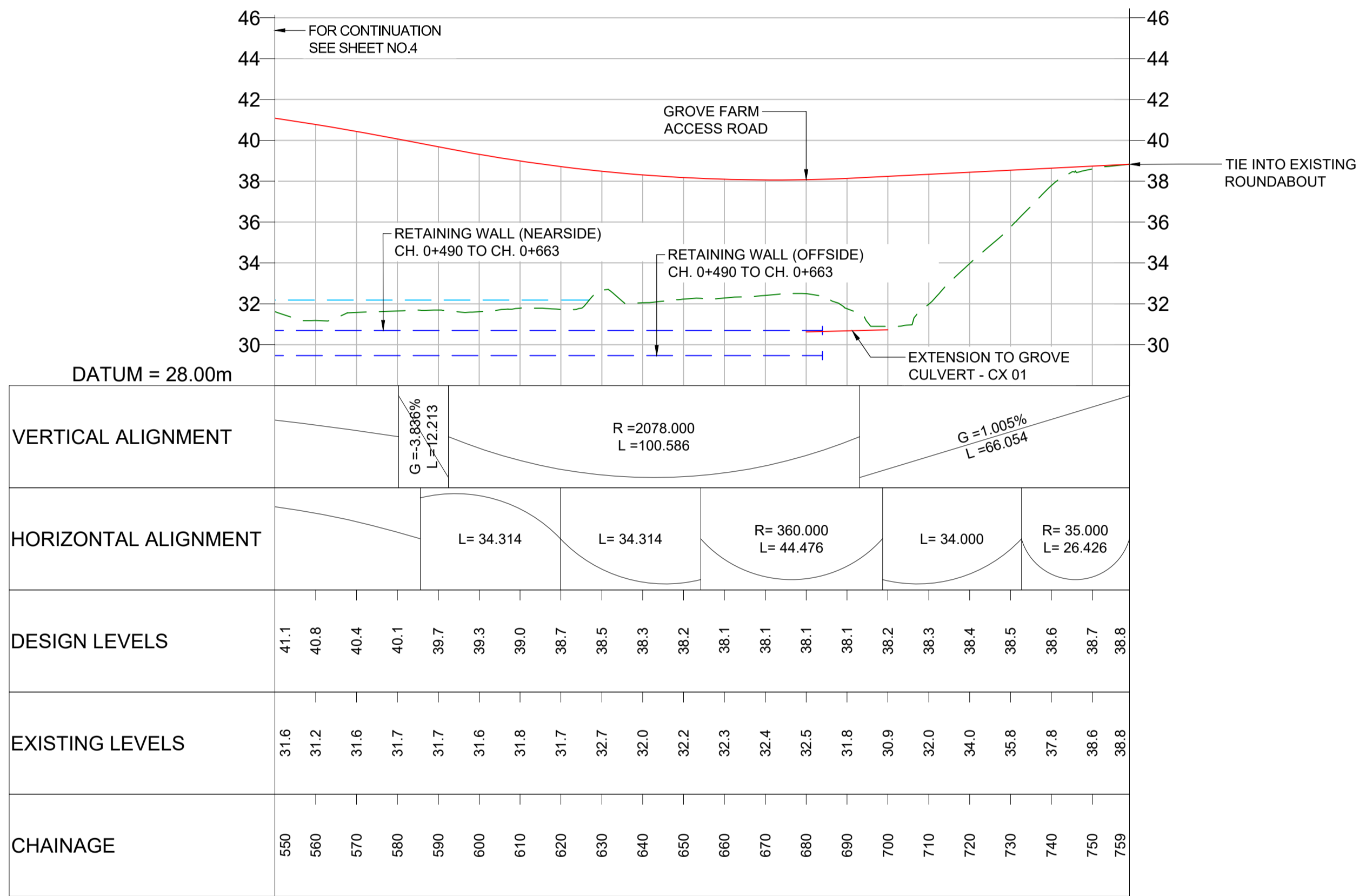
- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- ~ ~ ~ Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

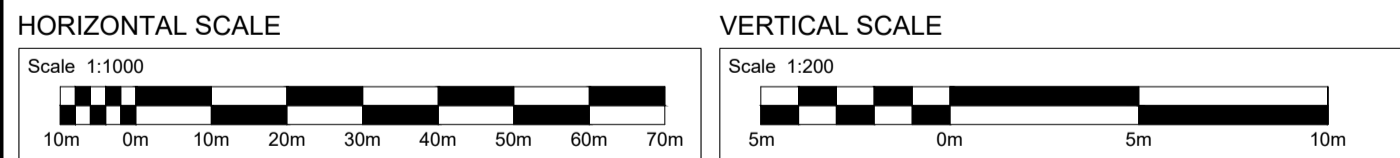
Drawing Suitability		Status		Project Title	
DCO APPLICATION		A4		M25 junction 28 improvement scheme	
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				Drawing Number: TR010029/APP/2.8 Rev: 0	
HE PIN: HE551519		Scale: AS SHOWN		Original Size: A1	

DO NOT SCALE

Millimetres



LONGITUDINAL SECTION A12 EASTBOUND OFF-SLIP (CHAINAGE 550 TO 759)
SCALE = H - 1:1000
V - 1:200



Notes:

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- Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

DCO APPLICATION

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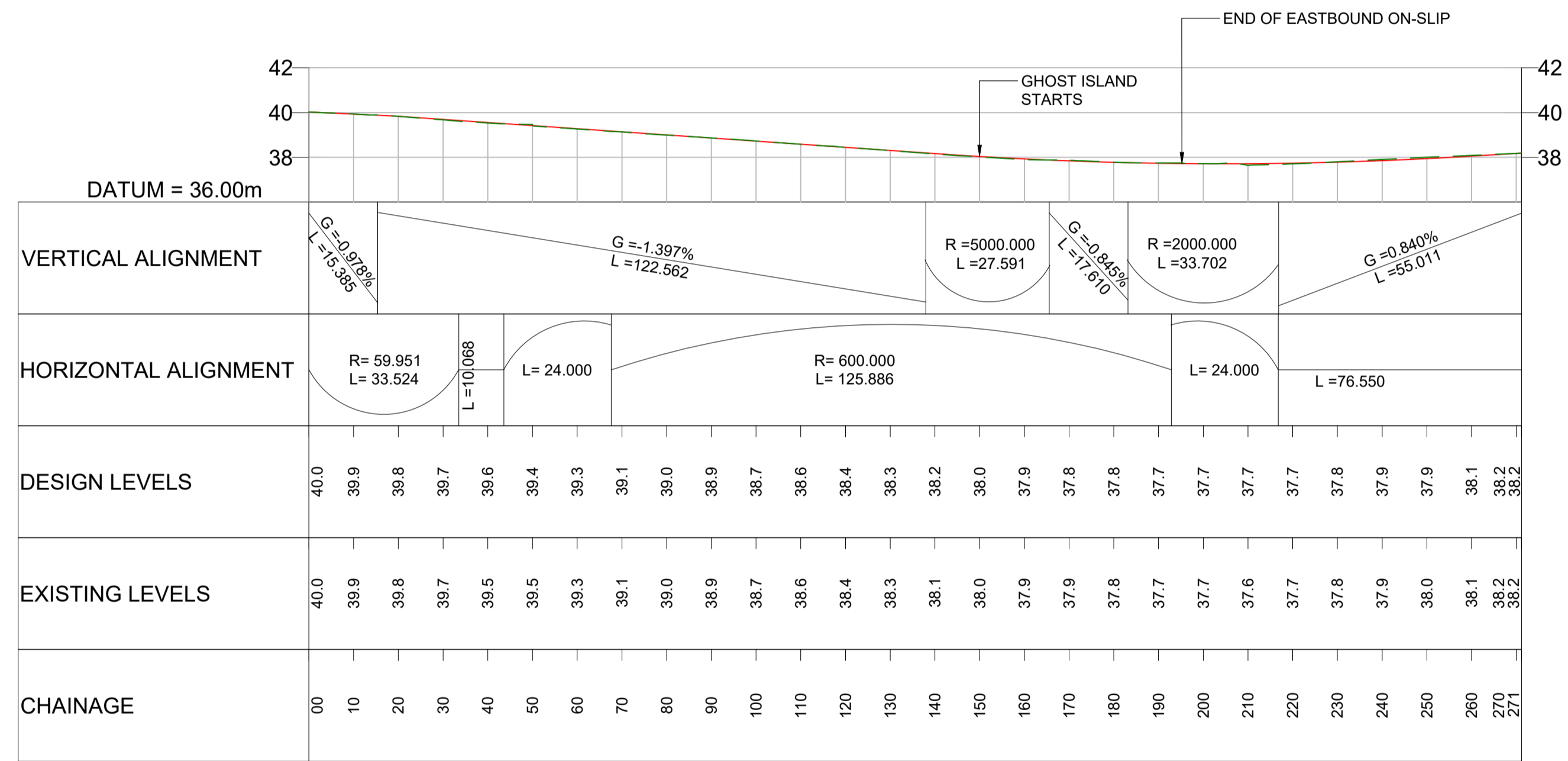
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england

Status	A4	Project Title	M25 junction 28 improvement scheme
Description	LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2)		
	SHEET 5 OF 10		
Client	TR010029/APP/2.8	Rev.	0
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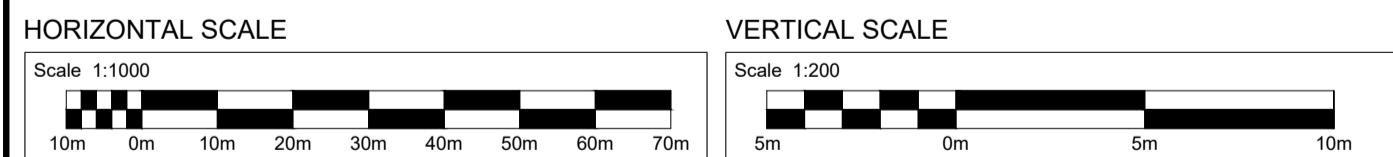
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LONGITUDINAL SECTION A12 EASTBOUND ON-SLIP (CHAINAGE 00 TO 271)

SCALE = H - 1:1000
V - 1:200



Notes:

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Legend

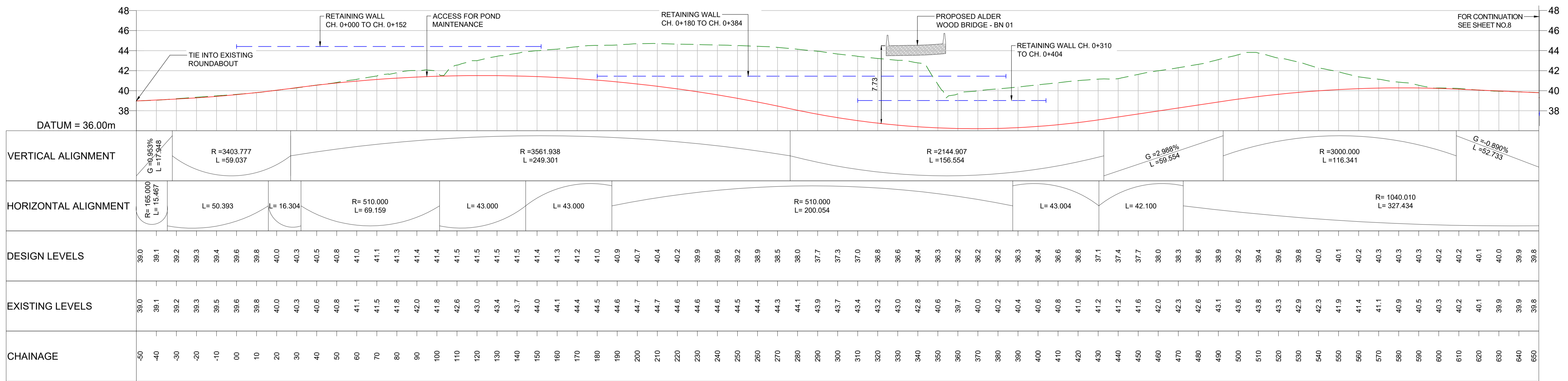
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- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
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- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- ~ ~ ~ Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability		Status		Project Title	
DCO APPLICATION		A4		M25 junction 28 improvement scheme	
		Amlyn House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com		Drawing Title LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) SHEET 6 OF 10	
Client		Drawing Number		Rev.	
		TR010029/APP/2.8		0	
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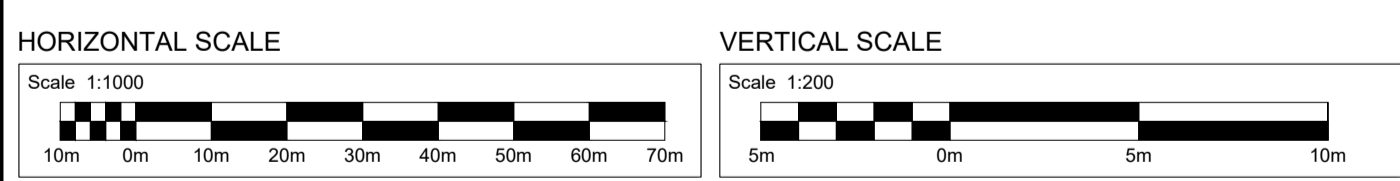
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Millimetres



LONGITUDINAL SECTION M25 NORTHBOUND ON-SLIP (CHAINAGE -50 TO 650)

SCALE = H - 1:1000
V - 1:200



Notes:

- All dimensions are in metres unless otherwise stated. Horizontal and vertical position may vary within the DCO boundary and the Limit of Deviation.
- The retaining walls, bridge decks, culvert and overhead power line details are indicative only.
- For location of longitudinal sections refer to Longitudinal section key plan drawings (application document reference TR010029/APP/2.8)
- Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

- Proposed road
- Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- Proposed retaining wall
- Realigned water course
- Proposed gantry
- Existing gantry (to be removed)

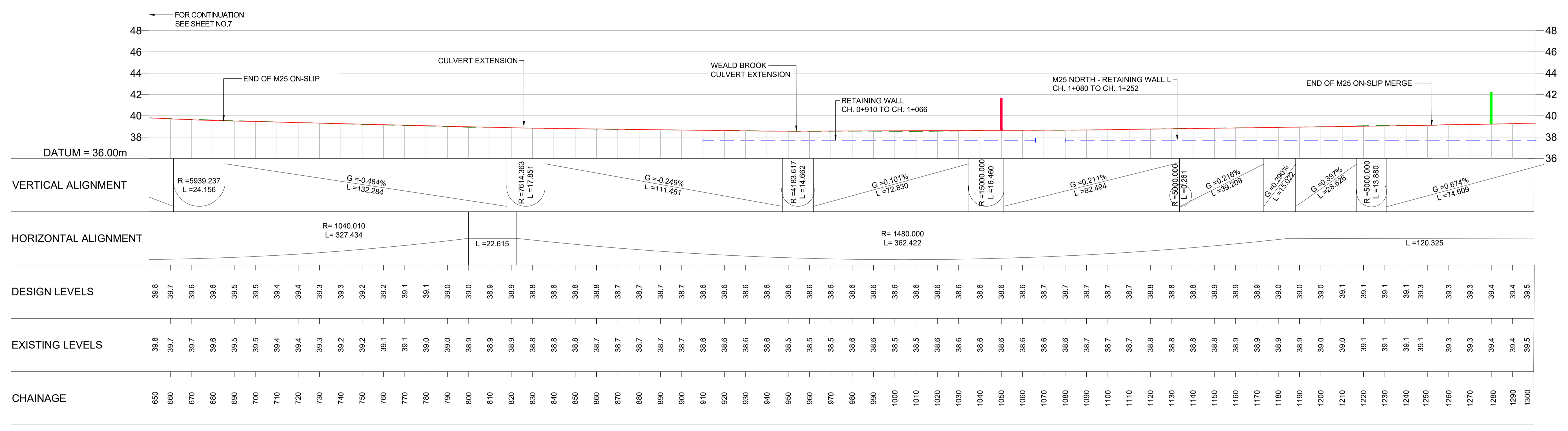
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	DCO APPLICATION
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	A4
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	M25 junction 28 improvement scheme
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2)
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	SHEET 7 OF 10
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	TR010029/APP/2.8
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	0

Client: Working on behalf of highways england

HE PIN: HE551519 | Scale: AS SHOWN | Original Size: A1

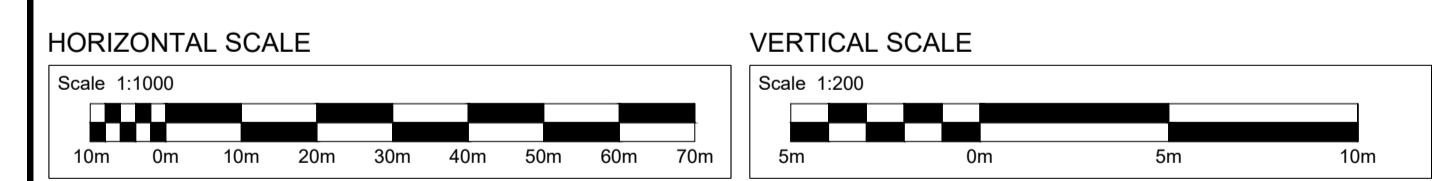
DO NOT SCALE

100
0 10
Millimetres



LONGITUDINAL SECTION M25 NORTHBOUND ON-SLIP (CHAINAGE 650 TO 1300)

SCALE = H - 1:1000
V - 1:200



Notes:

- All dimensions are in metres unless otherwise stated. Horizontal and vertical position may vary within the DCO boundary and the Limit of Deviation.
- The retaining walls, bridge decks, culvert and overhead power line details are indicative only.
- For location of longitudinal sections refer to Longitudinal section key plan drawings (application document reference TR010029/APP/2.8)
- Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability: **DCO APPLICATION** Status: **A4**

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Atkins 4th Floor
90-96 Victoria Road
Chelmsford
Essex CM1 1QU
Tel: +44 (0)1245 245245
Fax: +44 (0)1245 345010
www.atkinsglobal.com

Client: **Working on behalf of highways england**

Project Title: **M25 junction 28 improvement scheme**

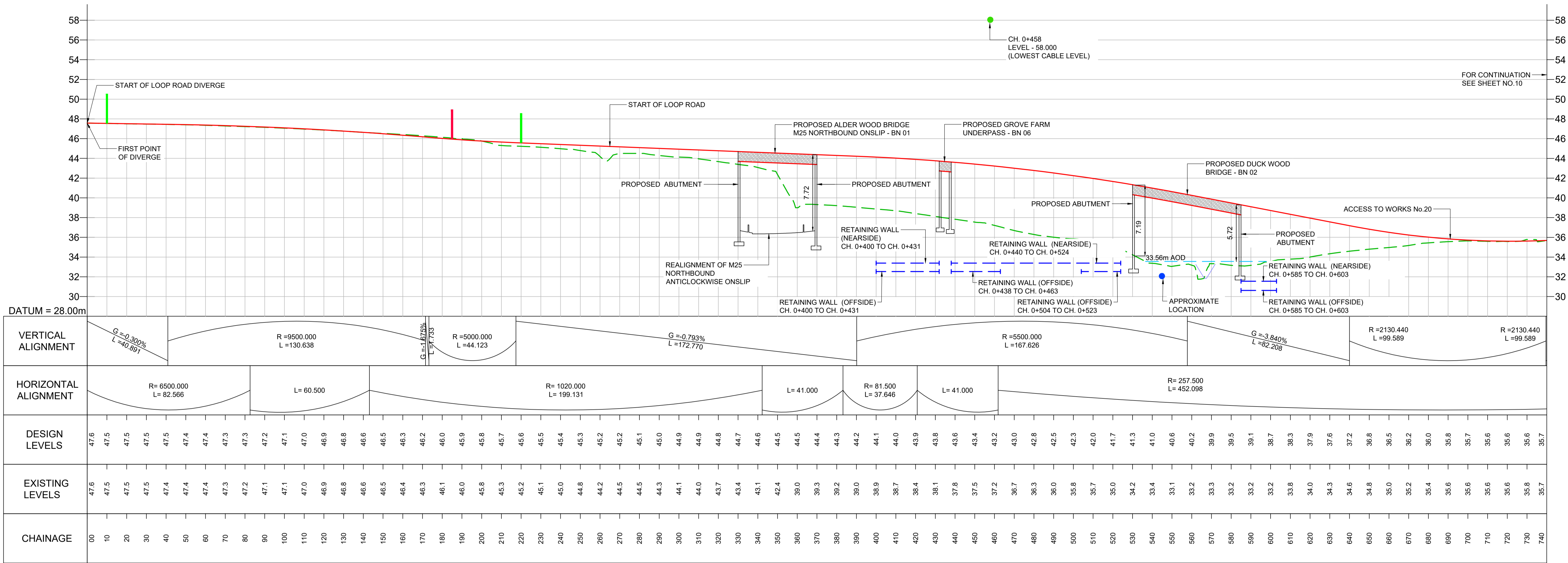
Drawing Title: **LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2)**

SHEET 8 OF 10

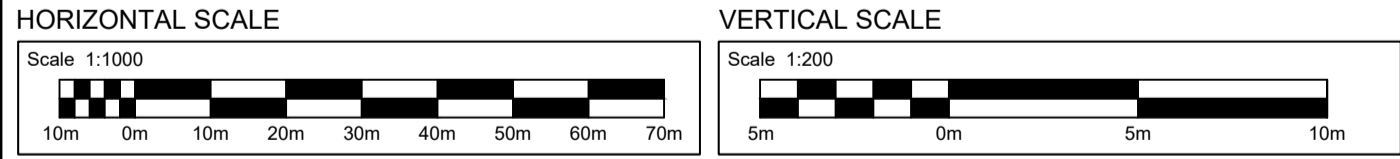
Drawing Number: **TR010029/APP/2.8** Rev: **0**

HE PIN: HE551519 Scale: AS SHOWN Original Size: A1

DO NOT SCALE



LONGITUDINAL SECTION M25 J28 LOOP ROAD (CHAINAGE 00 TO 740)
SCALE = H - 1:1000
V - 1:200



Notes:

- All dimensions are in metres unless otherwise stated. Horizontal and vertical position may vary within the DCO boundary and the Limit of Deviation.
- The retaining walls, bridge decks, culvert and overhead power line details are indicative only.
- For location of longitudinal sections refer to Longitudinal section key plan drawings (application document reference TR010029/APP/2.8)
- Refer to Work Plans (Application document reference TR010029/APP/2.3).

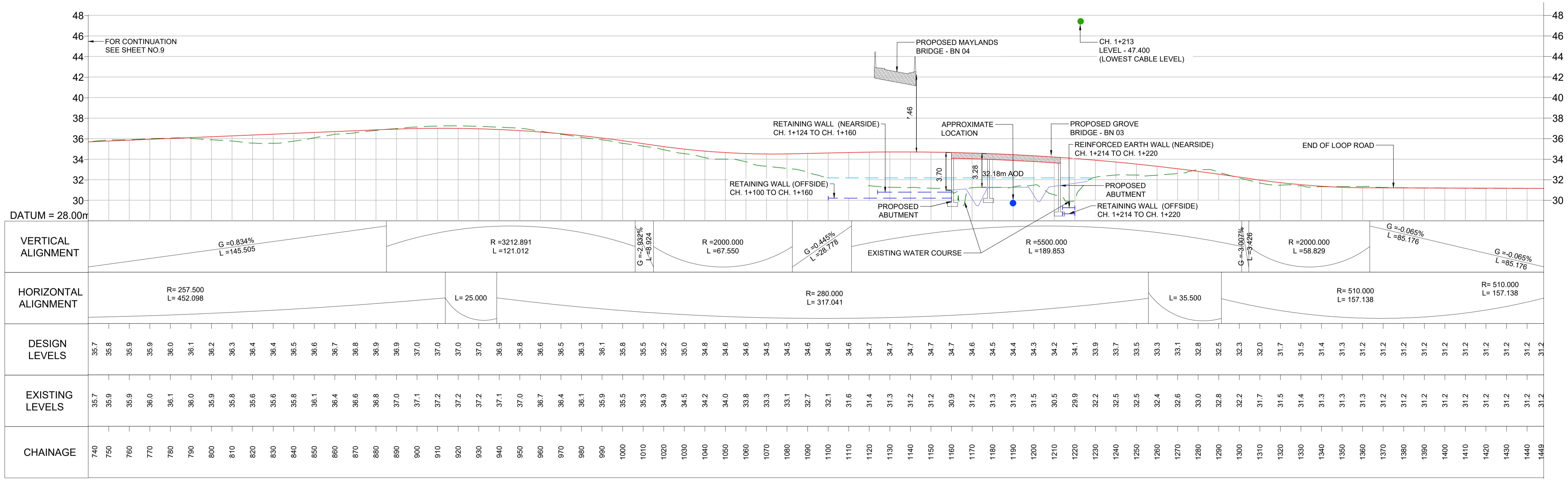
Legend

	Proposed road		Proposed gantry
	Existing ground		Existing gantry (to be removed)
	Proposed LHP gas diversion approximate location		
	Existing overhead power cable		
	1 in 100 years estimated flood level		
	Existing fuel pipeline approximate location		
	Proposed retaining wall		
	Realigned water course		

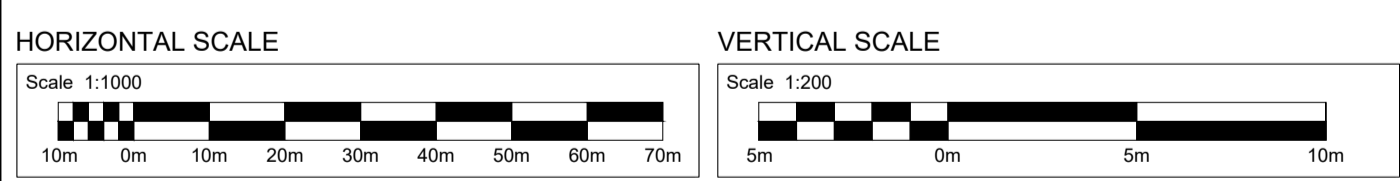
Description		Drawing Suitability		Status		Project Title	
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	
Description		DCO EXAMINATION		A4		M25 junction 28 improvement scheme	
Description		SNC-LAVALIN ATKINS		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com		Drawing Title	
Description		Member of the SNC-Lavalin Group Copyright © SNC Lavalin (2021)		Working on behalf of		LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2)	
Description		Client		highways england		SHEET 9 OF 10	
Description		Client		TR010029/APP/2.8		Drawing Number	
Description		Client		1		Rev.	
Description		Client		HE PIN: HE551519		Scale: AS SHOWN	
Description		Client		Original Size: A1			

DO NOT SCALE

Millimetres



LONGITUDINAL SECTION M25 J28 LOOP ROAD (CHAINAGE 740 TO 1449)
 SCALE = H - 1:1000
 V - 1:200



- Notes:**
- All dimensions are in metres unless otherwise stated. Horizontal and vertical position may vary within the DCO boundary and the Limit of Deviation.
 - The retaining walls, bridge decks, culvert and overhead power line details are indicative only.
 - For location of longitudinal sections refer to Longitudinal section key plan drawings (application document reference TR010029/APP/2.8)
 - Refer to Work Plans (Application document reference TR010029/APP/2.3).

Legend

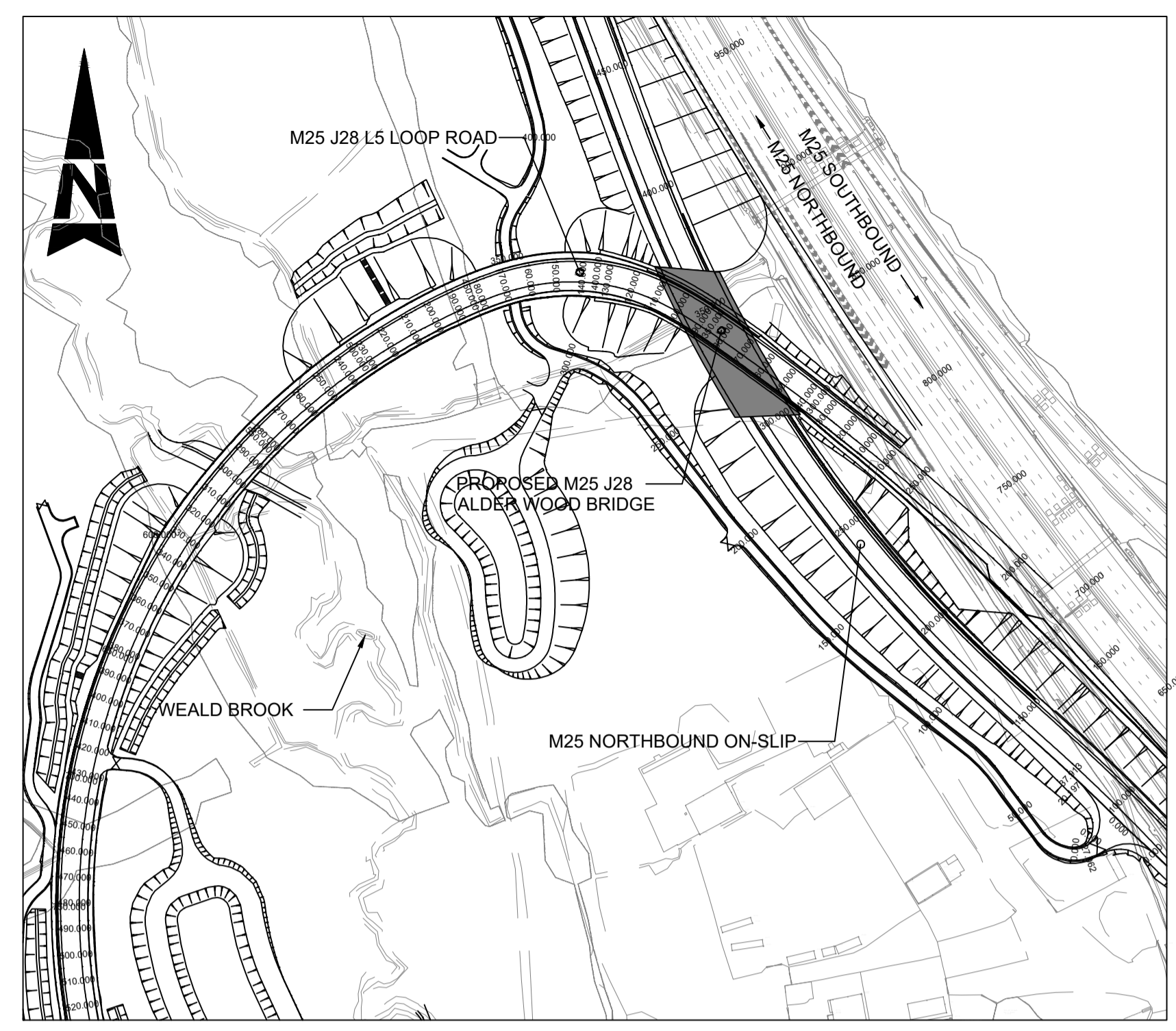
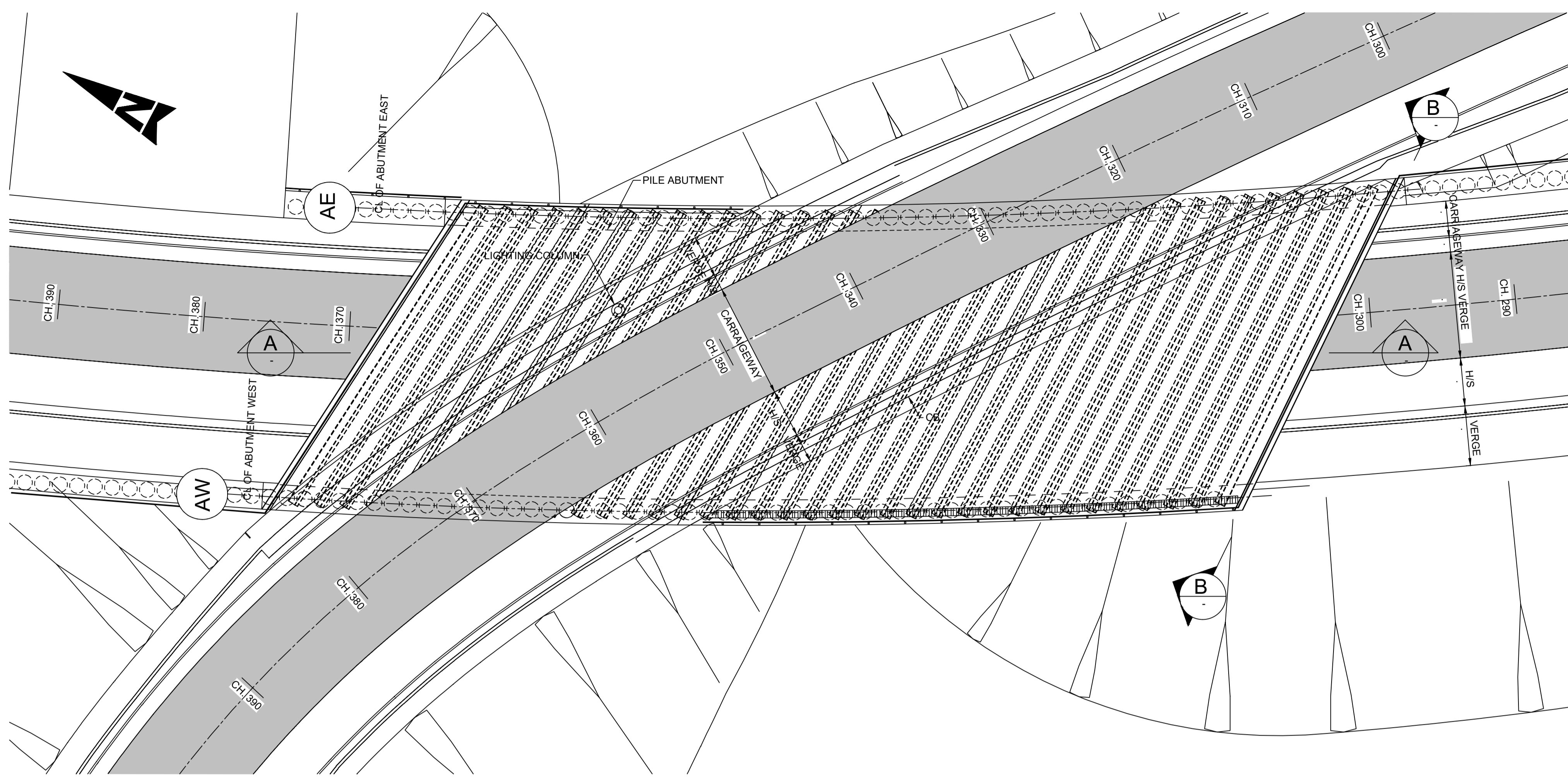
- Proposed road
- - - Existing ground
- Proposed LHP gas diversion approximate location
- Existing overhead power cable
- - - 1 in 100 years estimated flood level
- Existing fuel pipeline approximate location
- - - Proposed retaining wall
- - - Realigned water course
- | Proposed gantry
- | Existing gantry (to be removed)

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability		Status	Project Title
DCO APPLICATION		A4	M25 junction 28 improvement scheme
		Drawing Title LONGITUDINAL SECTION REGULATIONS 5(2)(o) and 6(2) SHEET 10 OF 10	
Client		Drawing Number	Rev.
		TR010029/APP/2.8	0
HE PIN: HE551519		Scale: AS SHOWN	Original Size: A1

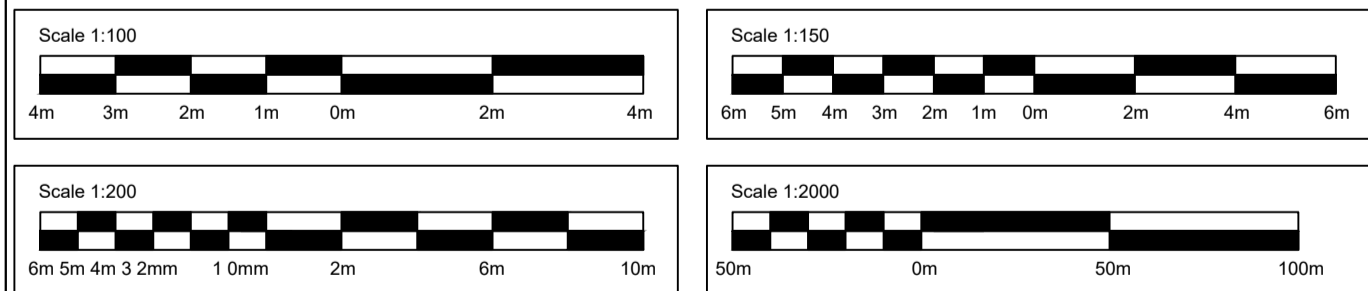
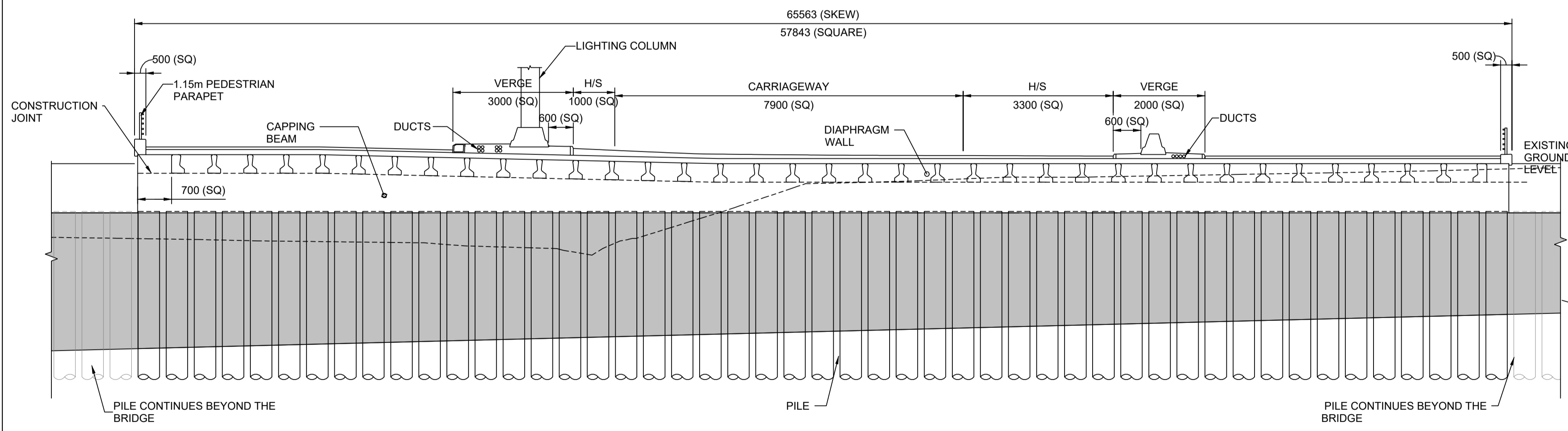
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Millimetres
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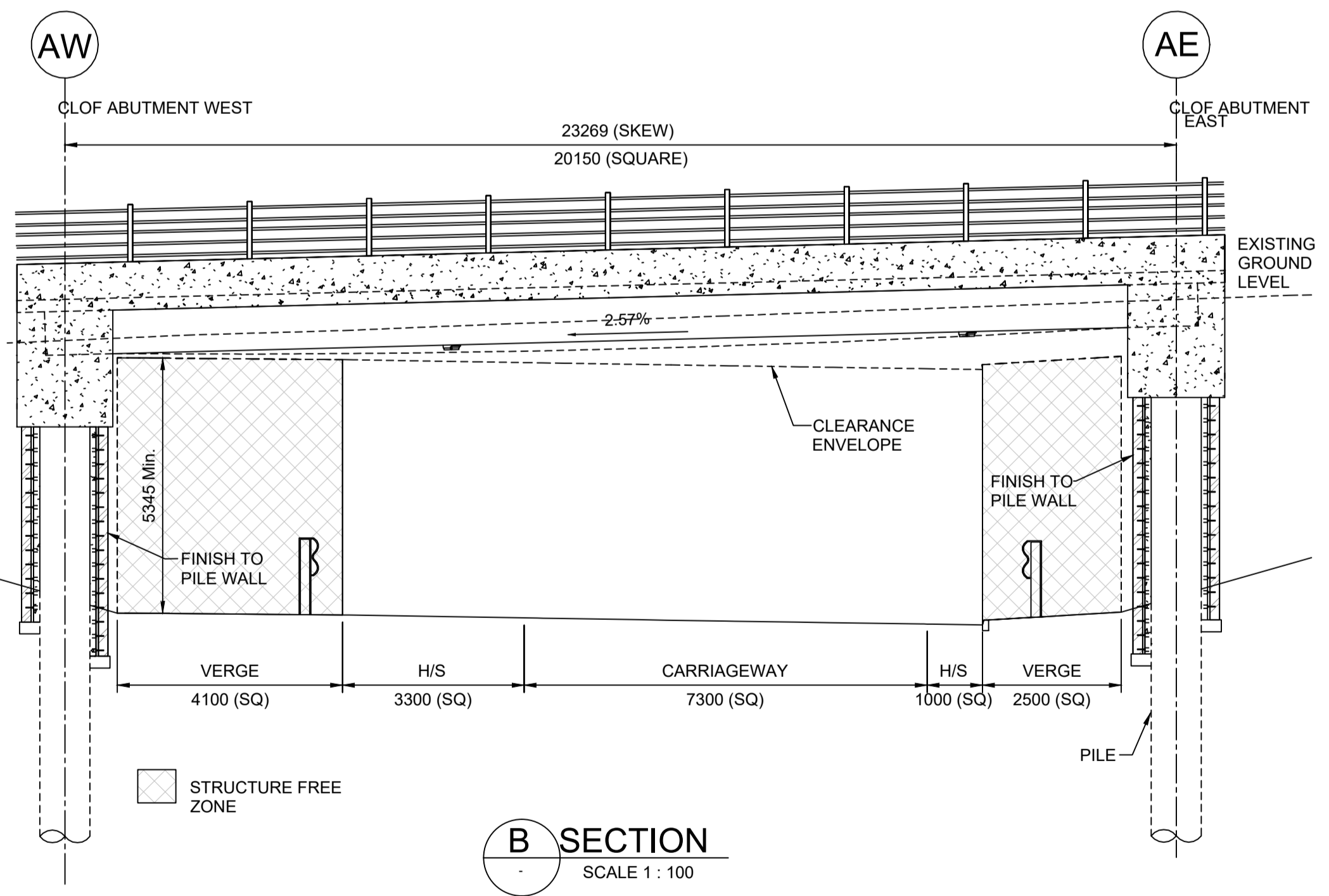


LOCATION PLAN
SCALE 1 : 2000

PLAN ON DECK
SCALE 1 : 200



A SECTION
SCALE 1 : 150



B SECTION
SCALE 1 : 100

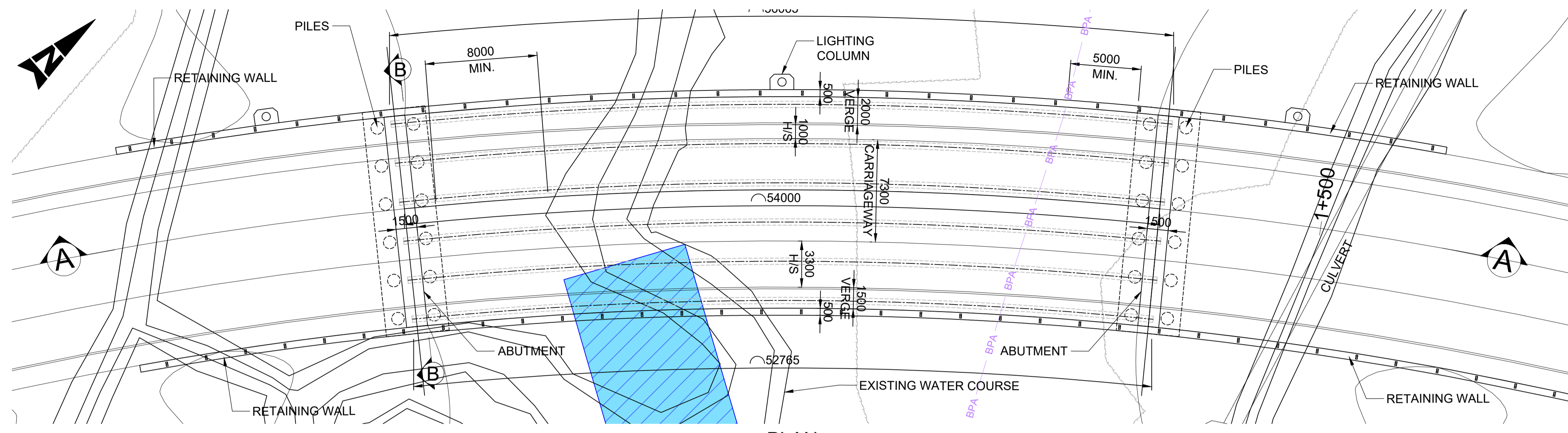
- Notes**
- All dimensions are in millimeters; all levels and chainages are in metres unless noted otherwise.
 - Pile length shall be optimized based on geotech recommendation.
 - The maximum cross fall as per highway typical cross section.
 - The stream behind the east abutment will be diverted.
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

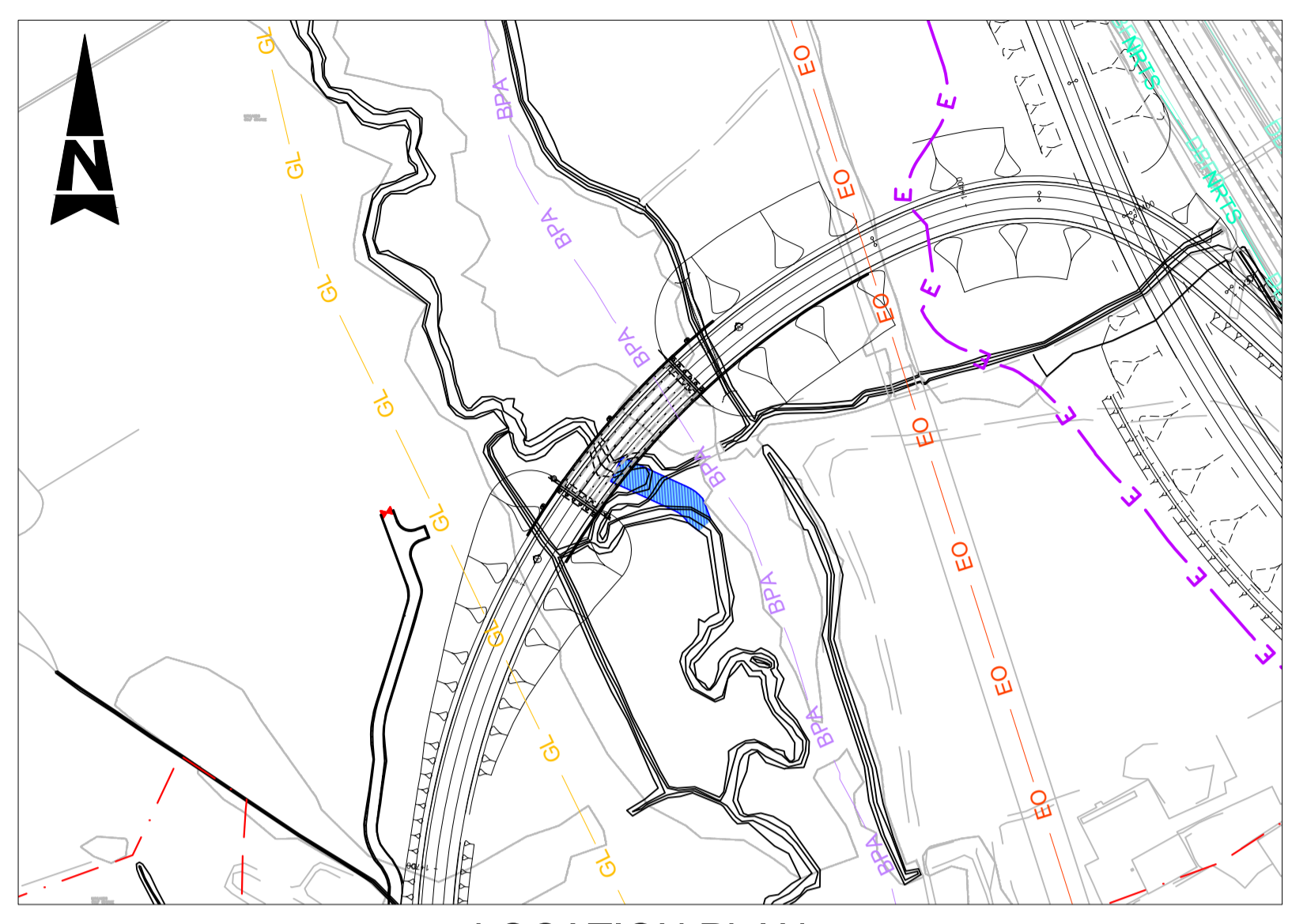
Drawing Subtitle DCO APPLICATION	Status A4	Project Title M25 junction 28 improvement scheme
 Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 Copyright © Atkins Limited (2020) www.atkinsglobal.com		Drawing Title ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) ALDER WOOD BRIDGE SHEET 1 OF 10
Client Working on behalf of highways england		Drawing Number TR10029/APP/2.8
HE PIN: HE551519		Scale: As Shown
Original Size: A1		Rev: 0

DO NOT SCALE

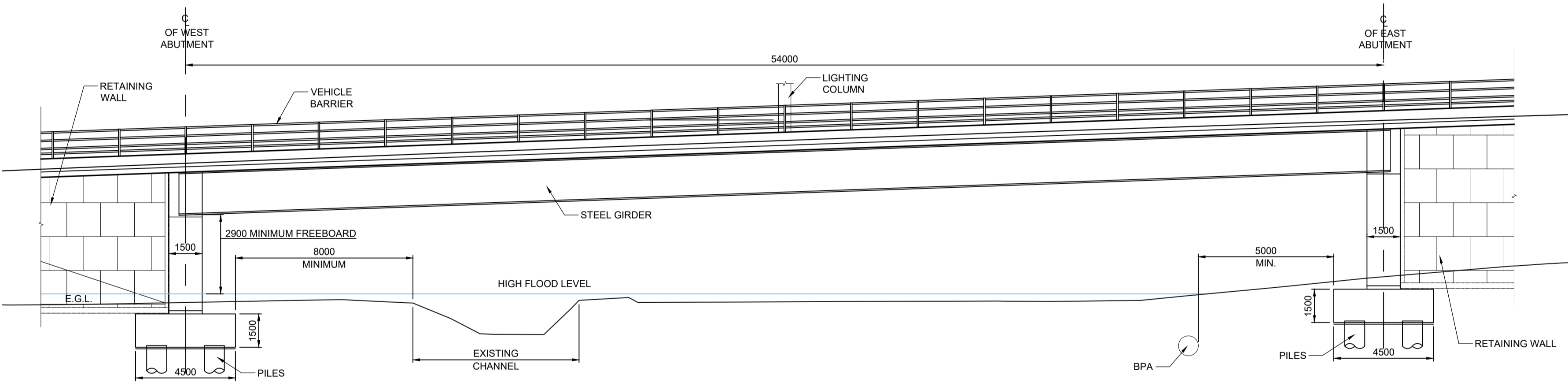
Millimetres
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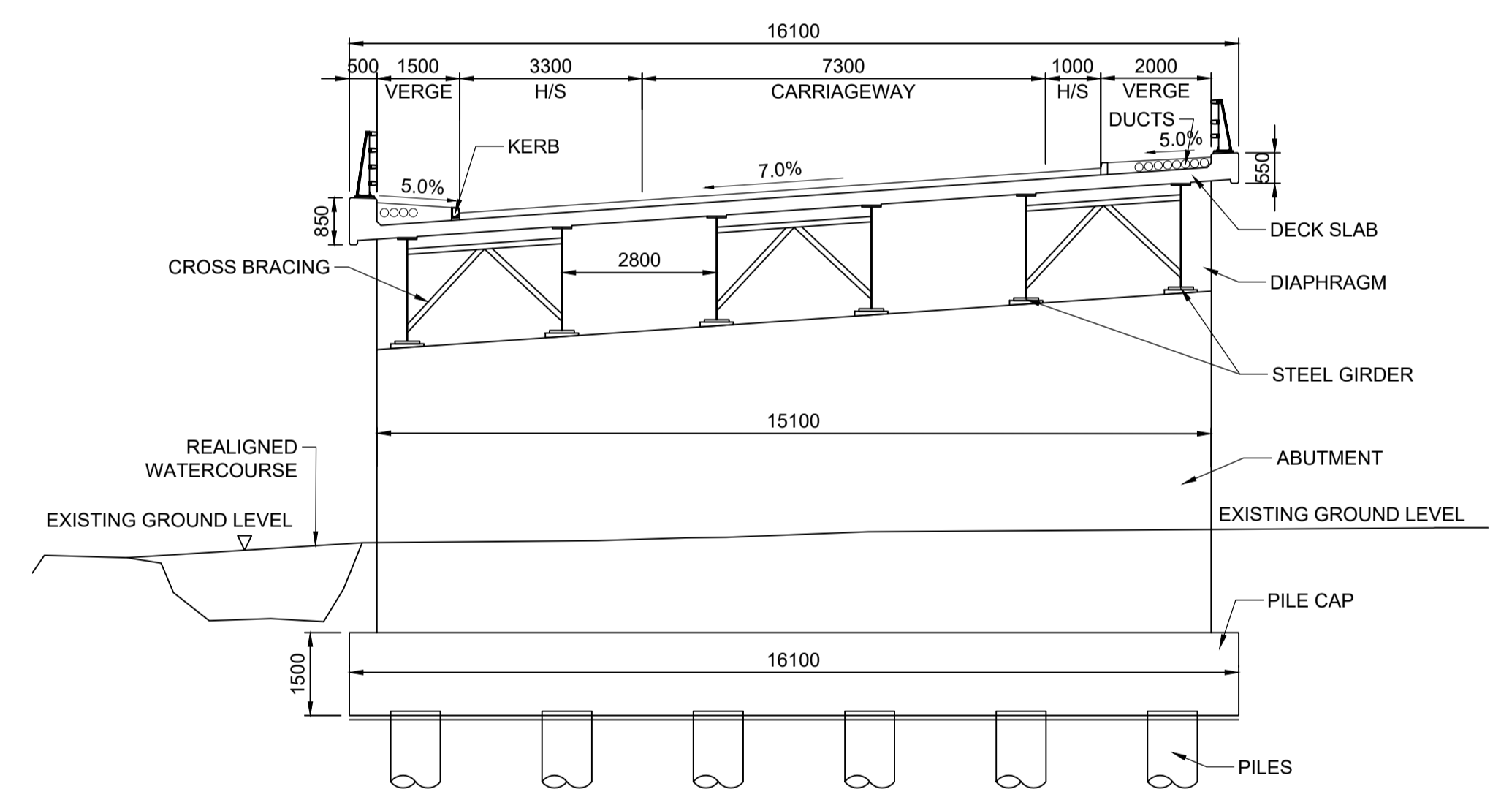
PLAN
SCALE 1:200



LOCATION PLAN
SCALE 1:2000

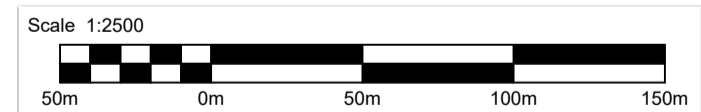


ELEVATION A-A
SCALE 1:150

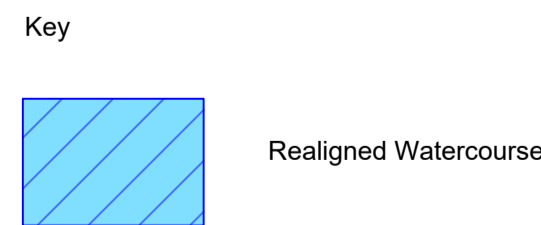


SECTION B-B
SCALE 1:100

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- Notes**
- All dimensions in millimetres unless stated otherwise
 - Full length of piles not shown
 - Drainage not shown
 - The proposed structure will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

DCO EXAMINATION Status: **A4**

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Project Title: **M25 junction 28 improvement scheme**

Drawing Title: **ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) DUCK WOOD BRIDGE SHEET 2 OF 10**

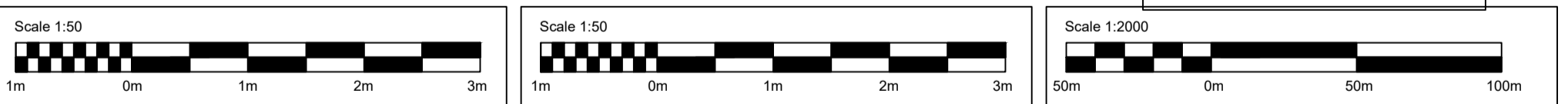
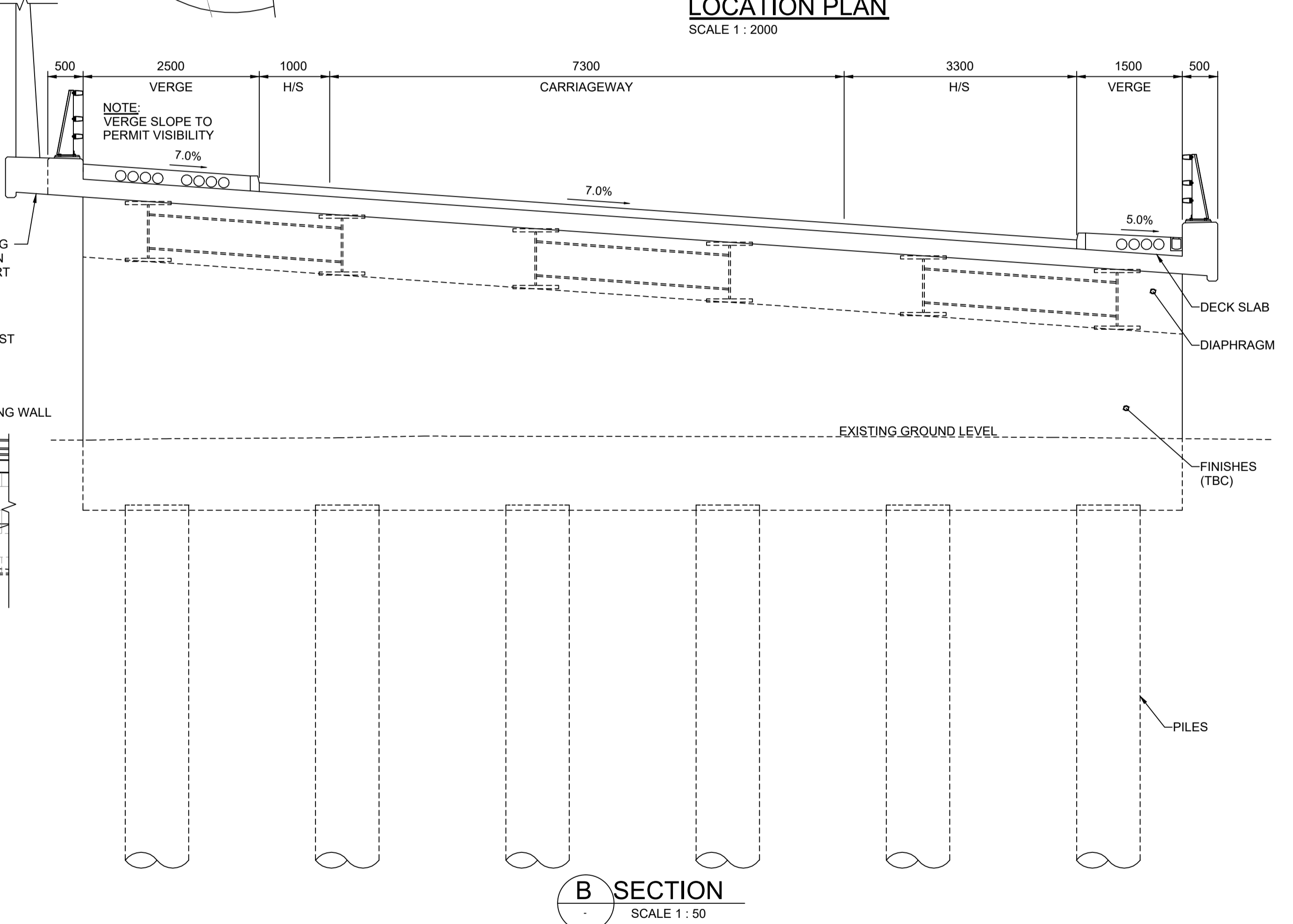
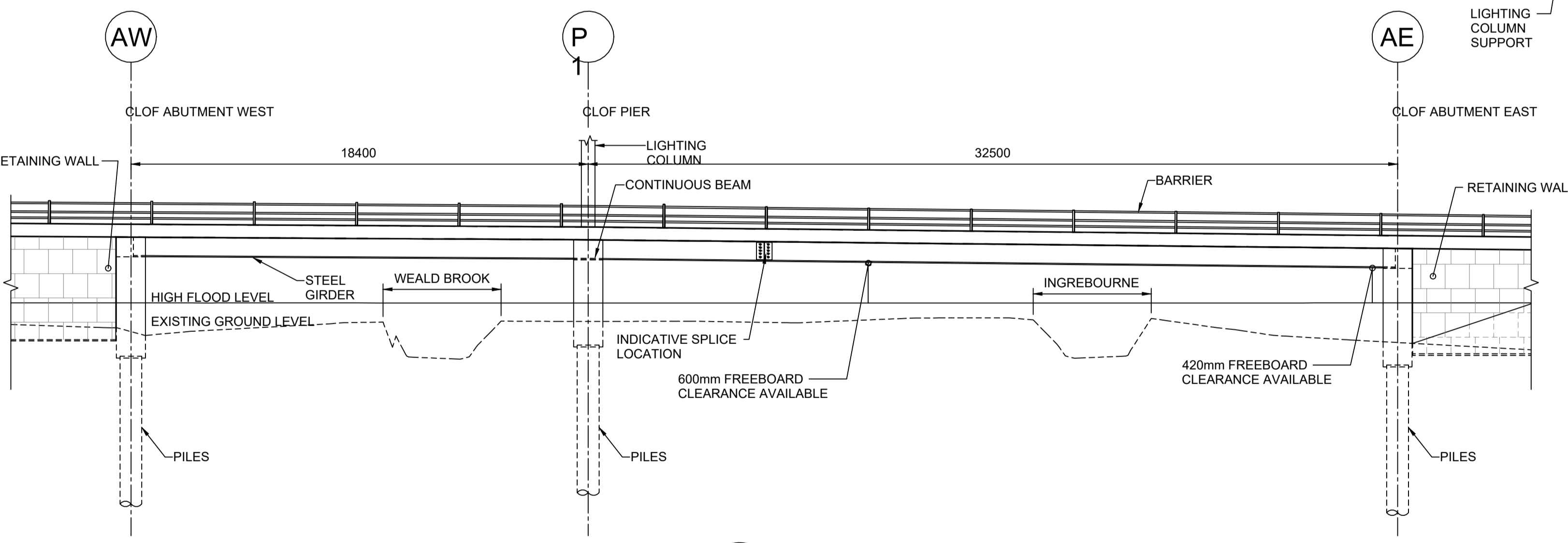
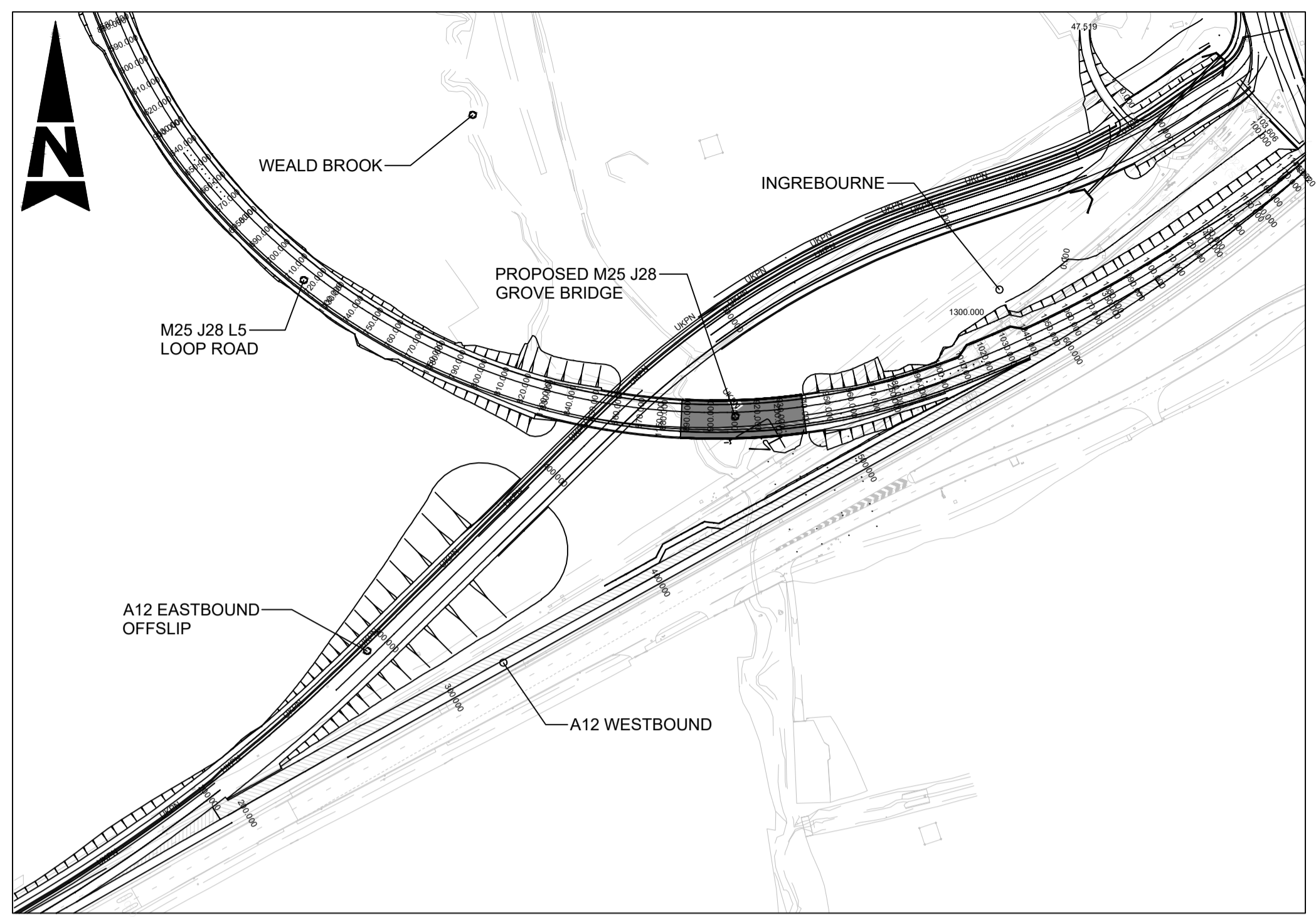
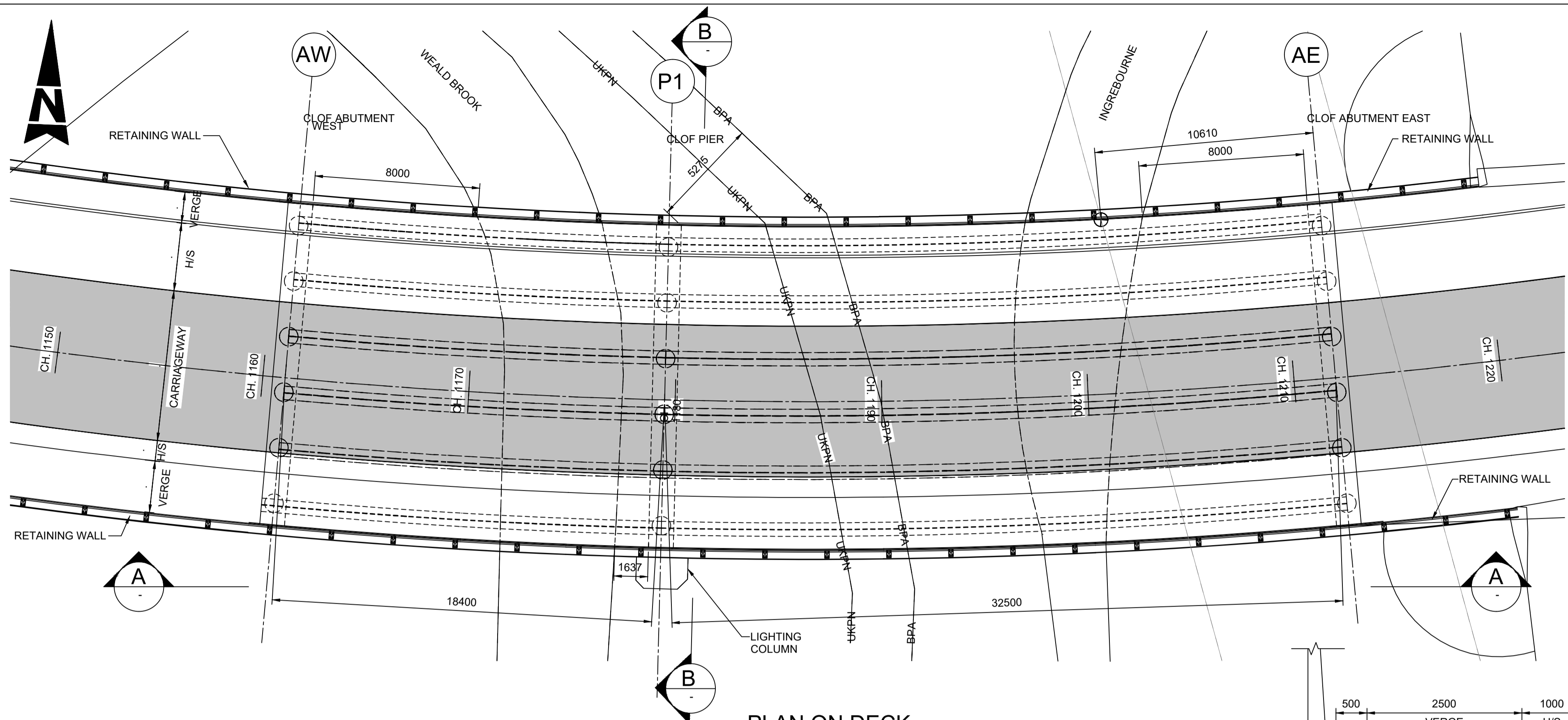
Client: **highways england**

Drawing Number: **TR10029/APP/2.8** Rev: **1**

HE PIN: HE551519 Scale: AS SHOWN Original Size: **A1**

DO NOT SCALE

Millimetres
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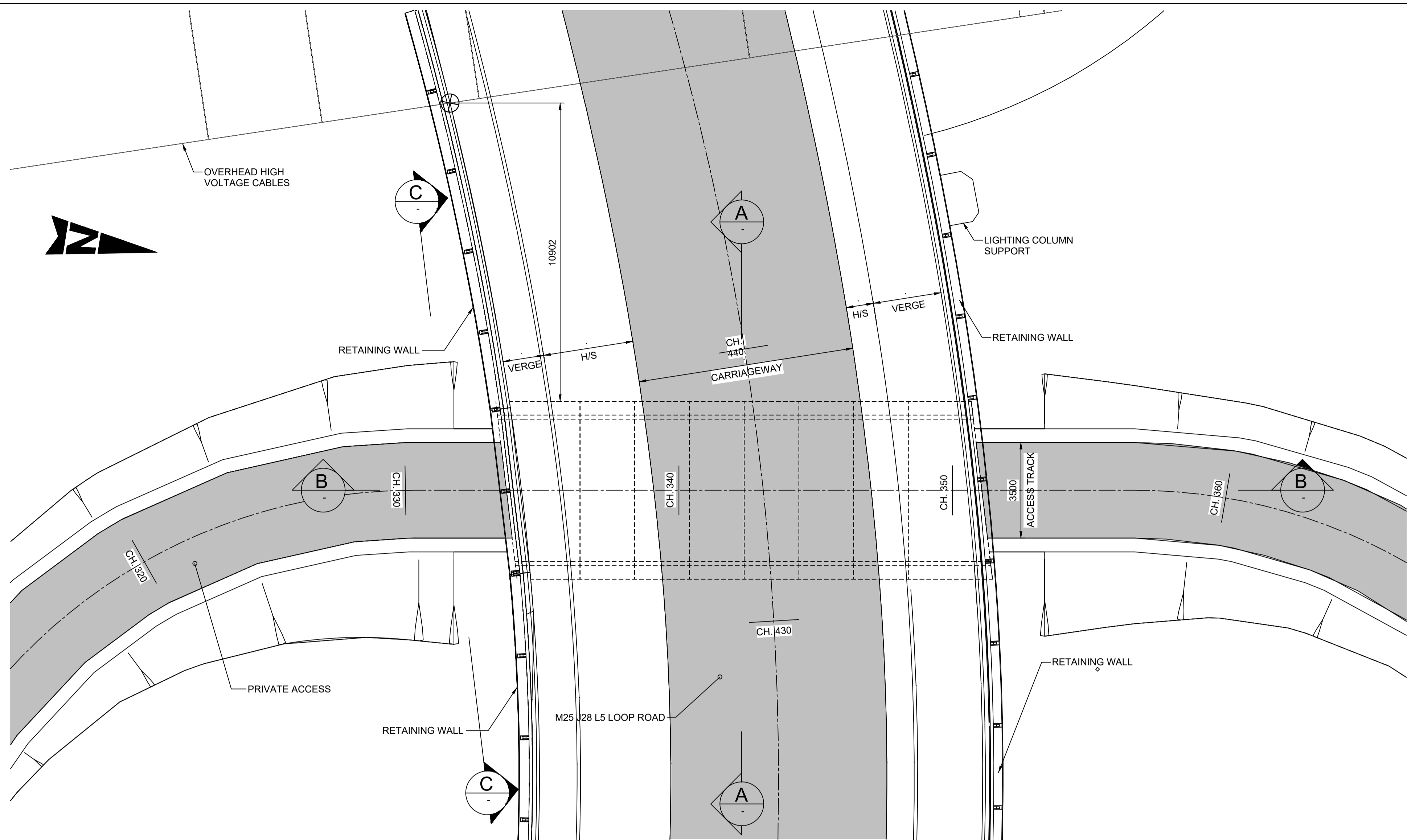
- Notes**
- All dimensions are in millimetres. all levels and chainages are in metres unless noted otherwise.
 - Full length of piles not shown. actual length shall be as per geotech recommendation
 - The maximum cross fall as per highway typical cross section is 7% maximum
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

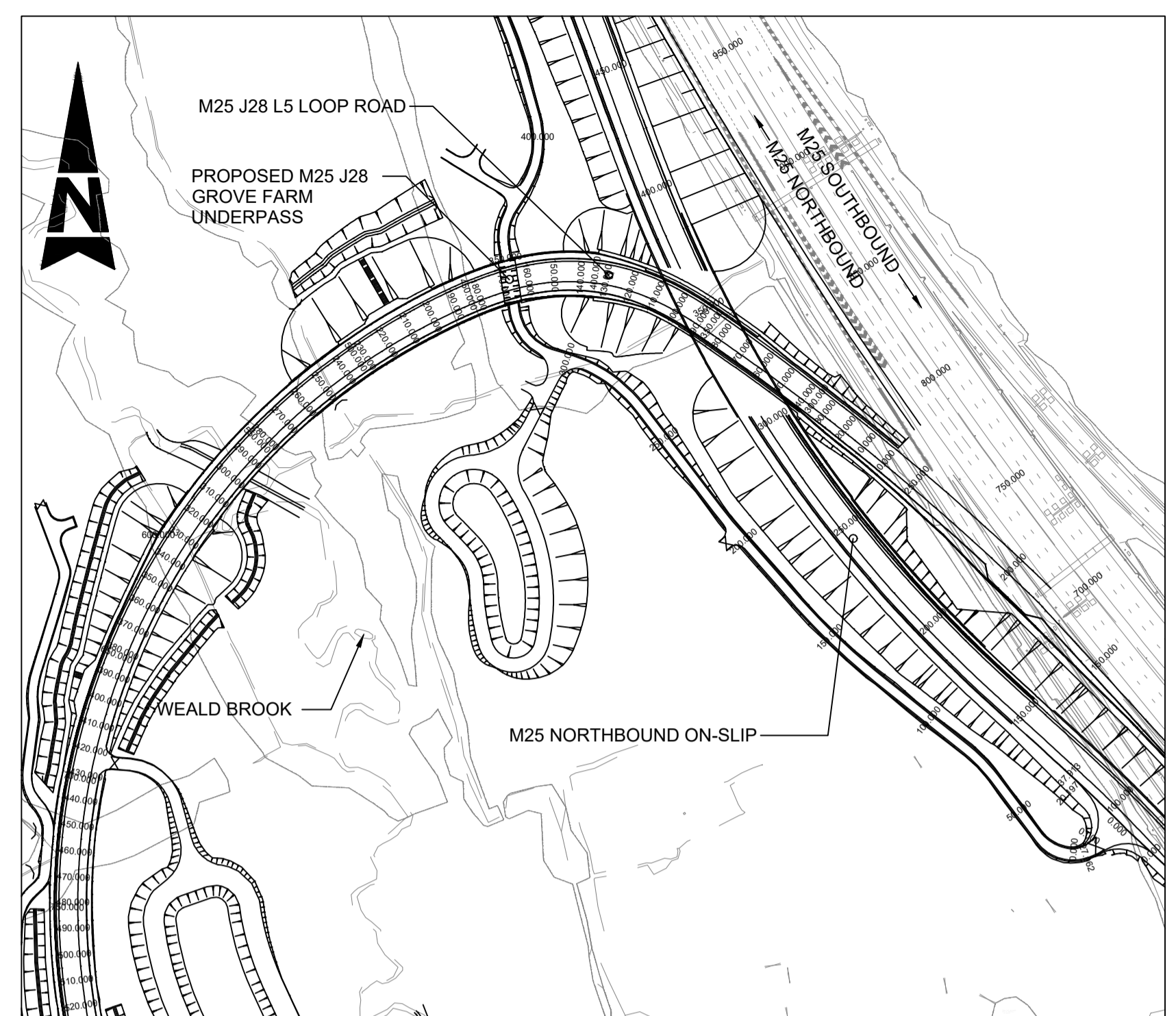
DCO APPLICATION		Status A4	Project Title M25 junction 28 improvement scheme
		Drawing Title ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) GROVE BRIDGE SHEET 3 OF 10	
Client 		Drawing Number TR10029/APP/2.8	Rev: 0
Member of the SNC-Lavalin Group Copyright © Atkins Limited (2020)		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinsglobal.com	HE PIN: HE551519 Scale: As Shown Original Size: A1

DO NOT SCALE

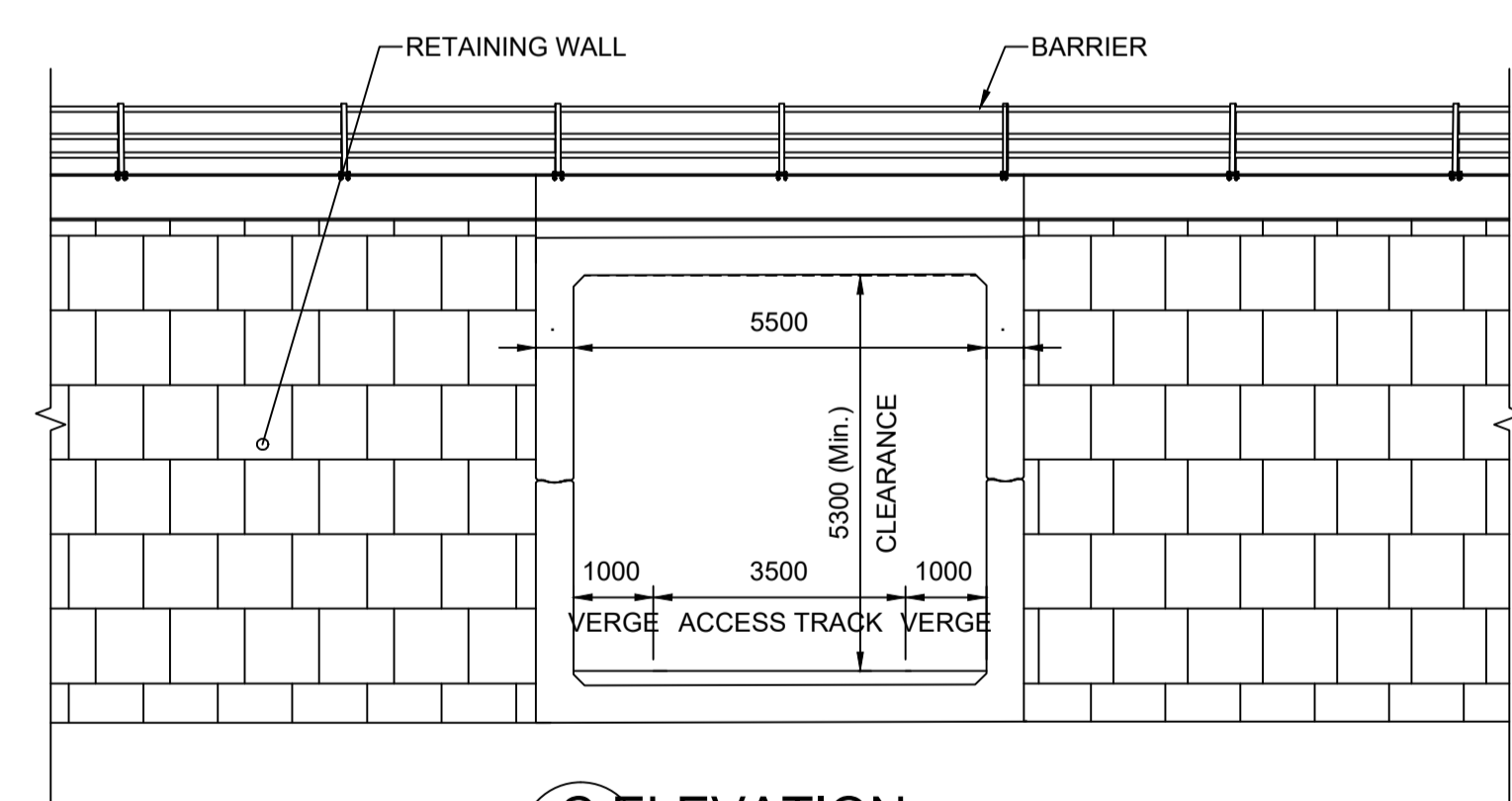
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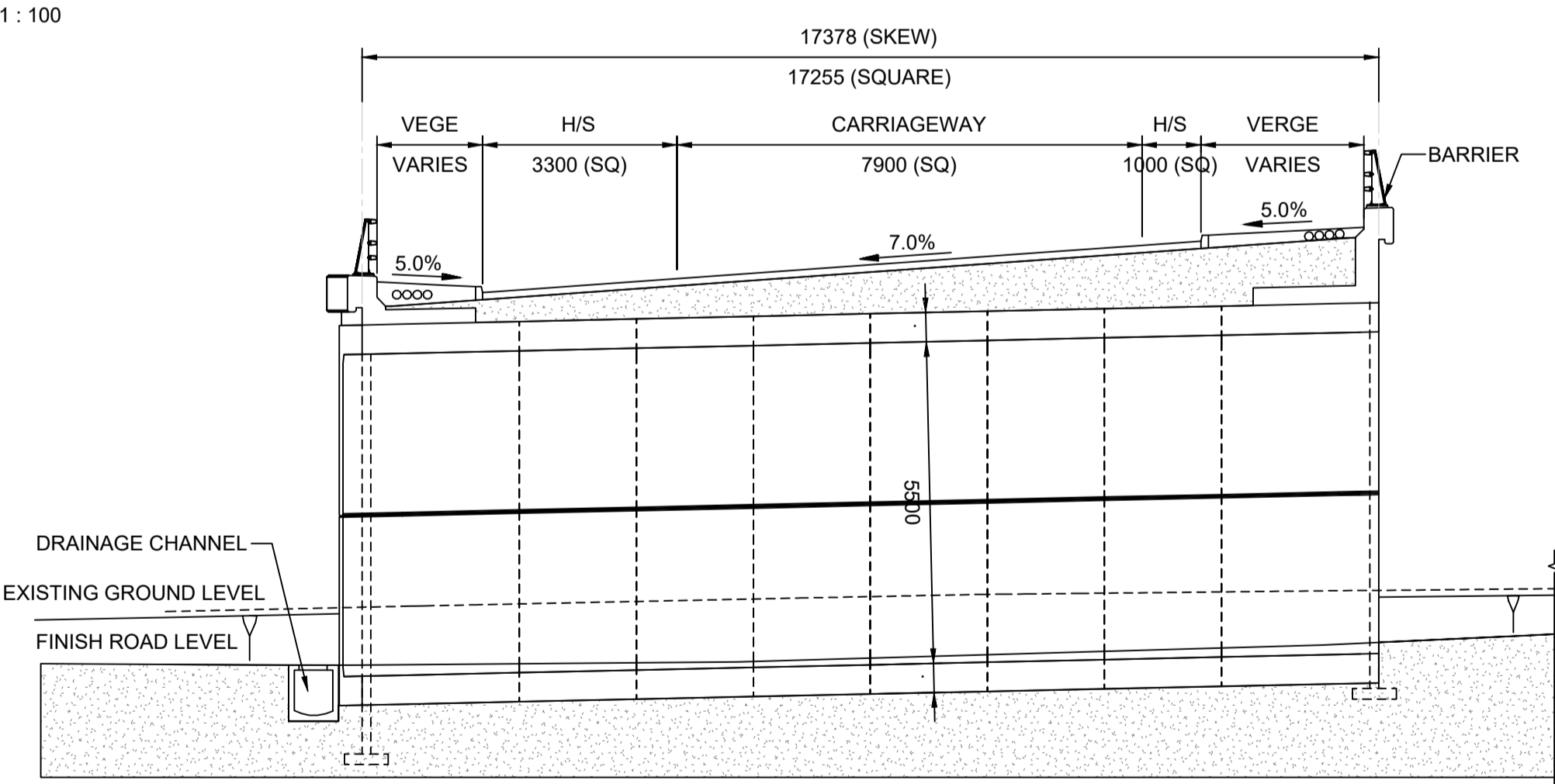
PLAN VIEW
SCALE 1 : 100



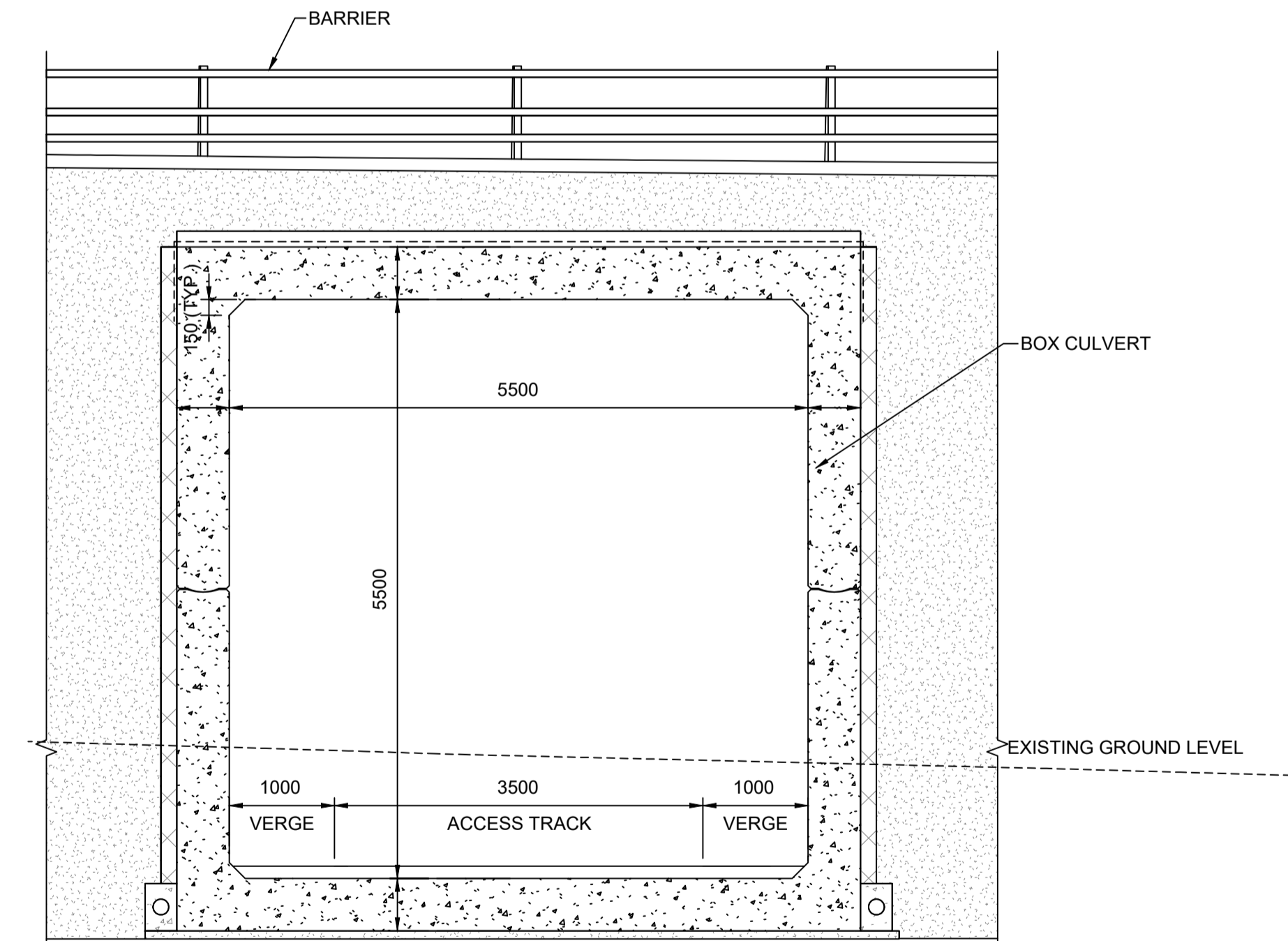
LOCATION PLAN
SCALE 1 : 2000



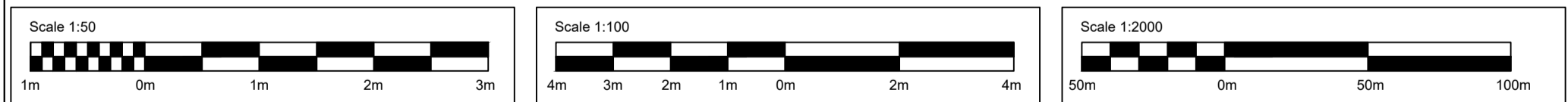
C ELEVATION
SCALE 1 : 100



B SECTION
SCALE 1 : 100



A SECTION
SCALE 1 : 50



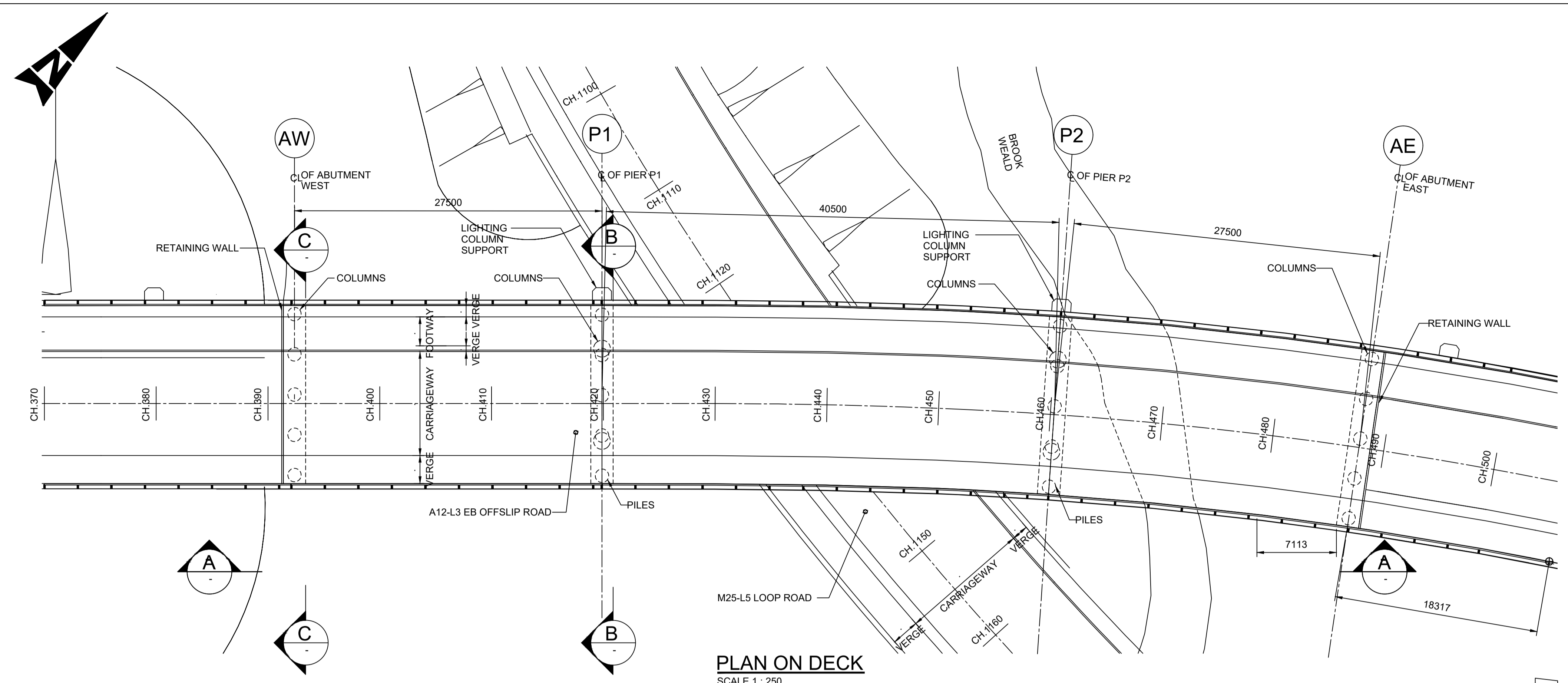
- Notes**
- All dimensions are in millimetres; all levels and chainages are in metres unless noted otherwise.
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

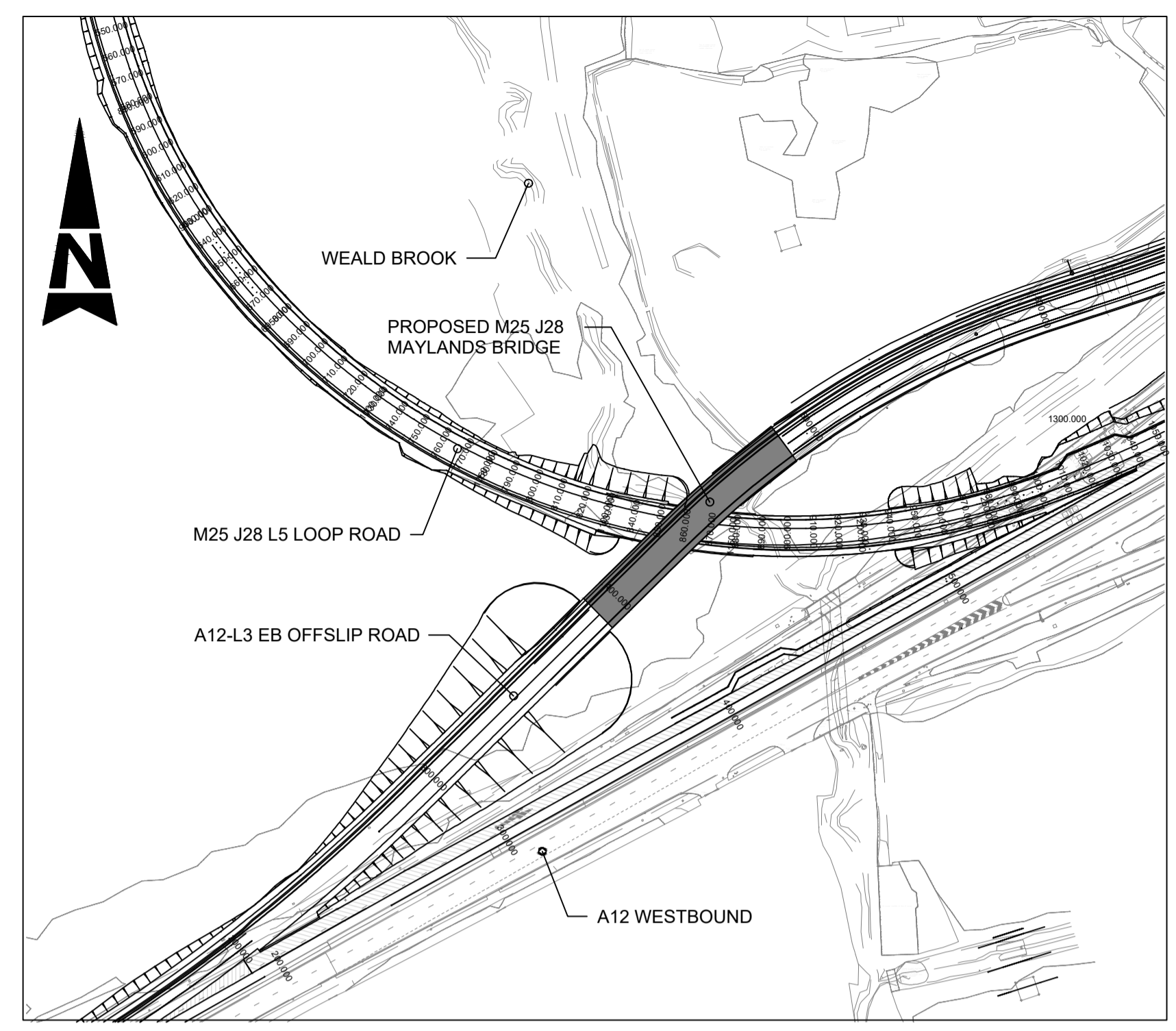
Drawing Subtitle DCO APPLICATION	Status A4	Project Title M25 junction 28 improvement scheme
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Client Working on behalf of highways england		Drawing Number TR10029/APP/2.8
HE PIN: HE551519	Scale: As Shown	Original Size: A1

DO NOT SCALE

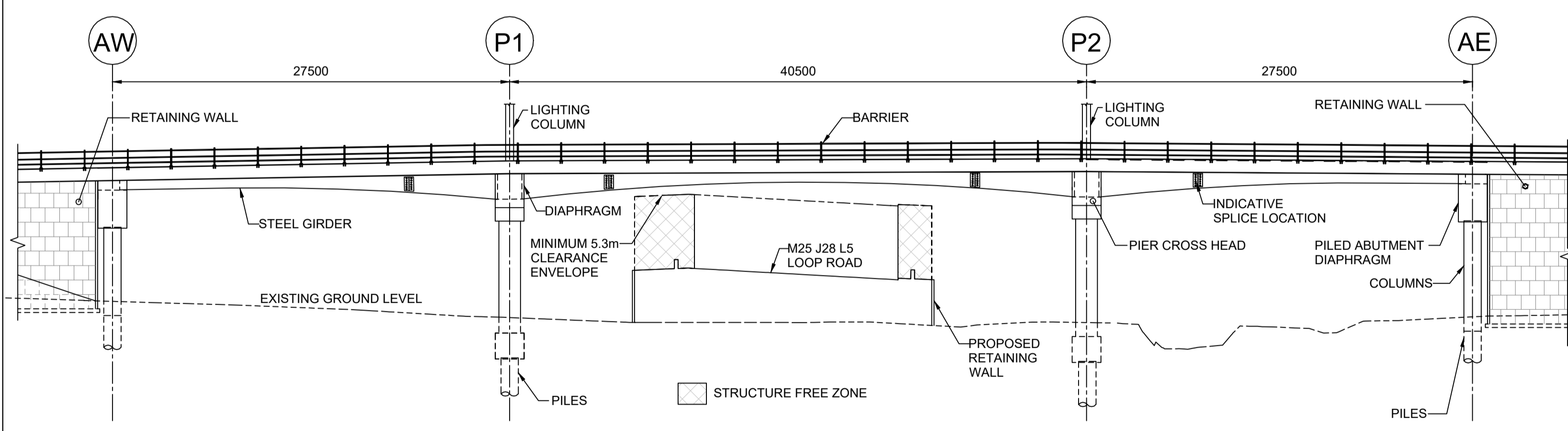
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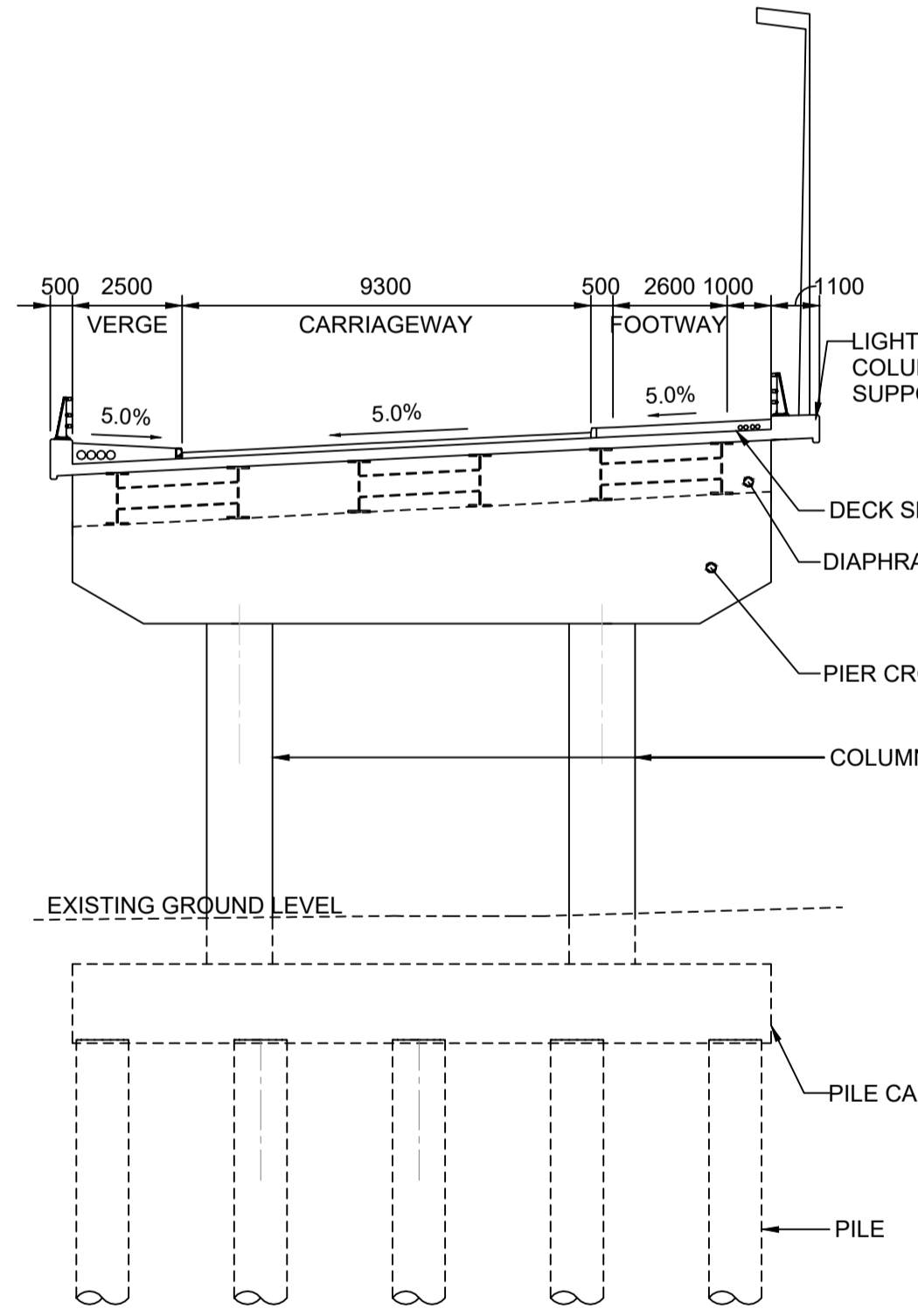
PLAN ON DECK
SCALE 1 : 250



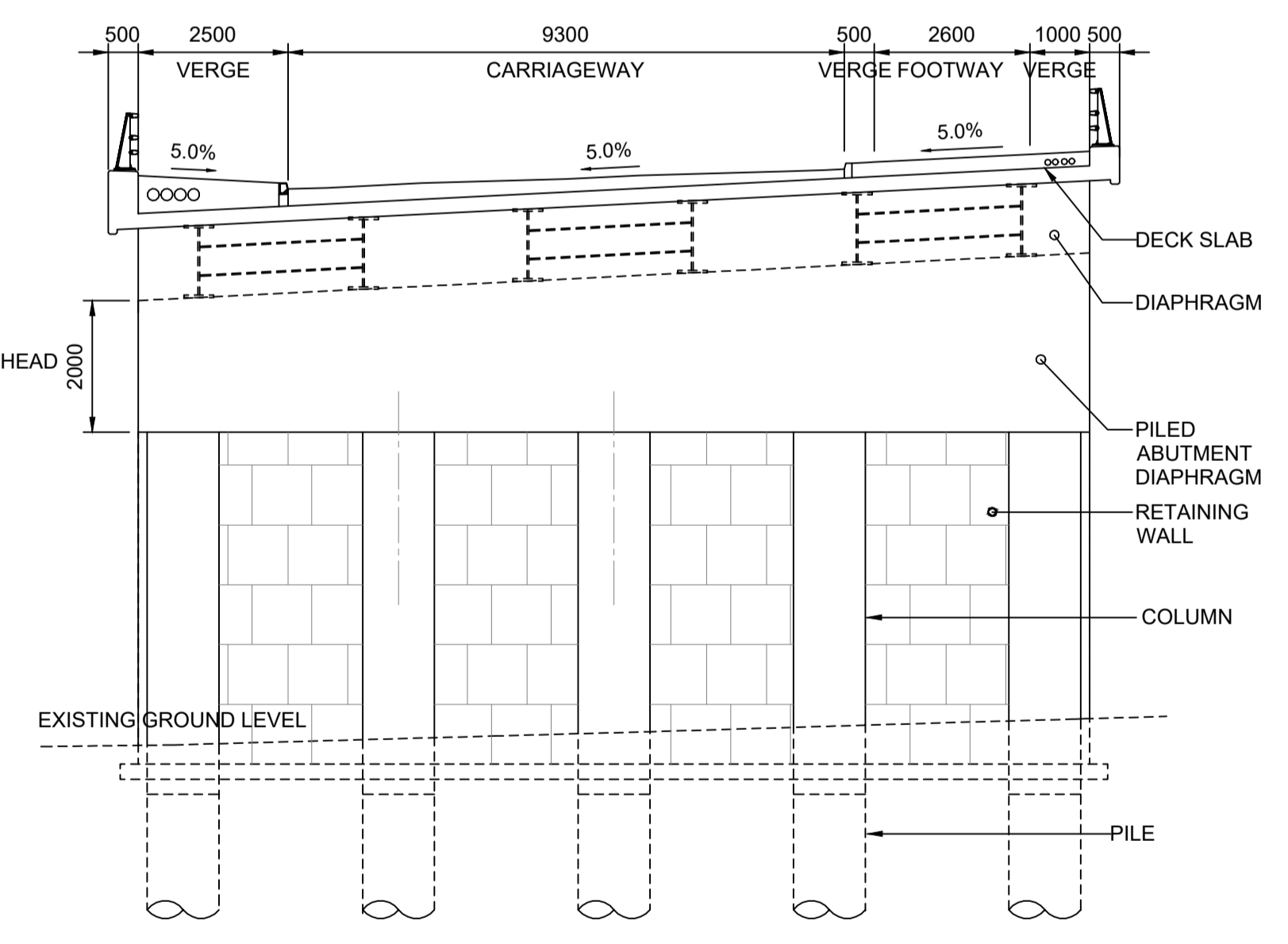
LOCATION PLAN
SCALE 1 : 2000



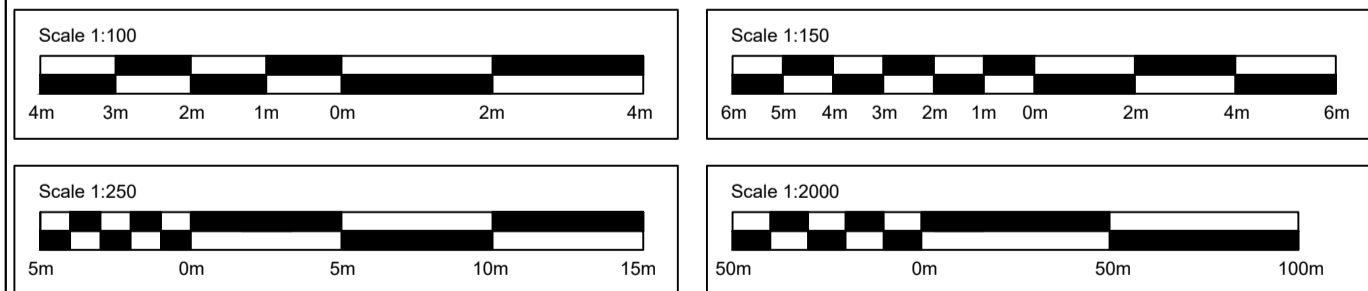
A ELEVATION
SCALE 1 : 250



B SECTION
SCALE 1 : 150



C SECTION
SCALE 1 : 100



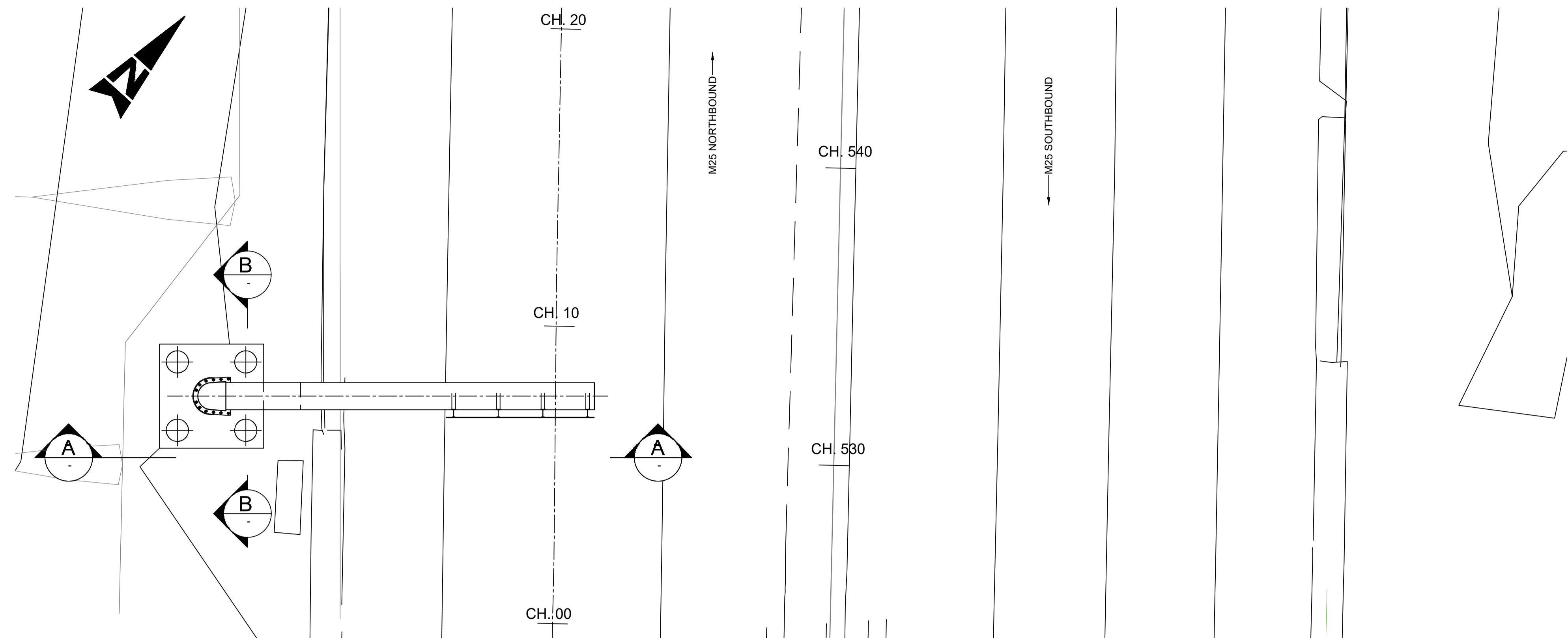
- Notes**
- All dimensions are in millimetres; all levels and chainages are in metres unless noted otherwise.
 - Full length of piles not shown. actual length shall be as per geotech recommendation.
 - The splice details shown are indicative.
 - The communication ducts shown are indicative.
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

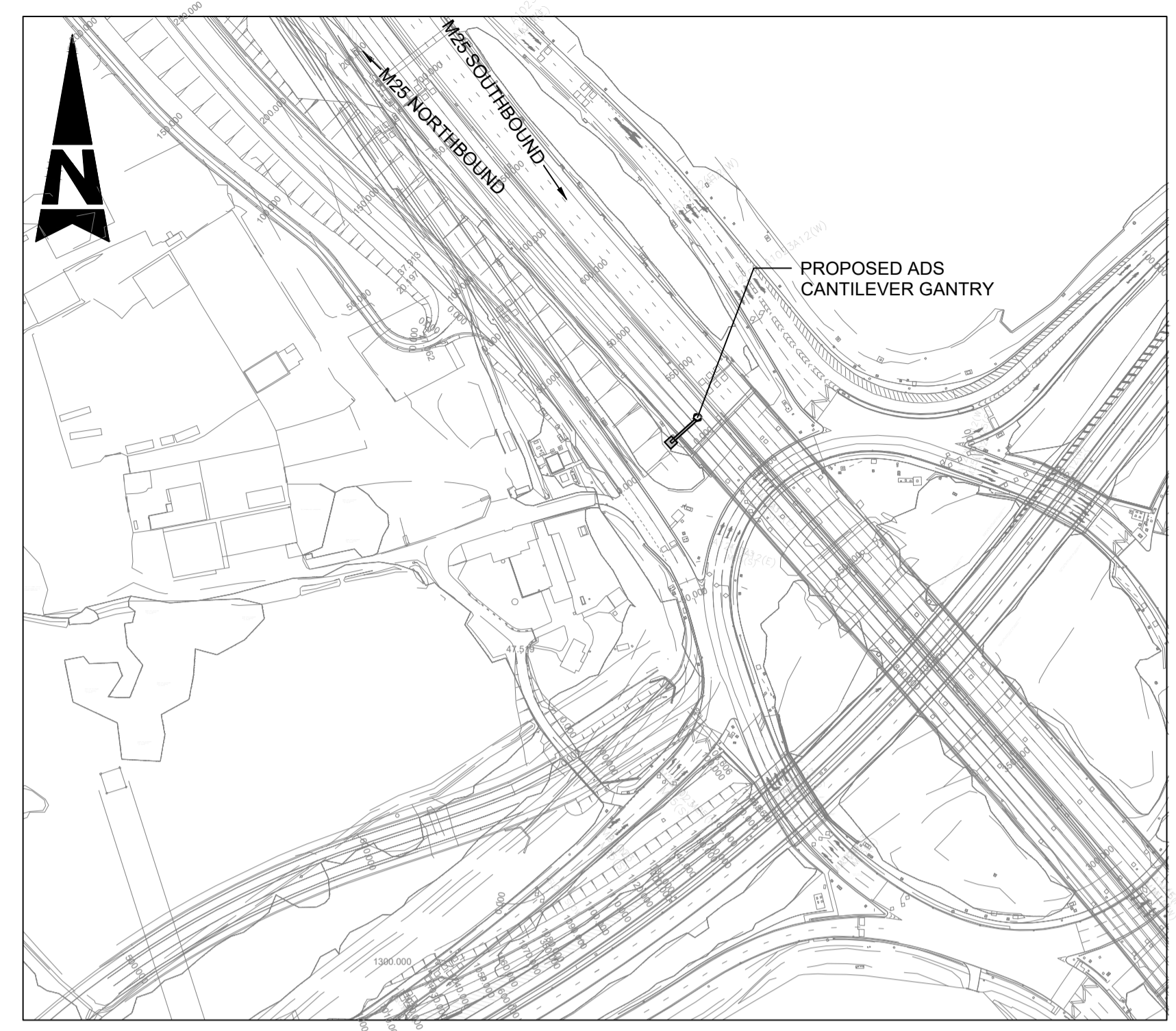
Drawing Subtitle DCO APPLICATION	Status A4	Project Title M25 junction 28 improvement scheme
 Member of the SNC-Lavalin Group Copyright © Atkins Limited (2020)		Drawing Title ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) MAYLANDS BRIDGE SHEET 5 OF 10
Client Working on behalf of 		Drawing Number TR10029/APP/2.8
HE PIN: HE551519		Scale: As Shown Original Size: A1

DO NOT SCALE

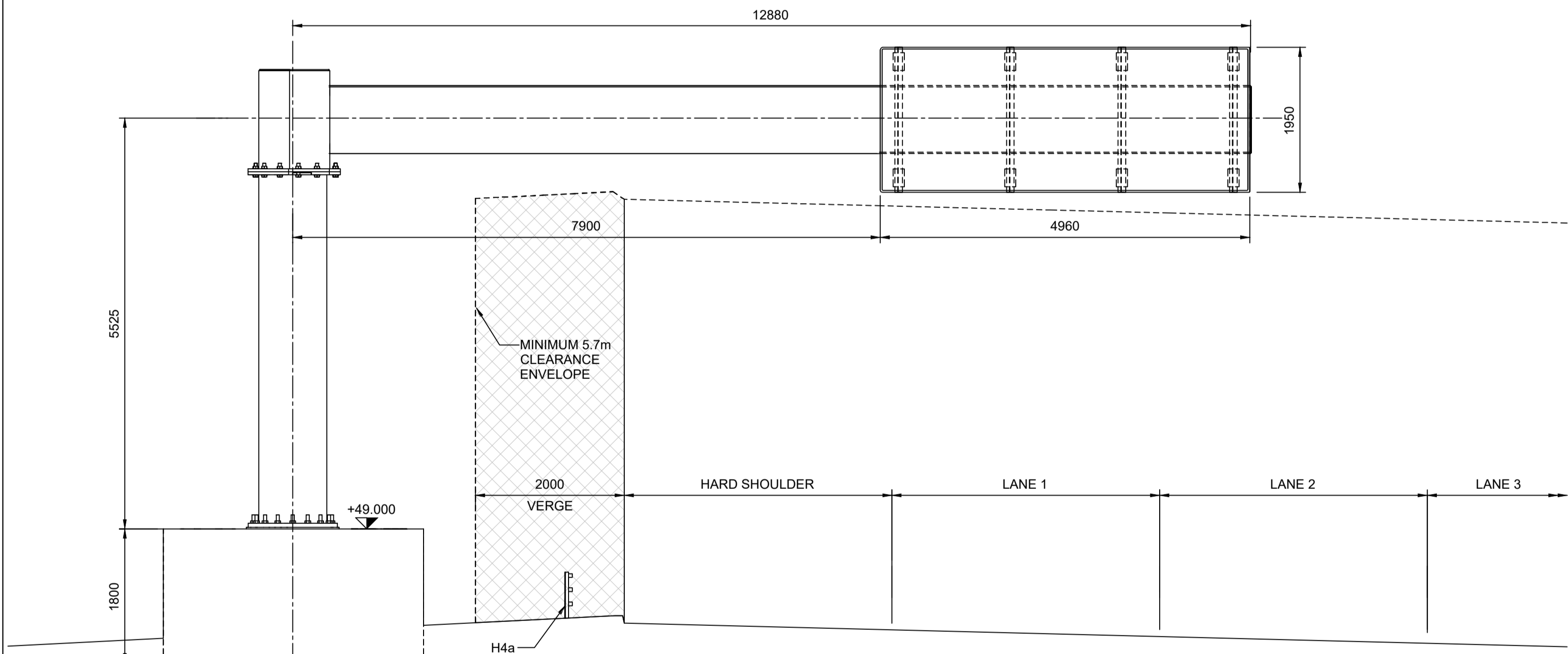
Millimetres
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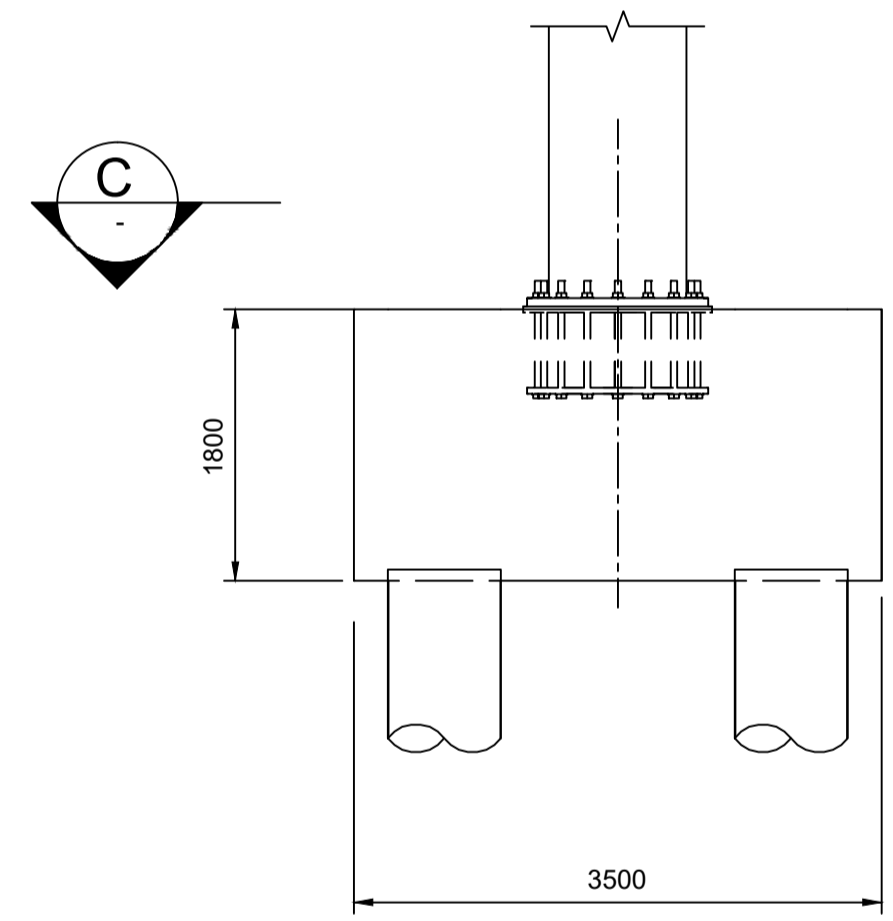
PLAN
SCALE 1 : 100



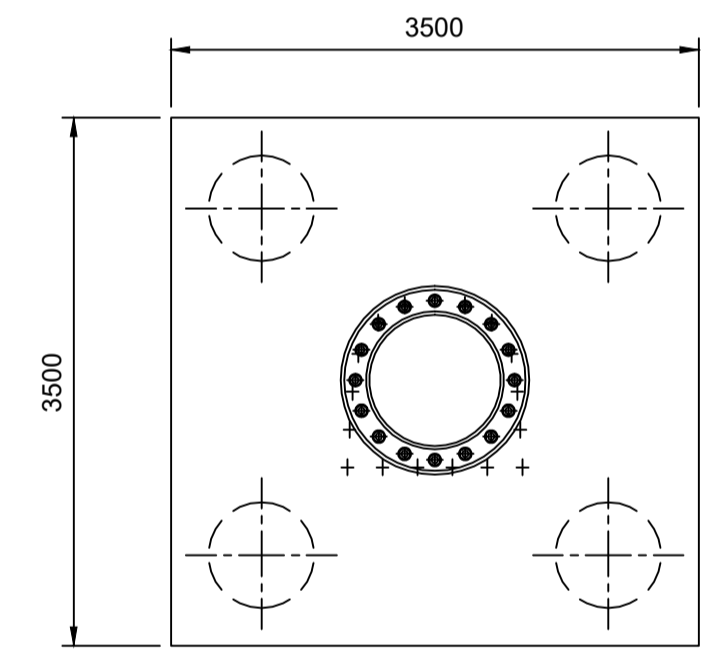
LOCATION PLAN
NOT TO SCALE



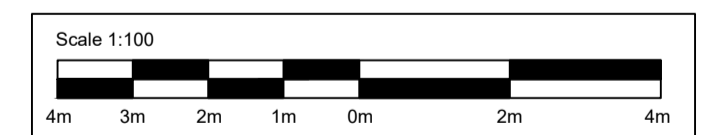
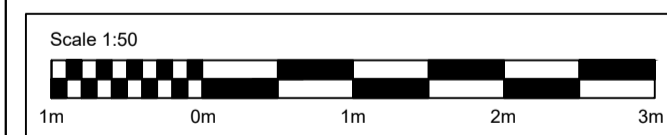
A ELEVATION
SCALE 1 : 50



B SECTION
SCALE 1 : 50



C SECTION
SCALE 1 : 50



Notes

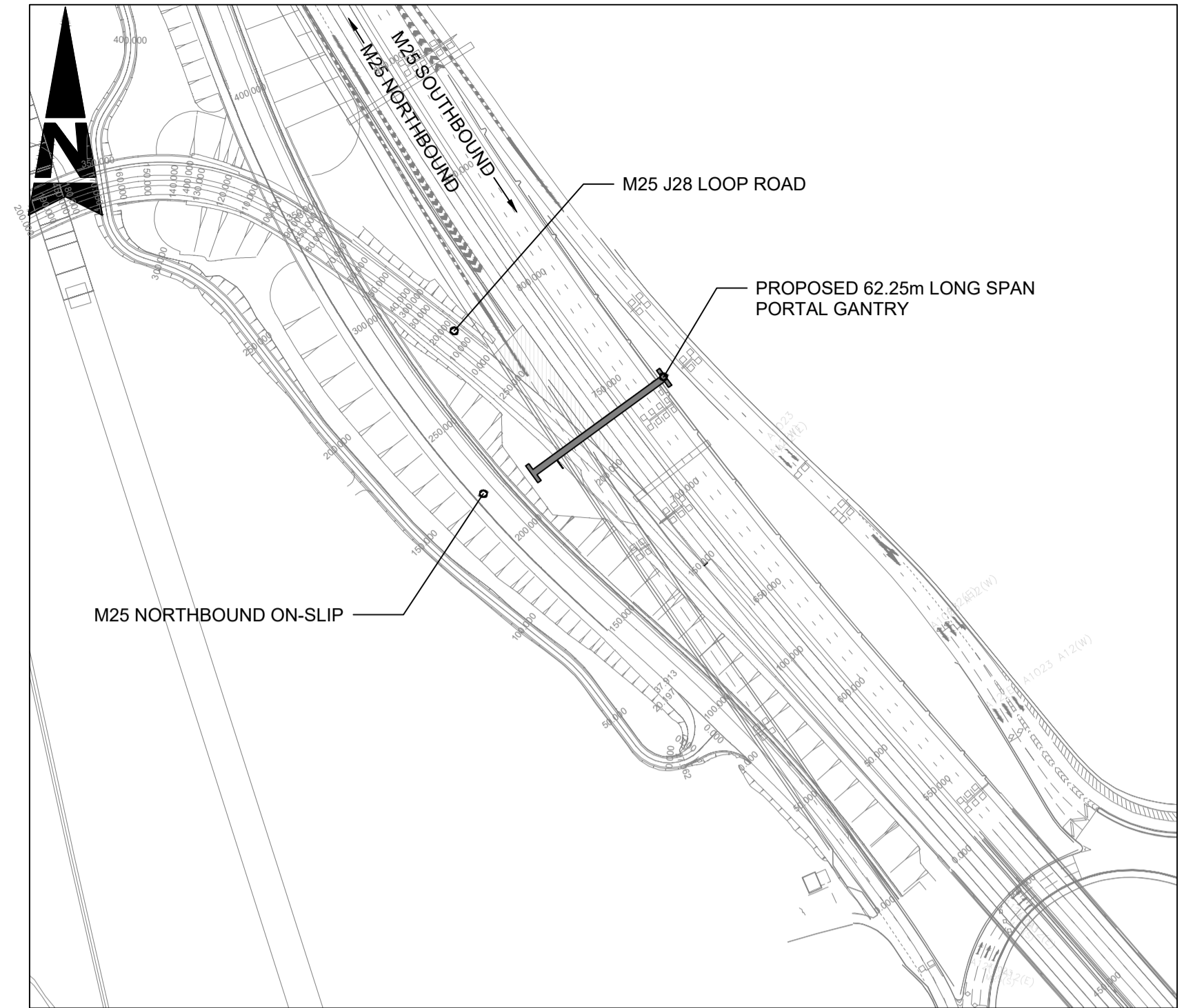
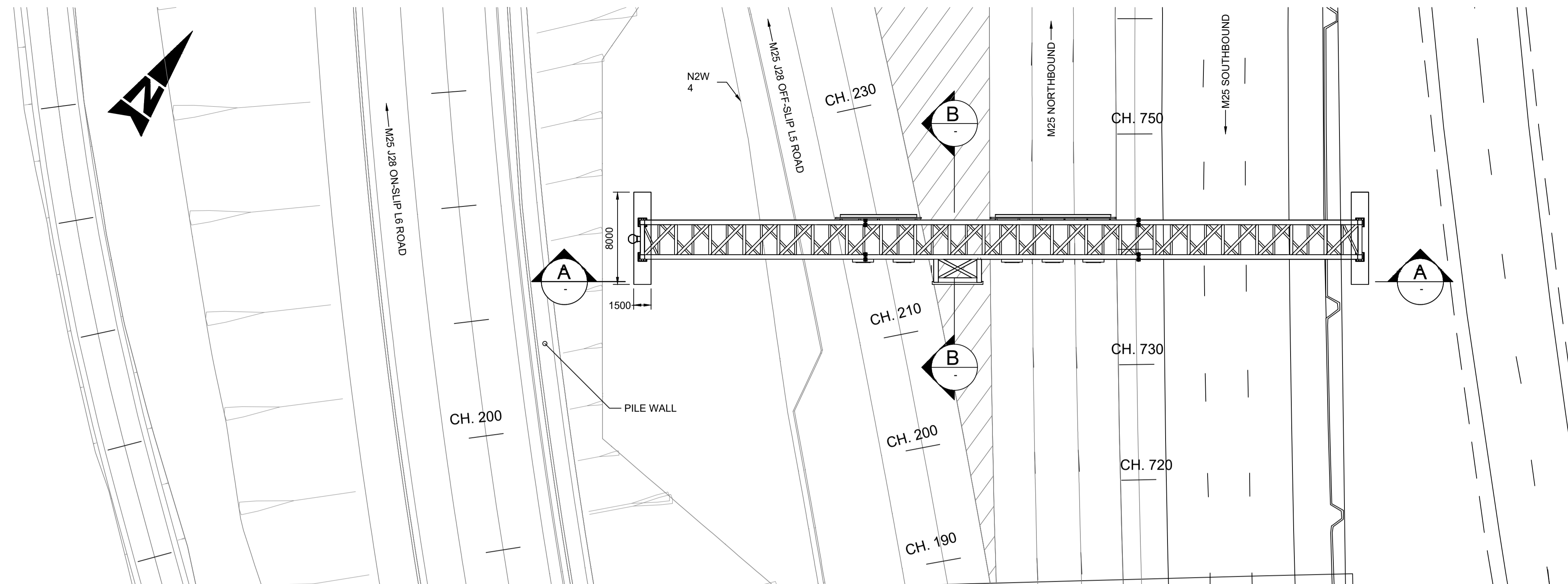
- All dimensions are in millimetres; all levels and chainages are in metres unless noted otherwise.
- All levels and dimensions are taken at centre line chainage of gantry.
- Drainage not shown.
- Utilities not shown.
- The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Subtitle DCO APPLICATION	Status A4	Project Title M25 junction 28 improvement scheme
 Member of the SNC-Lavalin Group Copyright © Atkins Limited (2020)		Drawing Title ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) PROPOSED ADS CANTILEVER GANTRY AT CH.530 SHEET 6 OF 10
Client 		Drawing Number TR10029/APP/2.8
HE PIN: HE551519		Scale: As Shown Original Size: A1

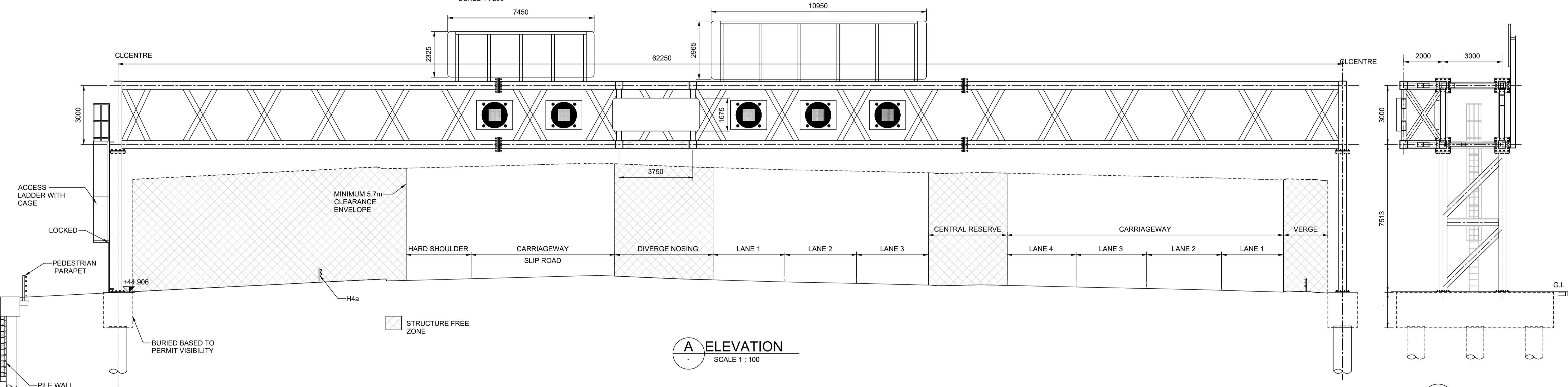
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Millimetres
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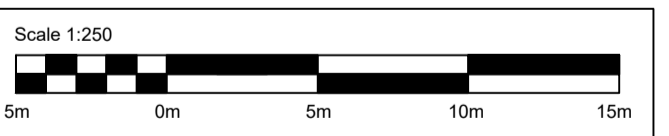
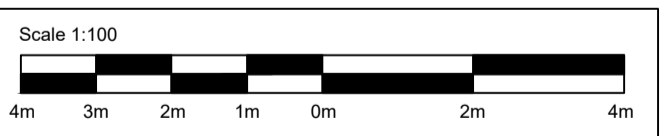
LOCATION PLAN
NOT TO SCALE

PLAN
SCALE 1 : 250



A ELEVATION
SCALE 1 : 100

B SECTION
SCALE 1 : 100



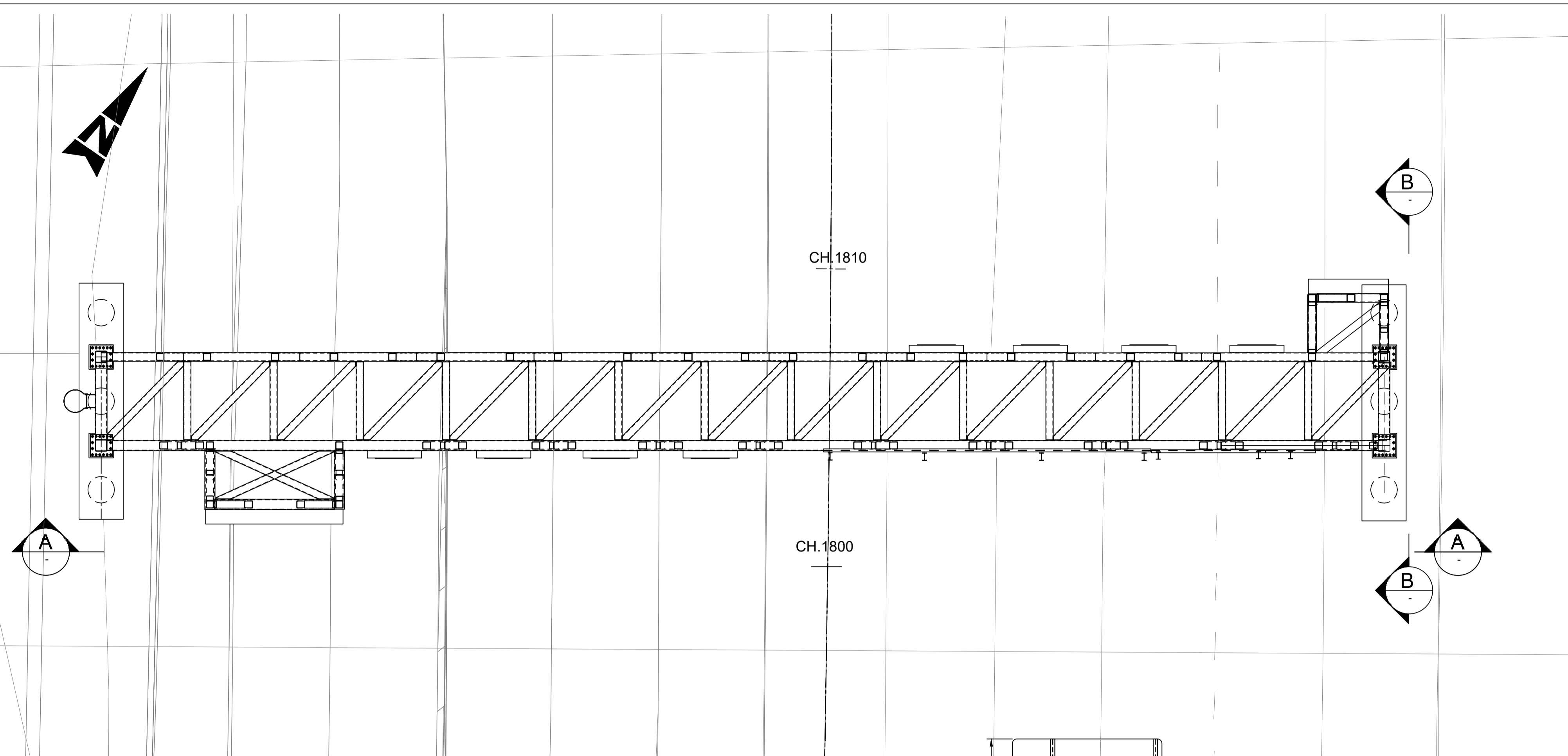
- Notes**
- All dimensions are in millimetres; all levels and chainages are in metres unless noted otherwise.
 - All levels and dimensions are taken at centre line chainage of gantry.
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

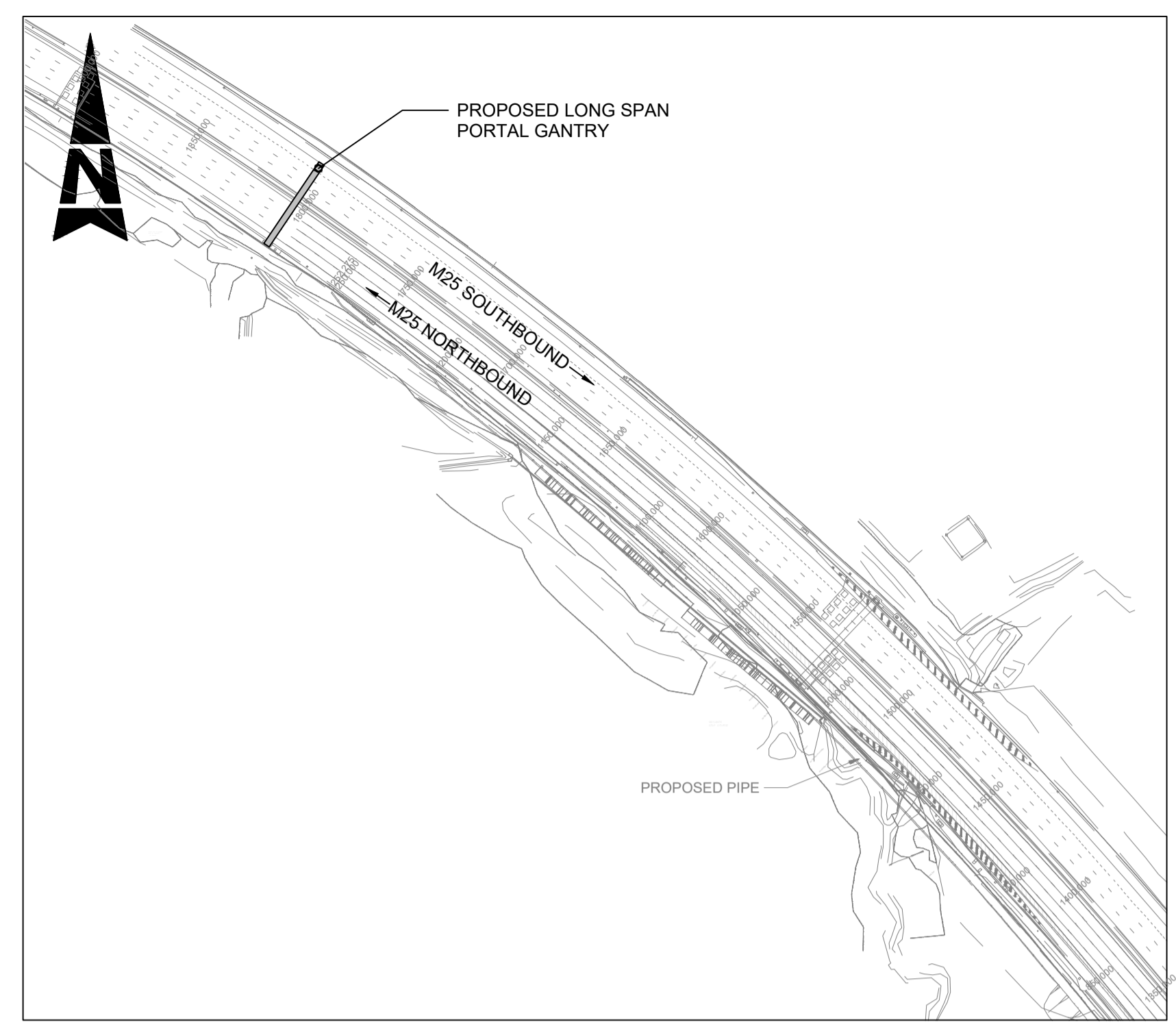
Drawing Subtitle DCO APPLICATION		Status A4	Project Title M25 junction 28 improvement scheme
 Member of the SNC-Lavalin Group Copyright © Atkins Limited (2020)		Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinglobal.com	
Client Working on behalf of highways england		Drawing Number TR10029/APP/2.8	Rev. 0
HE PIN: HE551519		Scale: As Shown	Original Size: A1

DO NOT SCALE

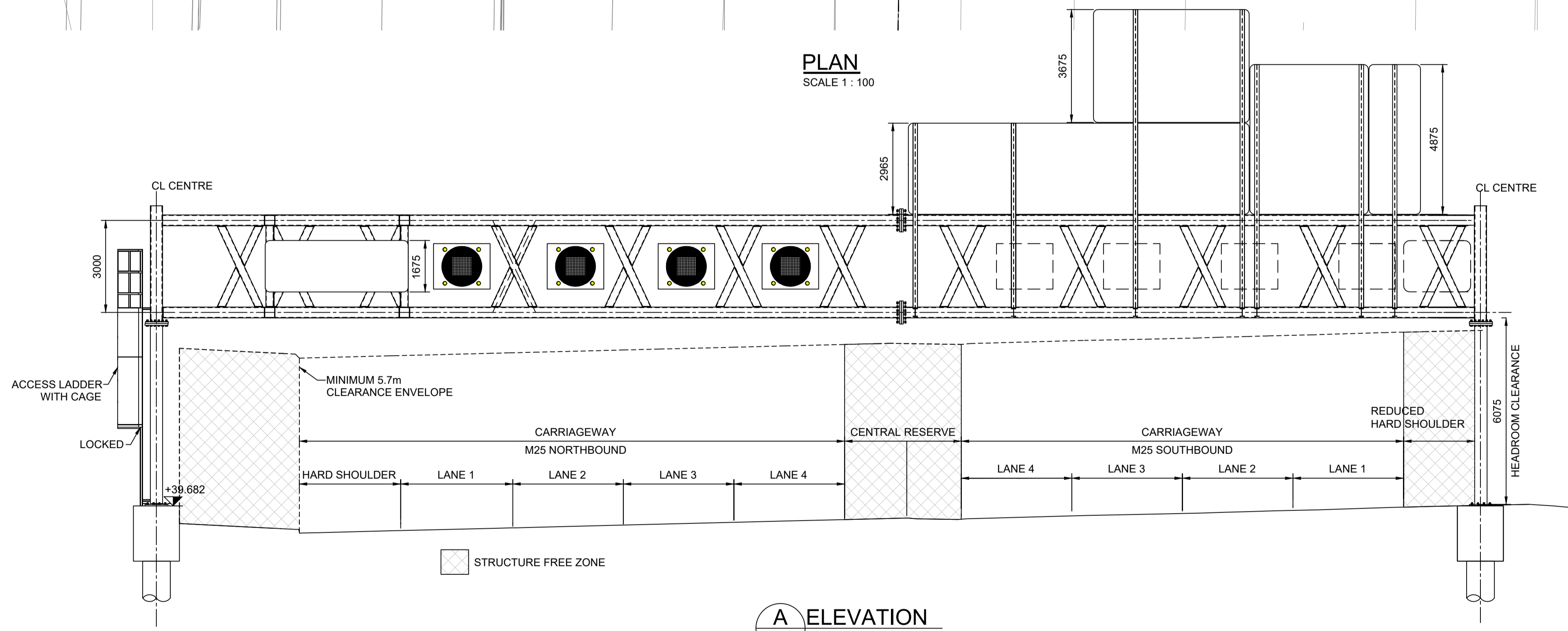
Millimetres
0 10 100



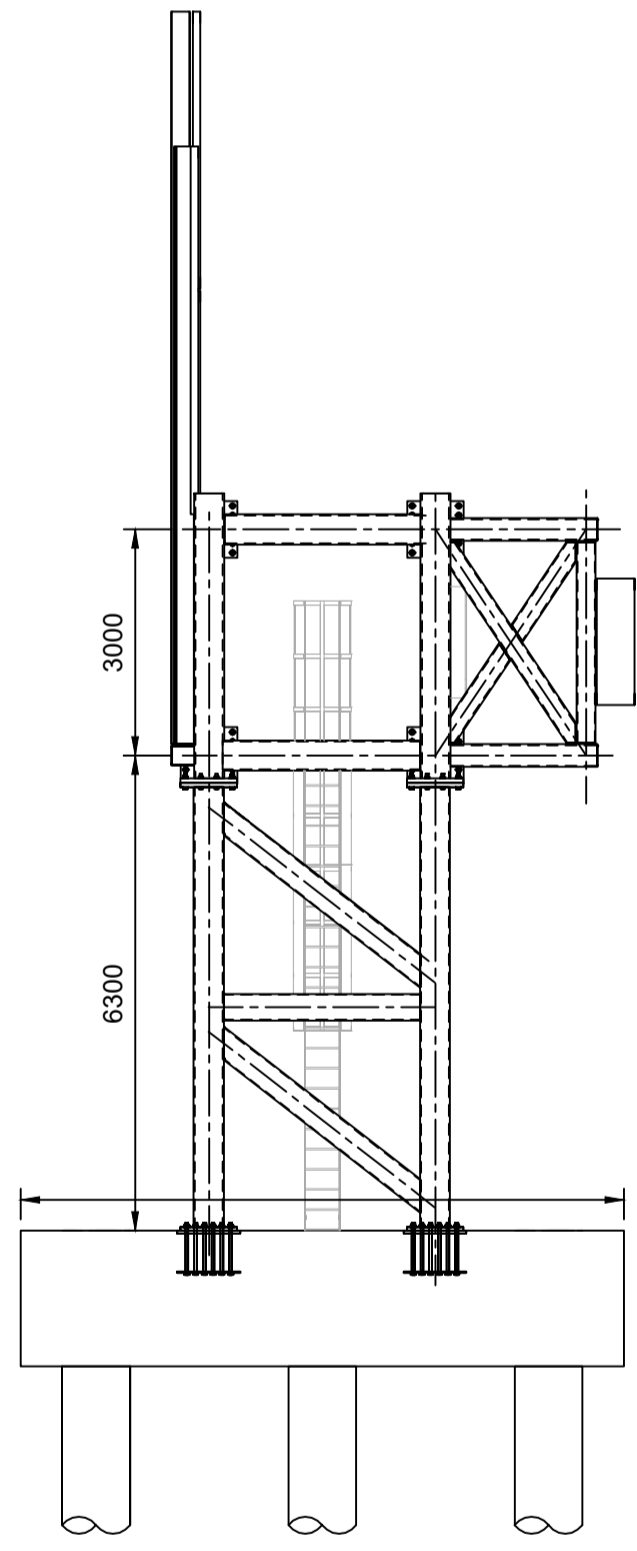
PLAN
SCALE 1 : 100



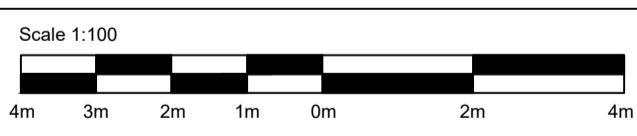
LOCATION PLAN
NOT TO SCALE



A ELEVATION
SCALE 1 : 100



B SECTION
SCALE 1 : 100



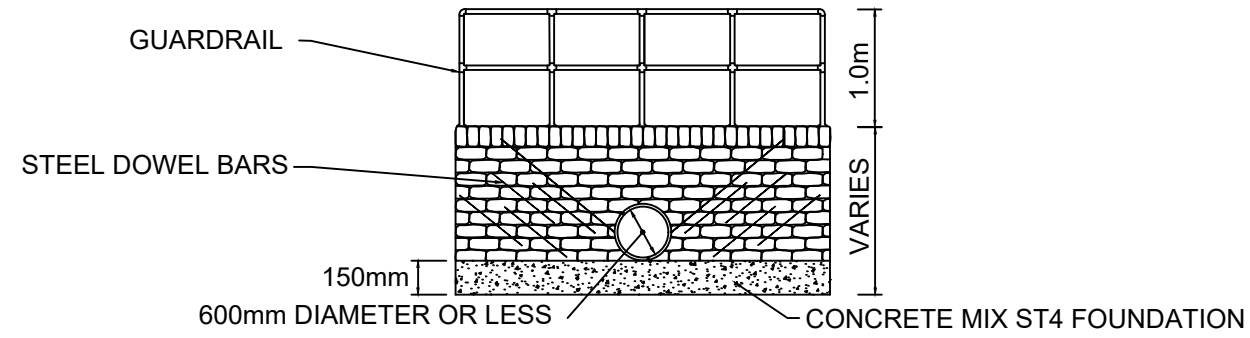
- Notes**
- All dimensions are in millimetres; all levels and chainages are in metres unless noted otherwise.
 - All levels and dimensions are taken at centre line chainage of gantry.
 - Drainage not shown
 - Utilities not shown.
 - The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

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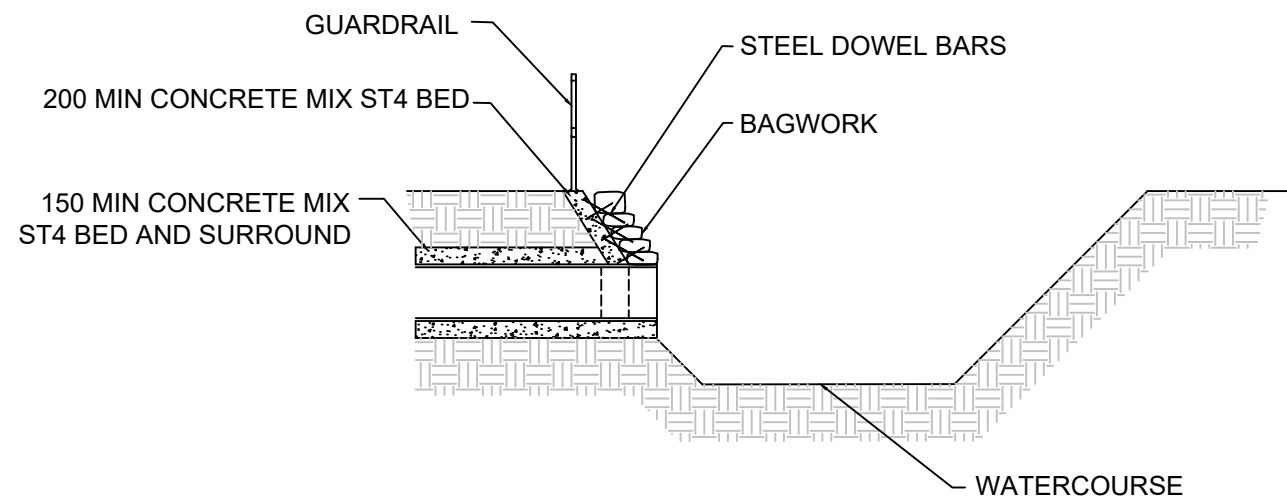
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<p>Member of the SNC-Lavalin Group Copyright © Atkins Limited (2020)</p>		Drawing Title ENGINEERING SECTIONS REGULATIONS 5(2)(o) AND 6(2) PROPOSED LONG SPAN PORTAL GANTRY AT CH.1806 SHEET 8 OF 10
		Drawing Number TR10029/APP/2.8
Client Working on behalf of		Rev. 0
HE PIN: HE551519	Scale: As Shown	Original Size: A1

100
0
Millimetres
DO NOT SCALE

BAGWORK HEADWALL

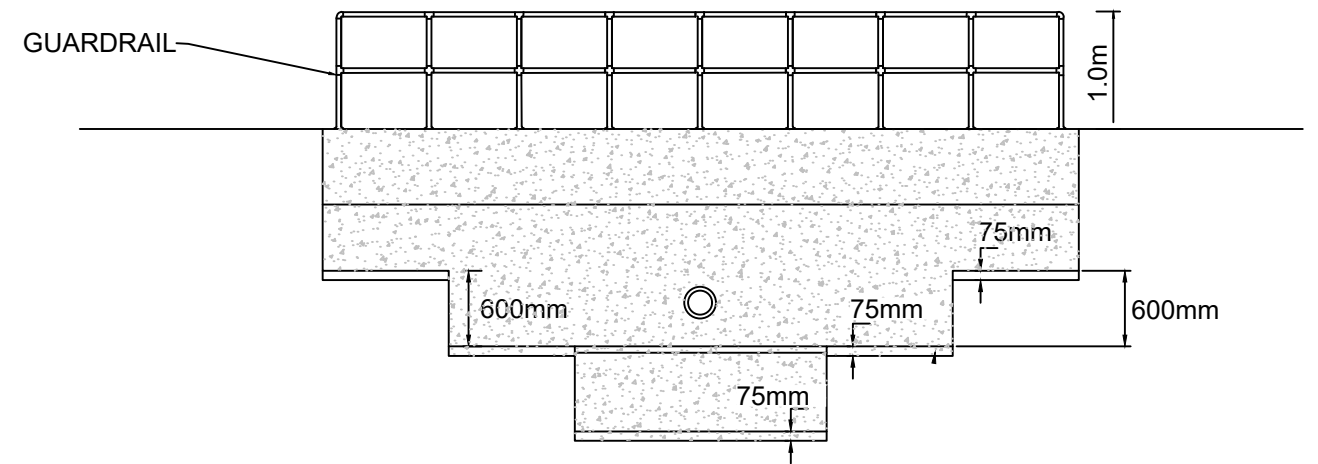


ELEVATION

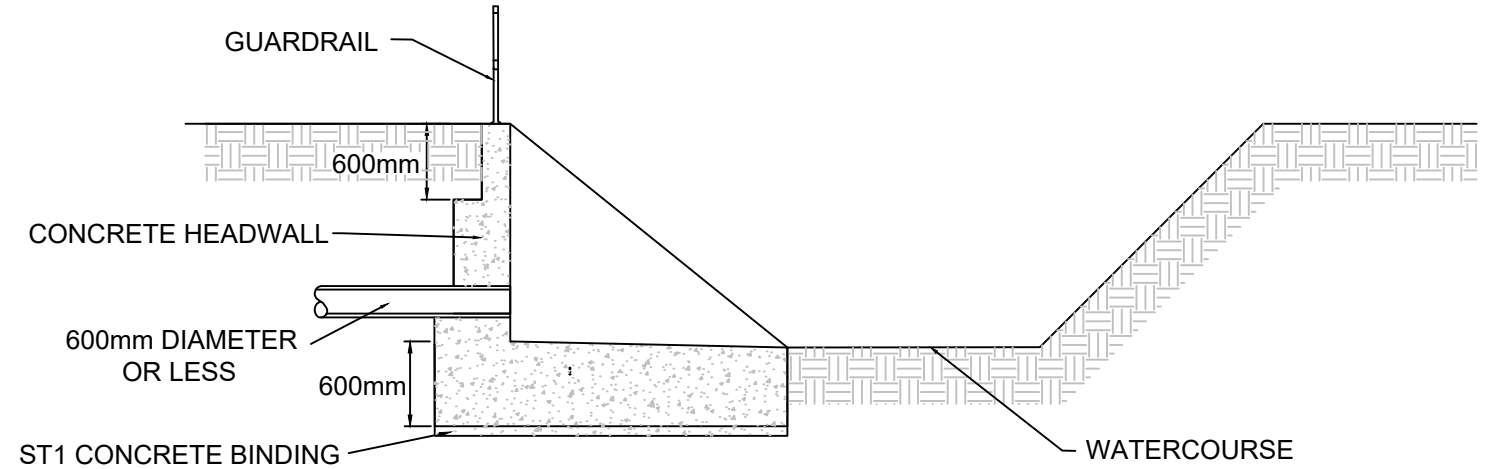


CROSS SECTION

CONCRETE HEADWALL



ELEVATION



CROSS SECTION

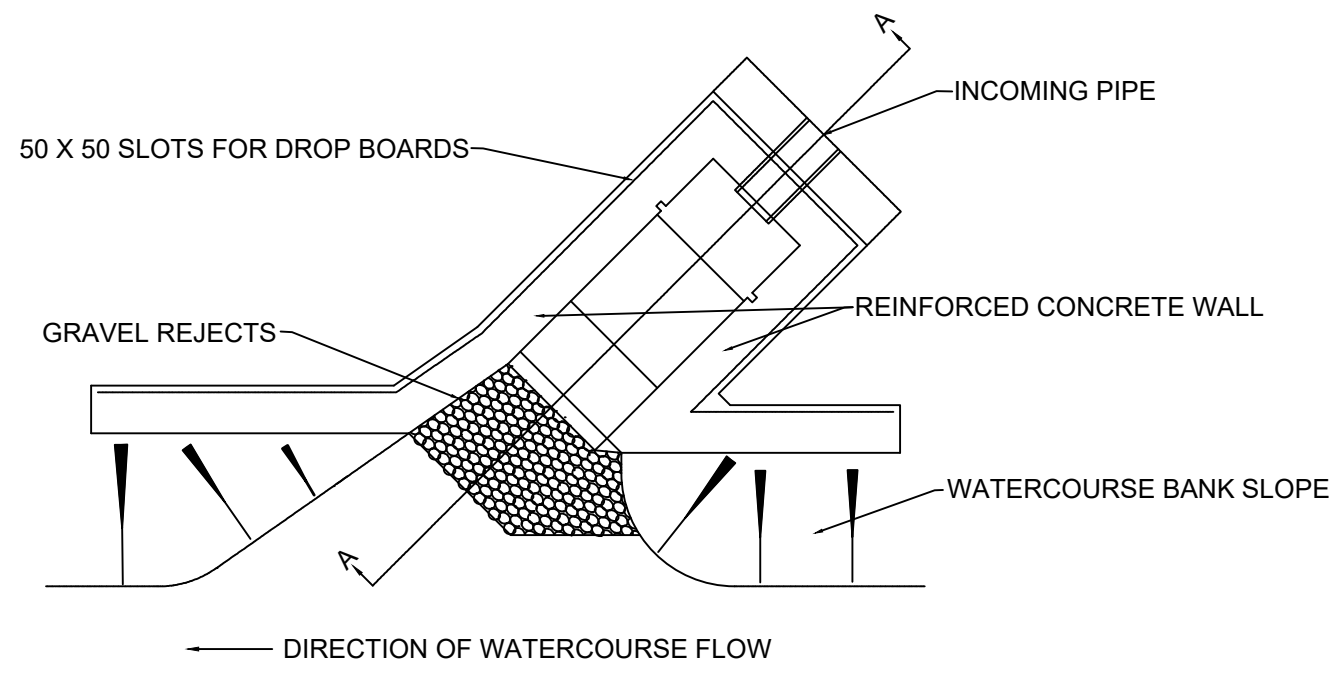
Notes

- All dimensions are in millimetres unless stated otherwise.
- Bag sizes nominally 500 x 300 x 120.
- The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

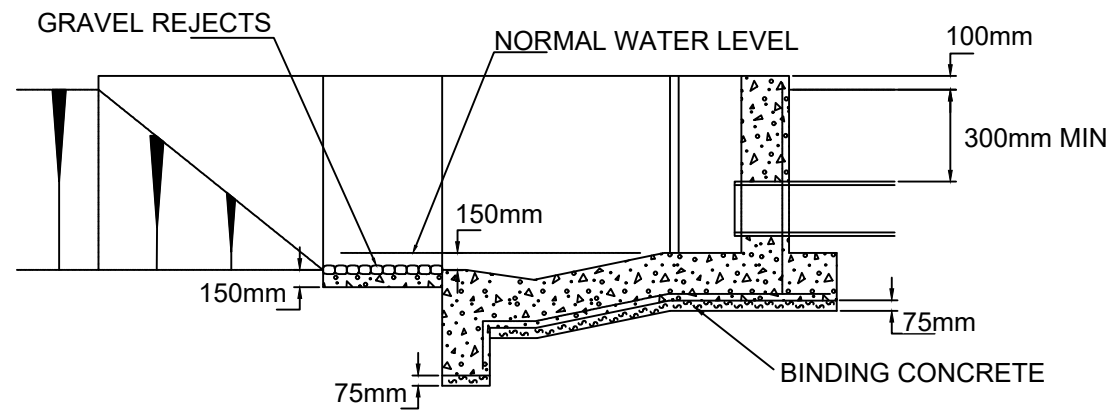
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Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	DCO APPLICATION	A4	M25 junction 28 improvement scheme
Description									
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	Amlin House Atkins 4th Floor 90-96 Victoria Road Chelmsford Essex CM1 1QU Tel: +44 (0)1245 245245 Fax: +44 (0)1245 345010 www.atkinglobal.com		
Description							Member of the SNC-Lavalin Group Copyright © SNC Lavalin (2020)		
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	Client 		Drawing Title REGULATIONS 5(2) (o) AND 6(2) TYPICAL HEADWALL SHEET 9 OF 10
Description							Drawing Number TR010029/APP/2.8		Rev. 0
Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	HE PIN: HE551519 Scale: NTS Original Size: A3		

100
 Millimetres
 10
 0
 DO NOT SCALE

REINFORCED CONCRETE HEADWALL



PLAN



SECTION A - A

Notes

1. All dimensions are in millimetres unless stated otherwise.
2. The proposed structures will be subject to detailed design development. Any changes will be limited to being within the DCO boundary or the relevant limits of deviation where not coincident with the DCO boundary and subject to the requirements of Schedule 2 of the Development Consent Order (application document TR010029/APP/3.1).

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Description</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Revision</td></tr> <tr><td style="font-size: 8px;">Drawn</td></tr> <tr><td style="font-size: 8px;">Checked</td></tr> <tr><td style="font-size: 8px;">Reviewed</td></tr> <tr><td style="font-size: 8px;">Authorised</td></tr> <tr><td style="font-size: 8px;">Issue Date</td></tr> </table>	Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="font-size: 8px;">Drawing Suitability</td></tr> <tr><td style="font-size: 8px;">Status</td></tr> <tr><td style="font-size: 8px;">Project Title</td></tr> <tr><td style="font-size: 8px;">Drawing Title</td></tr> <tr><td style="font-size: 8px;">Client</td></tr> <tr><td style="font-size: 8px;">Drawing Number</td></tr> <tr><td style="font-size: 8px;">Rev.</td></tr> <tr><td style="font-size: 8px;">HE PIN</td></tr> <tr><td style="font-size: 8px;">Scale</td></tr> <tr><td style="font-size: 8px;">Original Size</td></tr> </table>	Drawing Suitability	Status	Project Title	Drawing Title	Client	Drawing Number	Rev.	HE PIN	Scale	Original Size
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