
The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order

2.7 Bridge and Elevation Plans

Planning Act 2008

Infrastructure Planning

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

PINS Reference Number: TR010015

Document Reference: 2.7

Regulation Number: 5(2)(o)

Author: Norfolk County Council & Mott MacDonald

Revision	Date	Description
0	8 th January 2014	Revision For Submission

INTRODUCTION

This document is submitted in relation to the application for a Development Consent Order by Norfolk County Council to the Secretary of State, under the Planning Act 2008.

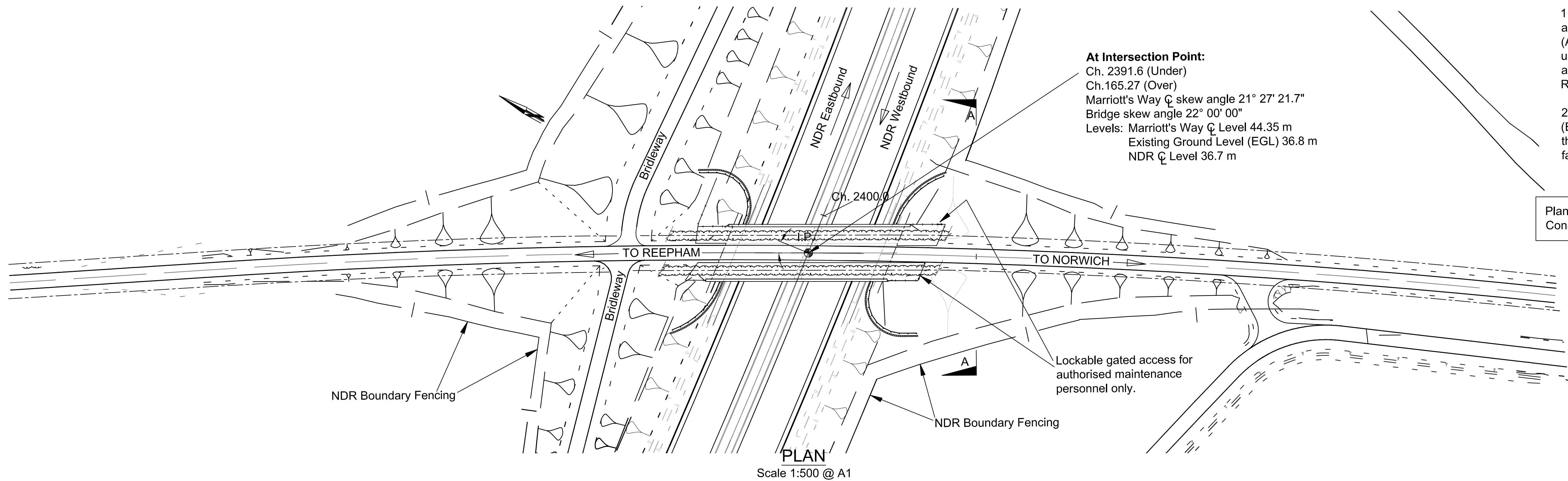
The application is for the Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order, to grant development consent for the construction of a new highway running west to east, to south, between the A1067 Fakenham Road and the A47 Trunk Road at Postwick, including improvements to the existing highway network to the north and north east of Norwich.

This document comprises part of the application documents and relates to Regulation 5(2)(o) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

SCHEDULE OF PLANS INCLUDED IN THIS DOCUMENT

Drawing No.	Drawing Title	Revision
R1C093/BD/BR1/300	Marriott's Way Bridge - Embankment Plan & Elevation	B
R1C093/BD/BR1/301	Marriott's Way Bridge - General Arrangement	A
R1C093/BD/BR2/300	Bell Farm Bridge - Embankment Plan & Elevation	B
R1C093/BD/BR2/301	Bell Farm Bridge - General Arrangement	A
R1C093/BD/BR3/300	A140 Cromer Road Bridge - Embankment Plan & Elevation	B
R1C093/BD/BR3/301	A140 Cromer Road Bridge - General Arrangement	A
R1C093/BD/BR4/300	Buxton Road Bridge - Embankment Plan & Elevation	B
R1C093/BD/BR4/301	Buxton Road Bridge - General Arrangement	A
R1C093/BD/BR5/300	Rackheath Bat Underpass - General Arrangement	B
R1C093/BD/BR6/300	Newman Road Bridge - Embankment Plan & Elevation	C

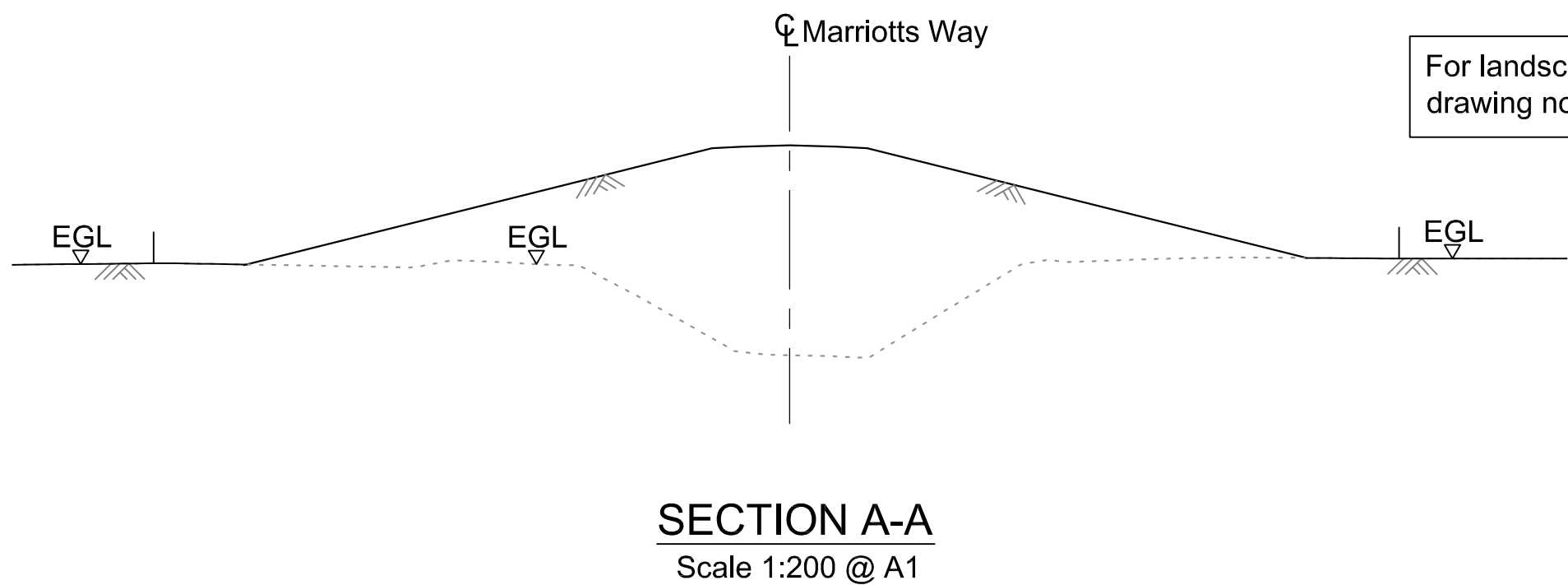
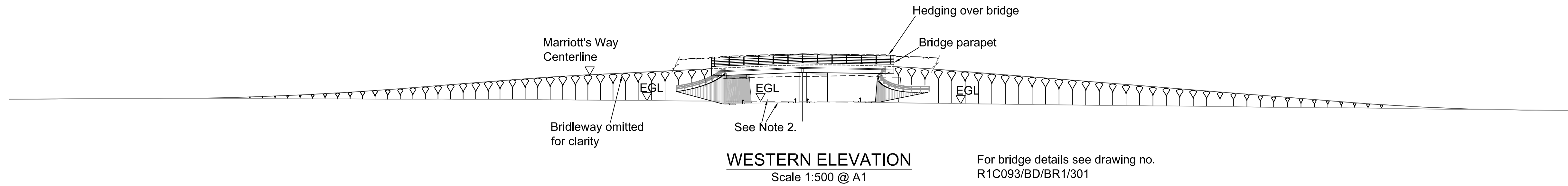
R1C093/BD/BR6/301	Newman Road Bridge - General Arrangement	A
R1C093/BD/BR9/300	Middle Road Bridge - Embankment Plan & Elevation	B
R1C093/BD/BR9/301	Middle Road Bridge - General Arrangement	A
R1C150-TC-4101	Postwick Existing Bridge - General Arrangement	A
R1C150-TC-4102	Postwick Existing Bridge - General Arrangement - Proposed	A
R1C150-TC-4103	Postwick Existing Bridge - General Arrangement - Retaining Wall	A
R1C150-CI-4001	Postwick New Bridge - General Arrangement Sheet 1	A
R1C150-CI-4002	Postwick New Bridge - General Arrangement Sheet 2	A
233906-DU01-P002	Rackheath Overbridge Option 2 - Sheet 1	A
233906-DU01-P003	Rackheath Overbridge Option 2 - Sheet 2	A
233906-DU01-P007	Plumstead Road Overbridge	A
233906-DU01-P006	Rackheath Rail Overbridge	A
233906-EC01-0010	Bat gantry locations	A
233906-EC01-0001	Bat gantry General Arrangement – Sheet 1	A
233906-EC01-0002	Bat gantry General Arrangement – Sheet 2	A
233906-EC01-0003	Bat gantry General Arrangement – Sheet 3	A
233906-EC01-0004	Bat gantry General Arrangement – Sheet 4	A
233906-EC01-0005	Bat gantry General Arrangement – Sheet 5	A
233906-EC01-0006	Bat gantry General Arrangement – Sheet 6	A
233906-EC01-0007	Bat gantry General Arrangement – Sheet 7	A
MMD-233906-DT-0859	Bat House Location Plan	0
MMD-233906-DT-0654	Hall Farm Bat House	0
MMD-233906-DT-0655	Gazebo Farm Bat House	0



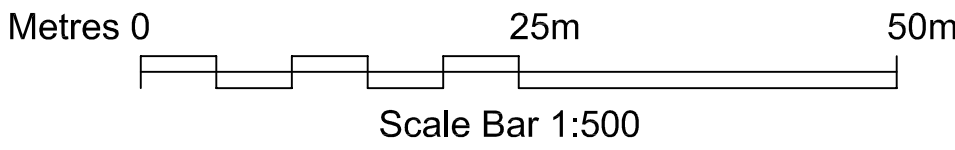
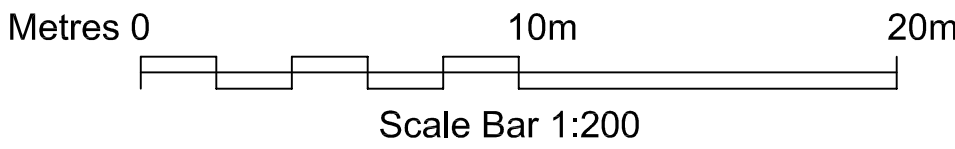
- Notes:
1. All dimensions are in millimetres, all levels are in metres Above Ordnance Datum (AOD) and all chainages are in metres, unless otherwise indicated. The chainages are shown on the scheme drawing nos. R1C093-R1-5015 to 5026.
 2. The NDR and Existing Ground Level (EGL) sections shown on the elevation at the bridge location are taken at the outer face of the western parapet plinth.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

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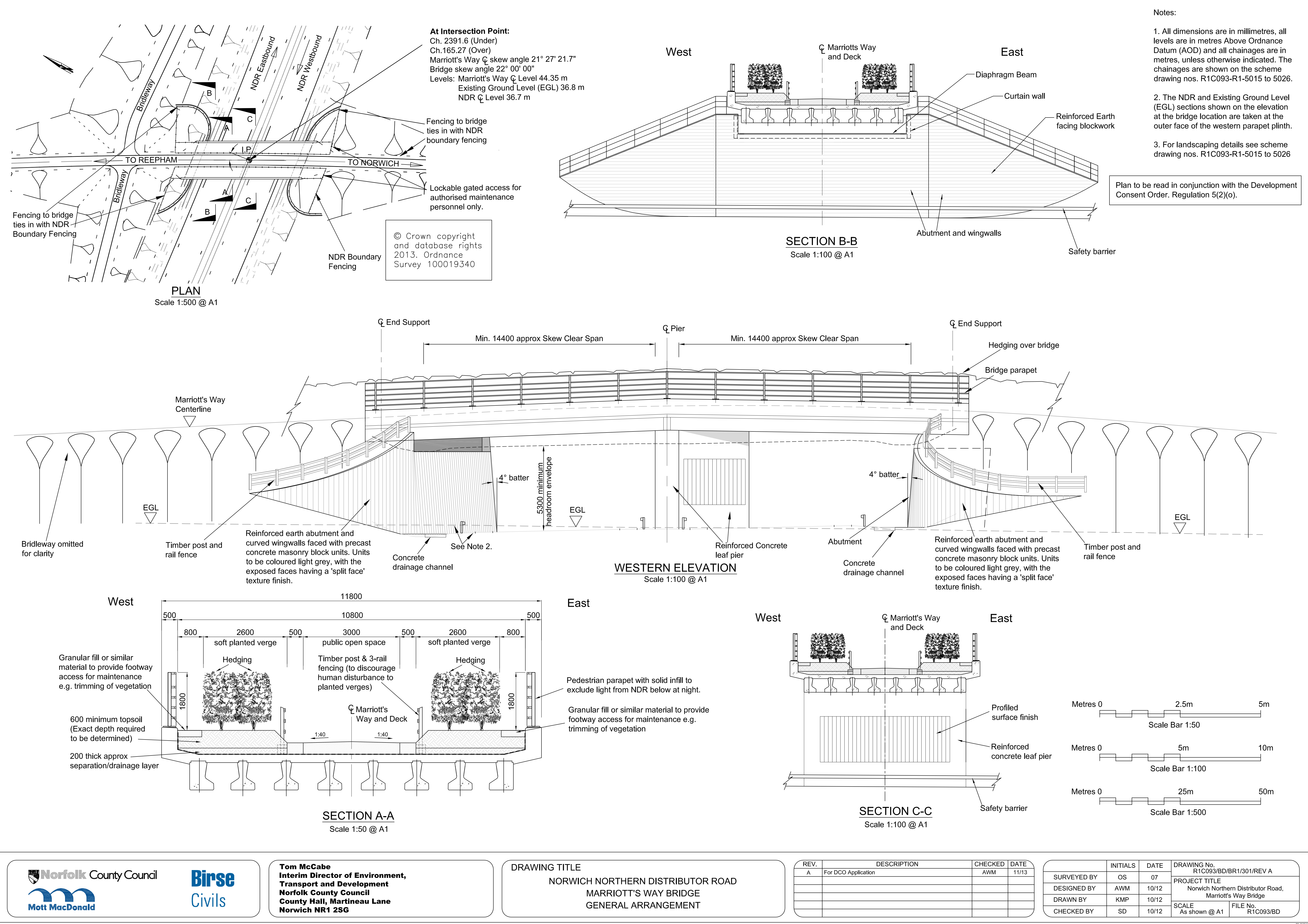


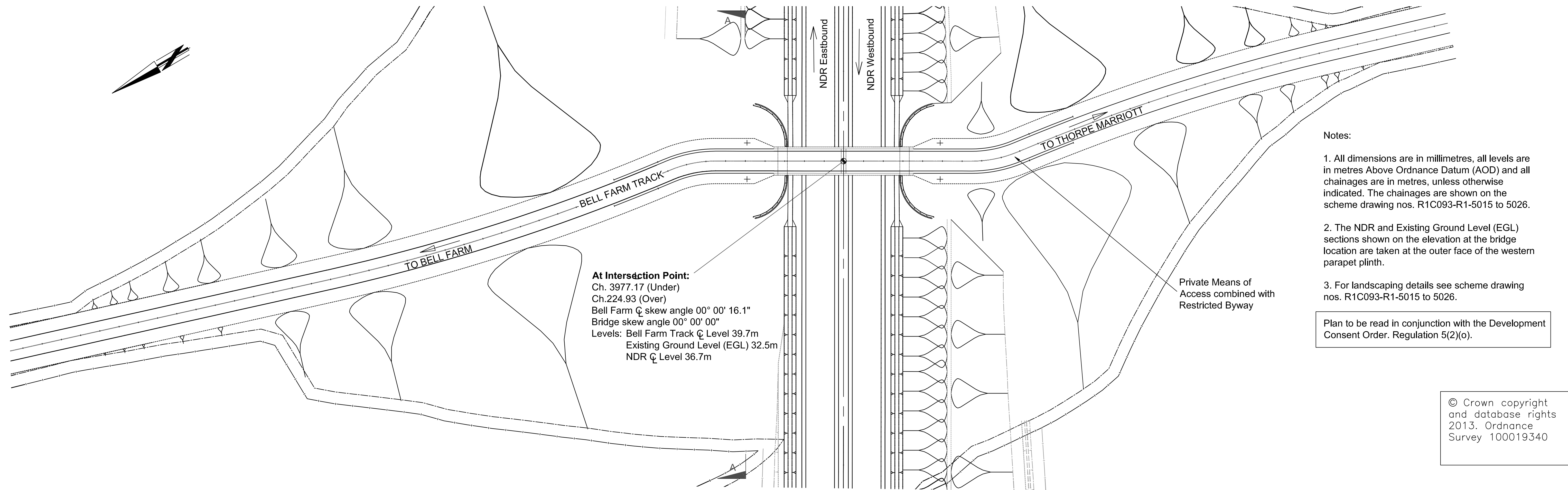
For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.



REV.	DESCRIPTION	CHECKED	DATE
A	For NSIP Pre-Application Consultation	AWM	06/13
B	For DCO Application	AWM	11/13

	INITIALS	DATE	DRAWING No. R1C093/BD/BR1/300/REV B
SURVEYED BY	OS	07	PROJECT TITLE Norwich Northern Distributor Road, Marriott's Way Bridge
DESIGNED BY	AWM	10/12	SCALE As shown @ A1
DRAWN BY	KMP	10/12	FILE No. R1C093/BD
CHECKED BY	SD	10/12	





At Intersection Point:
Ch. 3977.17 (Under)
Ch.224.93 (Over)
Bell Farm ϕ skew angle 00° 00' 16.1"
Bridge skew angle 00° 00' 00"
Levels: Bell Farm Track ϕ Level 39.7m
Existing Ground Level (EGL) 32.5m
NDR ϕ Level 36.7m

Notes:

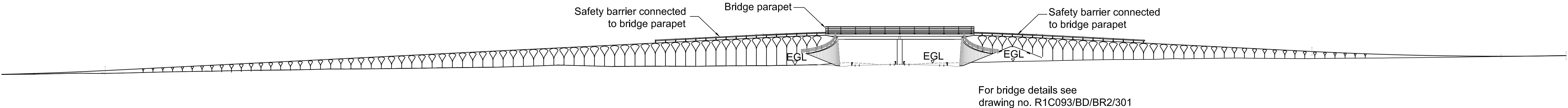
1. All dimensions are in millimetres, all levels are in metres Above Ordnance Datum (AOD) and all chainages are in metres, unless otherwise indicated. The chainages are shown on the scheme drawing nos. R1C093-R1-5015 to 5026.
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3. For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

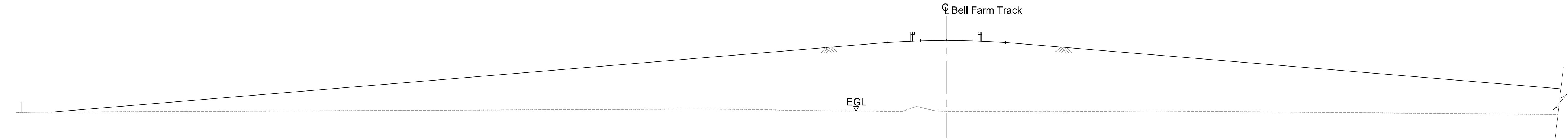
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Scale 1:500 @ A1

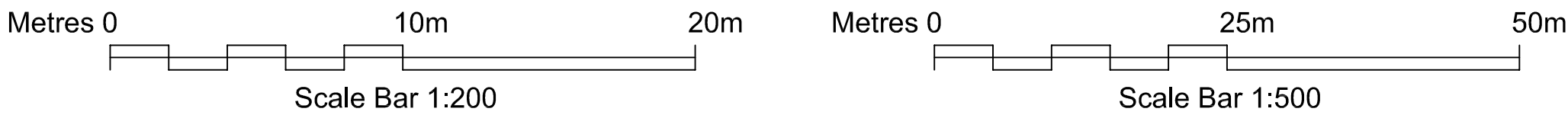
For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

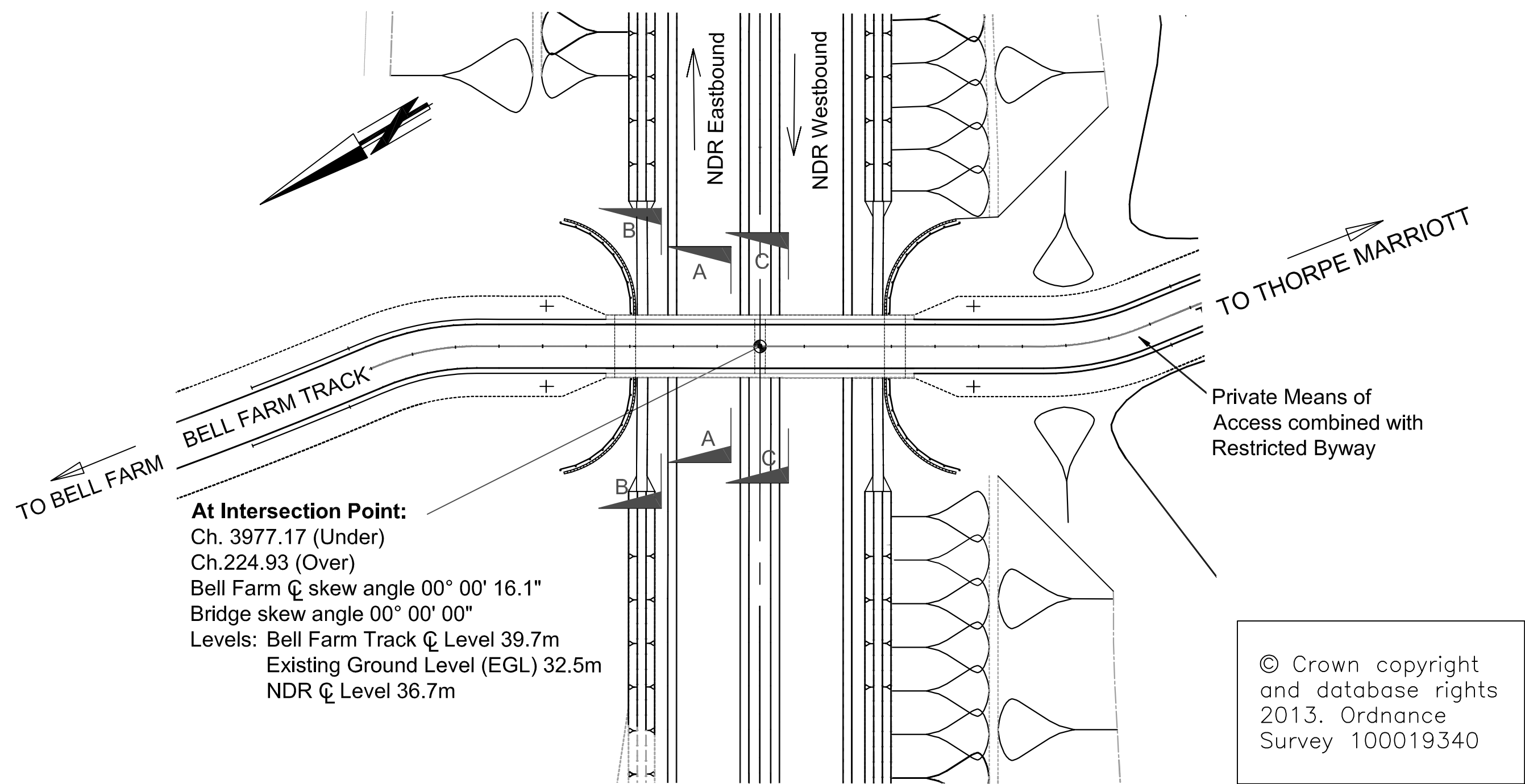


WESTERN ELEVATION
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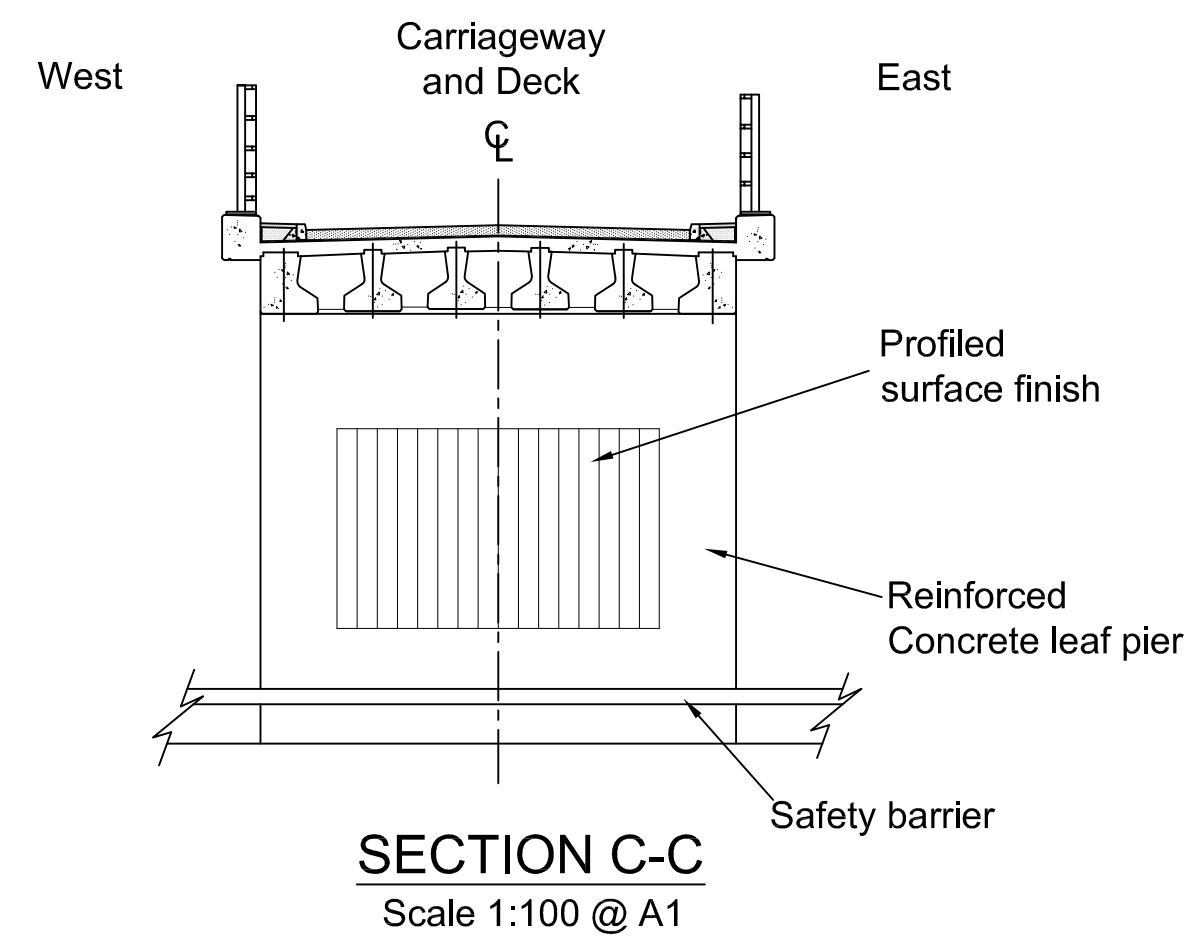


SECTION A-A
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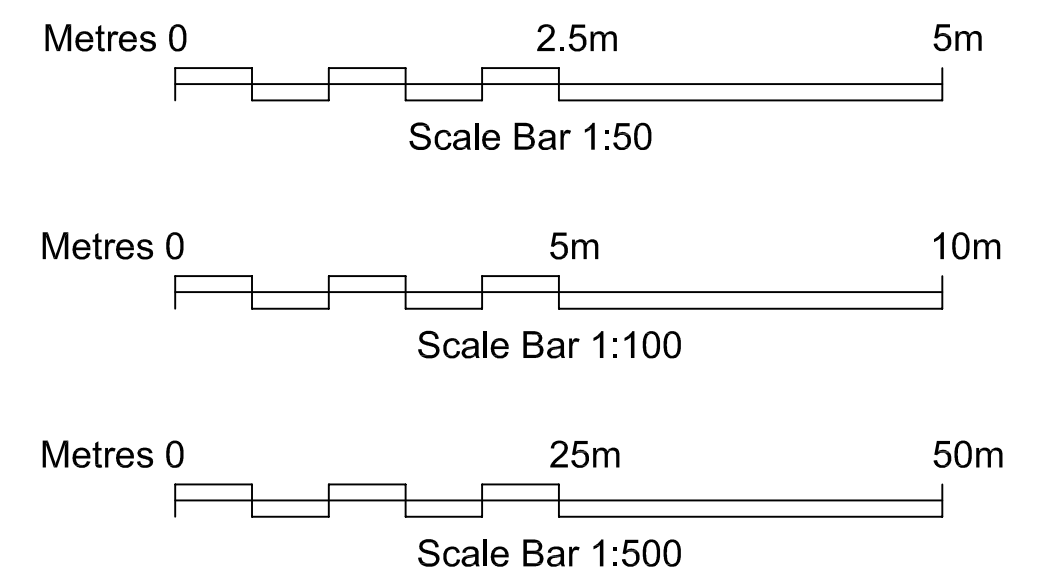
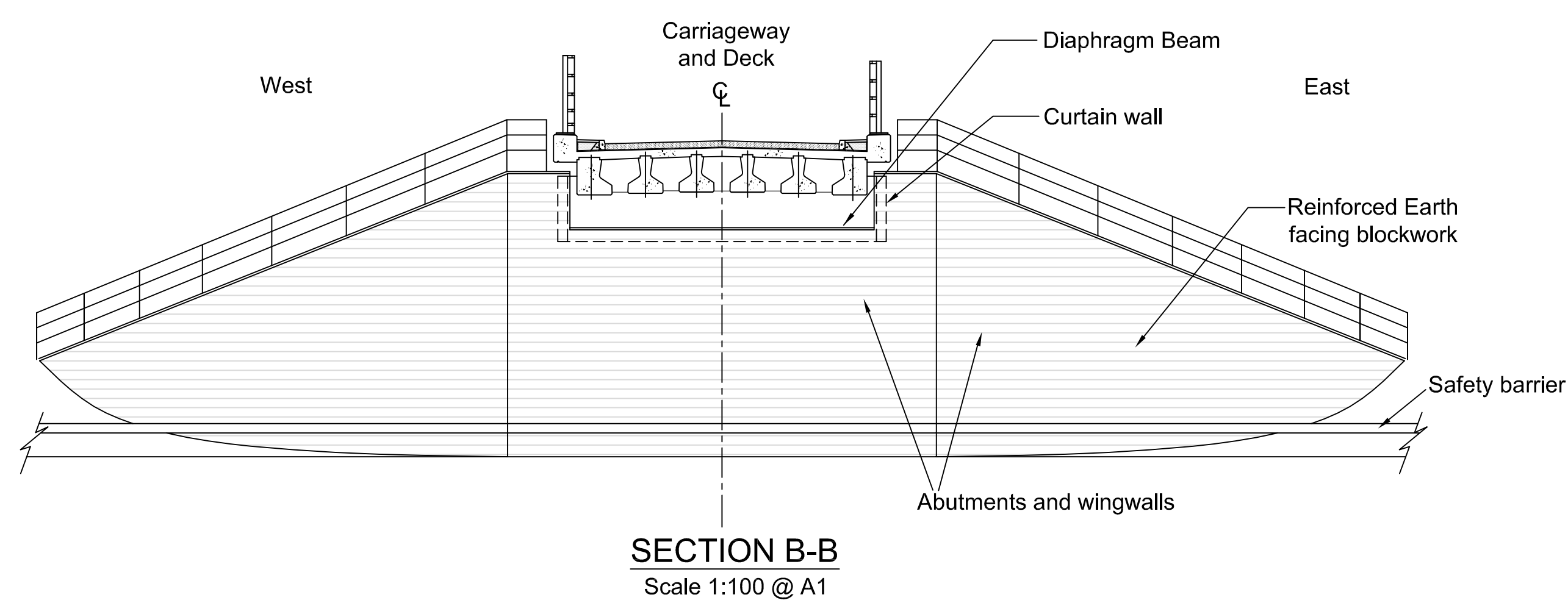
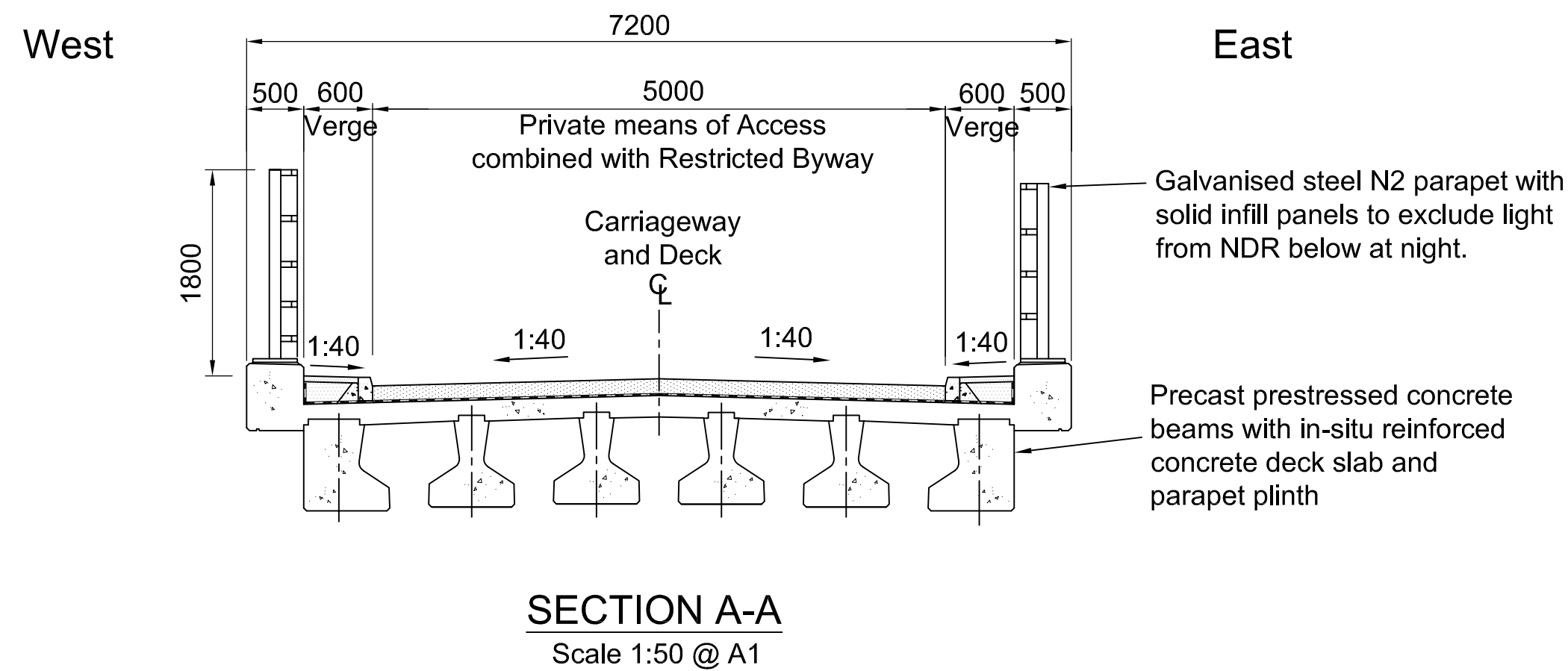
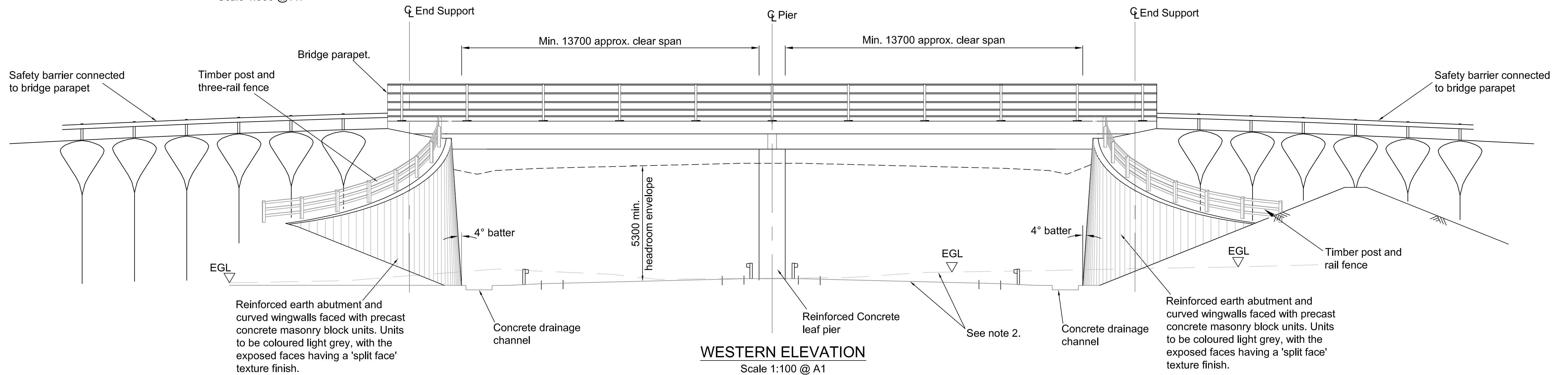


PLAN
Scale 1:500 @ A1



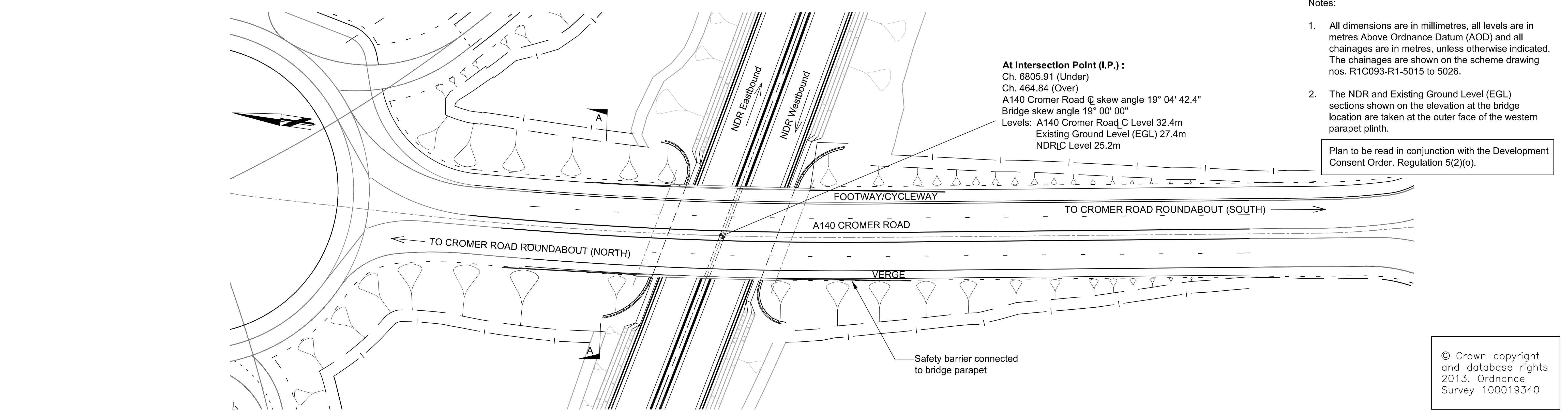
- Notes:
1. All dimensions are in millimetres, all levels are in metres Above Ordnance Datum (AOD) and all chainages are in metres, unless otherwise indicated. The chainages are shown on the scheme drawing nos. R1C093-R1-5015 to 5026.
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 3. For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

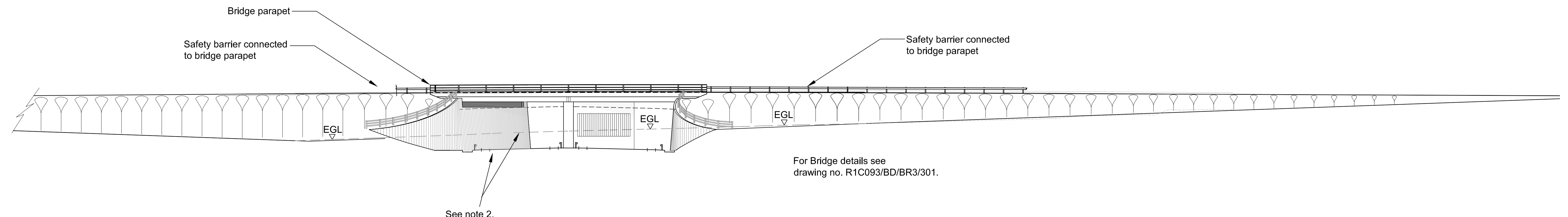


REV.	DESCRIPTION	CHECKED	DATE
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SURVEYED BY	INITIALS	DATE	DRAWING No. R1C093/BD/BR2/301/REV A
DESIGNED BY	OS	-	PROJECT TITLE Norwich Northern Distributor Road, Bell Farm Bridge
DRAWN BY	AWM	10/12	SCALE As shown @ A1
CHECKED BY	KMP	10/12	FILE No. R1C093/BD
	SD	10/12	

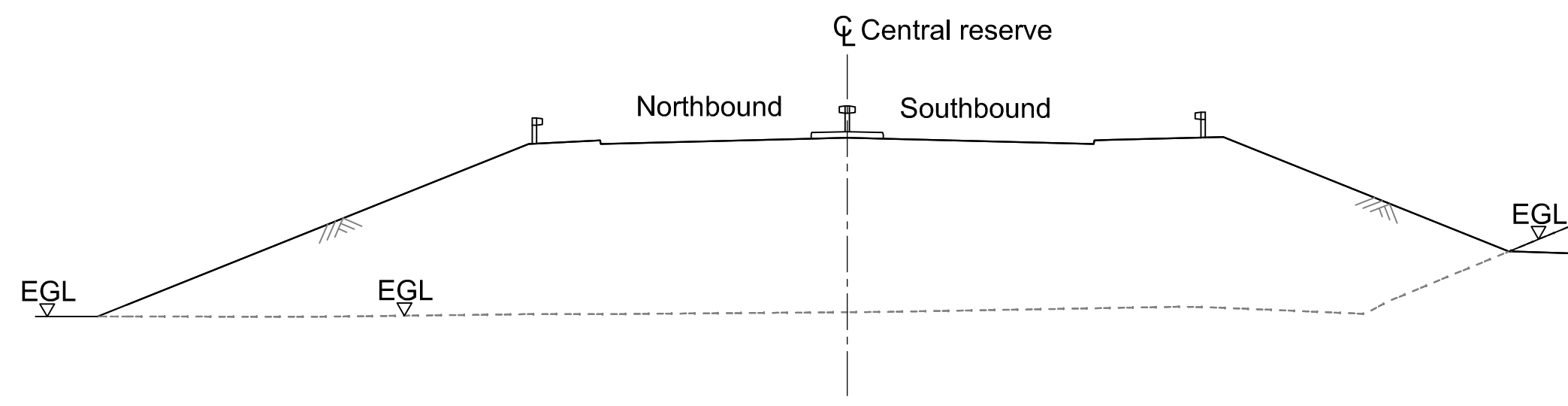


PLAN
Scale 1:500 @ A1

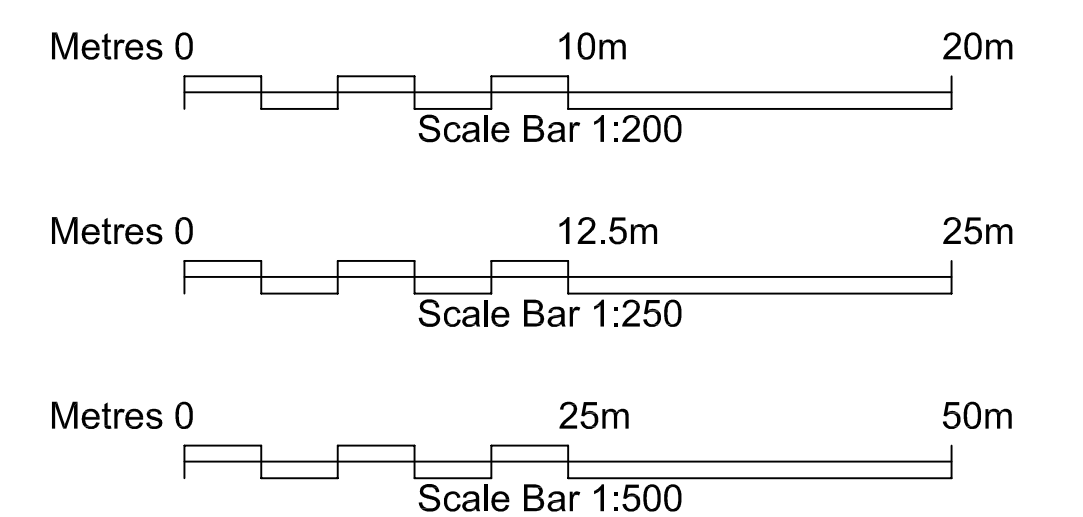


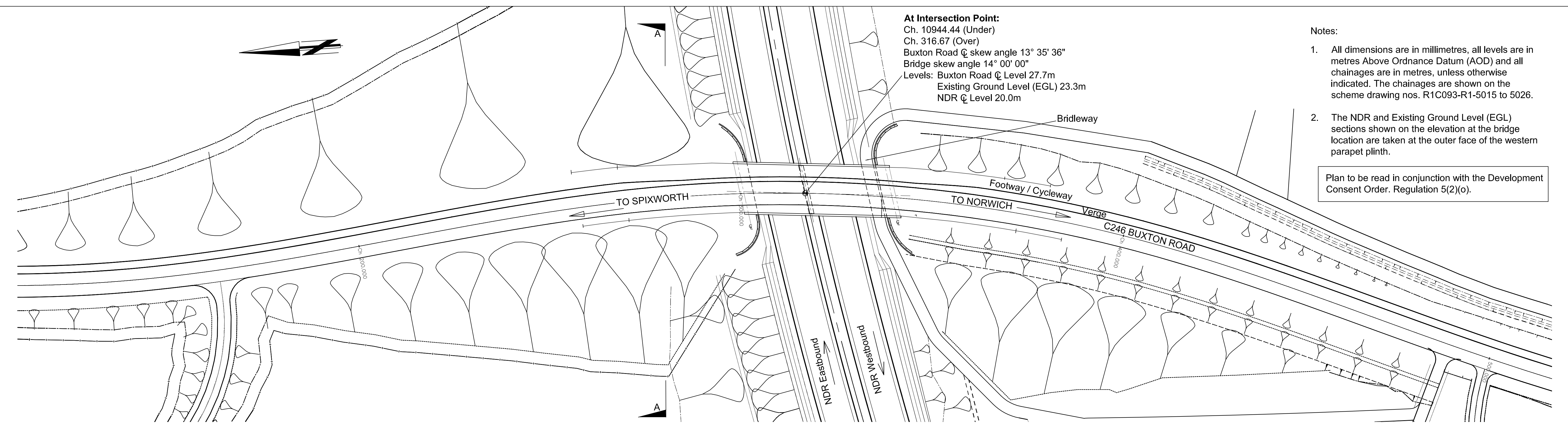
WESTERN ELEVATION
Scale 1:250 @ A1

For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.



SECTION A-A
Scale 1:200 @ A1



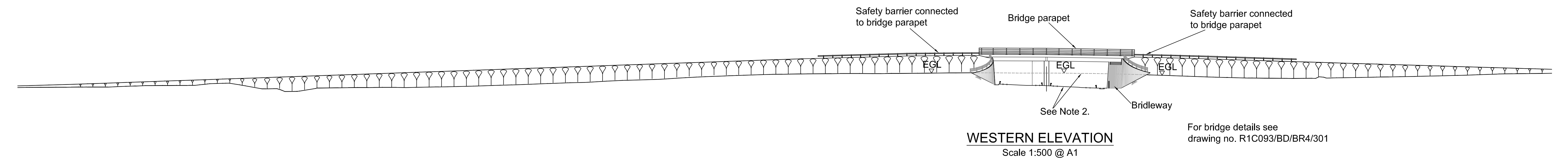


At Intersection Point:
Ch. 10944.44 (Under)
Ch. 316.67 (Over)
Buxton Road \varnothing skew angle 13° 35' 36"
Bridge skew angle 14° 00' 00"
Levels: Buxton Road \varnothing Level 27.7m
Existing Ground Level (EGL) 23.3m
NDR \varnothing Level 20.0m

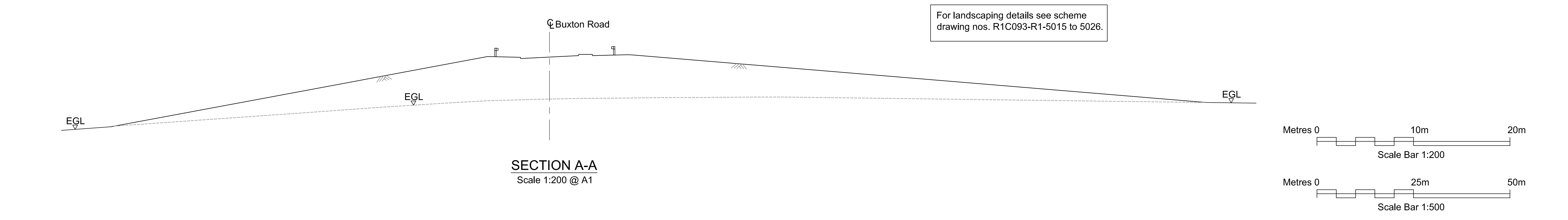
- Notes:
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Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

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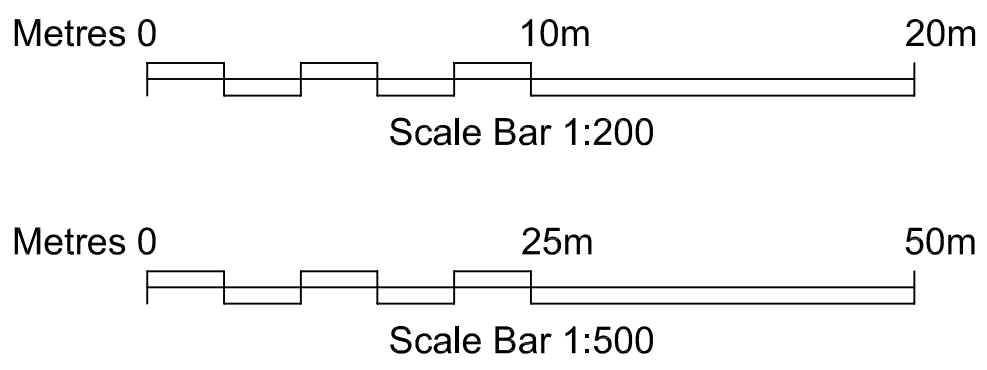


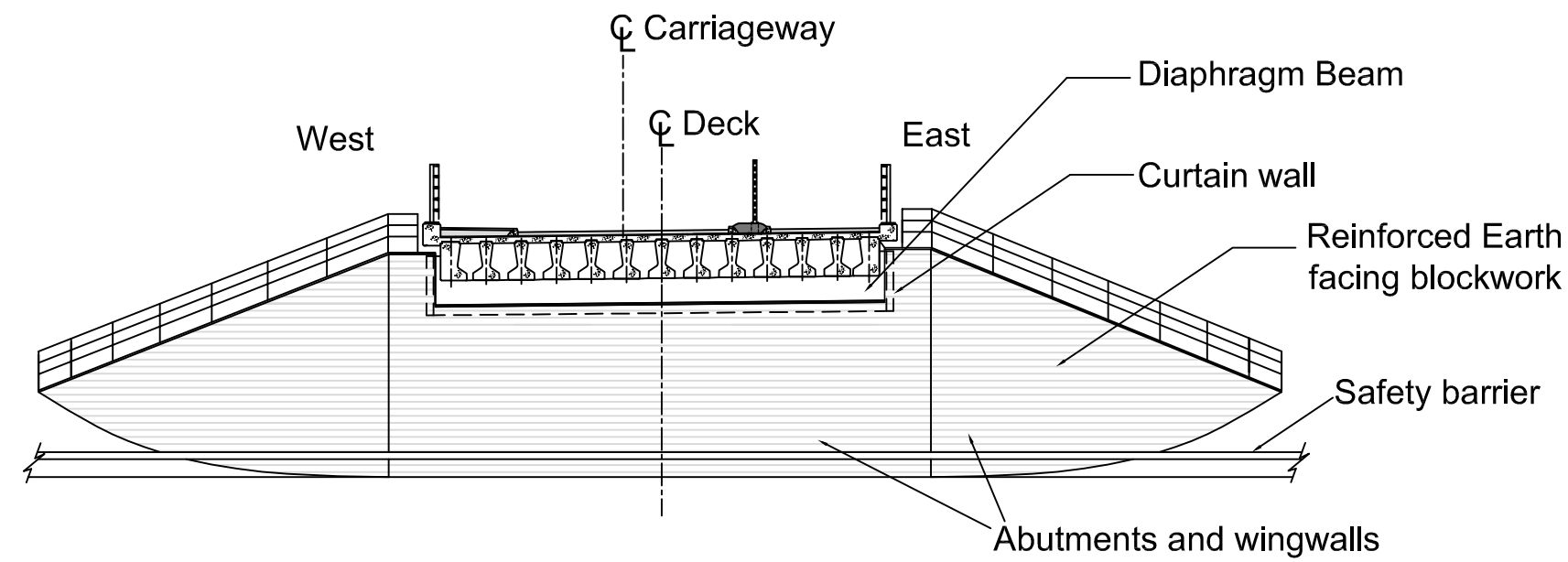
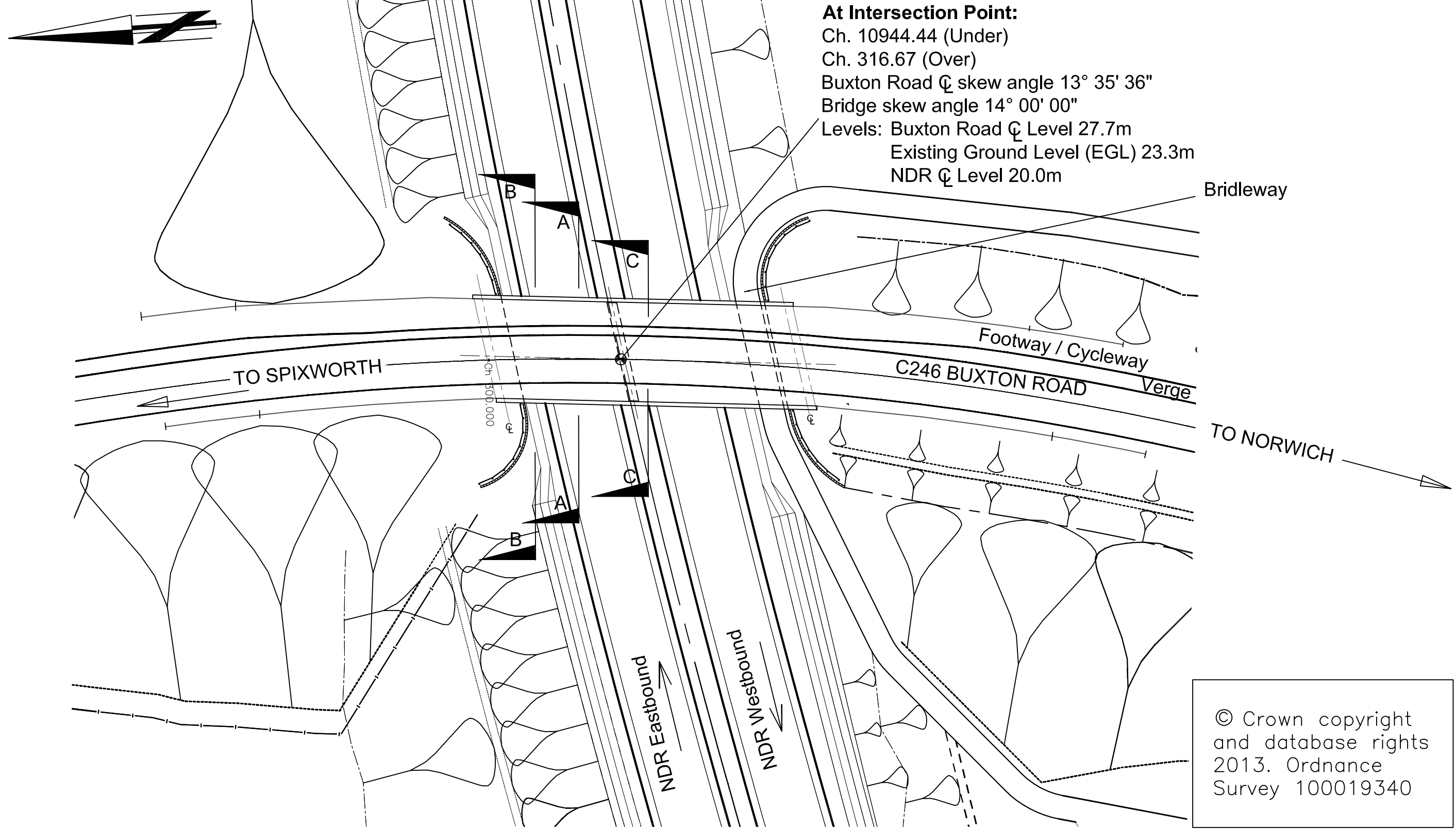
Safety barrier connected to bridge parapet
Bridge parapet
Safety barrier connected to bridge parapet
EGL
EGL
EGL
Bridleway
See Note 2.
For bridge details see drawing no. R1C093/BD/BR4/301



SECTION A-A
Scale 1:200 @ A1

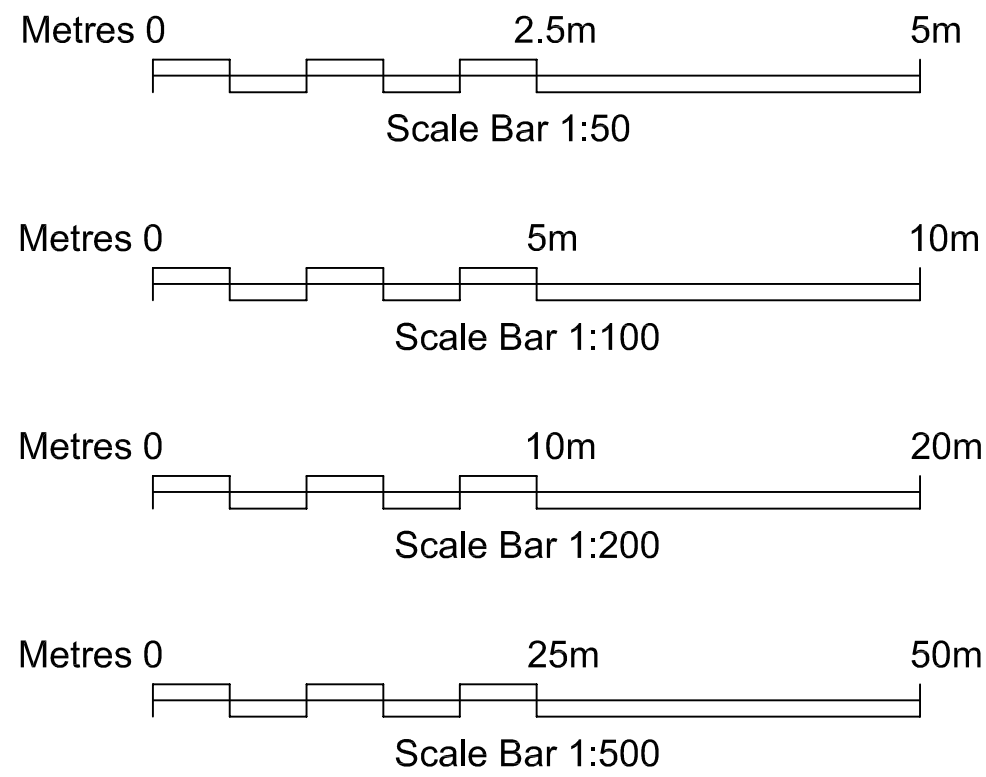
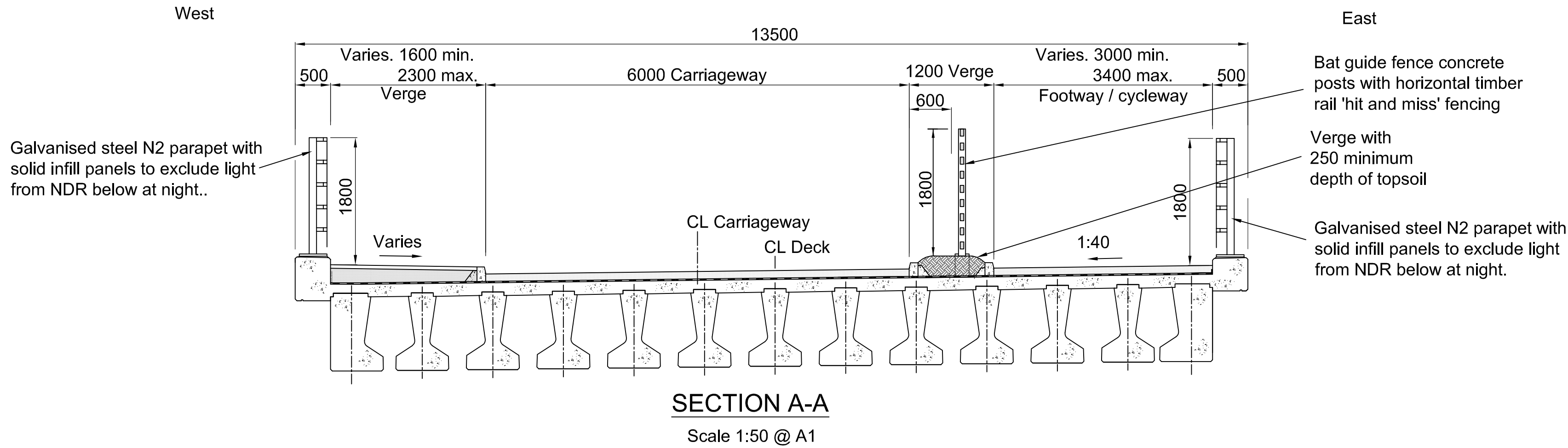
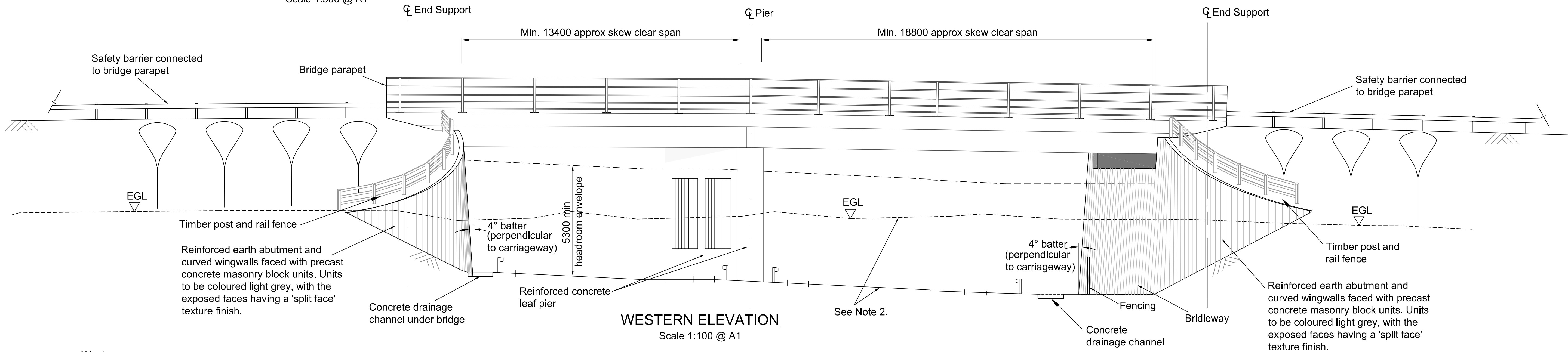
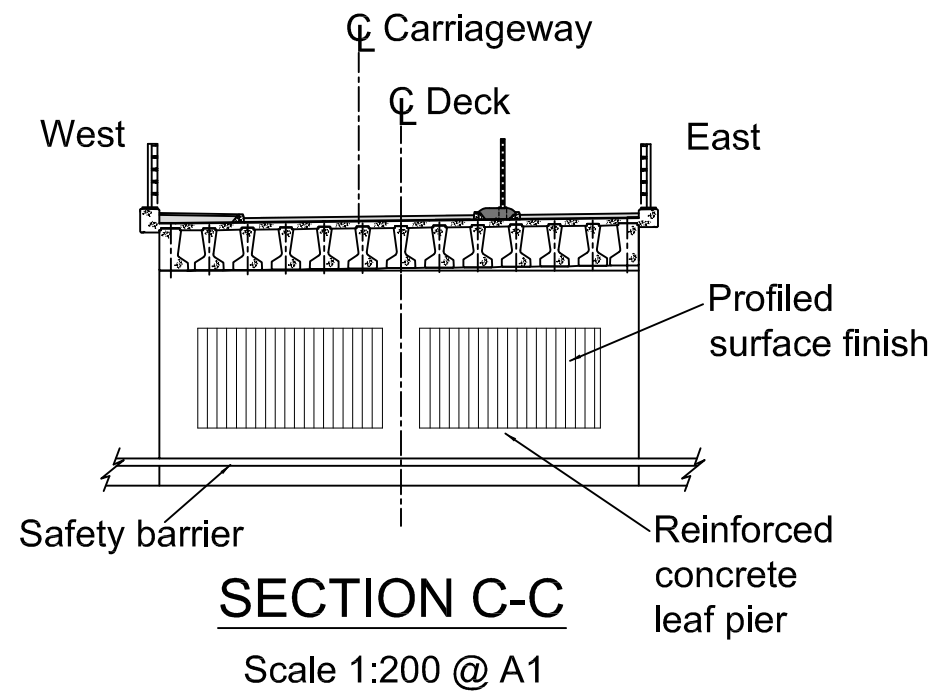
For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.





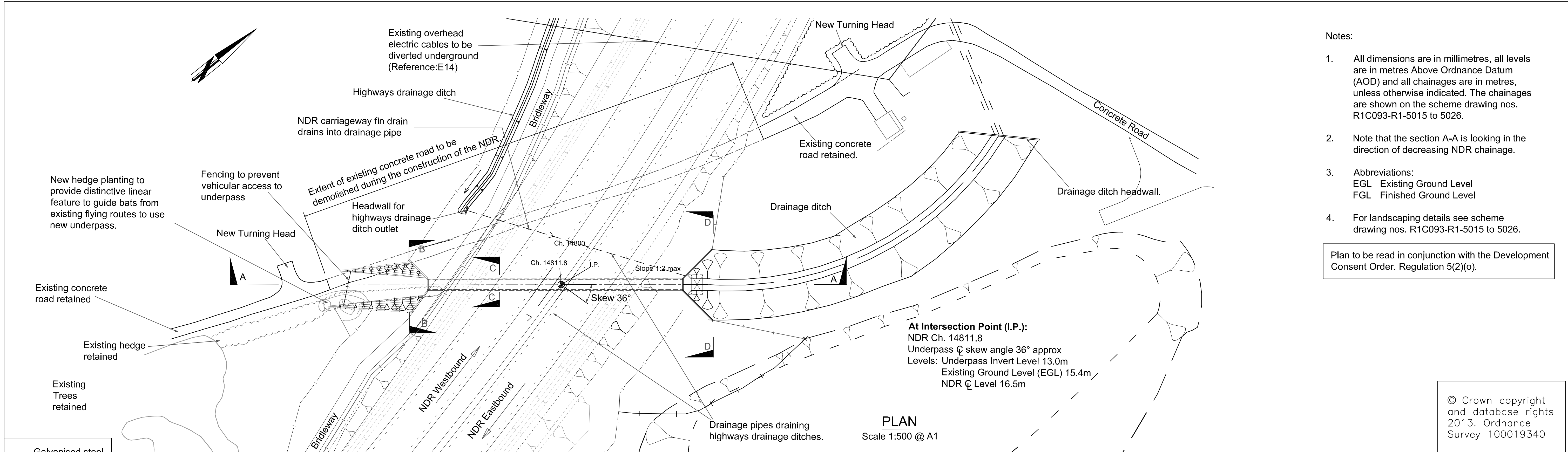
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 - For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).



REV.	DESCRIPTION	CHECKED	DATE
A	For DCO Application.	AWM	11/13

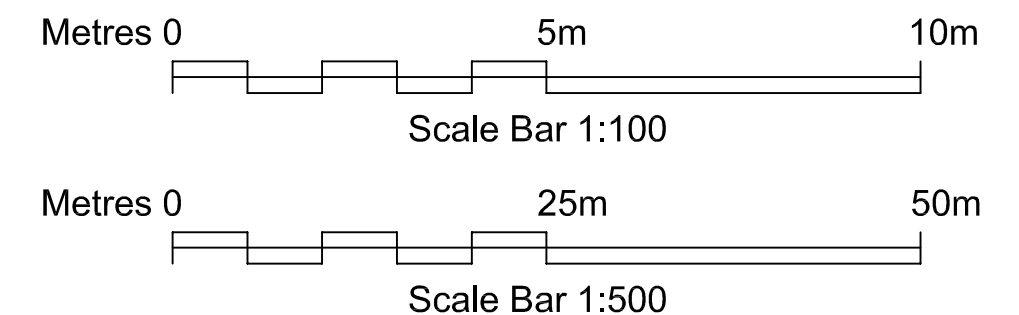
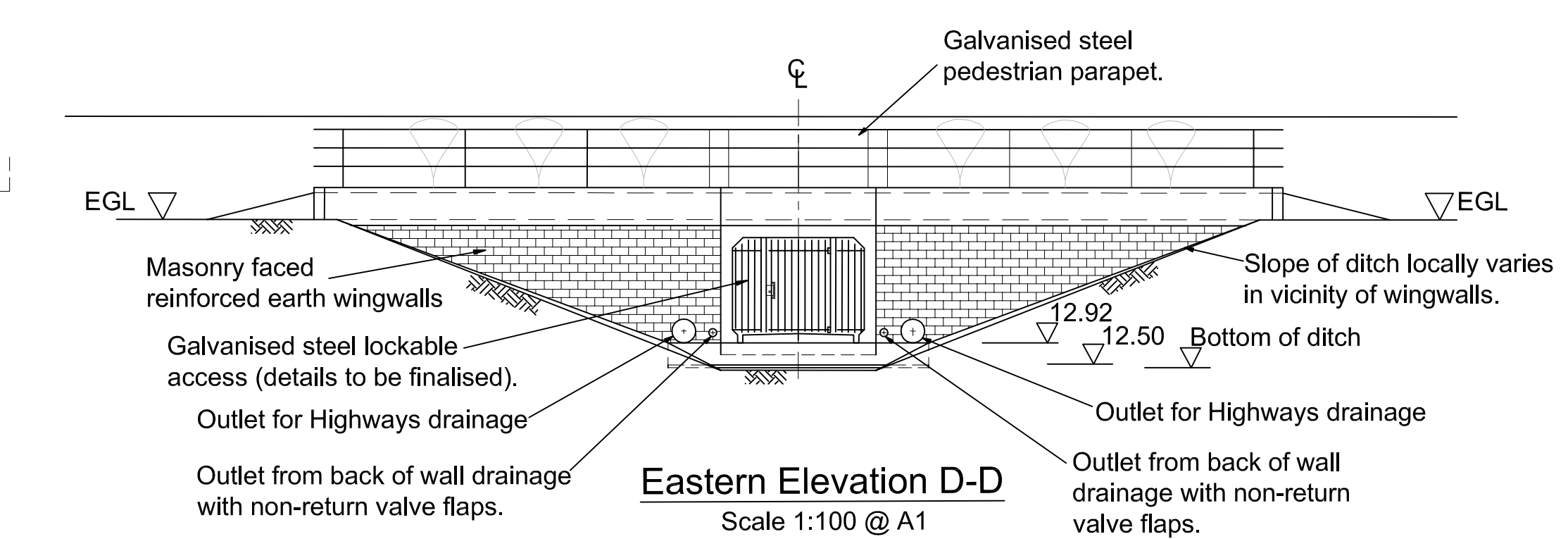
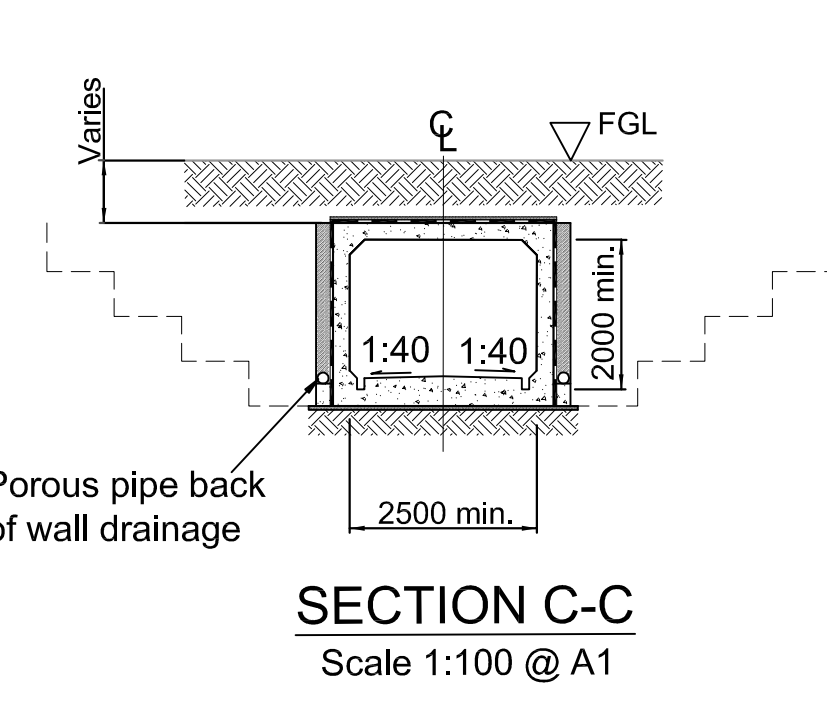
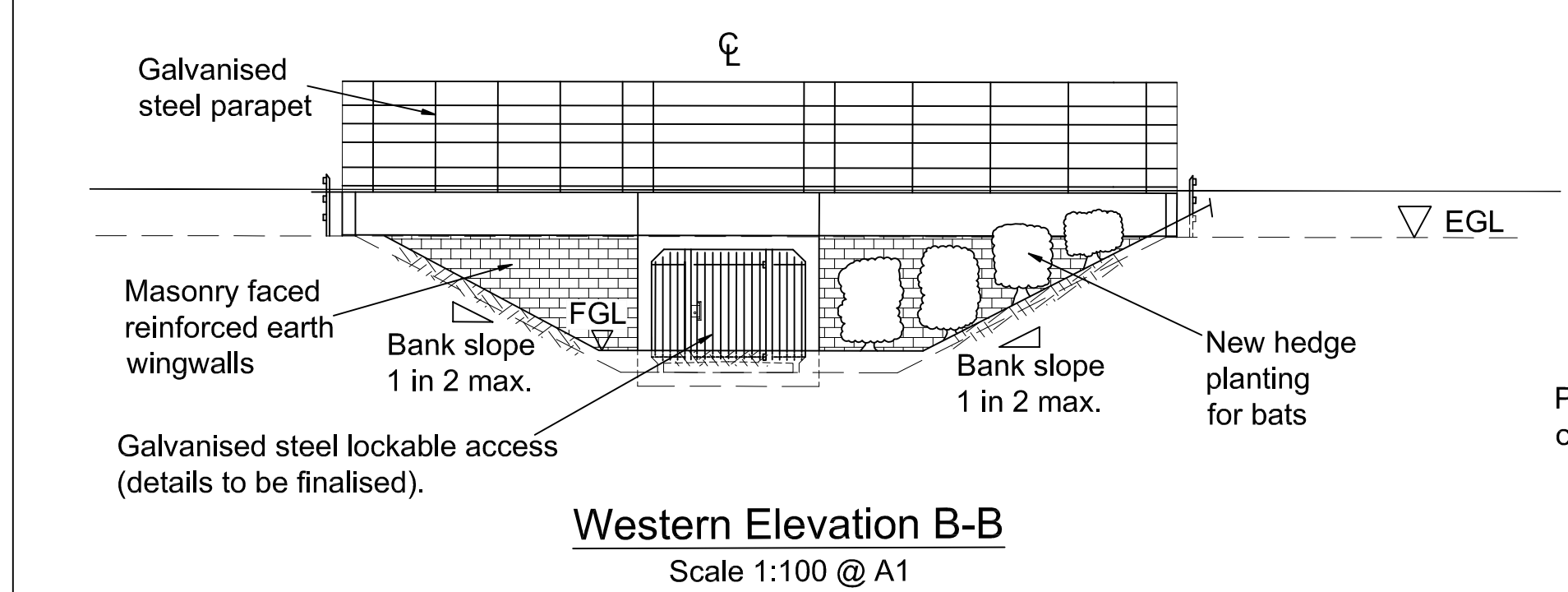
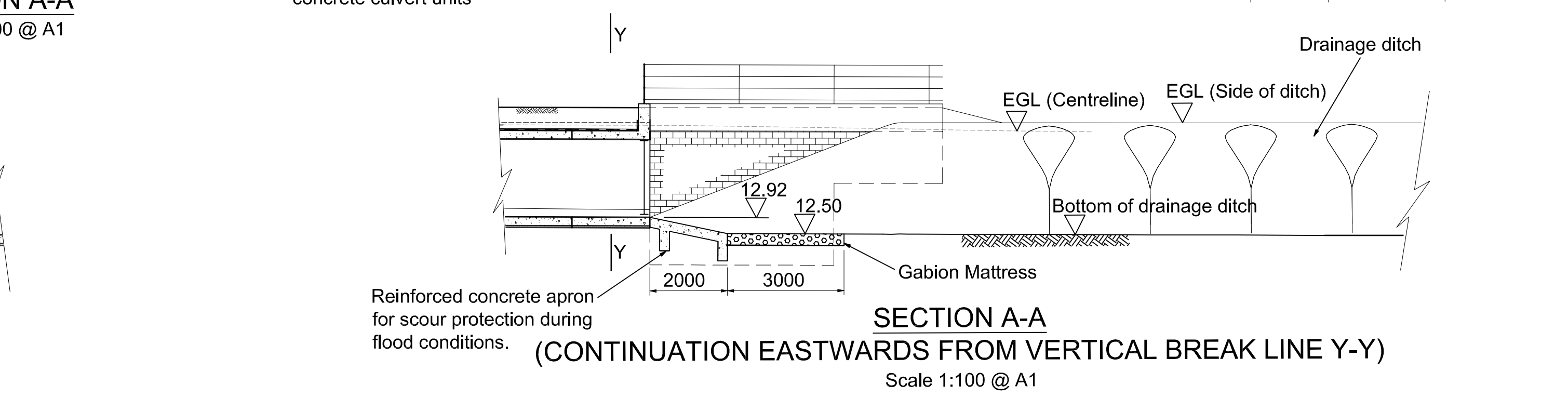
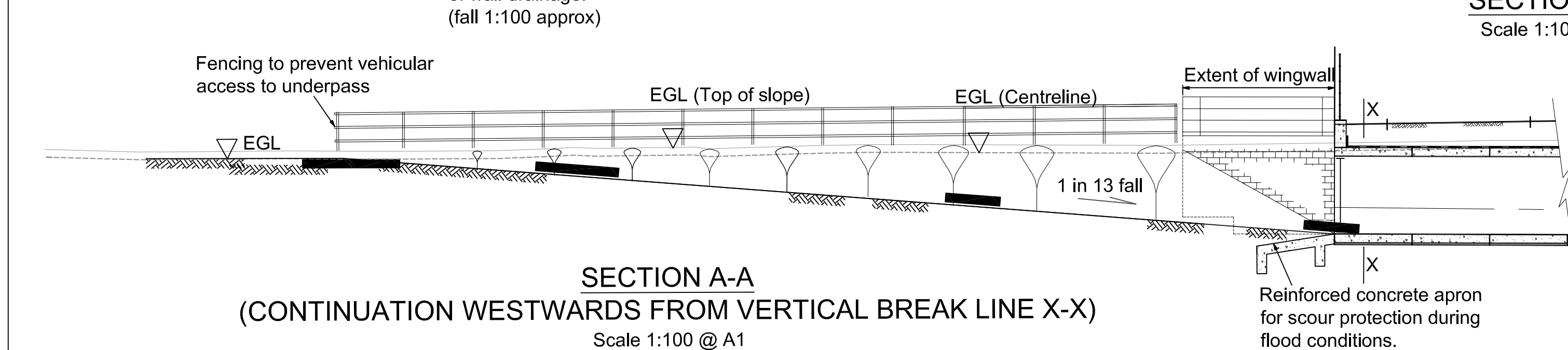
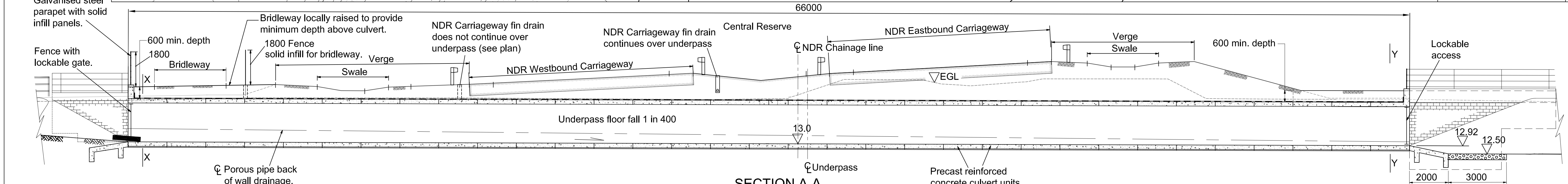
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DESIGNED BY	OS	07	PROJECT TITLE Norwich Northern Distributor Road, Buxton Road Bridge
DRAWN BY	KMP	10/12	SCALE As shown @ A1
CHECKED BY	SD	10/12	FILE No. R1C093/BD

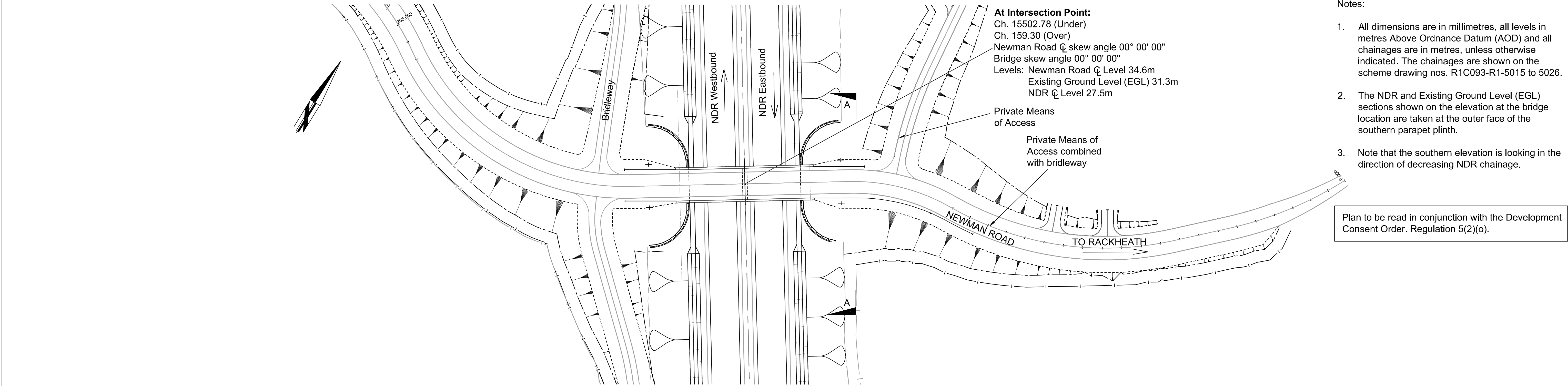


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1. All dimensions are in millimetres, all levels are in metres Above Ordnance Datum (AOD) and all chainages are in metres, unless otherwise indicated. The chainages are shown on the scheme drawing nos. R1C093-R1-5015 to 5026.
 2. Note that the section A-A is looking in the direction of decreasing NDR chainage.
 3. Abbreviations:
EGL Existing Ground Level
FGL Finished Ground Level
 4. For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

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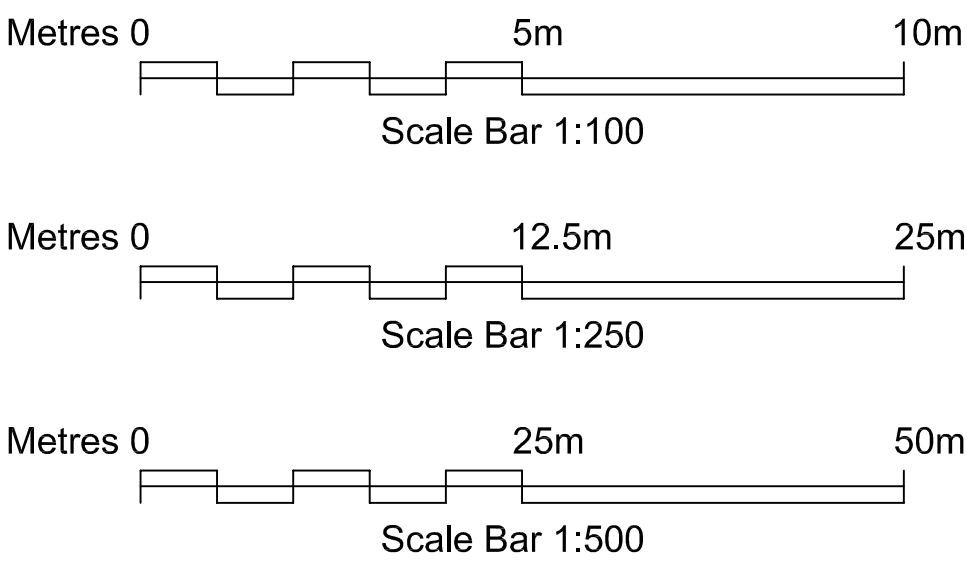
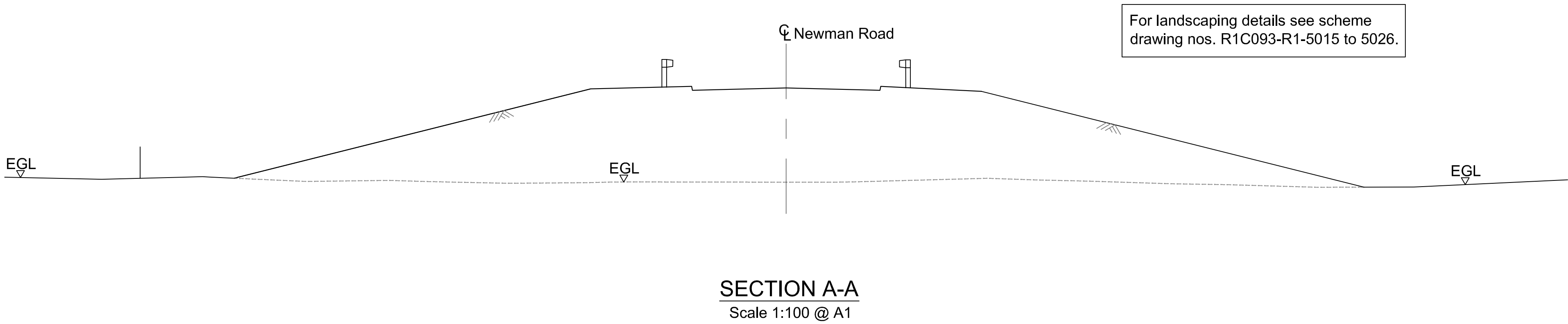
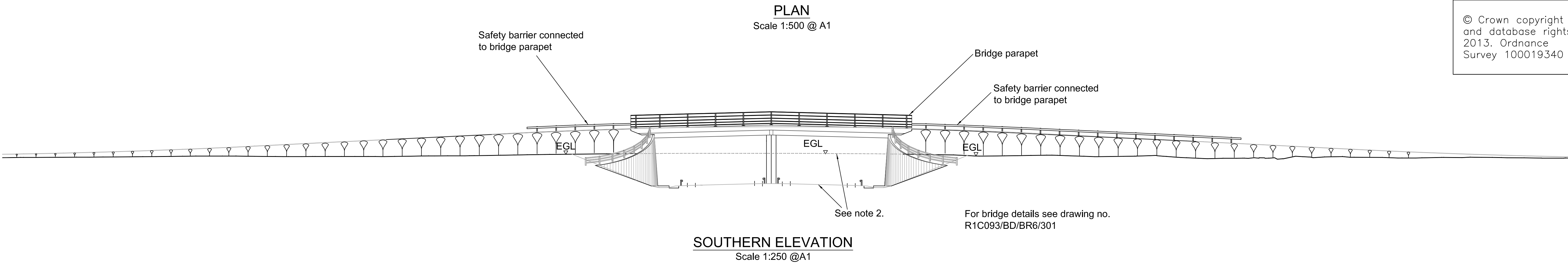




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 3. Note that the southern elevation is looking in the direction of decreasing NDR chainage.

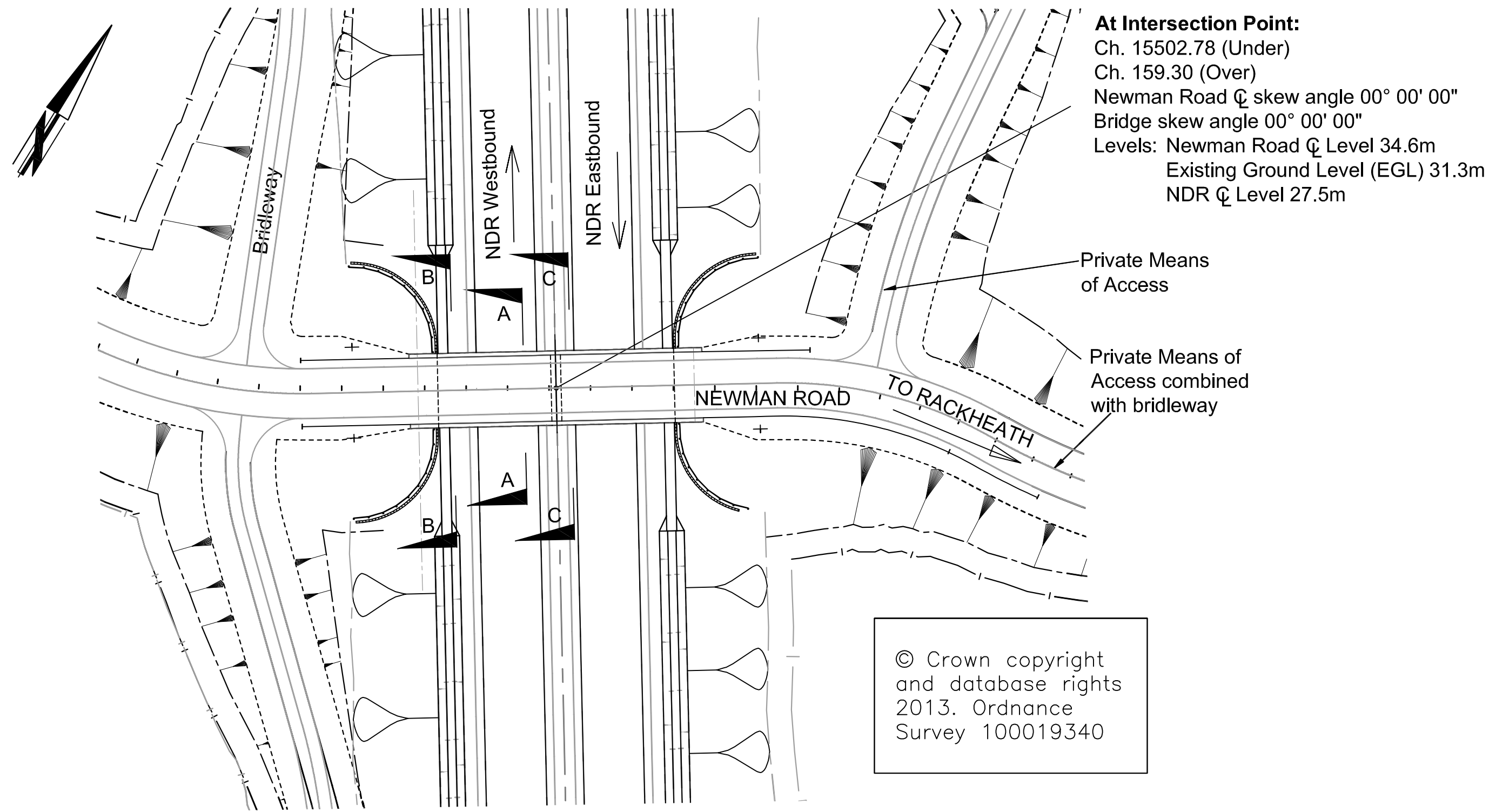
Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

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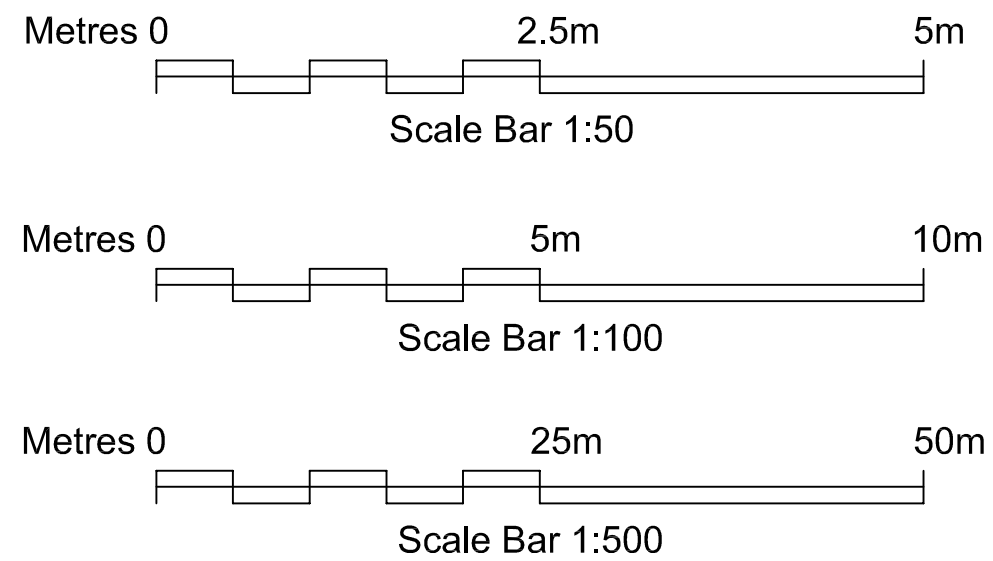
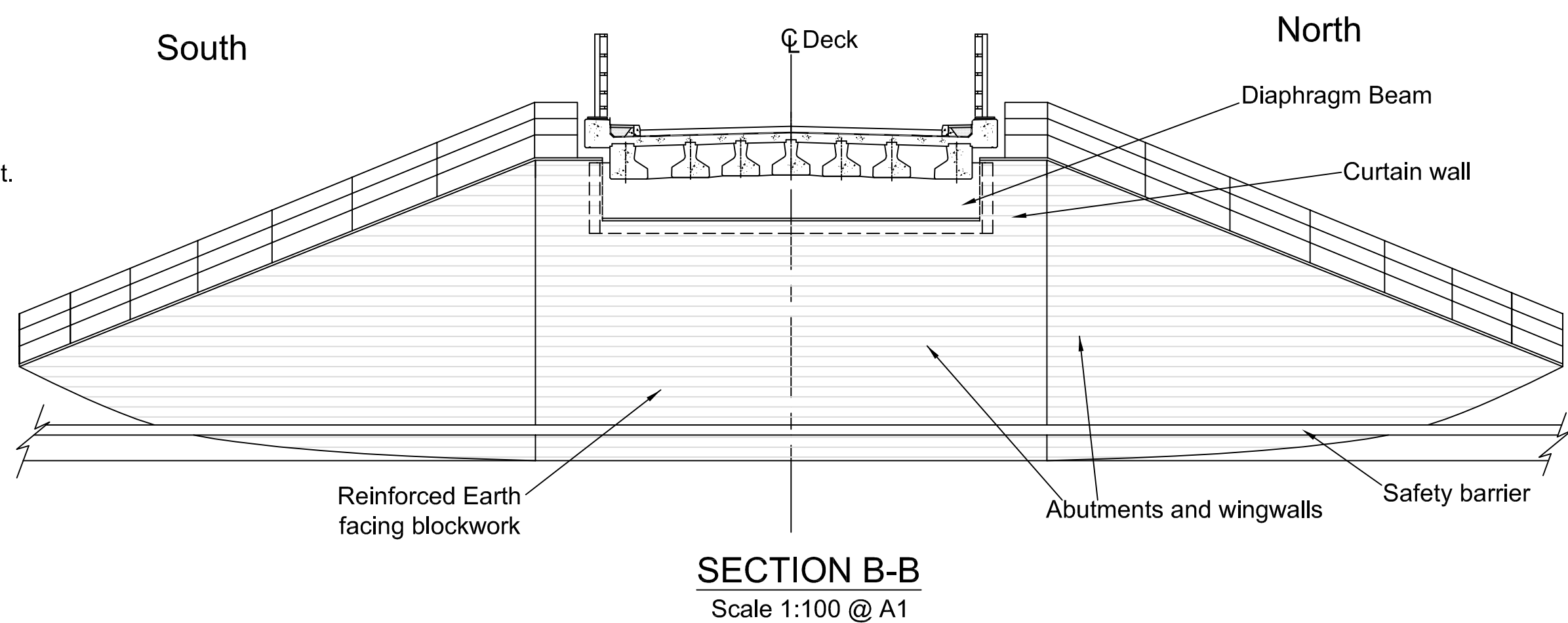
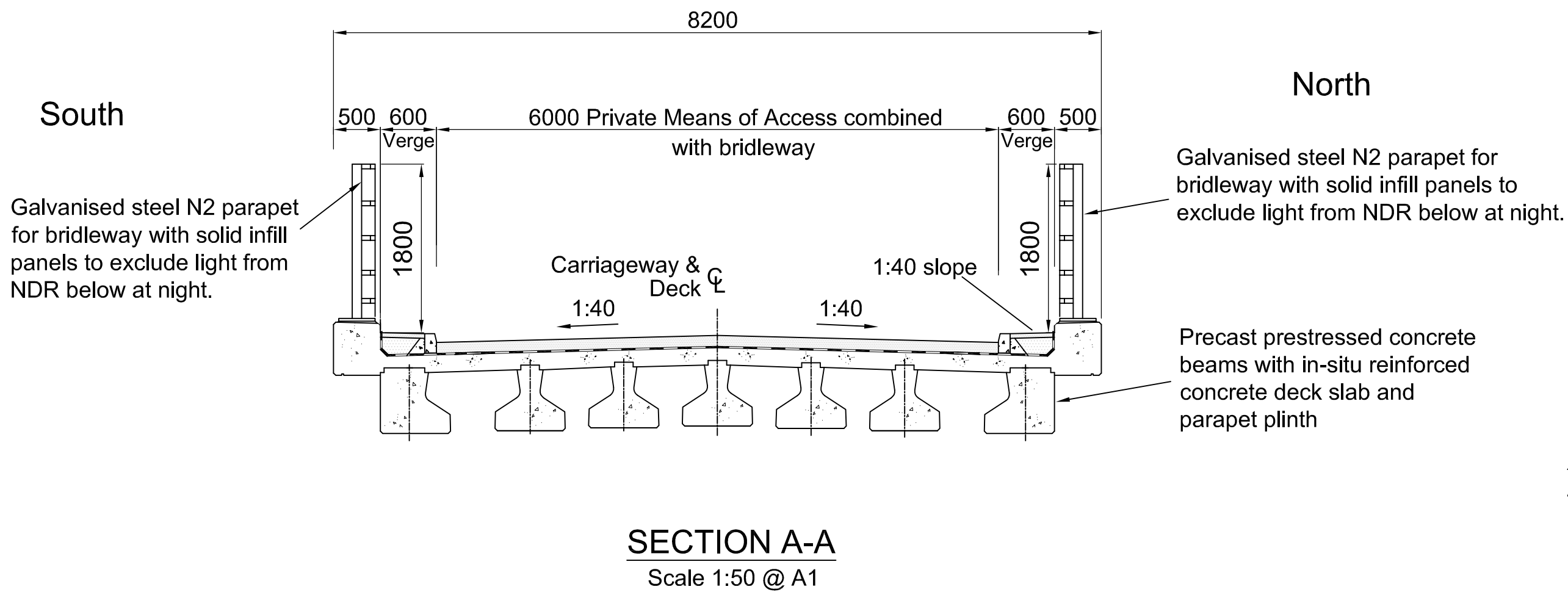
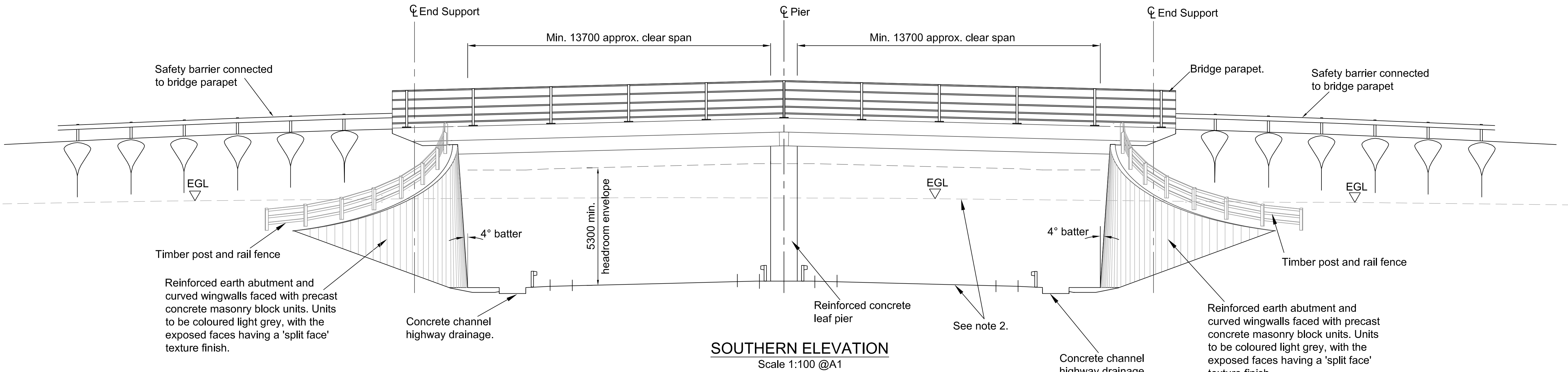


REV.	DESCRIPTION	CHECKED	DATE
A	For NSIP Pre-Application Consultation	AWM	06/13
B	Plan : Western side, PMA & 'To Norwich' notes removed.	AWM	06/13
C	For DCO Application.	AWM	11/13

	INITIALS	DATE	DRAWING No. R1C093/BD/BR6/300/REV C
SURVEYED BY	OS	07	
DESIGNED BY	AWM	10/12	PROJECT TITLE Norwich Northern Distributor Road, Newman Road Bridge
DRAWN BY	KMP	10/12	
CHECKED BY	SD	10/12	SCALE As shown @ A1
			FILE No. R1C093/BD



PLAN
Scale 1:500 @ A1



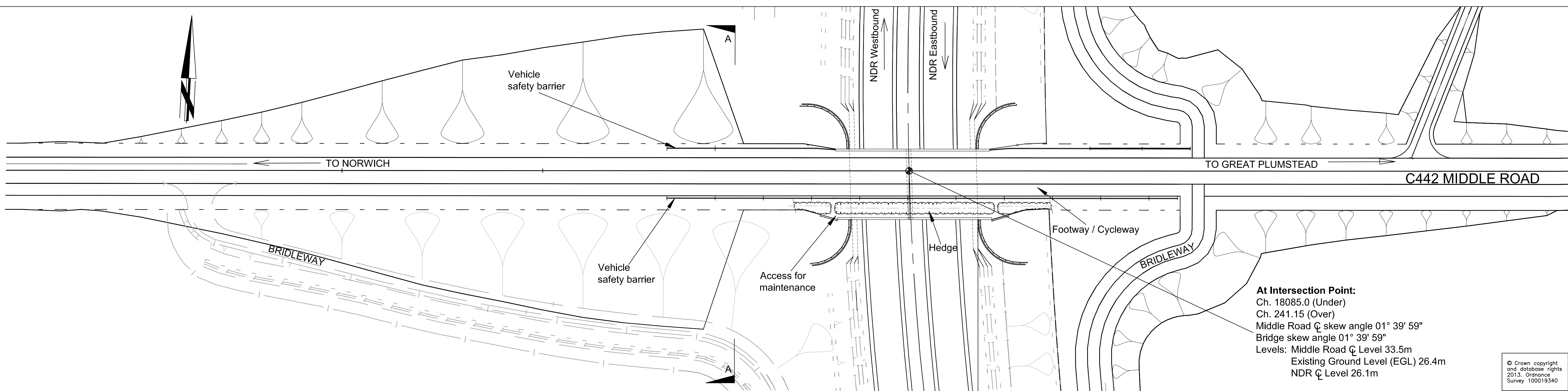
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- Note that the southern elevation is looking in the direction of decreasing NDR chainage.
- For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

REV.	DESCRIPTION	CHECKED	DATE
A	For DCO Application.	AWM	11/13

SURVEYED BY	INITIALS	DATE	DRAWING No.
DESIGNED BY	OS	07	R1C093/BD/BR6/301/REV A
DRAWN BY	AWM	10/12	PROJECT TITLE
CHECKED BY	KMP	10/12	Norwich Northern Distributor Road, Newman Road Bridge
	SD	10/12	SCALE As shown @ A1
			FILE No. R1C093/BD



PLAN
Scale 1:500 @ A1

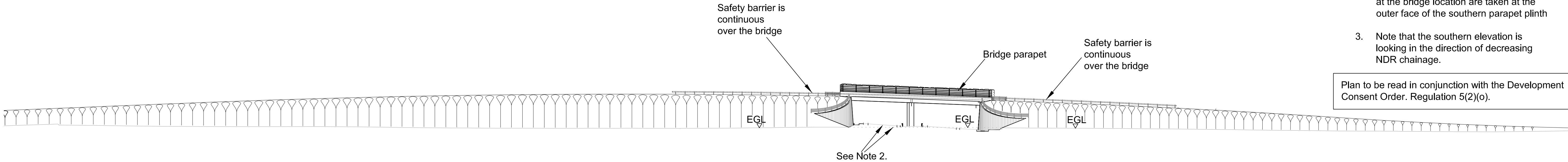
At Intersection Point:
Ch. 18085.0 (Under)
Ch. 241.15 (Over)
Middle Road ϕ skew angle 01° 39' 59"
Bridge skew angle 01° 39' 59"
Levels: Middle Road ϕ Level 33.5m
Existing Ground Level (EGL) 26.4m
NDR ϕ Level 26.1m

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Notes:

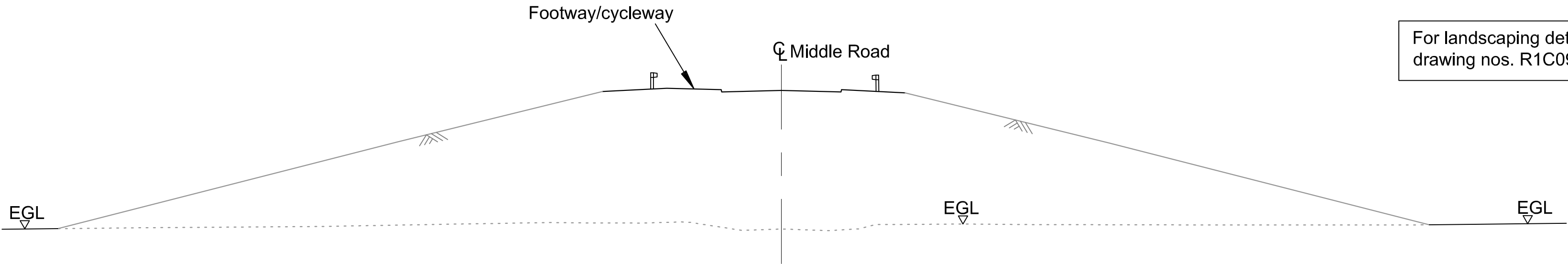
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3. Note that the southern elevation is looking in the direction of decreasing NDR chainage.

Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).



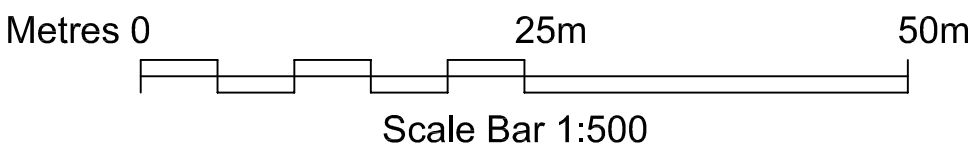
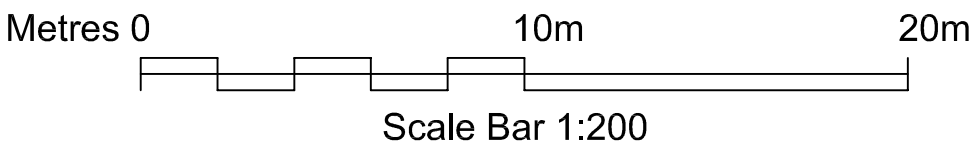
SOUTHERN ELEVATION
Scale 1:500 @A1

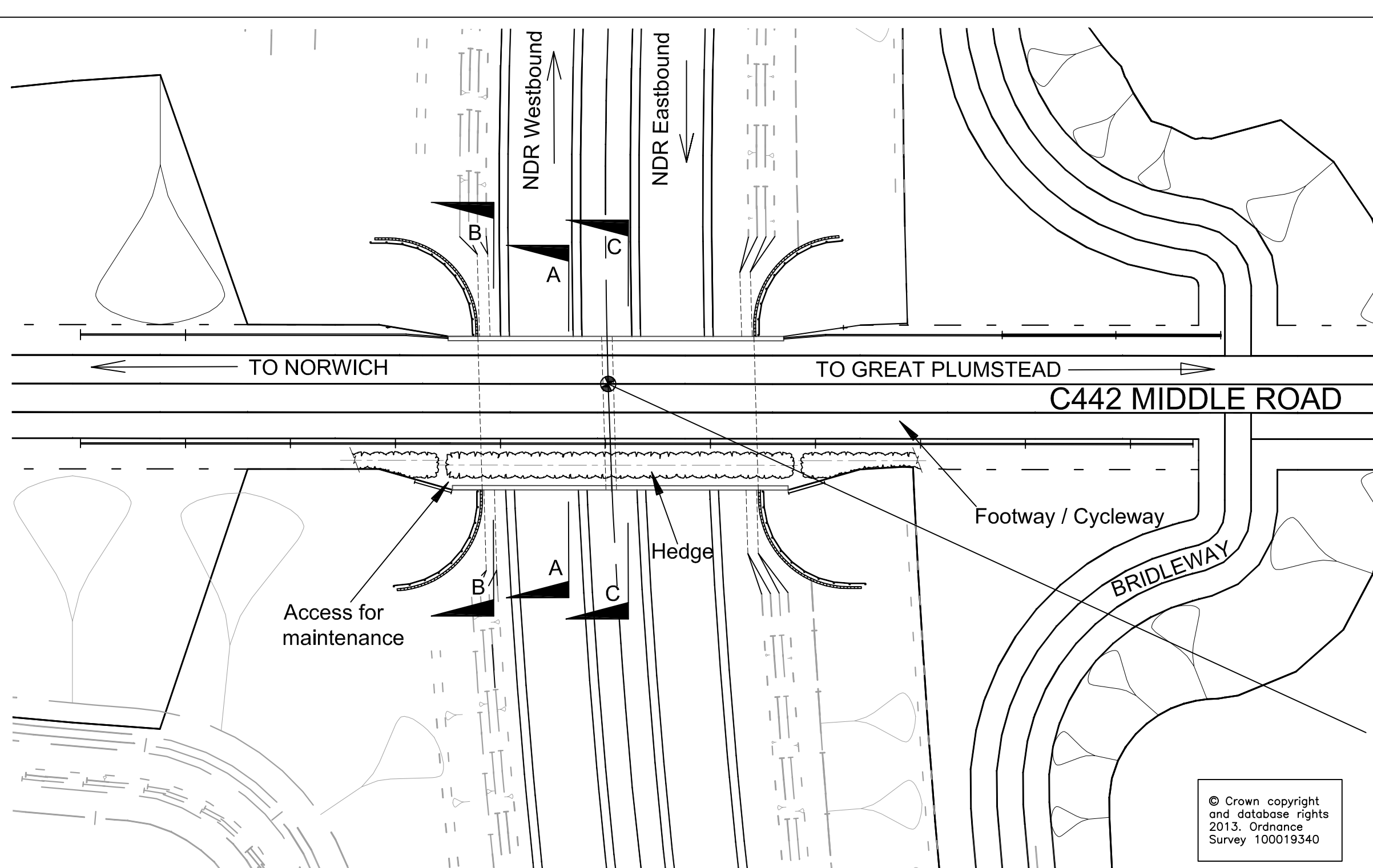
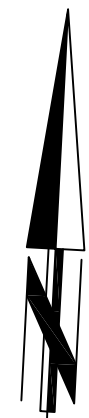
For bridge details see
drawing no. R1C093/BD/BR9/301



SECTION A-A
Scale 1:200 @A1

For landscaping details see scheme
drawing nos. R1C093-R1-5015 to 5026.

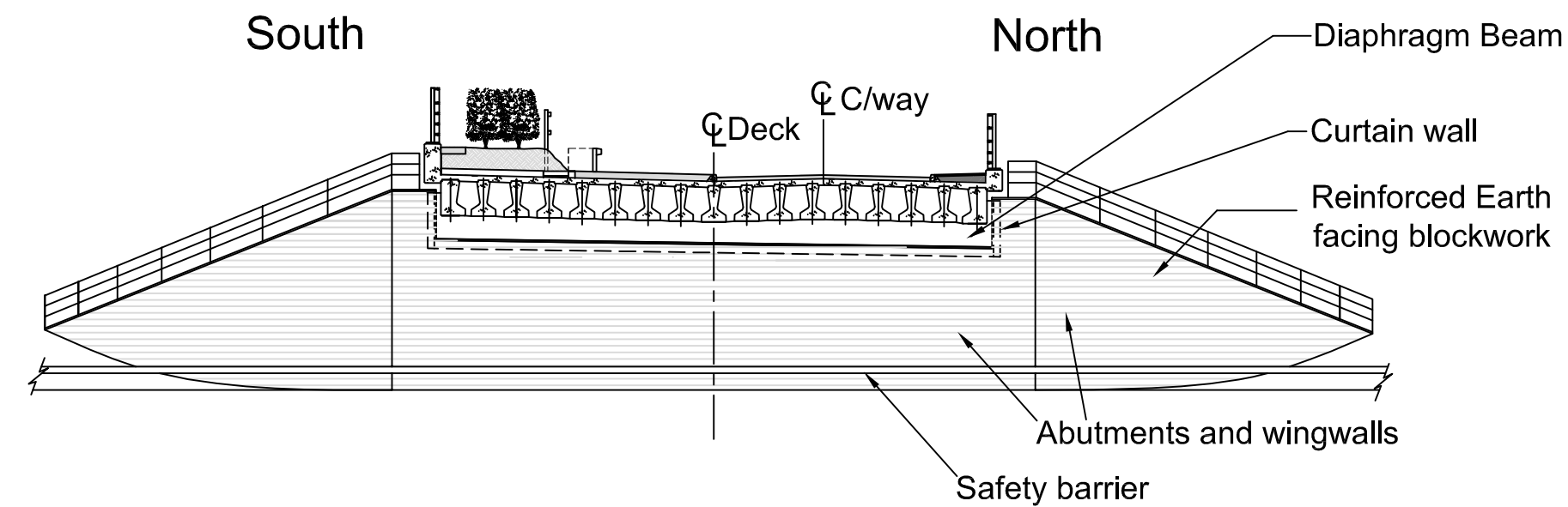




PLAN
Scale 1:500 @ A1

At Intersection Point:
Ch. 18085.0 (Under)
Ch. 241.15 (Over)
Middle Road C skew angle 01° 39' 59"
Bridge skew angle 01° 39' 59"
Levels: Middle Road C Level 33.5m
Existing Ground Level (EGL) 26.4m
NDR C Level 26.1m

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Survey 100019340

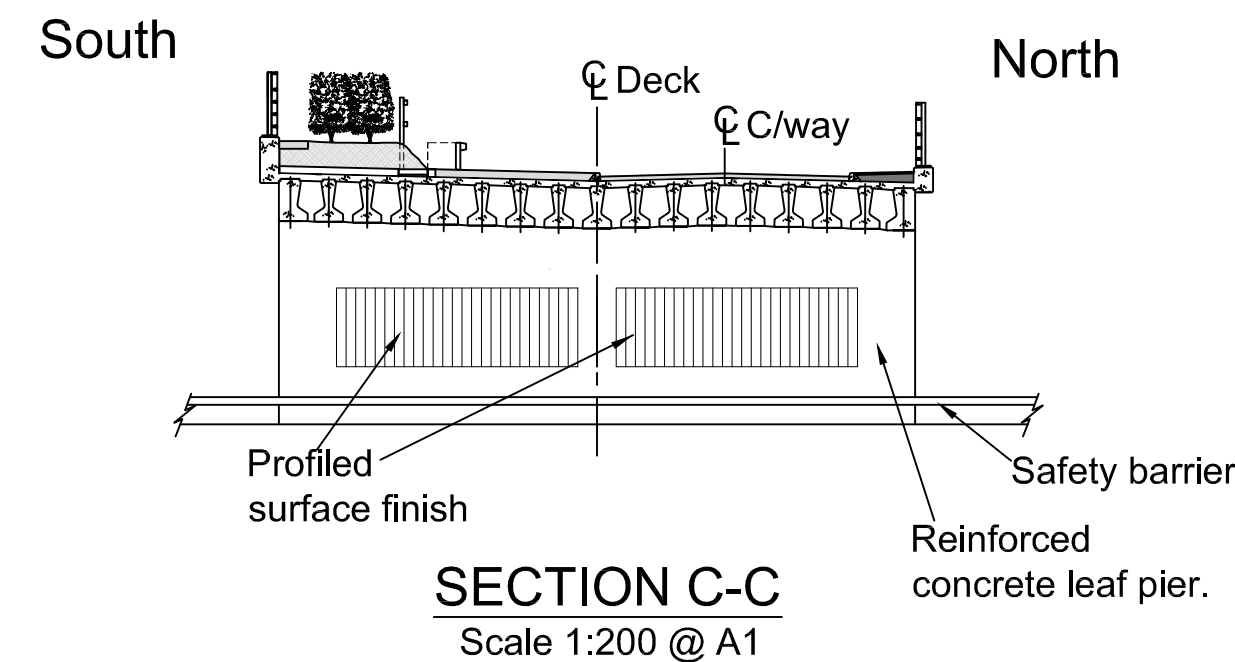
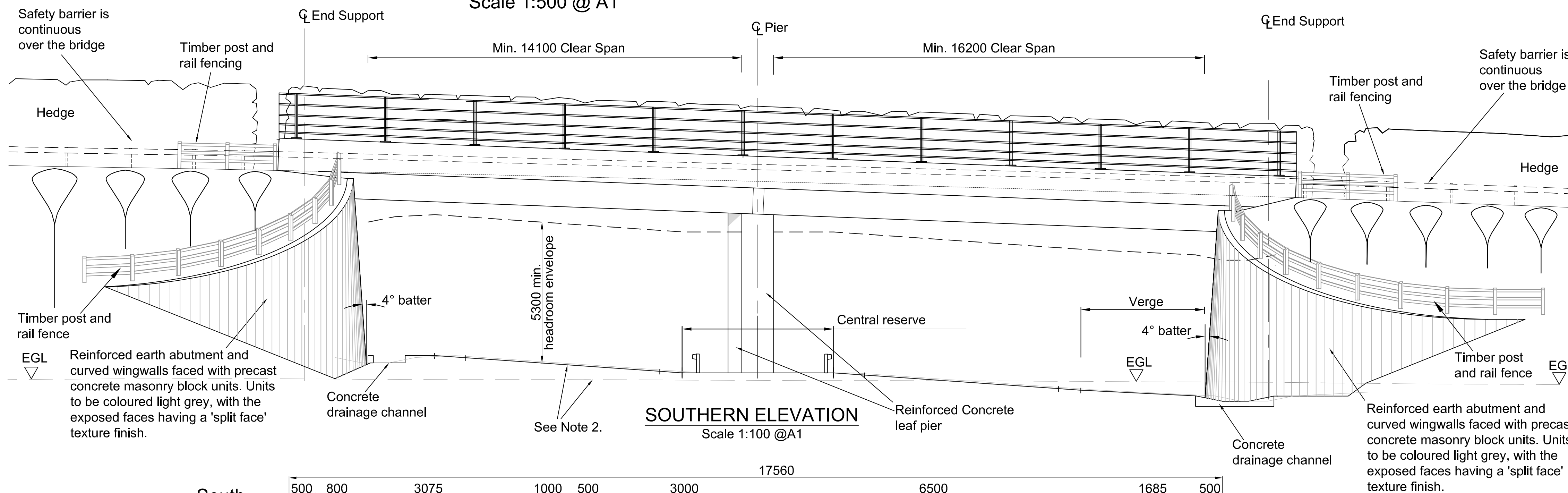


SECTION B-B
Scale 1:200 @ A1

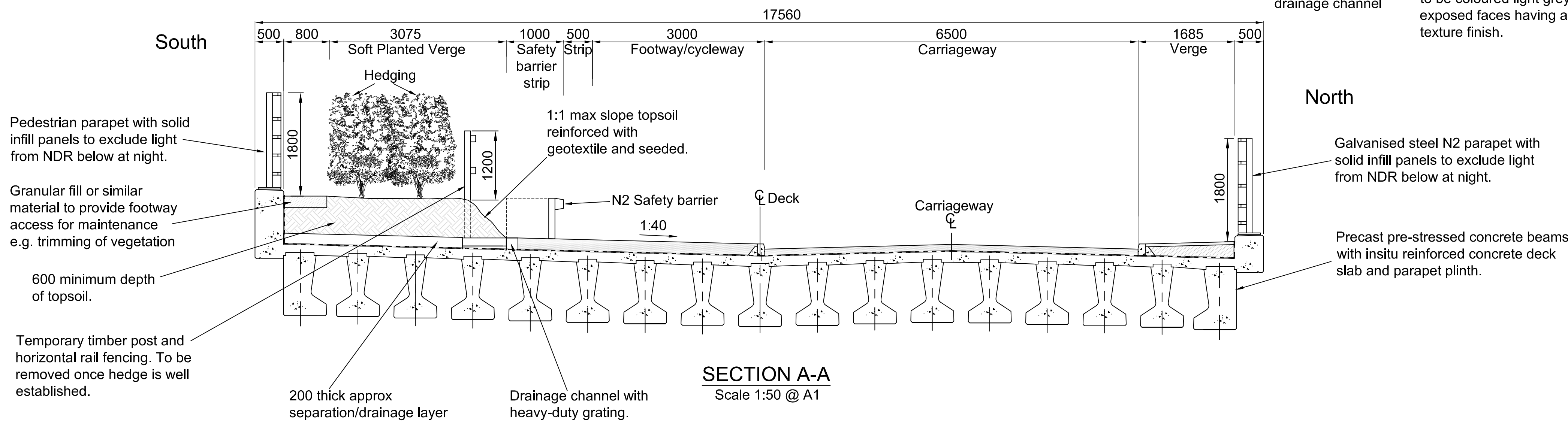
Notes:

1. All dimensions are in millimetres, all levels are in metres Above Ordnance Datum (AOD) and all chainages are in metres, unless otherwise indicated. The chainages are shown on the scheme drawing nos. R1C093-R1-5015 to 5026.
2. The NDR and Existing Ground Level (EGL) sections shown on the elevation at the bridge location are taken at the outer face of the southern parapet plinth.
3. Note that the southern elevation is looking in the direction of decreasing NDR chainage.
4. For landscaping details see scheme drawing nos. R1C093-R1-5015 to 5026.

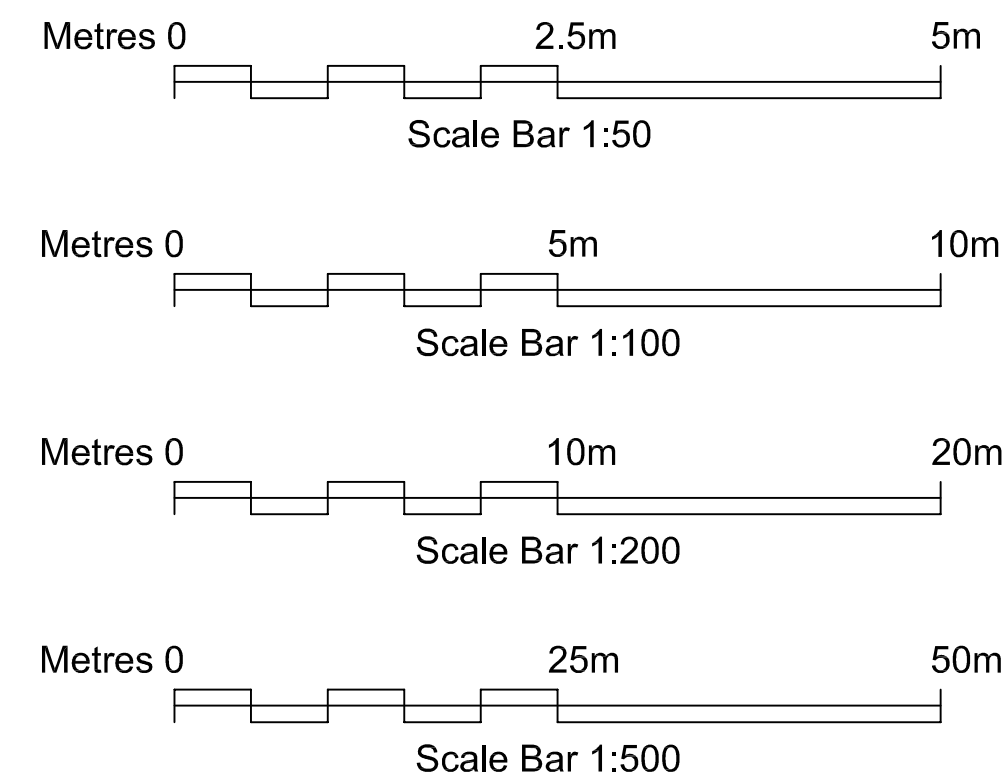
Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).



SECTION C-C
Scale 1:200 @ A1

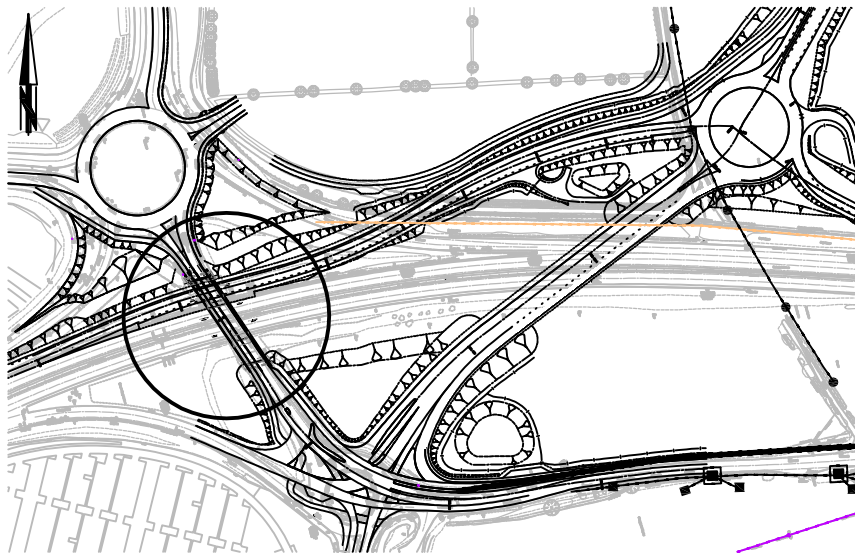


SECTION A-A
Scale 1:50 @ A1

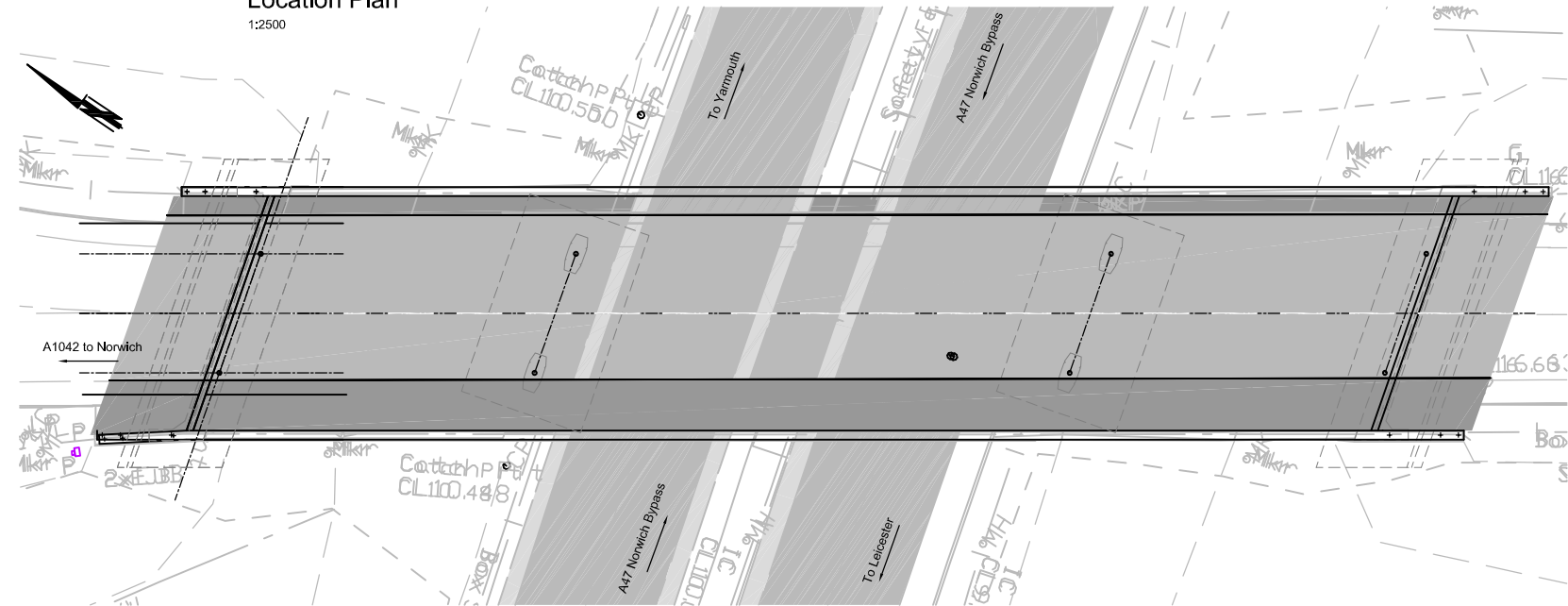


REV.	DESCRIPTION	CHECKED	DATE
A	For DCO Application.	AWM	11/13

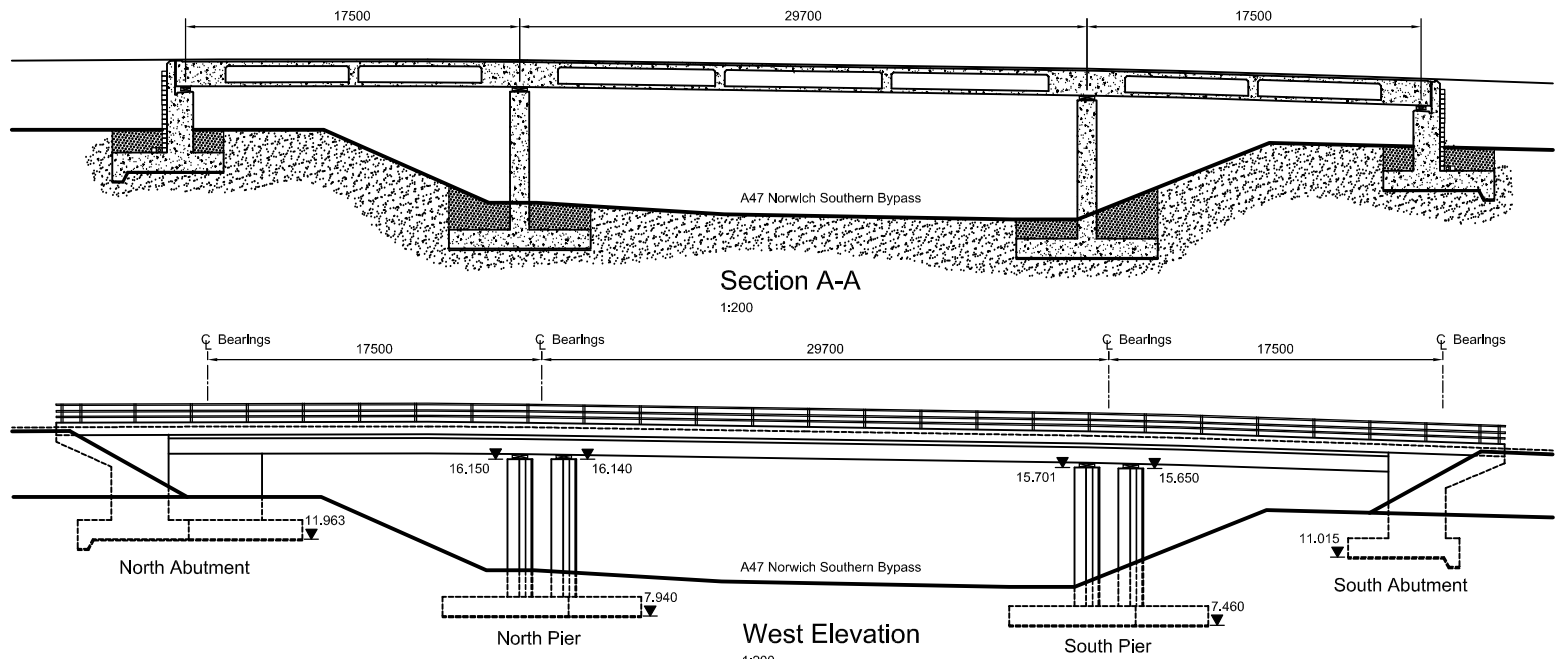
SURVEYED BY	INITIALS	DATE	DRAWING No.
OS	OS	07	R1C093/BD/BR9/301/REV A
DESIGNED BY	INITIALS	DATE	PROJECT TITLE
AWM	AWM	10/12	Norwich Northern Distributor Road, Middle Road Bridge
DRAWN BY	INITIALS	DATE	SCALE
KMP	KMP	10/12	As shown @ A1
CHECKED BY	INITIALS	DATE	FILE No.
SD	SD	10/12	R1C093/BD



Location Plan
1:2500

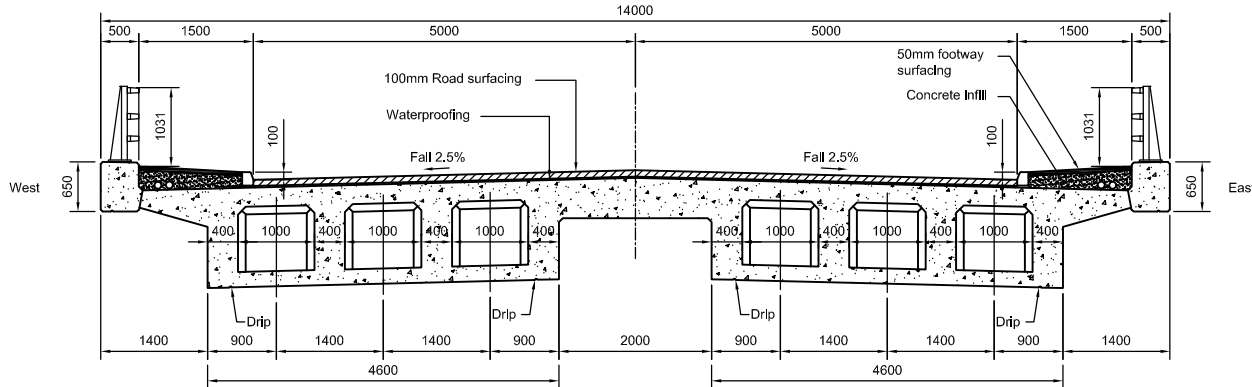


Plan on Existing Bridge
1:200

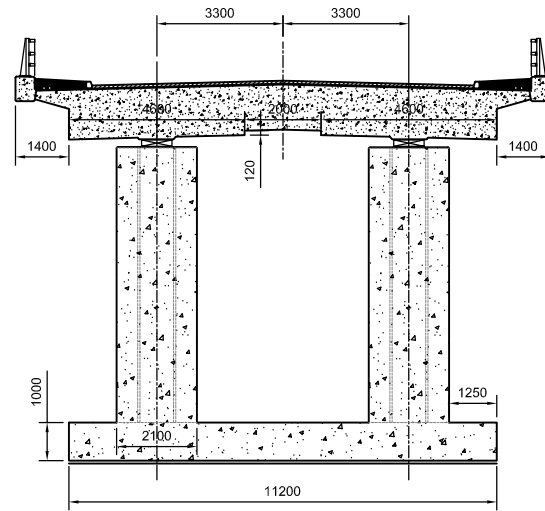


Section A-A
1:200

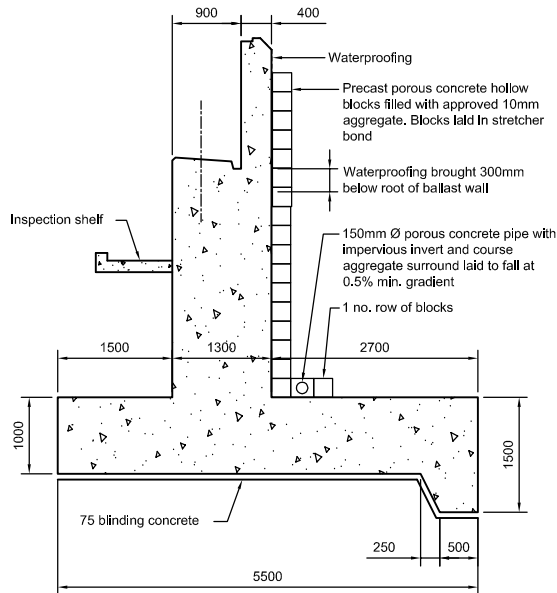
West Elevation
1:200



Existing Section Through Bridge Deck
1:50



Typical Section Through Bridge Deck at Pier Positions
1:100



Typical Section Through Abutment
1:50

- Notes
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Do not scale from this drawing.
 4. This drawing is based on the As-Built drawings, 81303/2480, 81303/2481, 81303/2482, 81303/2485, 81303/2006, 81303/2008, 81303/2009.
 5. Existing parapets, BACO P2/113 Type, 1.00m high.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).



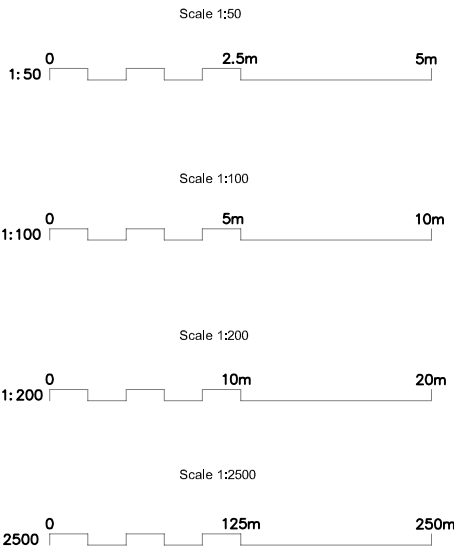
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

SIGNIFICANT CDM HEALTH & SAFETY RISKS

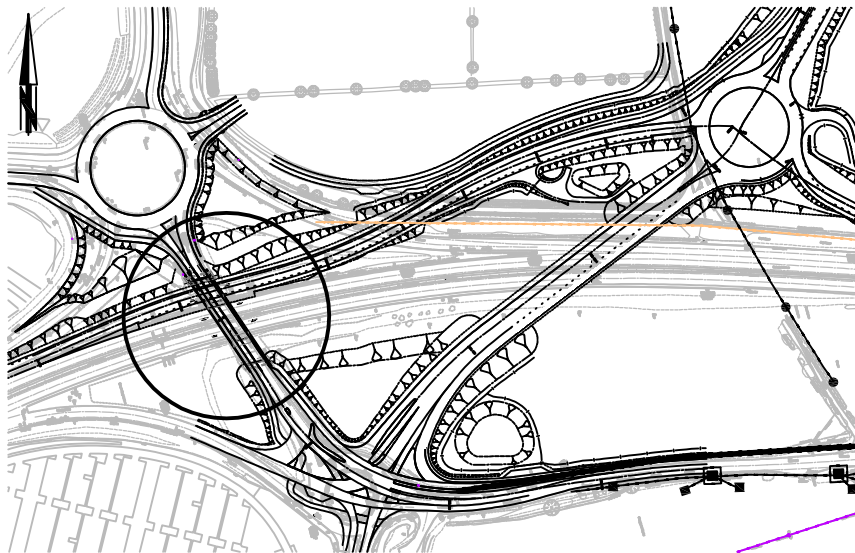
List not exhaustive.

1. Bridge deck constructed in-situ, voided box form of structure
2. Level of underside of bank seat abutments above level of A47 carriageway

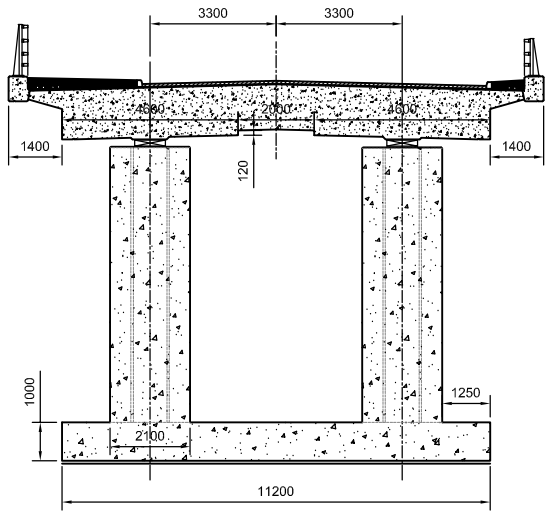


REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

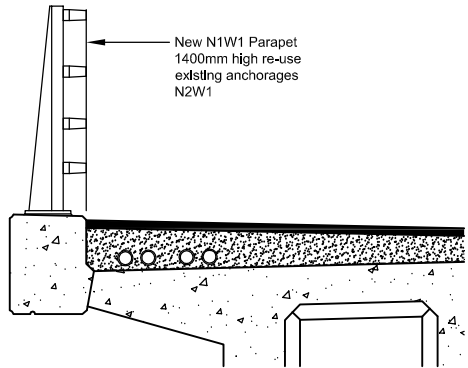
	INITIALS	DATE	DRAWING No.	FILE No.
SURVEYED BY			R1C150-TC 4101	
DESIGNED BY	JP	Aug 2009	PROJECT TITLE	Postwick Junction
DRAWN BY	SRV	Sept. 2009	SCALE	As Shown @ A1
CHECKED BY	GAK			



Location Plan
1:2500



Proposed Section Through Bridge Deck at Pier Positions
1:100



Enlargement of New Parapet
1:25

- Notes
- All dimensions are in millimeters unless stated otherwise.
 - All levels are in metres relative to AOD.
 - Do not scale from this drawing.
 - This drawing is based on the Southern Bypass - Contract 4, produced by G. Maunsell & Partners As-Built drawings, 81303/2480, 81303/2481, 81303/2482, 81303/2485, 81303/2006, 81303/2008, 81303/2009.
 - Existing 1.00m high P2/113 parapet on west side of bridge to be replaced with new 1.40m high N1 W1 type parapet in accordance with BS EN 1317. Parapet on east side of bridge to remain. If permitted it shall be sought to re-use the existing parapet anchorages or alternatively the new parapets will be 'drilled and fixed' to the parapet beam using resin anchors.
 - Carriageway over deck to comprise of 3.0m wide foot / cycleway on west side, 3 no. 3.0m wide lanes and a 1.1m wide footway on east side.
 - Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(o)



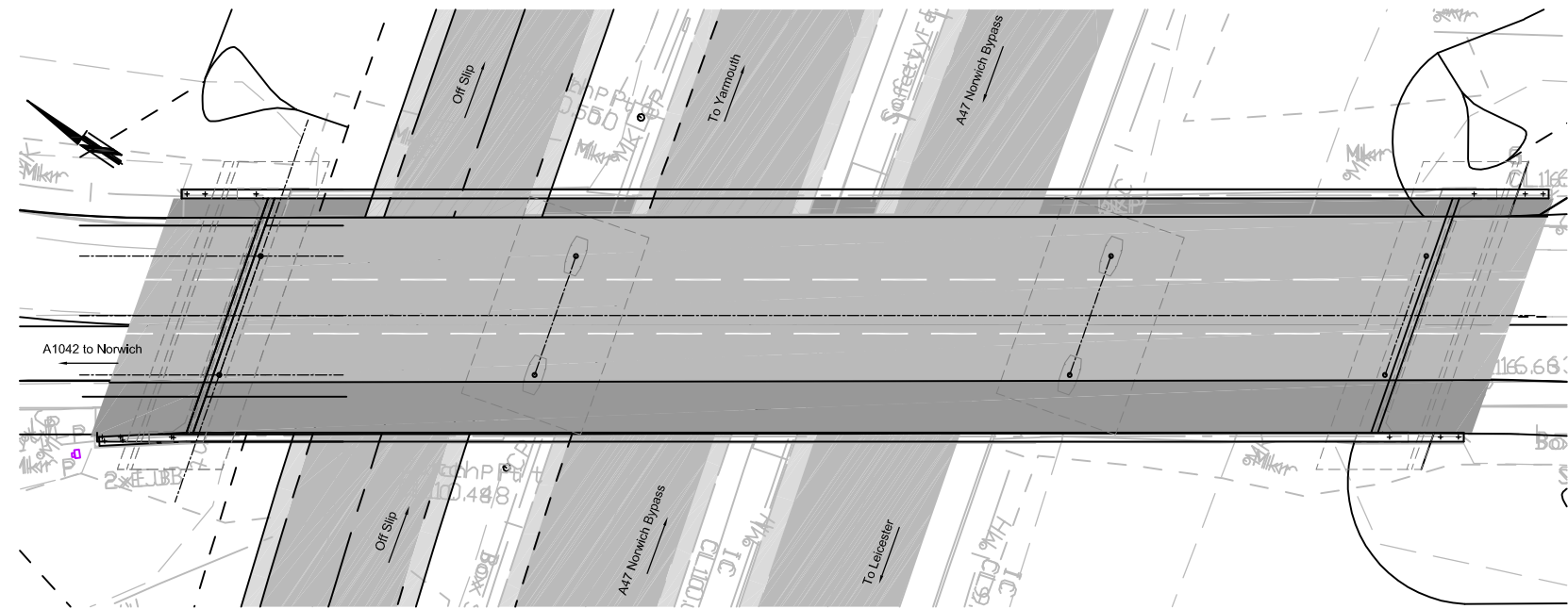
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

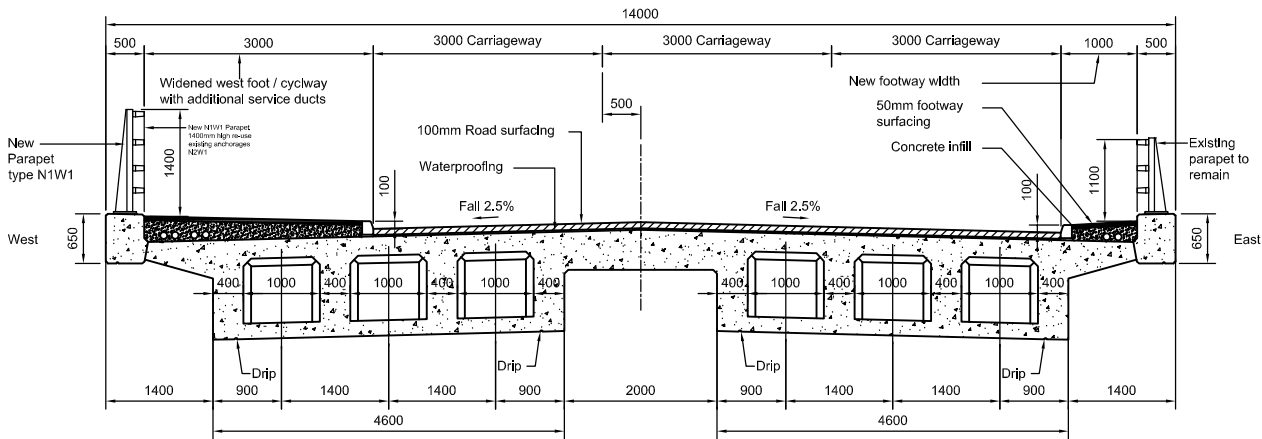
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

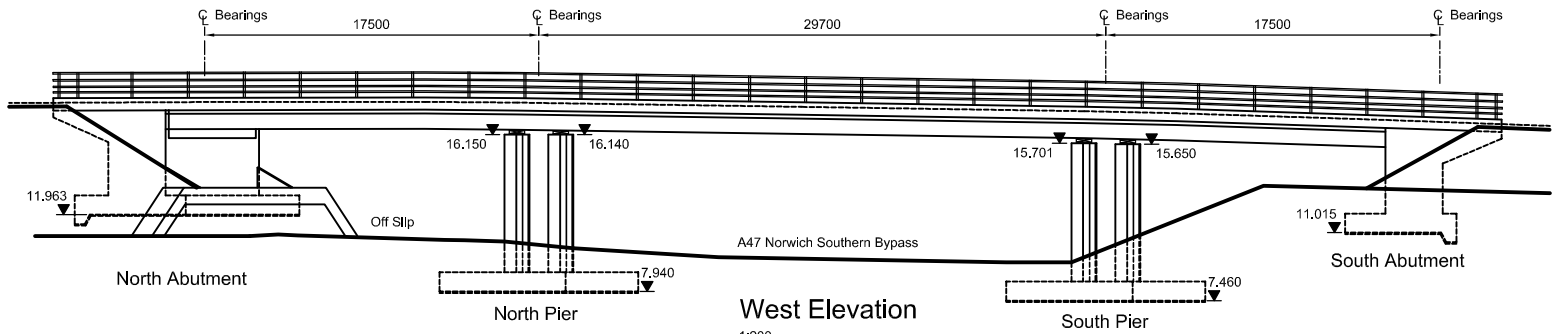
- Bridge deck constructed in-situ, voided box form of structure
- Parapet replacement over live carriageway



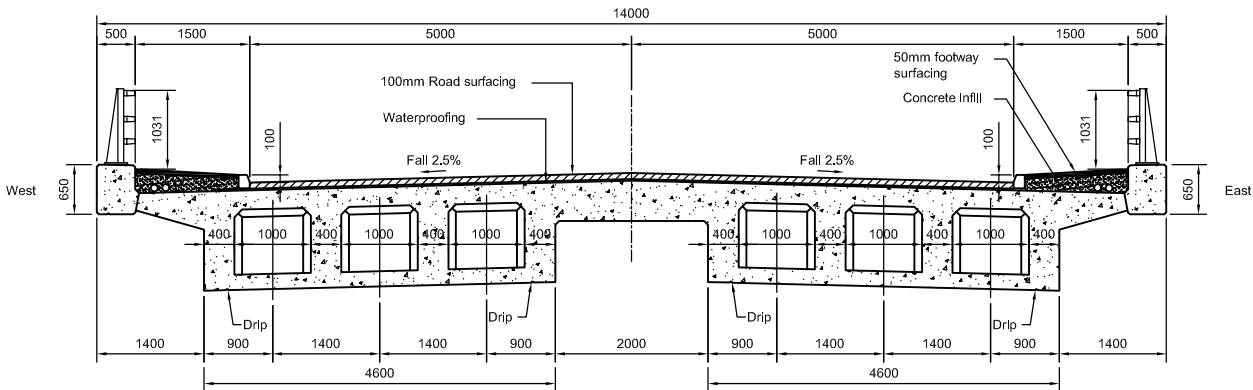
Plan
1:200



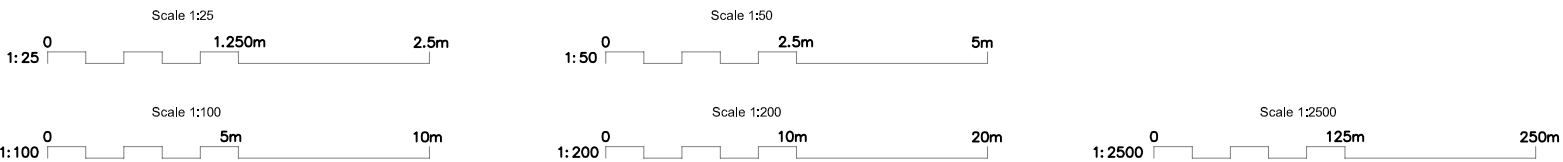
Proposed Section Through Bridge Deck
1:50



West Elevation
1:200



Existing Section Through Bridge Deck
1:50



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Interim Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

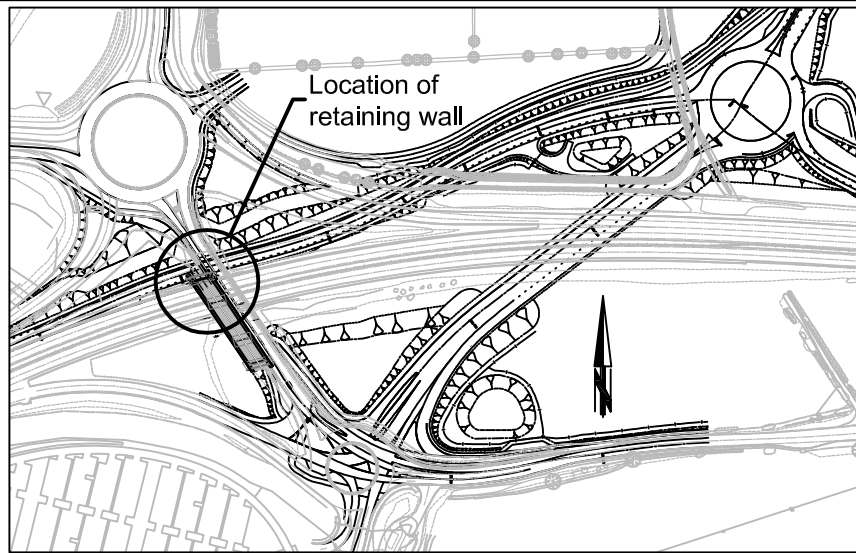
Norwich Northern Distributor Road
A47 Postwick Bridge (Structure 11630)
General Arrangement of
Proposed Modifications to Bridge

REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

	INITIALS	DATE	DRAWING No. R1C150-TC 4102
SURVEYED BY			PROJECT TITLE Postwick Junction
DESIGNED BY	JP	Aug. 2009	
DRAWN BY	SRV	Sept. 2009	
CHECKED BY	GAK		SCALE As Shown @ A1
			FILE No.

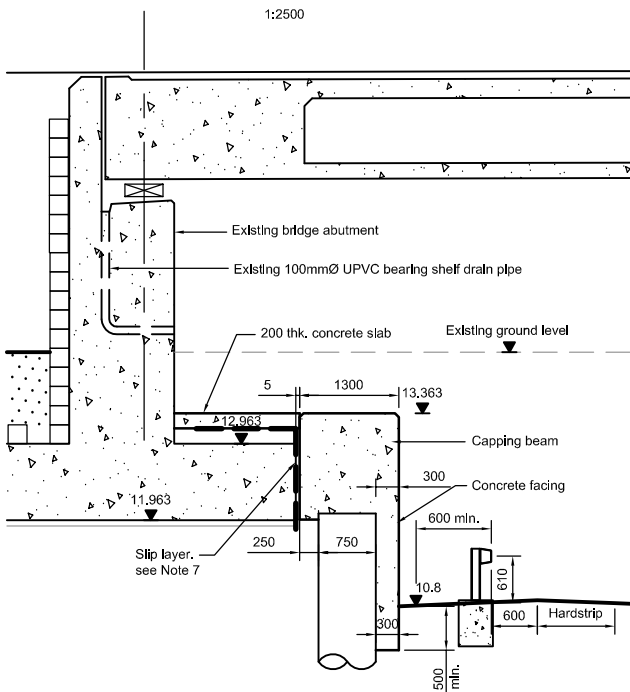
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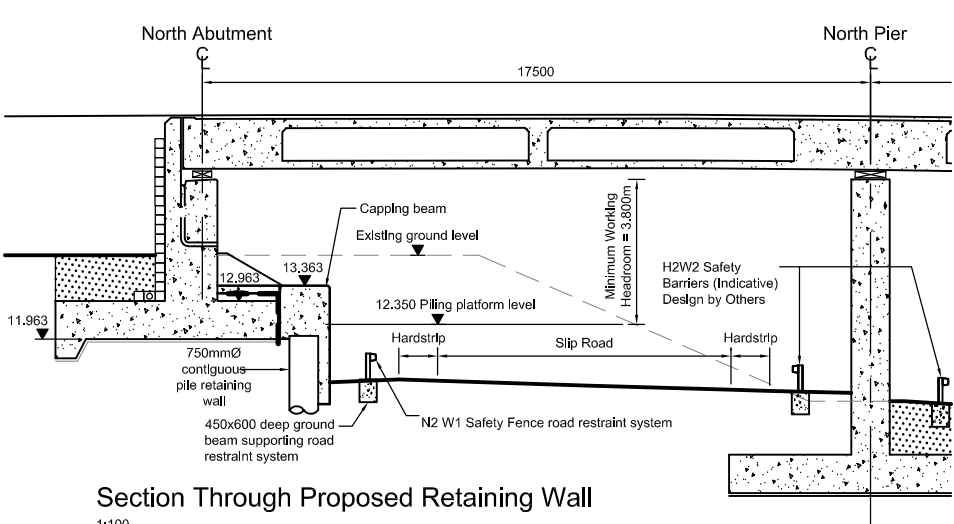
Location Plan

1:2500



Detail of Retaining Wall

1:50



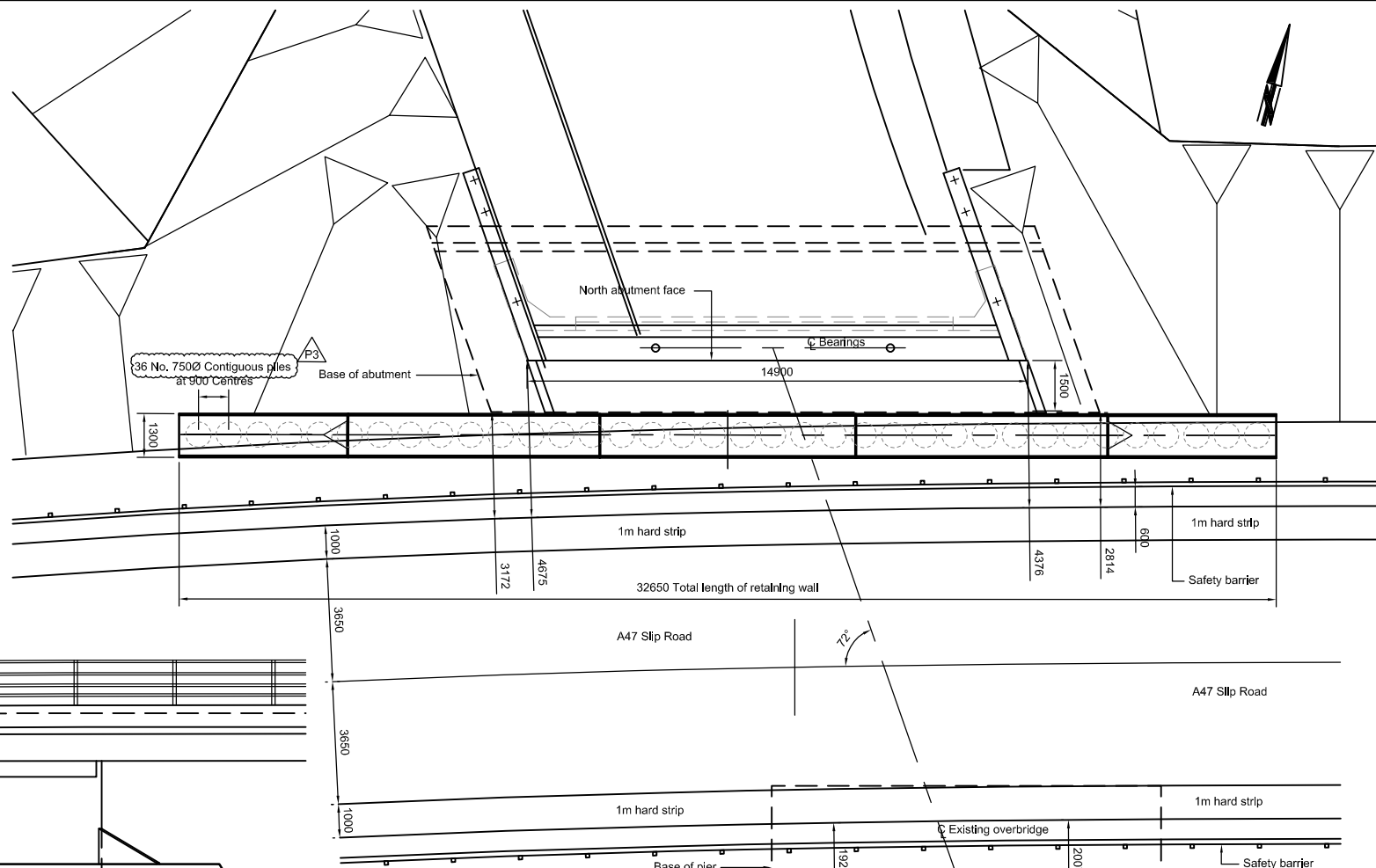
Section Through Proposed Retaining Wall

1:100



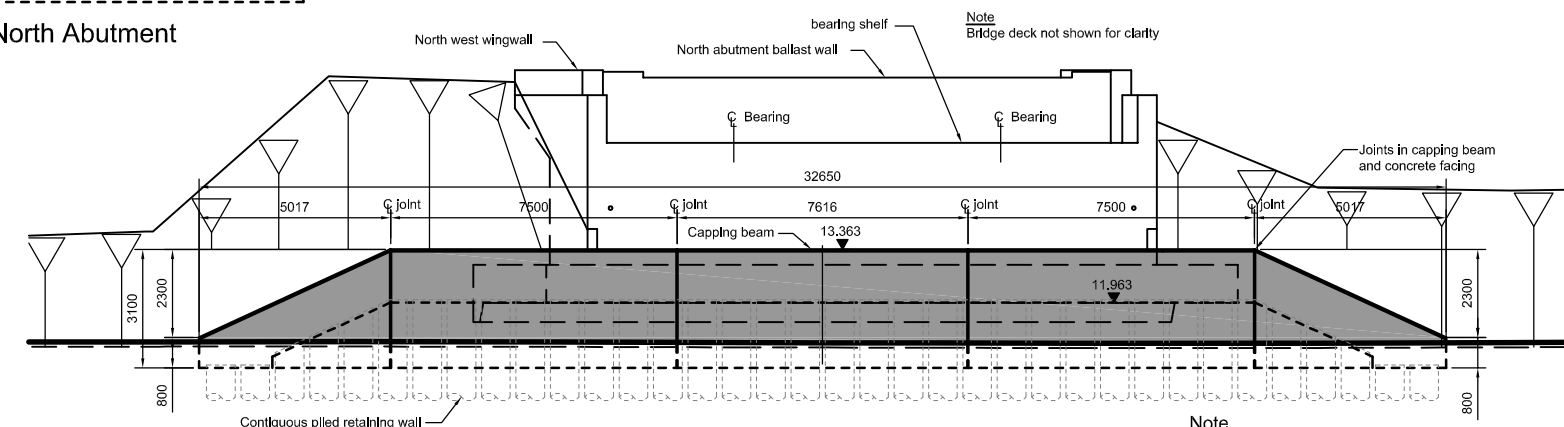
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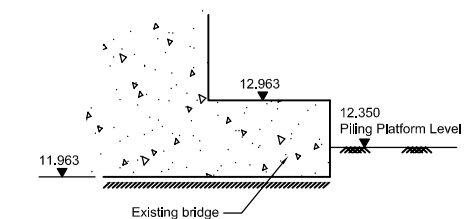
Plan on Retaining Wall

1:100



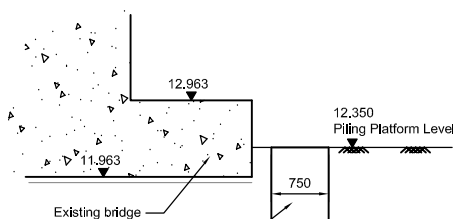
Elevation on Retaining Wall

1:100



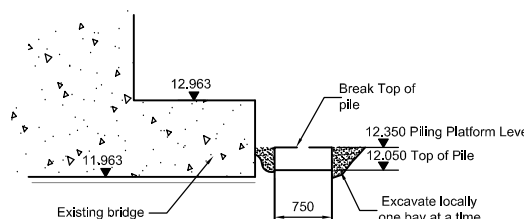
Stage 1

Construct Piling Platform
1:50



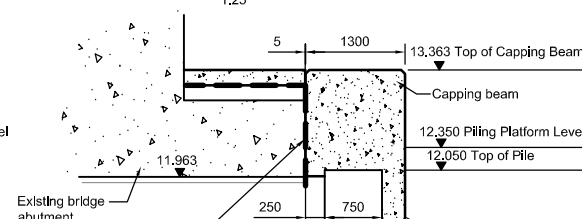
Stage 2

Place Cased Piles for Contiguous Pile Retaining Wall
1:50



Stage 3

Break Piles Down by 300mm
1:50



Stage 4

Construct Capping Beam
1:50

- Notes
- All dimensions are in millimeters unless stated otherwise.
 - All levels are in metres relative to AOD.
 - Do not scale from this drawing.
 - This drawing is based on the Norwich Southern Bypass - Contract 4, As Built drawings, produced by G. Maunsell & Partners.
81303/2480
81303/2481
81303/2482
81303/2485
81303/2006
81303/2008
81303/2009
 - Concrete:
-In situ concrete-
Concrete Class C40/50
-Piles-
Concrete Class C32/40
-Reinforcement-
Grade 500 bars to BS 4449:2005
 - Piles: for Contiguous Piled Retaining Wall.
- All piles to be bored piles 750mm Ø, approximately 10,000m in length.
- Piles to be cased along full height.
- Steel pile casing to be formed in sections, 1,000m in length 840mm OD.
- Reinforcement cages to be coupled in sections approximately 2,000m in length.
- Piles to be constructed in accordance with appendix 16/3.
 - Slip layer between face of abutment raft and contiguous piled wall capping beam to comprise of 2 no. layers of polythene sheeting. Polythene sheeting to be a minimum of 1200g/m² with 150mm overlap to joints in each layer.
 - Plan to be read in conjunction with the Development Consent Order.
Regulation 5(2)(c)

RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

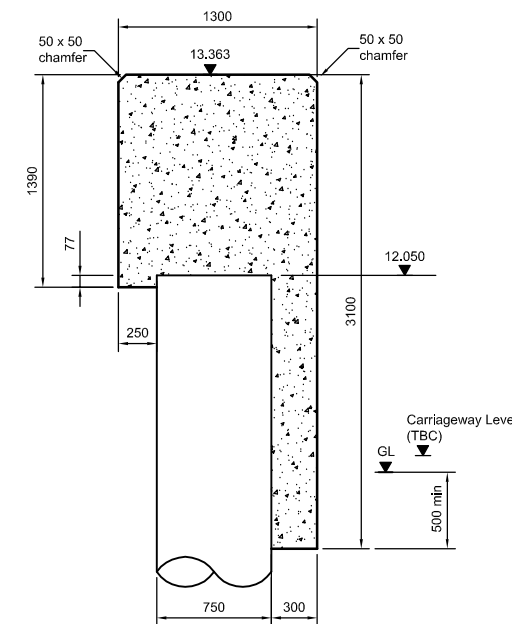
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

- Use of reduced height piling rig beneath existing bridge.
- Piling being undertaken in front of North Abutment
- Excavation and piling works have the potential to induce movement in the existing bridge foundations. The Contractor will be required to undertake a detailed monitoring regime both before, during and after works completion to ensure no degradation to the existing structure integrity occurs.
- All works to be undertaken adjacent to a live highway environment. The Contractor to ensure safe system of working including access and egress are employed.

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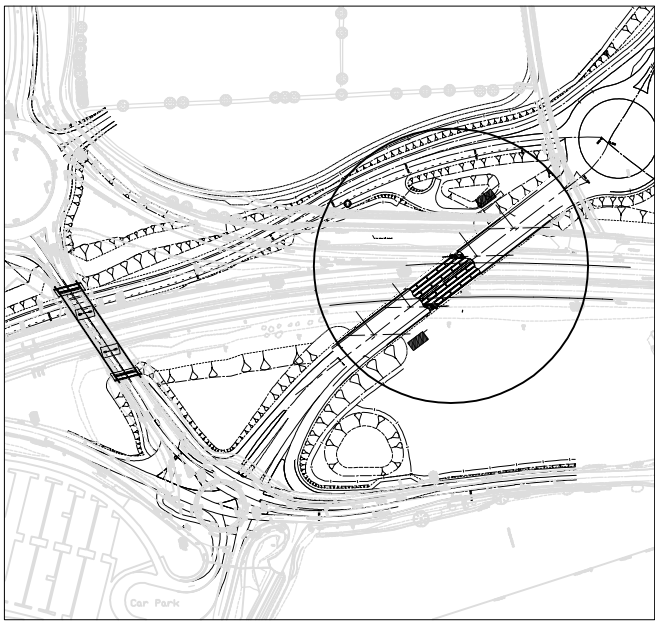


Typical Section Through Retaining Wall

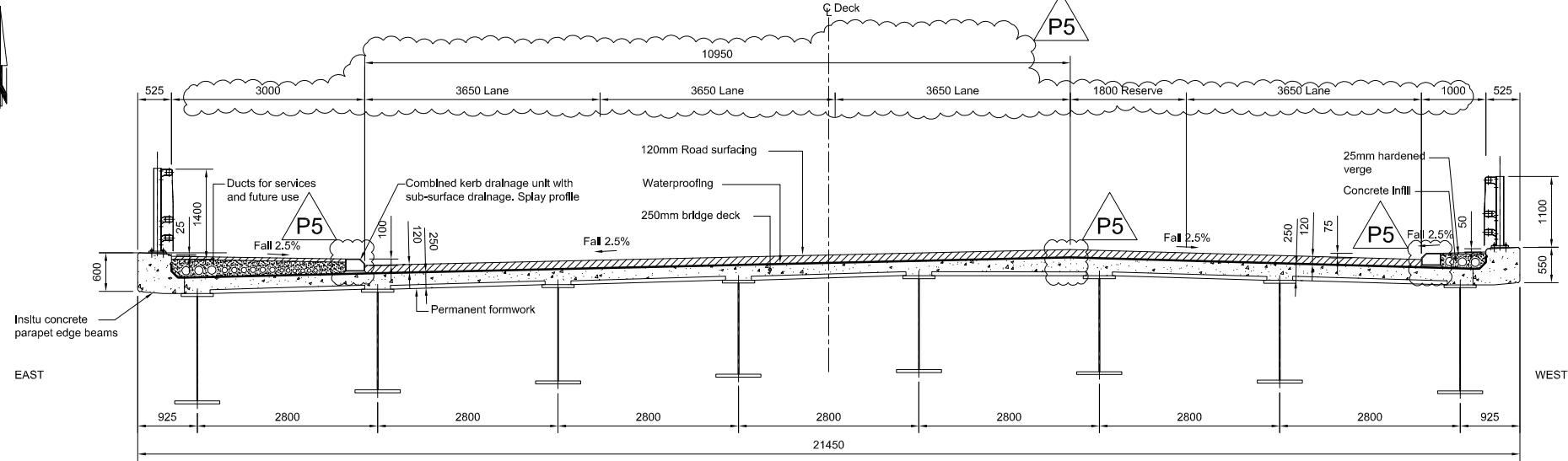
1:25

REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

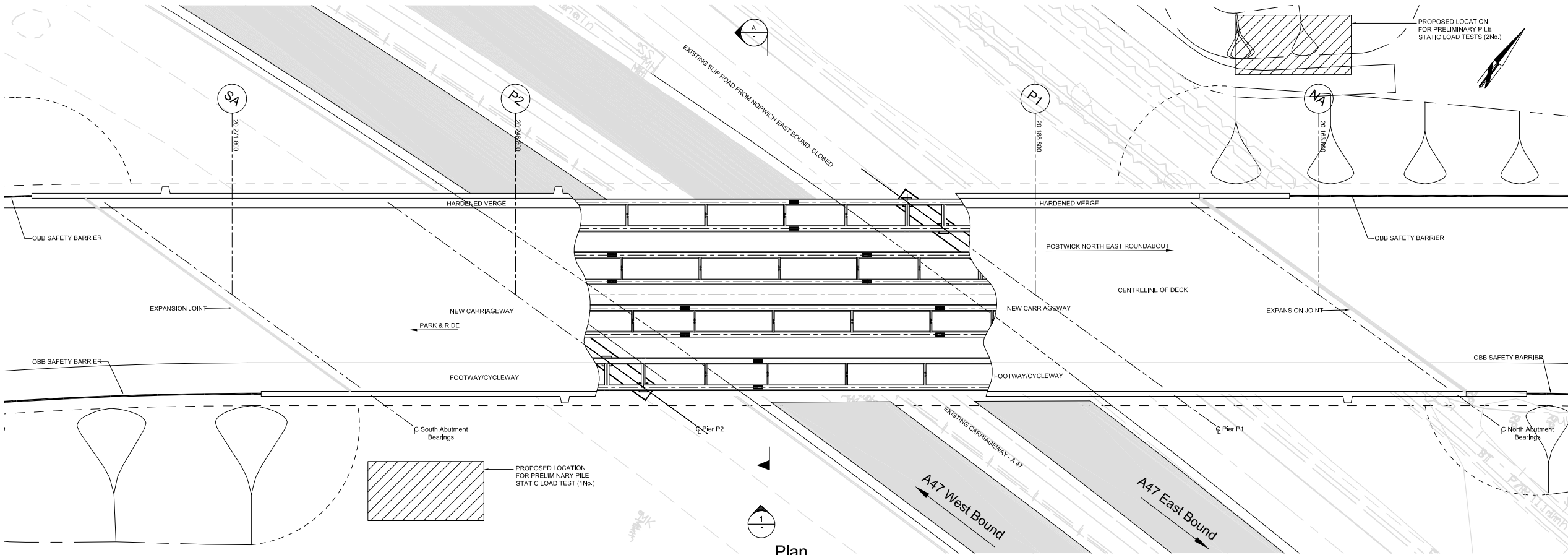
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DESIGNED BY			PROJECT TITLE
			Postwick Junction
DRAWN BY			SCALE
			As Shown @ A1
CHECKED BY			FILE No.



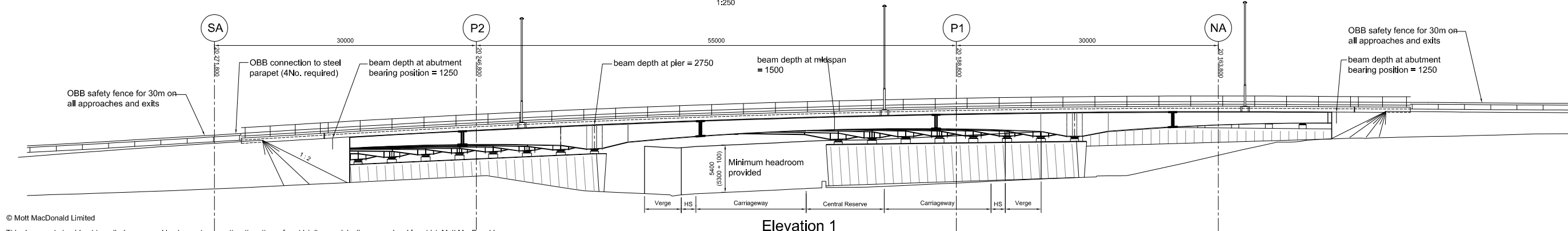
Location Plan
1:2500



Section A - Middle of the Main Span
1:50
(Bracing omitted for clarity)



Plan
1:250



Elevation 1
1:250

- Notes
- All dimensions are in millimeters unless stated otherwise.
 - All levels are in metres relative to AOD.
 - Steelwork:
 - Non Alloy Steel Grade S355 to BSEN 10025
 - All Shear studs shall be in accordance with BS 5400 part 6 Cl. 3.3
 - All Bolts shall be HSFG to BS 4395 part 1
 - Concrete:
 - Insitu Deck Slab Concrete Grade C40/50B
 - Abutments, Wing Walls and Piers Concrete Grade C40/50A
 - Abutment, Wing wall and Pier Footings Concrete Grade C32/40A
 - Piles Concrete Grade C32/40P
 - Insitu Cantilevers and String Course Beams Concrete Grade C40/50C
 - Pre-cast Concrete Participating Permanent Formwork Concrete Grade C40/50A
 - Reinforcement Grade 500 bars to BS4449:2005
 - All cantilevers and string courses are to be cast with a smooth vertical alignment and fixed over superstructure and adjacent abutments, after self weight deflections have taken place.
 - Parapet posts are to be fixed vertical. Parapets to be of type N1 W1, 1.100m high west and 1.400m high east with full height mesh infill. In accordance with BS EN 1317.
 - Ducts in footway to be provided for services and future use.
 - 3No. 150mmØ
 - 3No. 100mmØ
 - 3No. 75mmØ
 - 6 No. lighting columns to be sited on bridge. Exact locations and requirements for anchorage to be confirmed.
 - Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o)



RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

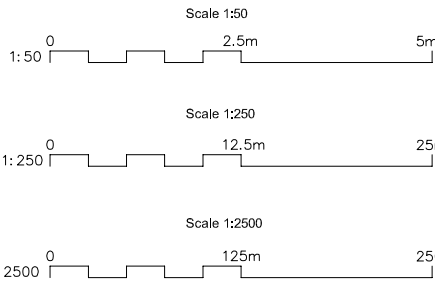
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

- Piling
- Excavation
- Bridge construction works adjacent to live carriageway
- Buried services and drainage

FOR INFORMATION

DO NOT USE FOR CONSTRUCTION
Date : 09.13



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Tom McCabe
Interim Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

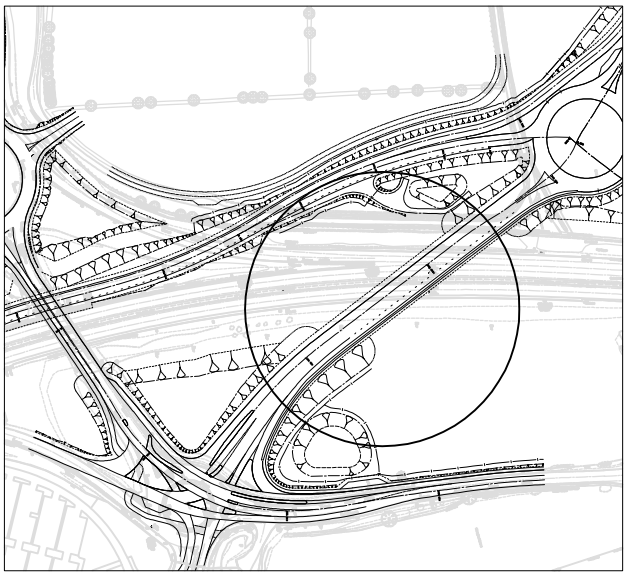
Norwich Northern Distributor Road
A47 Postwick Bridge East
General Arrangement
Sheet 1 of 2

REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

SURVEYED BY	INITIALS	DATE	DRAWING No.
DESIGNED BY	JP	Nov 2012	R1C150-CI 4001
DRAWN BY	AW	Nov 2012	PROJECT TITLE
CHECKED BY	GAK		Postwick Junction
			SCALE
			As Shown @ A1
			FILE No.

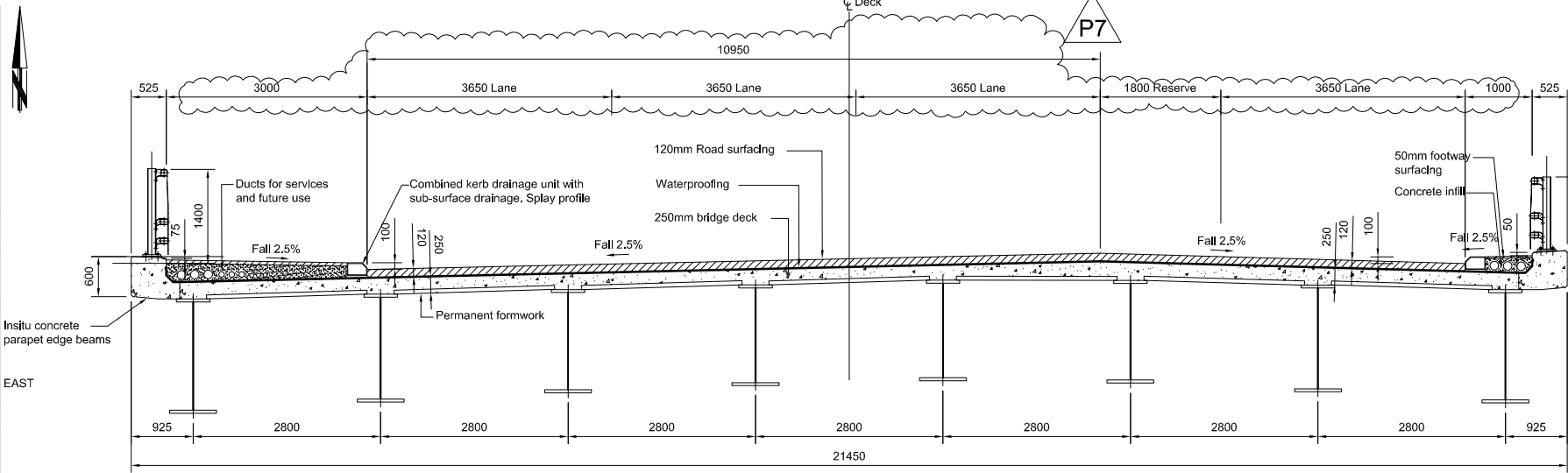
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Location Plan

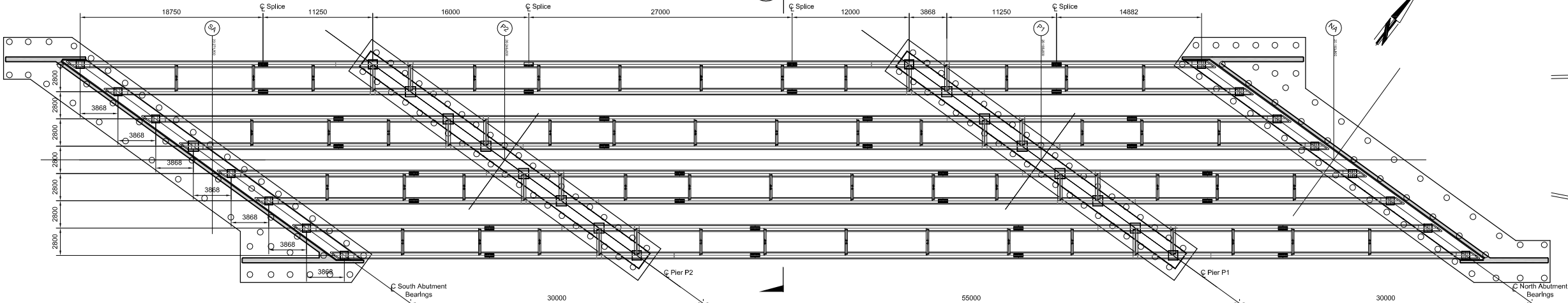
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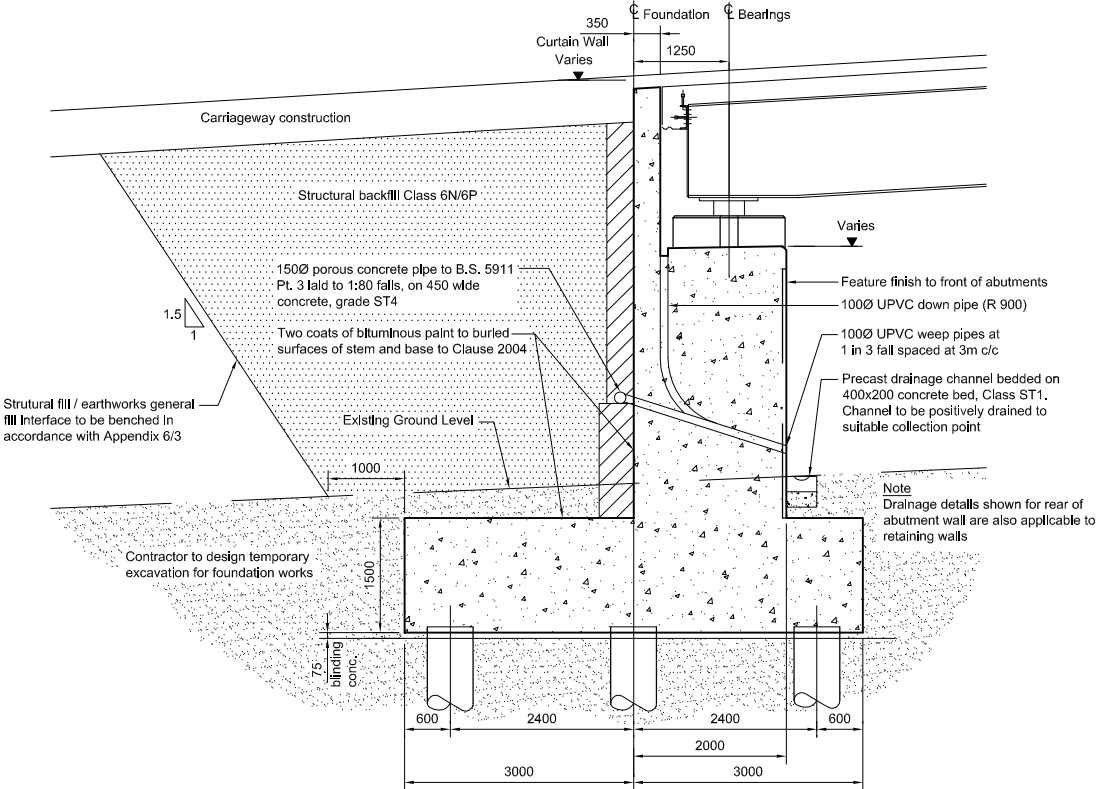
Section A-A
Square Section Through Bridge at Bracing Position

WEST

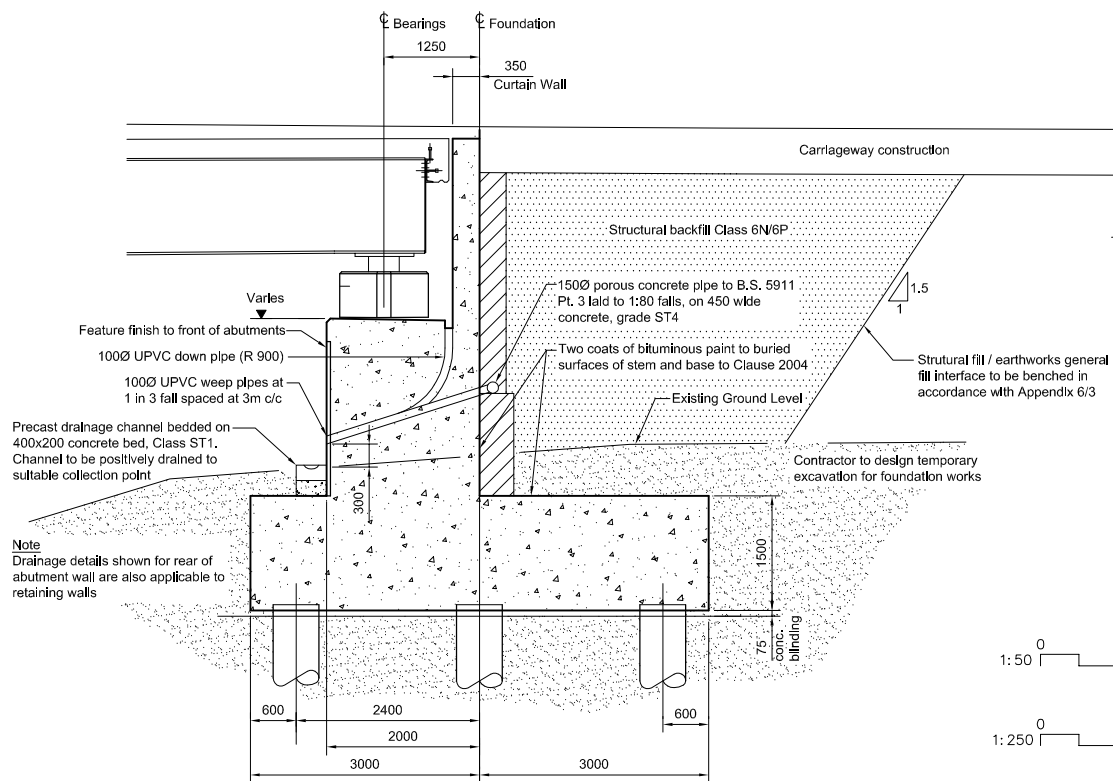
- Notes
- All dimensions are in millimeters unless stated otherwise.
 - All levels are in metres relative to AOD.
 - Steelwork:
 - Non Alloy Steel Grade S355 to BSEN 10025
 - All Shear studs shall be in accordance with BS 5400 part 6 Cl. 3.3
 - All Bolts shall be HSFG to BS 4395 part 1
 - Concrete:
 - Insitu Deck Slab Concrete Grade C40/50B
 - Abutments, Wing Walls and Piers Concrete Grade C40/50A
 - Abutment, Wing wall and Pier Footings Concrete Grade C32/40A
 - Piles Concrete Grade C32/40P
 - Insitu Cantilevers and String Course Beams Concrete Grade C40/50C
 - Pre-cast Concrete Participating Permanent Formwork Concrete Grade C40/50A
 - Reinforcement Grade 500 bars to BS4449:2005
 - All cantilevers and string courses are to be cast with a smooth vertical alignment and fixed over superstructure and adjacent abutments, after self weight deflections have taken place.
 - Parapet posts are to be fixed vertical. Parapets to be of type N1 W1, 1.100m high west and 1.400m high east with full height mesh infill. In accordance with BS EN 1317.
 - Ducts in footway to be provided for services and future use.
 - 3No. 150mmØ
 - 3No. 100mmØ
 - 3No. 75mmØ
 - 6 No. lighting columns to be sited on bridge. Exact locations and requirements for anchorage to be confirmed.
 - A minimum of 2.00m 6N/6P Class backfill is required behind the structure at road deck level.
 - Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(o)



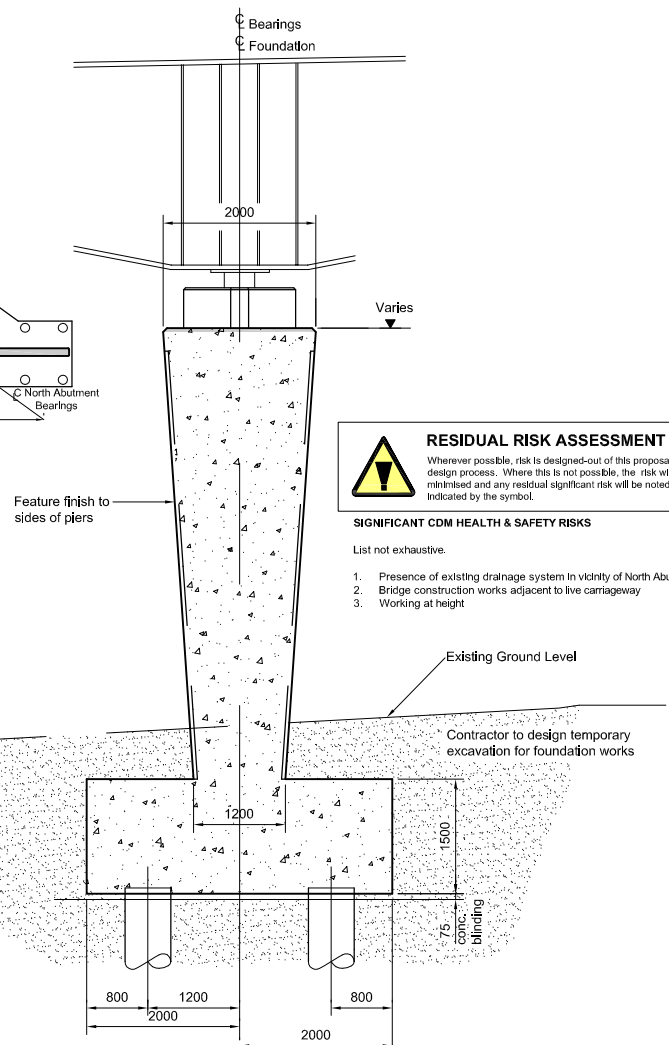
Plan
1:250
(Deck Slab Omitted)



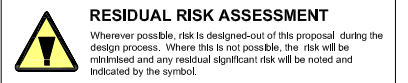
Section Through South Abutment
1:50
(Fixed End)



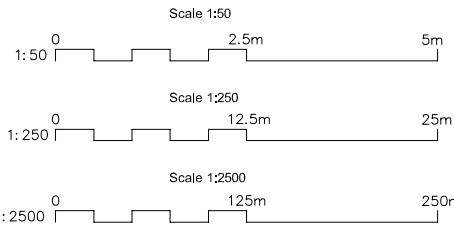
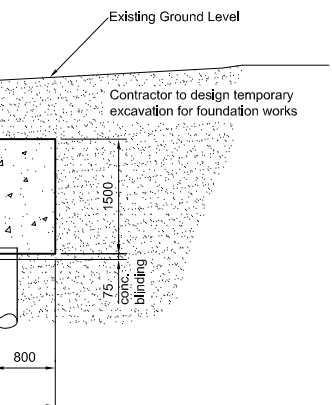
Section Through North Abutment
1:50
(Free End)



Section Through Piers
1:50



- RESIDUAL RISK ASSESSMENT**
- Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.
- SIGNIFICANT CDM HEALTH & SAFETY RISKS**
- List not exhaustive.
- Presence of existing drainage system in vicinity of North Abutment
 - Bridge construction works adjacent to live carriageway
 - Working at height



FOR INFORMATION

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Date : 06.12.2013

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Tom McCabe
Interim Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

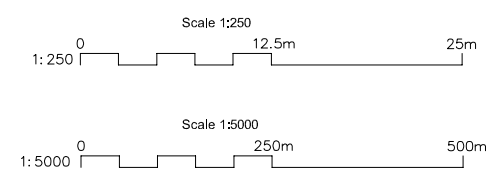
Norwich Northern Distributor Road
A47 Postwick Bridge East
General Arrangement
Sheet 2 of 2

REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

SURVEYED BY	INITIALS	DATE	DRAWING No.
DESIGNED BY	JP	Nov 2012	R1C150-CI 4002
DRAWN BY	DM	Nov 2012	PROJECT TITLE
CHECKED BY	GAK		Postwick Junction
			SCALE
			As Shown @ A1
			FILE No.



1:5000



- | Notes |
|---|
| 1. All dimensions are in millimeters unless stated otherwise. |
| 2. All levels are in metres relative to AOD. |
| 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines. |
| 4. Propose that East abutment of rail bridge be set back 2,0m away from Network Rail boundary fence to enable establishment of Green Zone Boundary. |
| 5. Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(p) and Regulation 6(2)(a). |



Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

List not exhaustive.

1. Piling
2. Excavation
3. Bridge construction works adjacent to live railway and cartageway
4. Buried services and drainage (I.P. Gas Main)

<h1 style="margin: 0;">FOR INFORMATION</h1> <p style="margin: 0;">DO NOT USE FOR CONSTRUCTION</p>	
	Date : 31.01.2013



	INITIALS	DATE	DRAWING No. 233906-DU01-P002	
SURVEYED BY			PROJECT TITLE Rackheath Overbridge	
DESIGNED BY	JP	Jan 2013		
DRAWN BY	DM	Jan 2013		
CHECKED BY	GAK		SCALE As Shown @ A1	FILE No. 233906DU01

Notes

1. All dimensions are in millimeters unless stated otherwise.
2. All levels are in metres relative to AOD.
3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
4. Propose that East abutment of rail bridge be set back 2.0m away from Network Rail boundary fence to enable establishment of Green Zone Boundary.
5. Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(p) and Regulation 6(2)(a)



RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

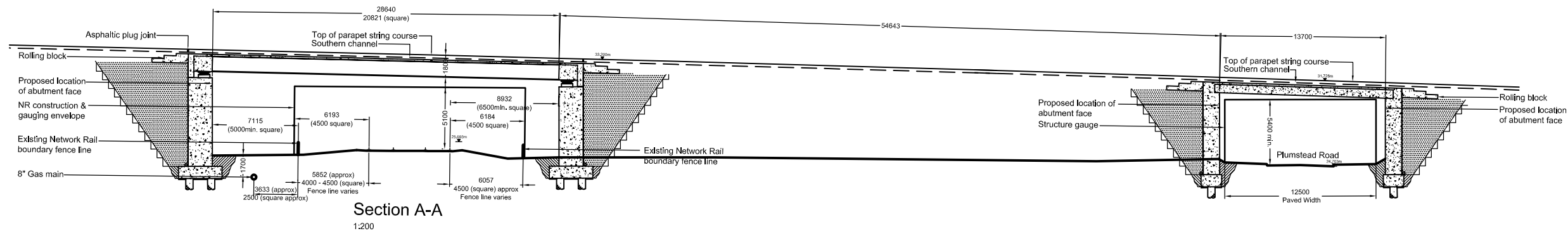
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

1. Piling
2. Excavation
3. Working adjacent to railway and Highway
4. Buried services and Drainage (I.P. Gas Main)

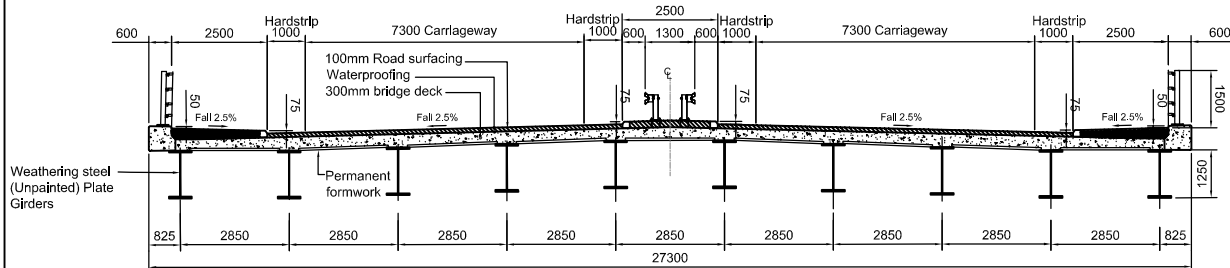
FOR INFORMATION
DO NOT USE FOR CONSTRUCTION

Date :31.01.2013



Section A-A

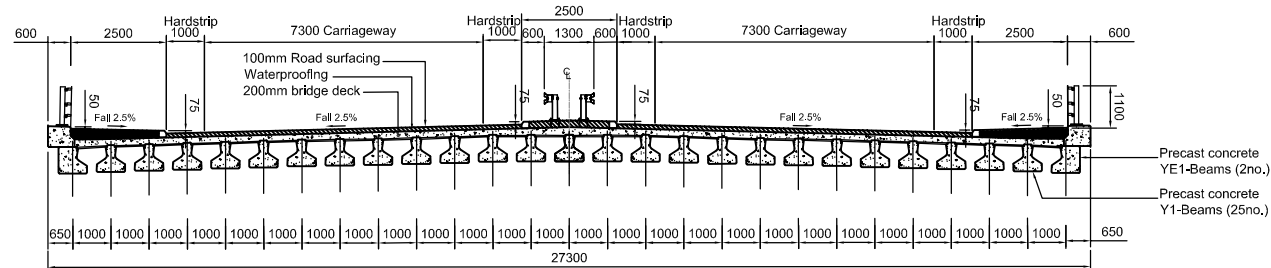
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Section B - Square Section (Railway)

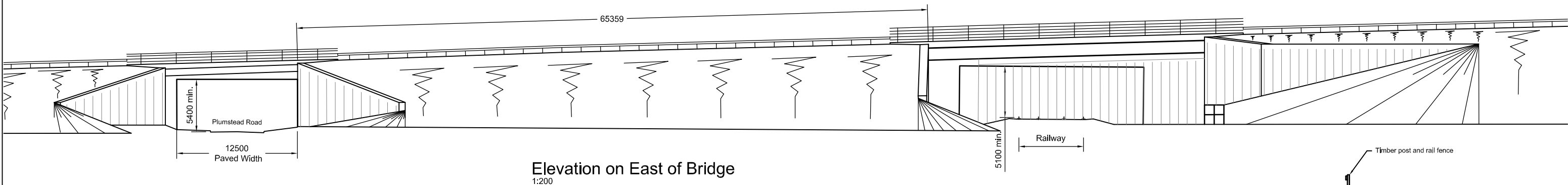
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(Diagonal Plan Bracing Cast WithIn Deck Slab omitted for clarity)



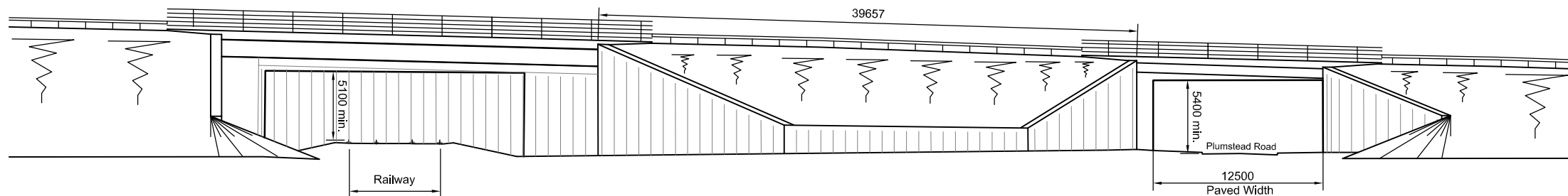
Section C - Square Section (Plumstead Road)

1:100



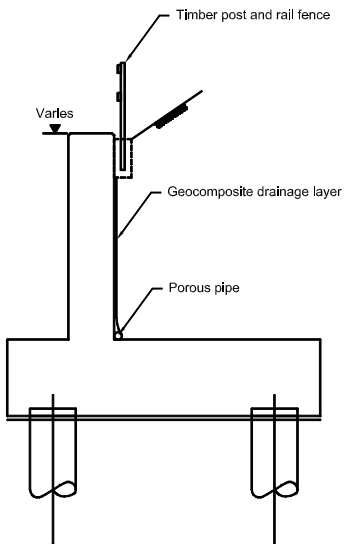
Elevation on East of Bridge

1:200

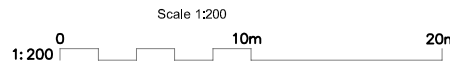


Elevation on West of Bridge

1:200

Typical Section
Through Wing Wall

1:50



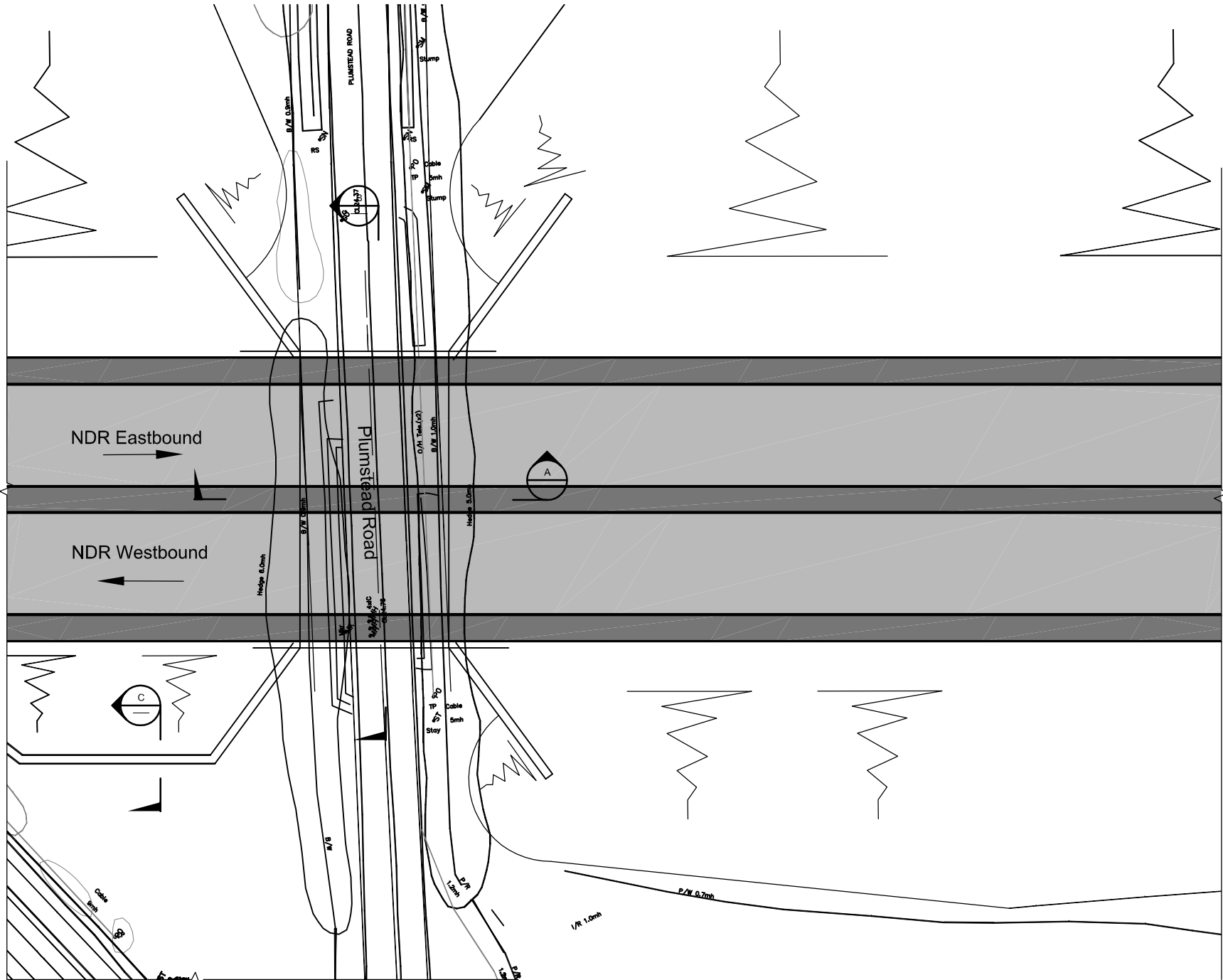
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REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

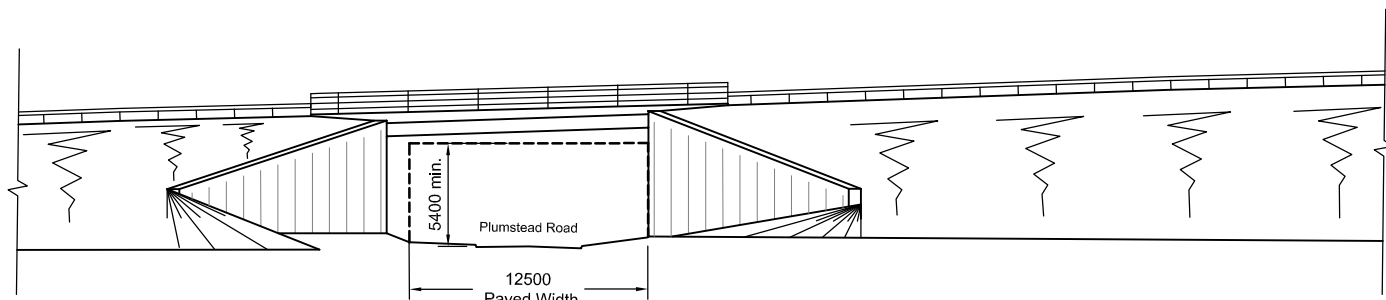
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SURVEYED BY			PROJECT TITLE Rackheath Overbridge
DESIGNED BY	JP	Jan 2013	
DRAWN BY	DM	Jan 2013	
CHECKED BY	GAK		SCALE As Shown @ A1
			FILE No. 233906DU01

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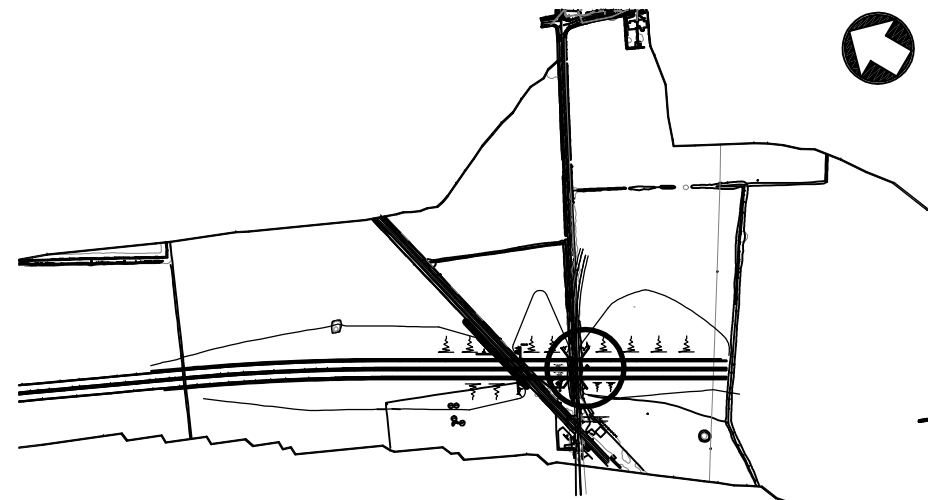
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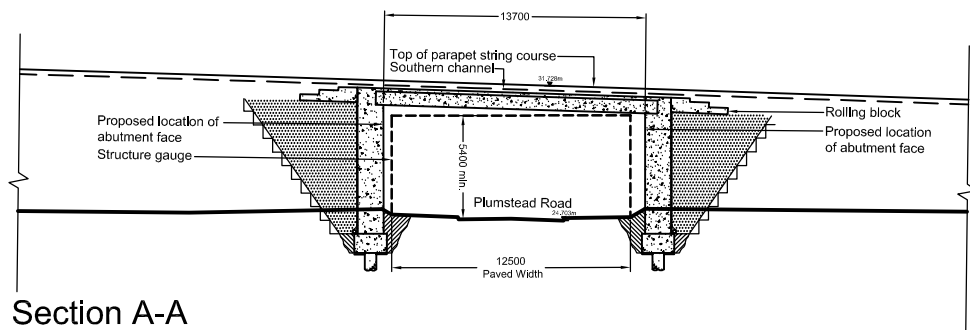
Plan
1:500



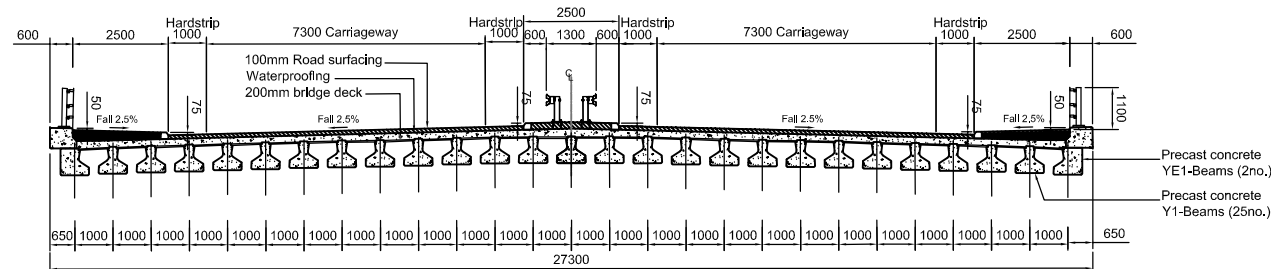
Elevation on East of Bridge
1:200



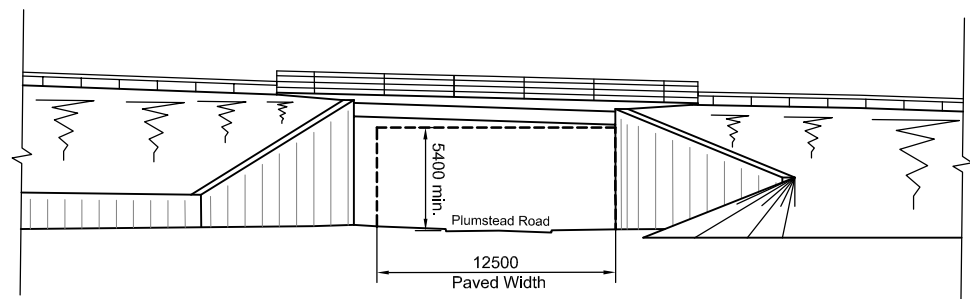
Bridge Location Plan
1:5000



Section A-A
1:200



Section B - Square Section
1:100



Elevation on West of Bridge
1:200

Notes

1. All dimensions are in millimeters unless stated otherwise.
2. All levels are in metres relative to AOD.
3. Topographical survey proposed to verify and re confirm all levels and positions, including railway tracks and fence lines.
4. This drawing is to be read in conjunction with 233906-DU01-P006
5. Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(p) and Regulation 6(2)(a).

RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

SIGNIFICANT CDM HEALTH & SAFETY RISKS

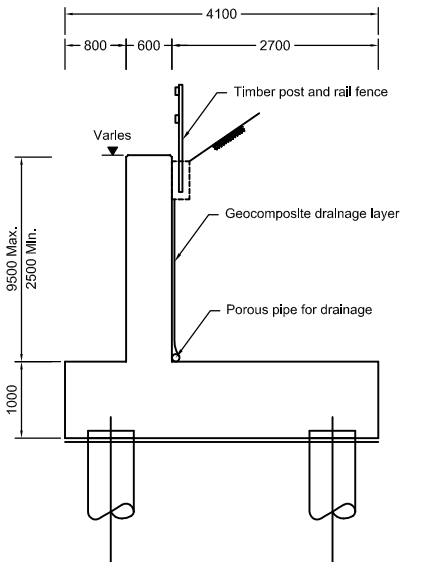
List not exhaustive.

1. Piling
2. Excavation
3. Level crossing in close proximity to the west

FOR INFORMATION

DO NOT USE FOR CONSTRUCTION

Date :May2013.

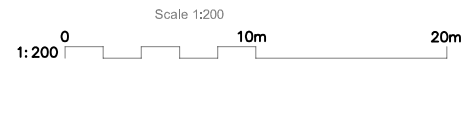
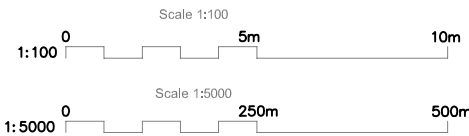
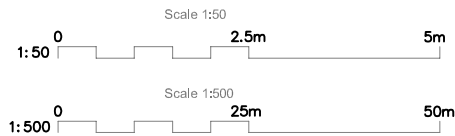


Section C - Typical Section Through Wing Wall
1:50

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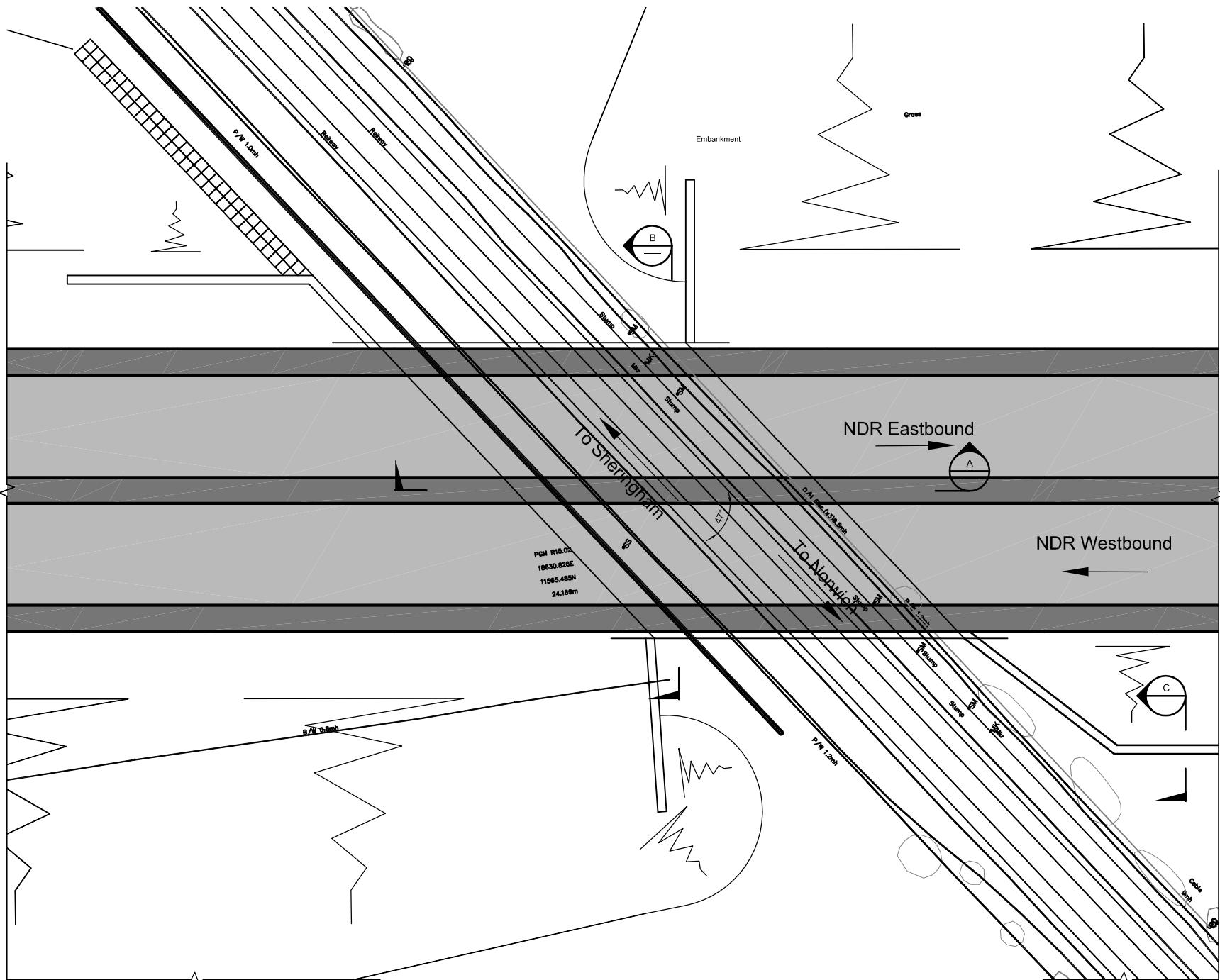
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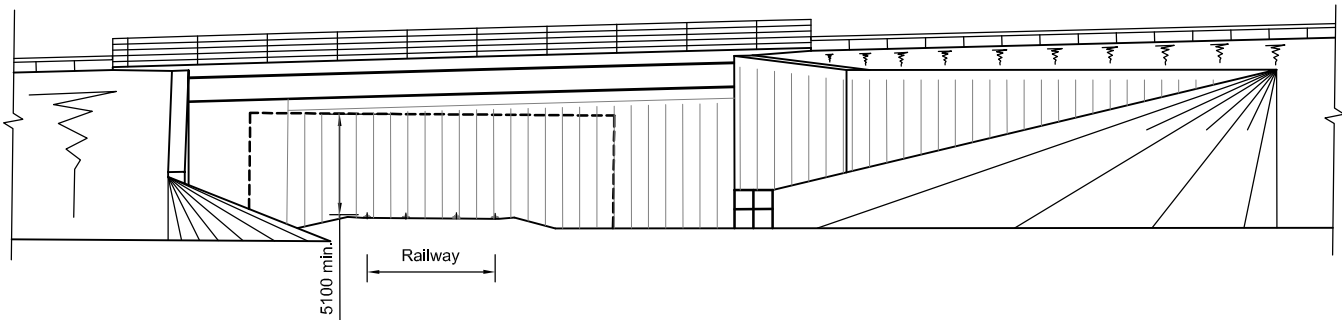


REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

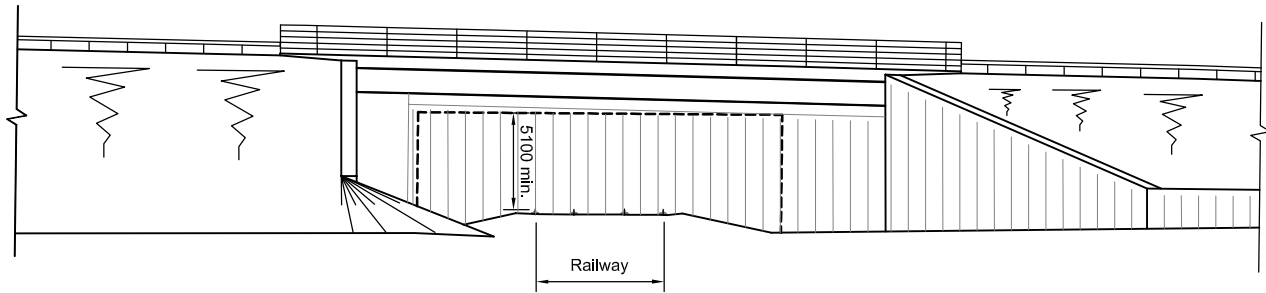
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SURVEYED BY			PROJECT TITLE Rackheath Overbridge	
DESIGNED BY	JP	May 2013		
DRAWN BY	DM	May 2013		
CHECKED BY	GAK		SCALE As Shown @ A1	FILE No. 233906DU01



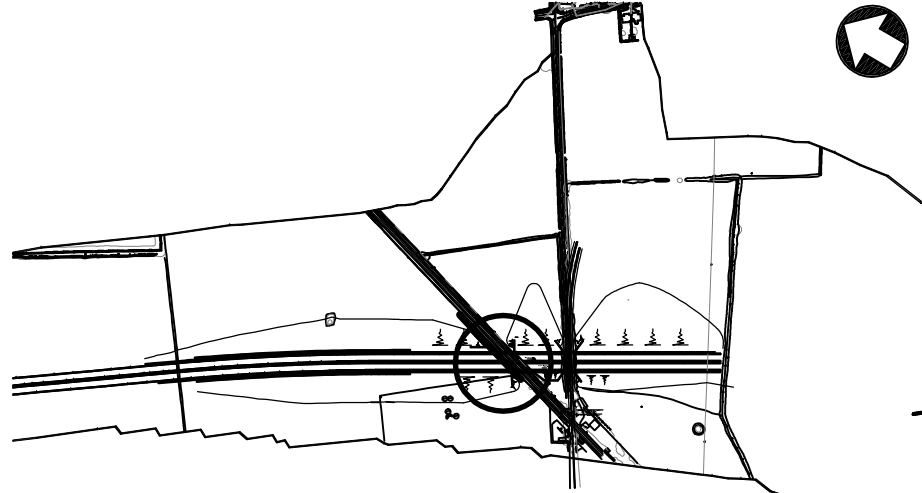
Plan
1:500



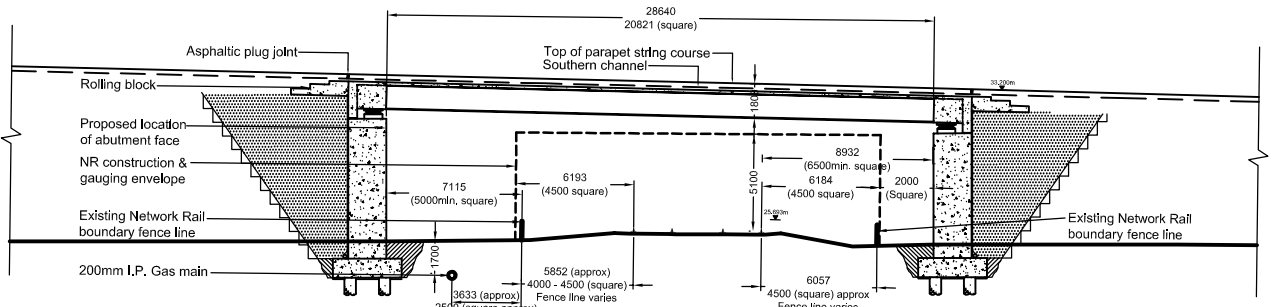
Elevation on East of Bridge
1:200



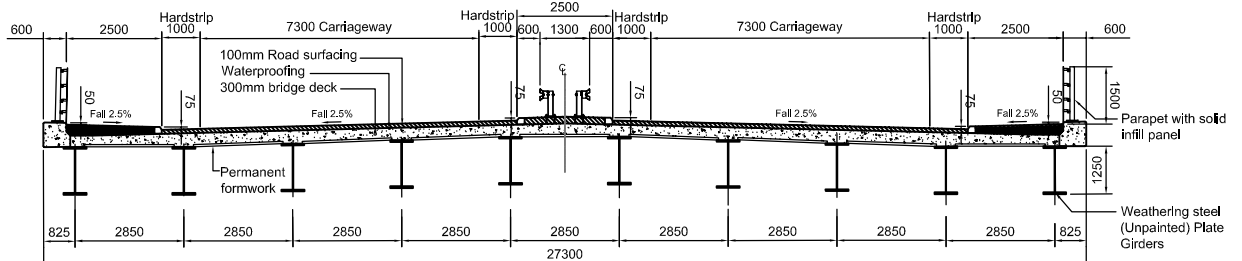
Elevation on West of Bridge
1:200



Bridge Location Plan
1:5000



Section A-A
1:200



Section B - Square Section
1:100
(Diagonal Plan Bracing Cast Within Deck Slab omitted for clarity)

Notes

1. All dimensions are in millimeters unless stated otherwise.
2. All levels are in metres relative to AOD.
3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
4. Propose that East abutment of rail bridge be set back 2.0m away from Network Rail boundary fence to enable establishment of Green Zone Boundary.
5. This drawing is to be read in conjunction with 233906-DU01-P007
6. Plan to be read in conjunction with the Development Consent Order, Regulation 5(2)(p) and Regulation 6(2)(a).

RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

1. Piling
2. Excavation
3. Working adjacent to railway
4. Buried services and Drainage (I.P. Gas Main)

FOR INFORMATION

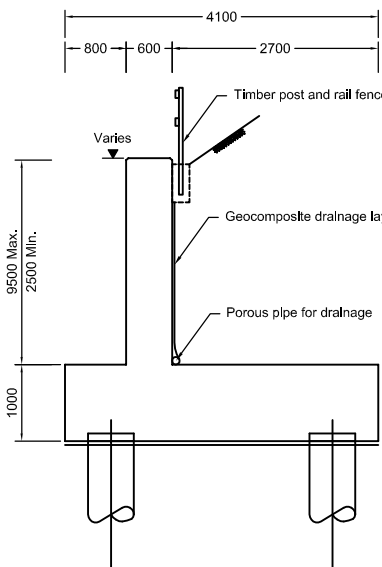
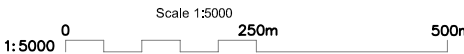
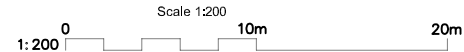
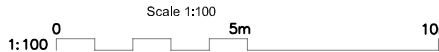
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Section C -
Typical Section Through
Wing Wall
1:50



Tom McCabe
Interim Director of Planning and Transportation
Norfolk County Council
County Hall
Martineau Lane
Norwich NR1 2SG

DRAWING TITLE

Norwich Northern Distributor Road
Rackheath Rail Overbridge

REV.	DESCRIPTION	DATE
A	Revision for Submission	Nov 2013

	INITIALS	DATE	DRAWING No. 233906-DU01-P006
SURVEYED BY	JP	May 2013	PROJECT TITLE Rackheath Overbridge
DESIGNED BY	DM	May 2013	SCALE As Shown @ A1
CHECKED BY	GAK		FILE No. 233906DU01



Bridge Location Plan
NTS

Bat Bridge Gantry Information												
Location	Central Reserve (mm)	Eastbound Verge (mm)	Westbound Verge (mm)	Span 1 (mm)	Span 2 (mm)	Skew (°)	a1 (mm)	a2 (mm)	h1 (mm)	h2 (mm)	h3 (mm)	VRS Provided
MBT01	7100	2500	2500	37500		9	5000	5000	10000	10500		Yes
MBT02	2500	1500	1500	38000		29	7250	7250	8900	10000		Yes
MBT03	5720	5500	2500	50900	10125	38	8075	4150	10000	8300	10200	Yes
MBT04	3380	1500	1500	26000		17	2330	5500	10100	10100		Yes
MBT05	2550	1500	1500	35500		27	5800	5250	10500	10500		Yes
MBT06	2500	1500	1500	26500		27	8000	5000	8750	6135		Yes
MBT07	2500	1500	1500	35500		22	6750	7150	9800	9000		Yes



- Notes:**
- All dimensions are in millimeters unless stated otherwise.
 - All levels are in metres relative to AOD.
 - Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 - Foundations are indicative at this stage.
 - This drawing is to be read in conjunction with:
233906-EC01-0001 Bat Gantry 01
233906-EC01-0002 Bat Gantry 02
233906-EC01-0003 Bat Gantry 03
233906-EC01-0004 Bat Gantry 04
233906-EC01-0005 Bat Gantry 05
233906-EC01-0006 Bat Gantry 06
233906-EC01-0007 Bat Gantry 07
 - Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o)

RESIDUAL RISK ASSESSMENT
Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

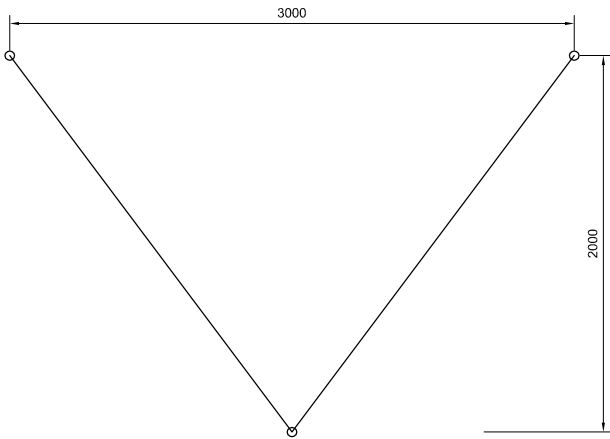
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25/11/13		Revision for Submission				
Rev	Date	Description				
 Norfolk County Council		 Birse Civils				
 Mott MacDonald		Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG				
Project						
Norwich Northern Distributor Road						
Title						
Bat Gantry Locations						
Bridge Number						
MBT01 to MBT07						
Scale	Date	Drawn/Design	Checked	Approved	Sheet	
As Shown	18.06.13	DM	JP	GAK	A1	
Drawing Number				Status		
233906-EC01-0010				PRE		

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Bridge Location Plan
1:20,000



Section A-A
'V' Shaped Option
1:20

- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).

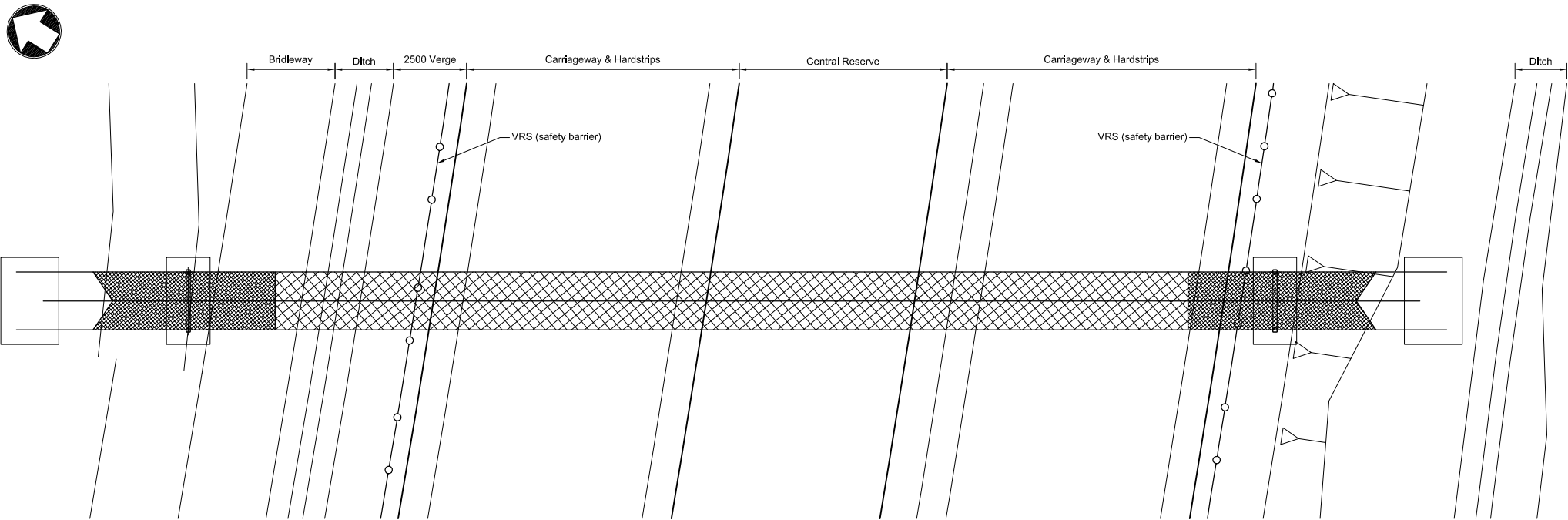
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

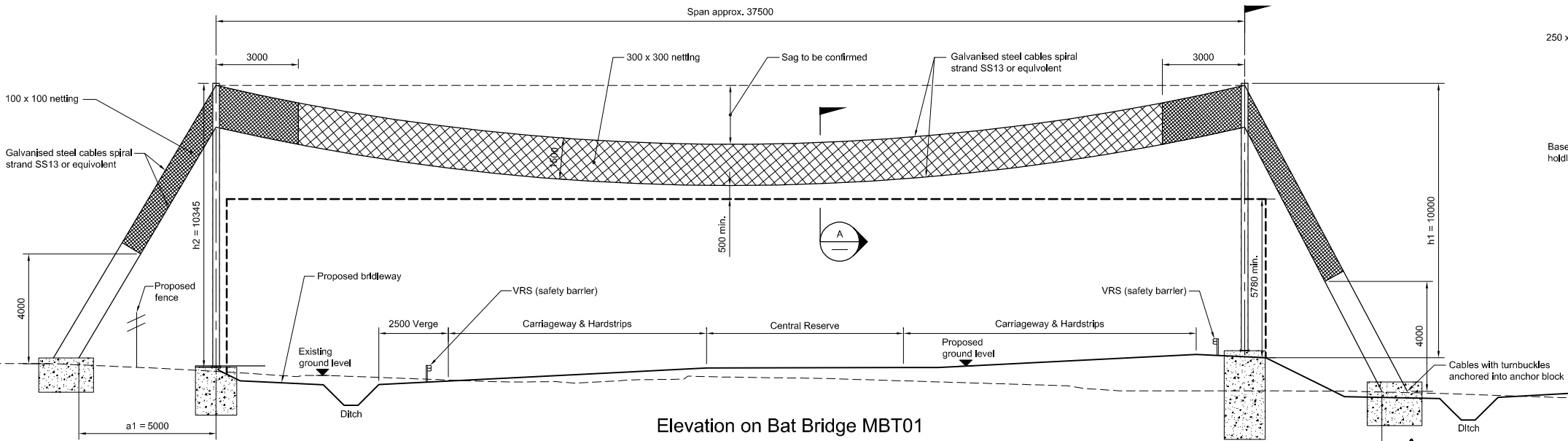
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

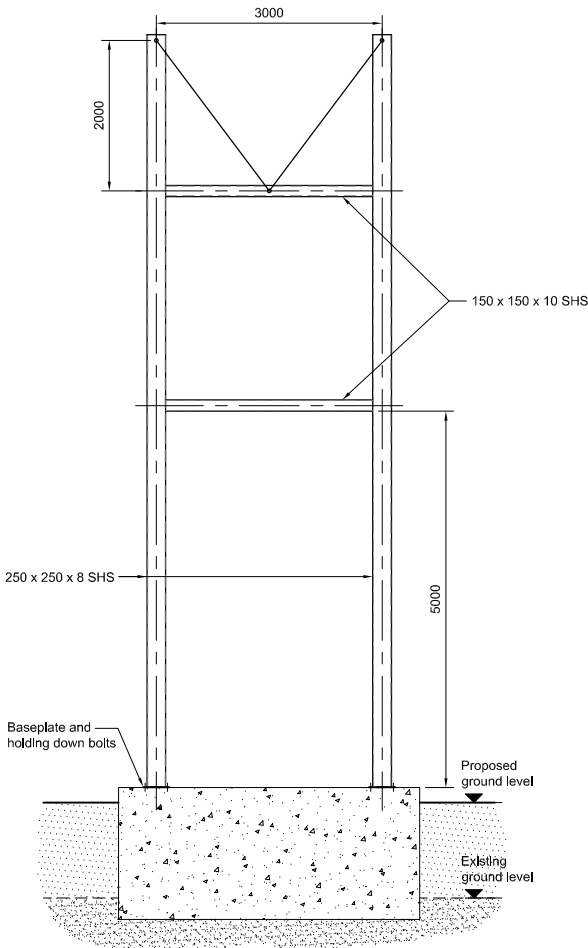
- 1.



Plan on Bat Bridge 01
1:100




Elevation on Bat Bridge MBT01
1:100



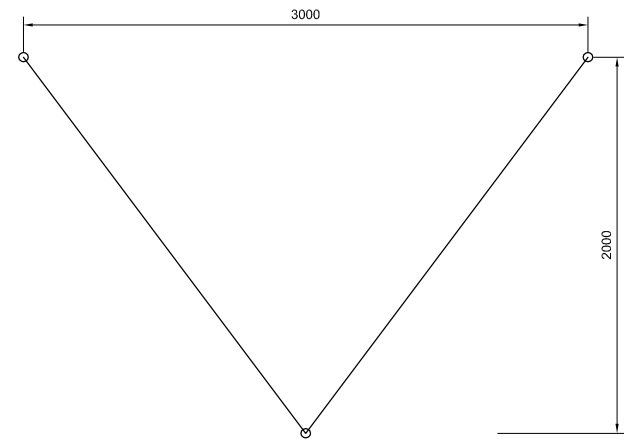
Section B-B
'V' Shaped Option
1:50

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A	25/11/13	Revision for Submission
Rev	Date	Description
		
Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project Norwich Northern Distributor Road		
Title Bat Gantry 01 General Arrangement		
Bridge Number MBT01		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
Checked	JP	Approved
GAK	A1	Sheet
Drawing Number 233906-EC01-0001		Status PRE

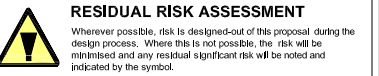


Bridge Location Plan
1:20,000



Section A-A
'V' Shaped Option
1:20

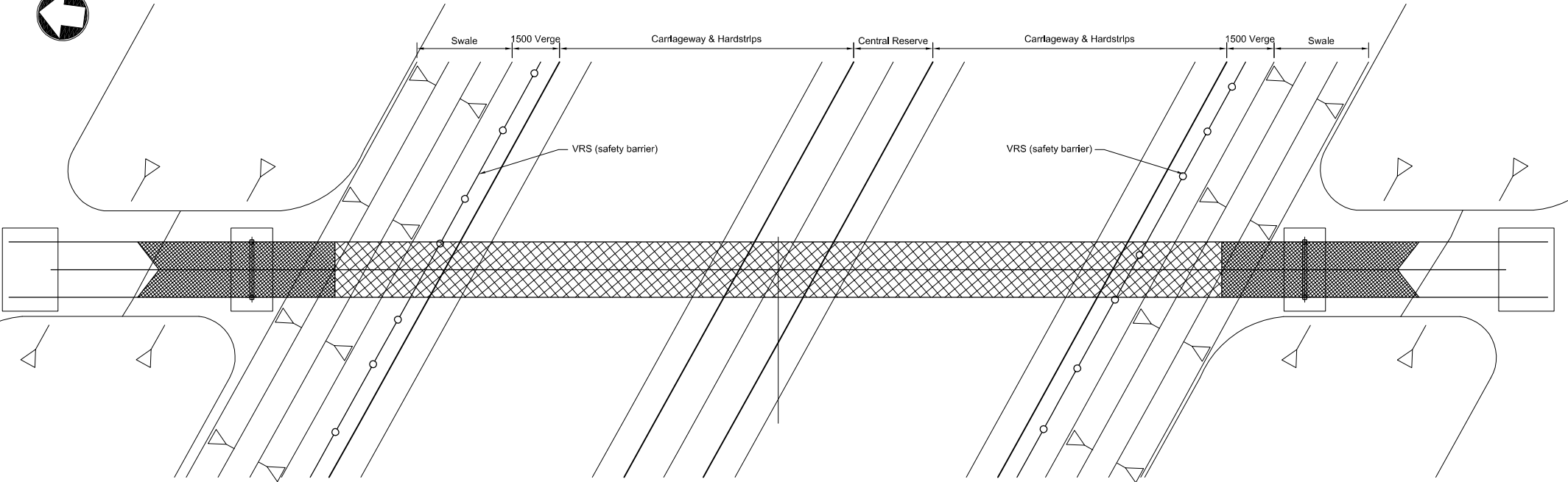
- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).



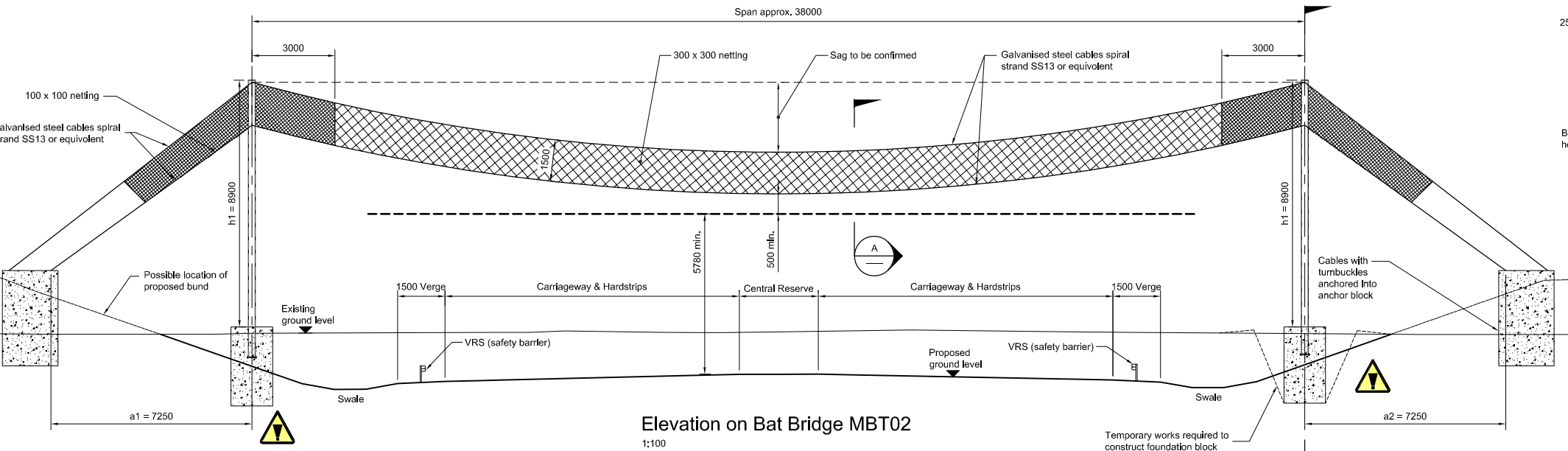
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

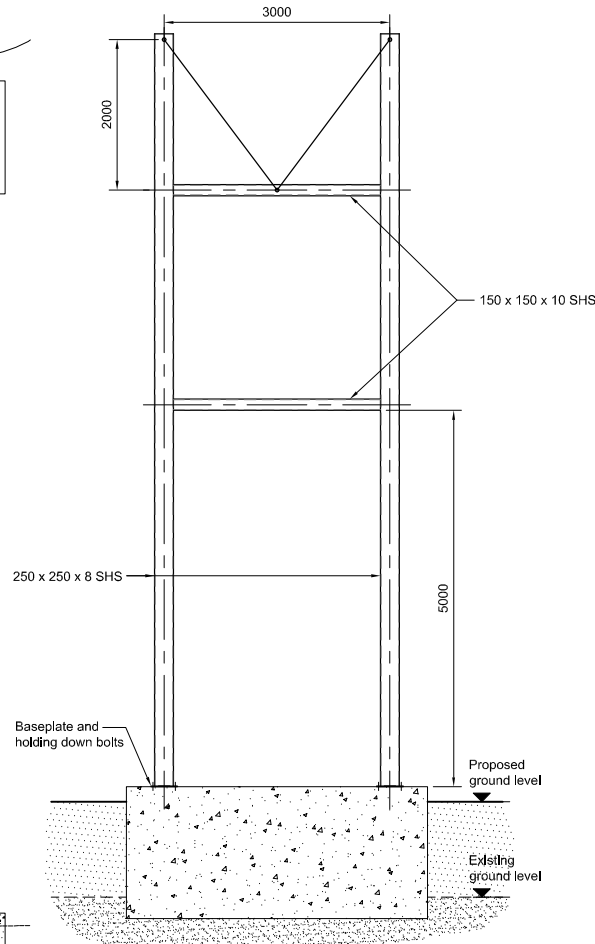
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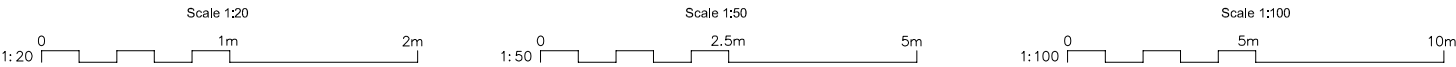
Plan on Bat Bridge 02
1:100





Elevation on Bat Bridge MBT02
1:100

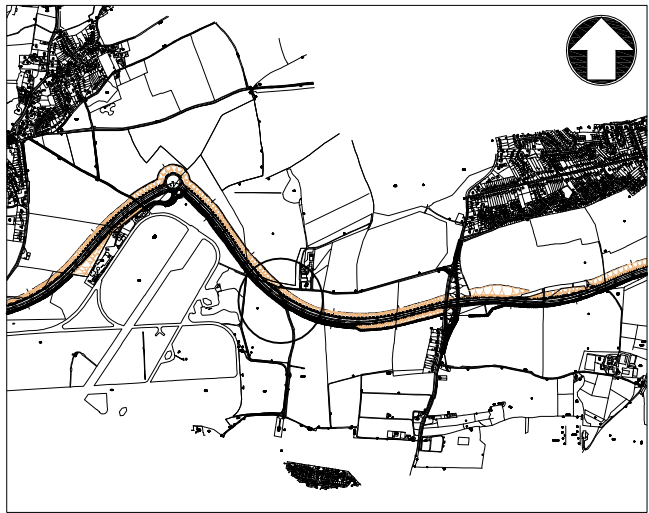


Section B-B
'V' Shaped Option
1:50

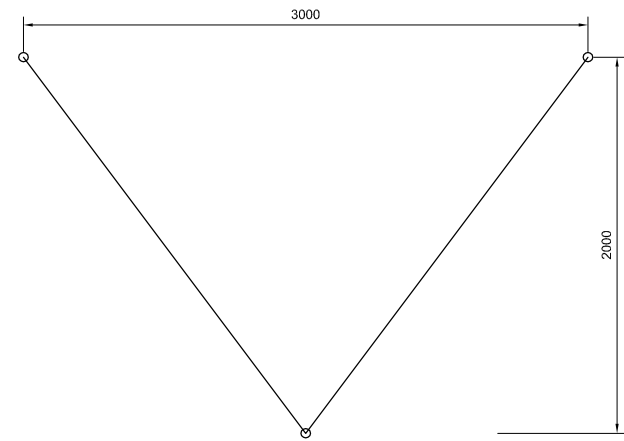


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A	25/11/13	Revision for Submission
Rev	Date	Description
  Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project Norwich Northern Distributor Road		
Title Bat Gantry 02 General Arrangement		
Bridge Number MBT02		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
Checked	JP	Approved
GAK	A1	Sheet
Drawing Number 233906-EC01-0002		Status PRE



Bridge Location Plan
1:20,000



Section A-A
'V' Shaped Option
1:20

- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).

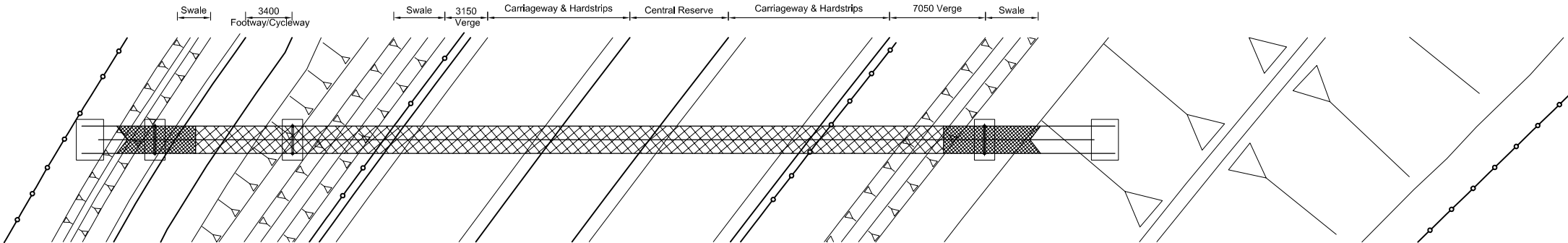
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

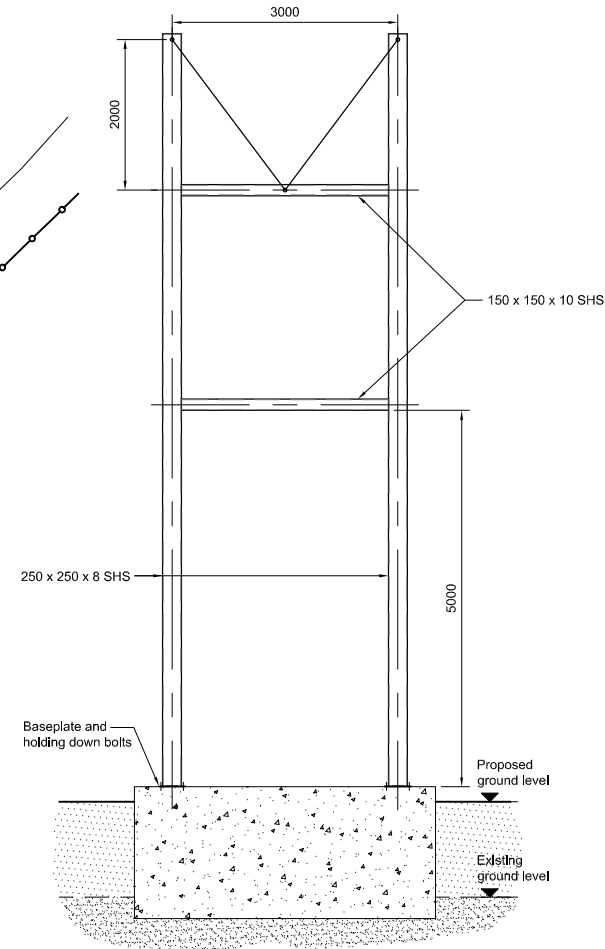
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

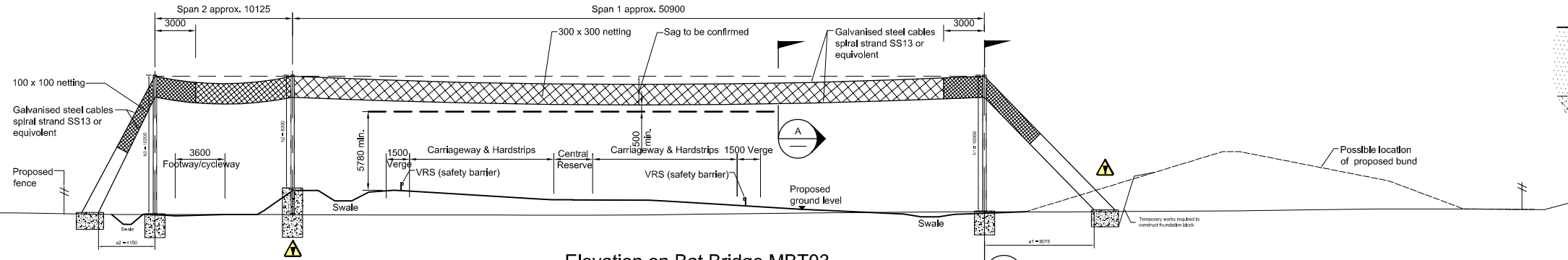
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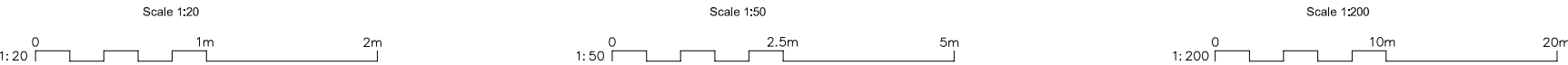
Plan on Bat Bridge 03
1:200



Section B-B
'V' Shaped Option
1:50



Elevation on Bat Bridge MBT03
1:200

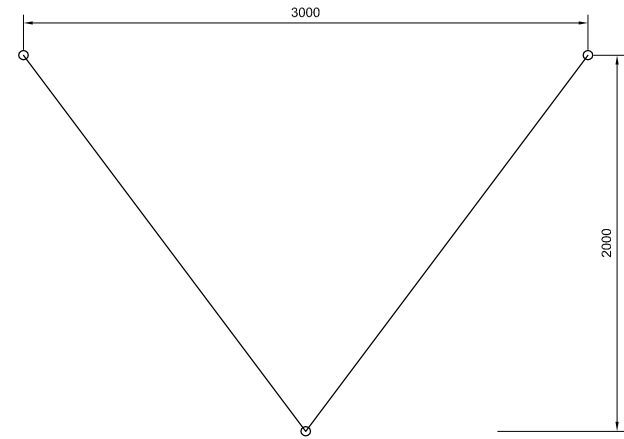


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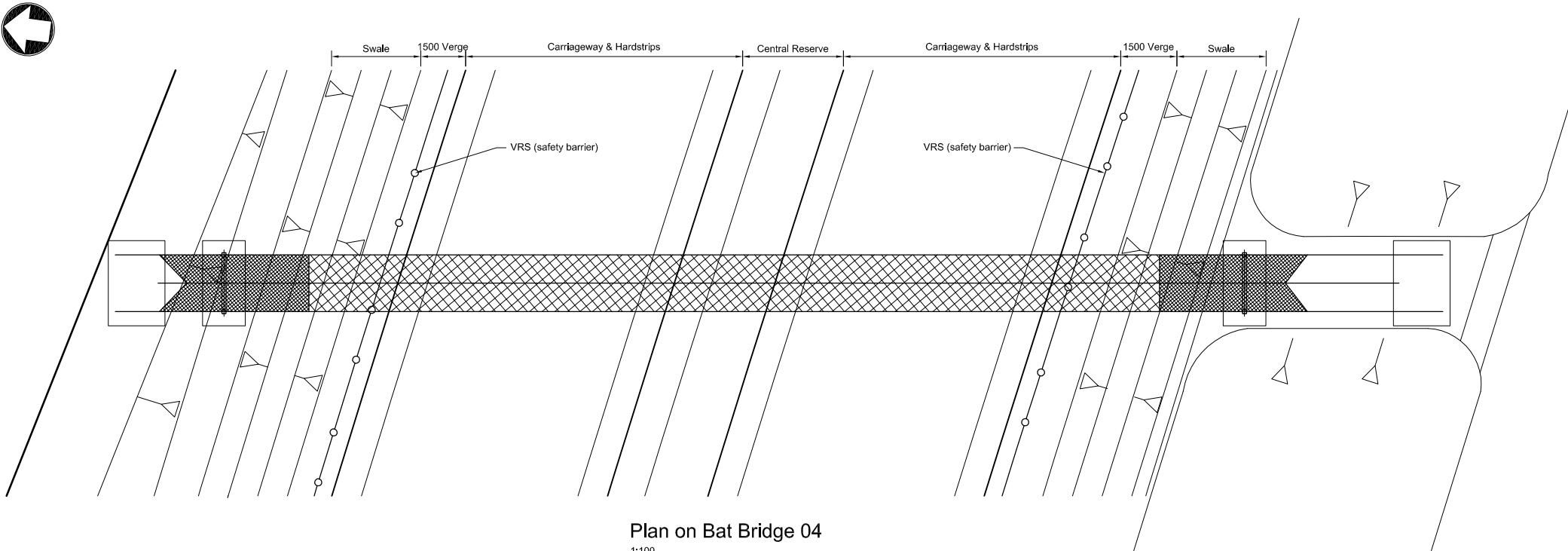
A	25/11/13	Revision for Submission
Rev	Date	Description
 Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project Norwich Northern Distributor Road		
Title Bat Gantry 03 General Arrangement		
Bridge Number MBT03		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
Checked	JP	Approved
GAK	A1	Sheet
Drawing Number 233906-EC01-0003		Status PRE



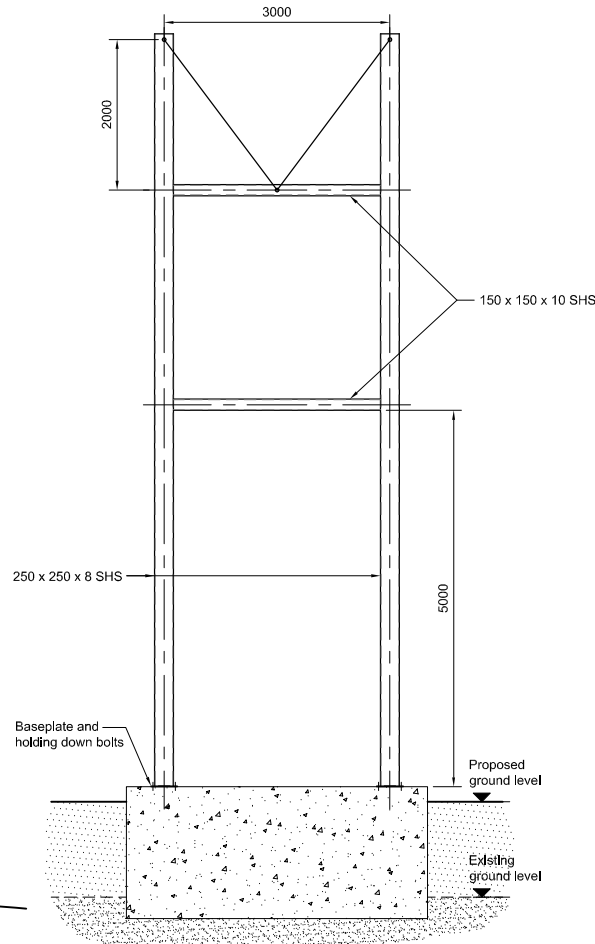
Bridge Location Plan
1:20,000



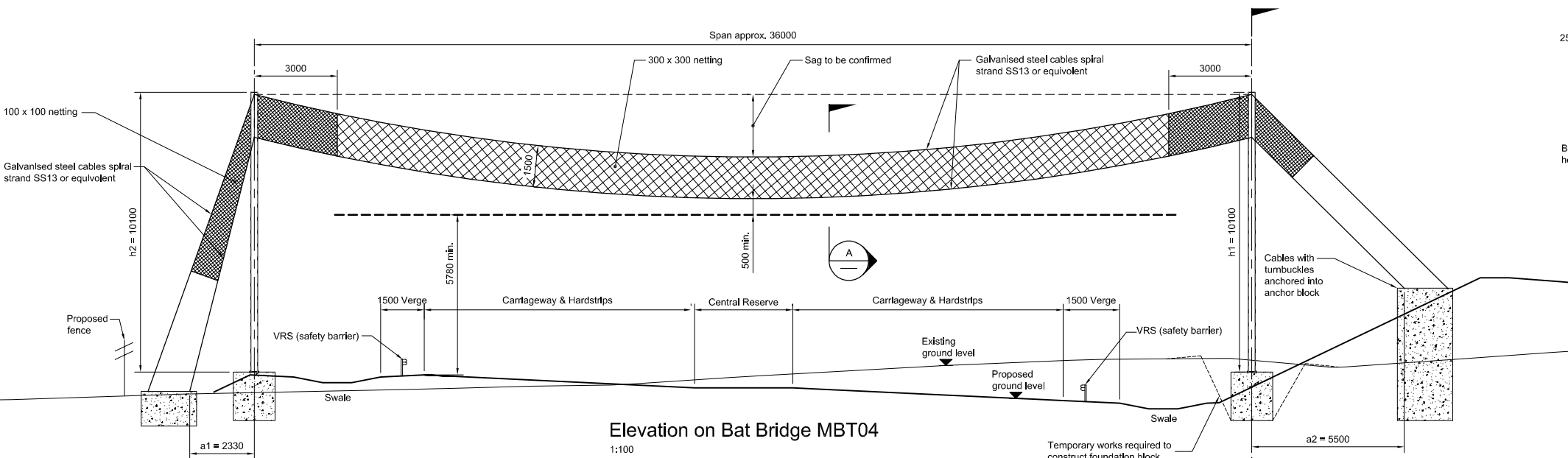
Section A-A
'V' Shaped Option
1:20



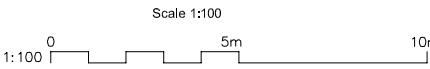
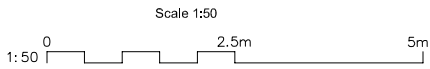
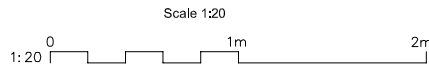
Plan on Bat Bridge 04
1:100



Section B-B
'V' Shaped Option
1:50



Elevation on Bat Bridge MBT04
1:100



- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).




RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

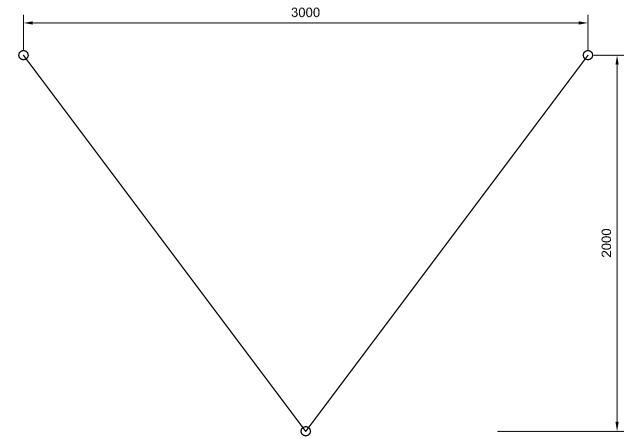
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A	25/11/13	Revision for Submission
Rev	Date	Description
 Norfolk County Council  Mott MacDonald  Birse Civils		
Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project Norwich Northern Distributor Road		
Title Bat Gantry 04 General Arrangement		
Bridge Number MBT04		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
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GAK	A1	Sheet
Drawing Number 233906-EC01-0004		Status PRE

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Bridge Location Plan
1:20,000



Section A-A
'V' Shaped Option
1:20

- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).

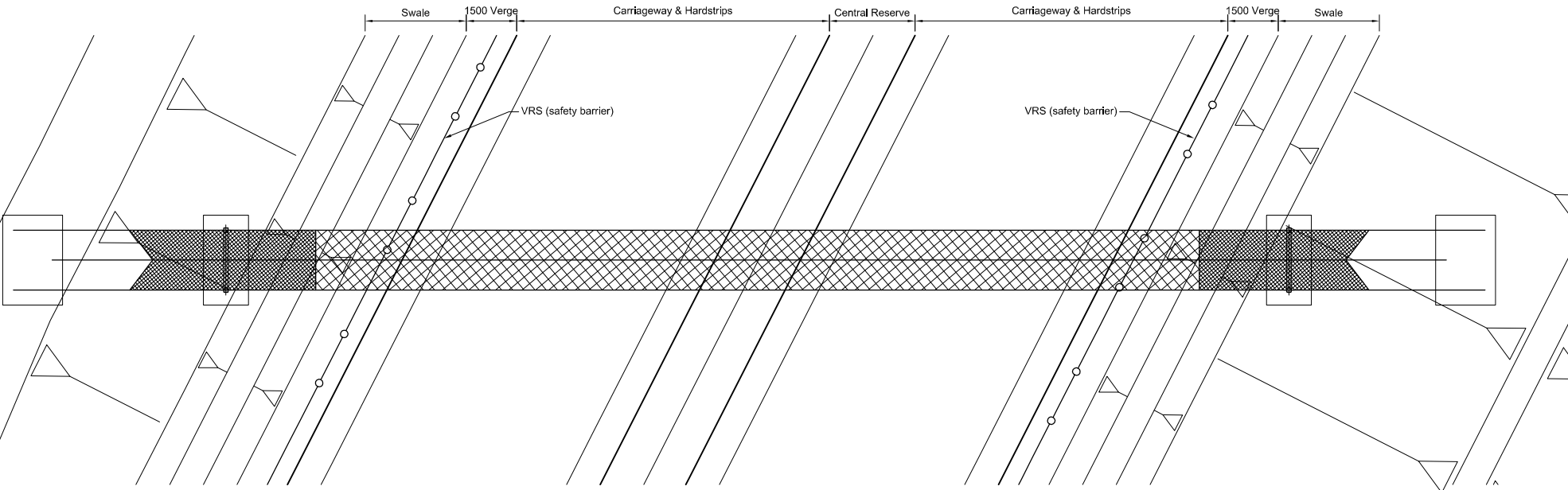
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

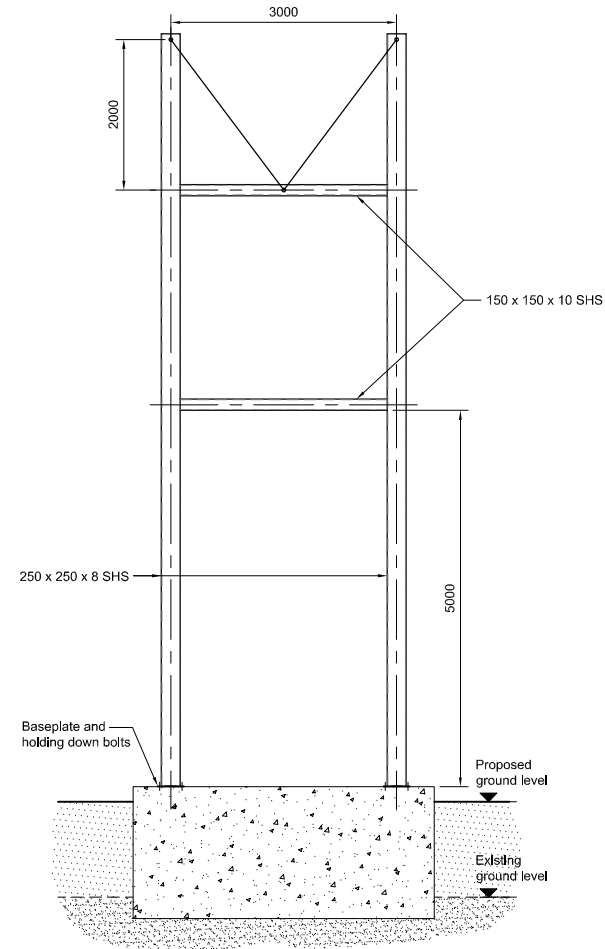
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

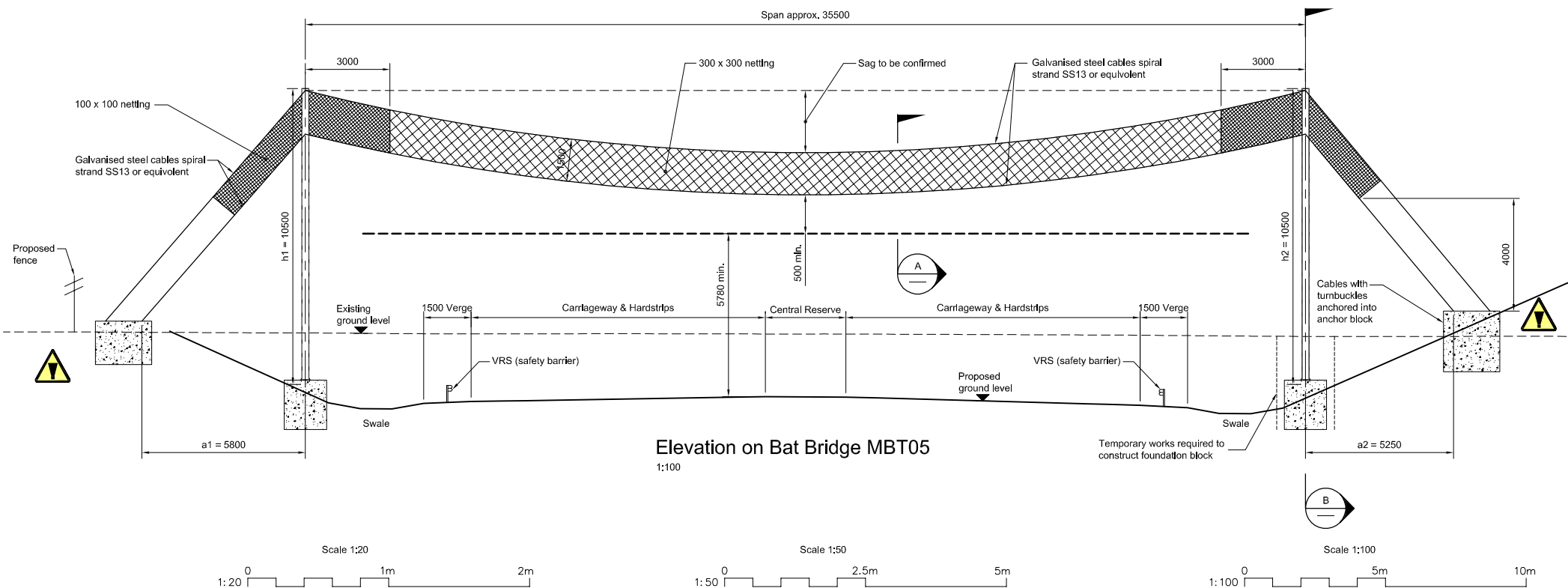
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Plan on Bat Bridge 05
1:100


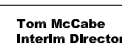



Section B-B
'V' Shaped Option
1:50



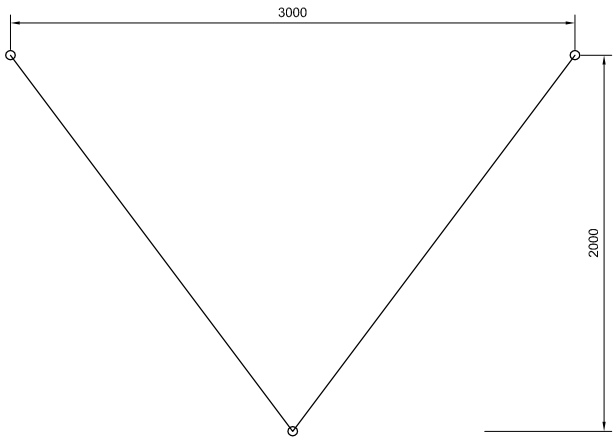
Elevation on Bat Bridge MBT05
1:100

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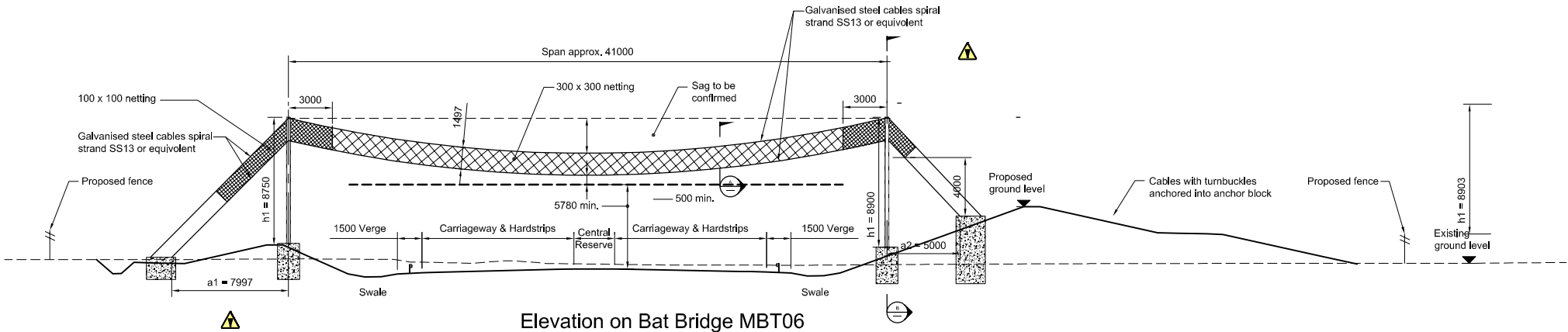
A	25/11/13	Revision for Submission
Rev	Date	Description
   Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project		
Norwich Northern Distributor Road		
Title		
Bat Gantry 05 General Arrangement		
Bridge Number		
MBT05		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
Checked	JP	Approved
GAK		Sheet
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Drawing Number		Status
233906-EC01-0005		PRE



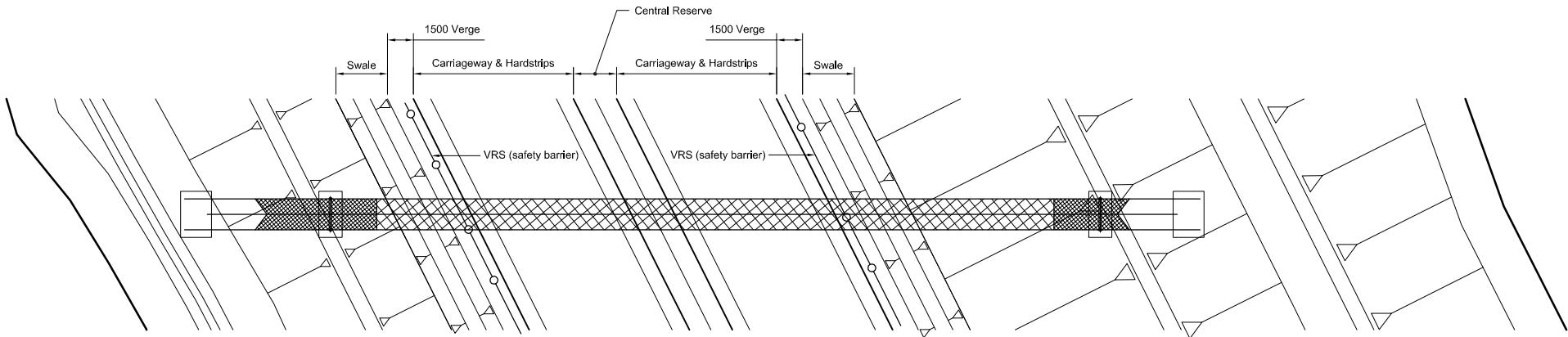
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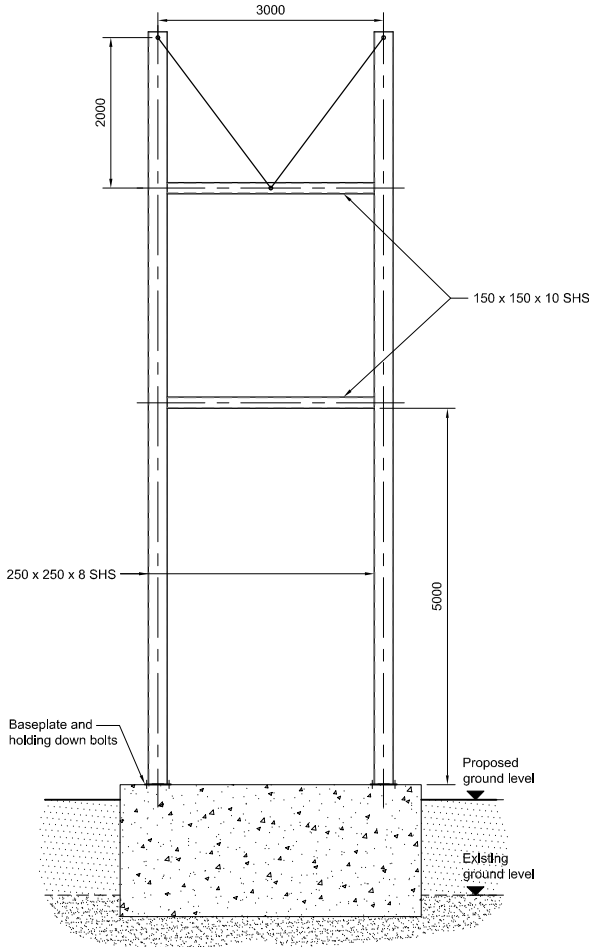
Section A-A
'V' Shaped Option
1:20



Elevation on Bat Bridge MBT06
1:200



Plan on Bat Bridge 06
1:200



Section B-B
'V' Shaped Option
1:50

Notes:

1. All dimensions are in millimeters unless stated otherwise.
2. All levels are in metres relative to AOD.
3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
4. Foundations are indicative at this stage.
5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge Location and information regarding Gantry dimensions.
6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).






RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

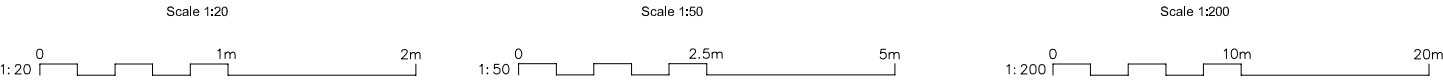
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

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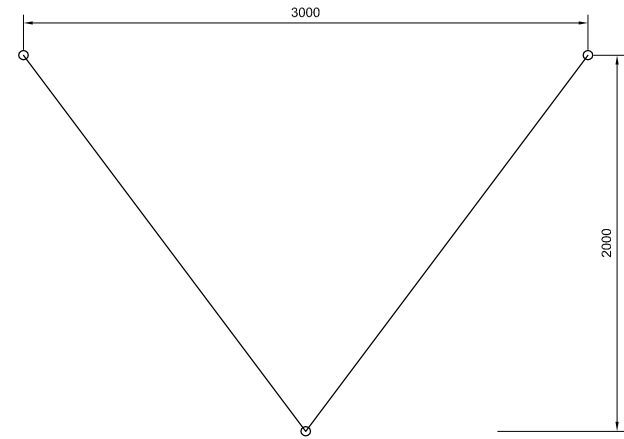
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Rev	Date	Description			
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Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG					
Project					
Norwich Northern Distributor Road					
Title					
Bat Gantry 06 General Arrangement					
Bridge Number					
MBT06					
Scale	Date	Drawn/Design	Checked	Approved	Sheet
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233906-EC01-0006				PRE	

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Bridge Location Plan
1:20,000



Section A-A
'V' Shaped Option
1:20

- Notes:**
1. All dimensions are in millimeters unless stated otherwise.
 2. All levels are in metres relative to AOD.
 3. Topographical survey proposed to verify all levels and positions, including railway tracks and fence lines.
 4. Foundations are indicative at this stage.
 5. This drawing is to be read in conjunction with drawing 233906-EC01-0010 for Bat Bridge location and information regarding Gantry dimensions.
 6. Plan to be read in conjunction with Development Consent Order, Regulation 5(2)(o).

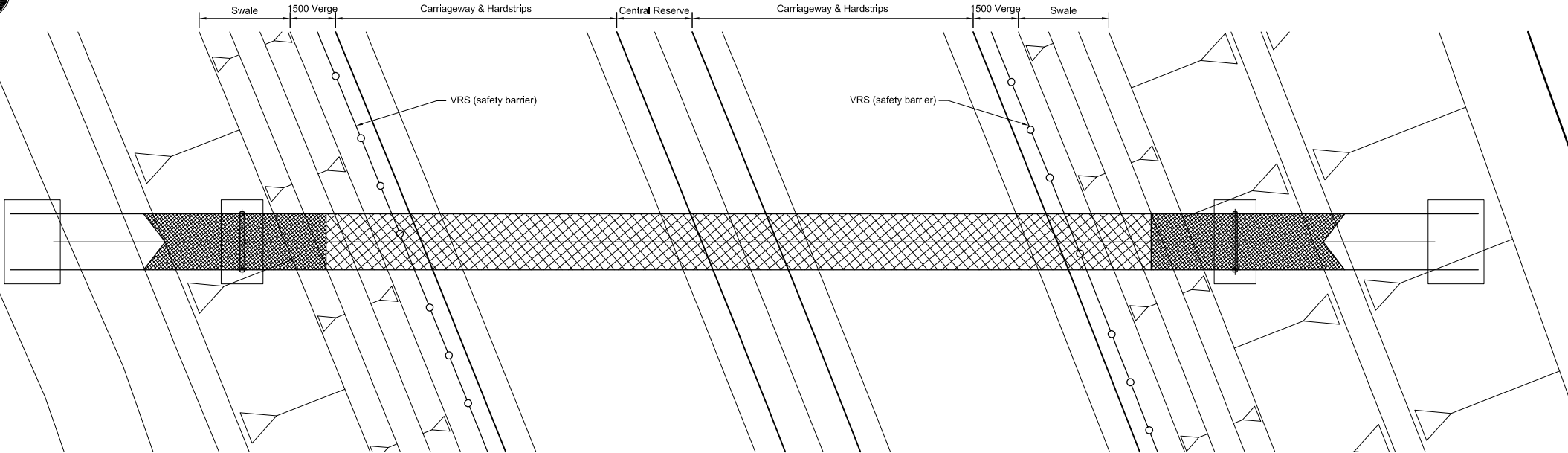
RESIDUAL RISK ASSESSMENT

Wherever possible, risk is designed-out of this proposal during the design process. Where this is not possible, the risk will be minimised and any residual significant risk will be noted and indicated by the symbol.

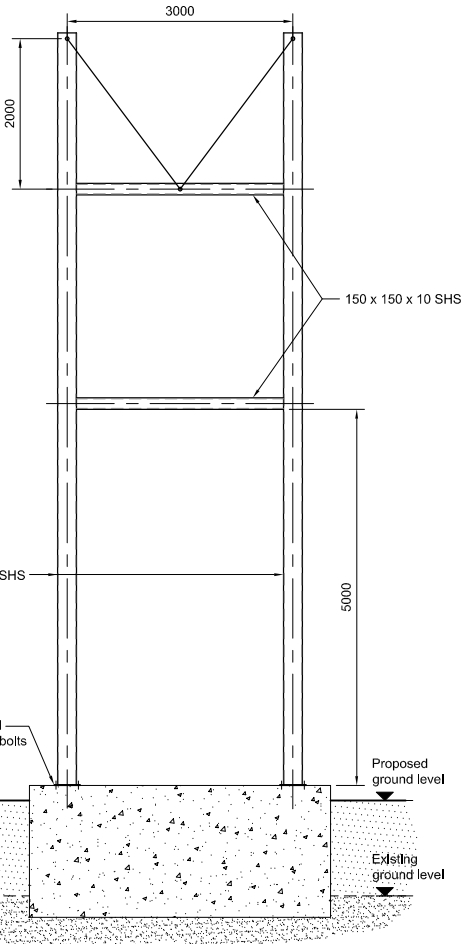
SIGNIFICANT CDM HEALTH & SAFETY RISKS

List not exhaustive.

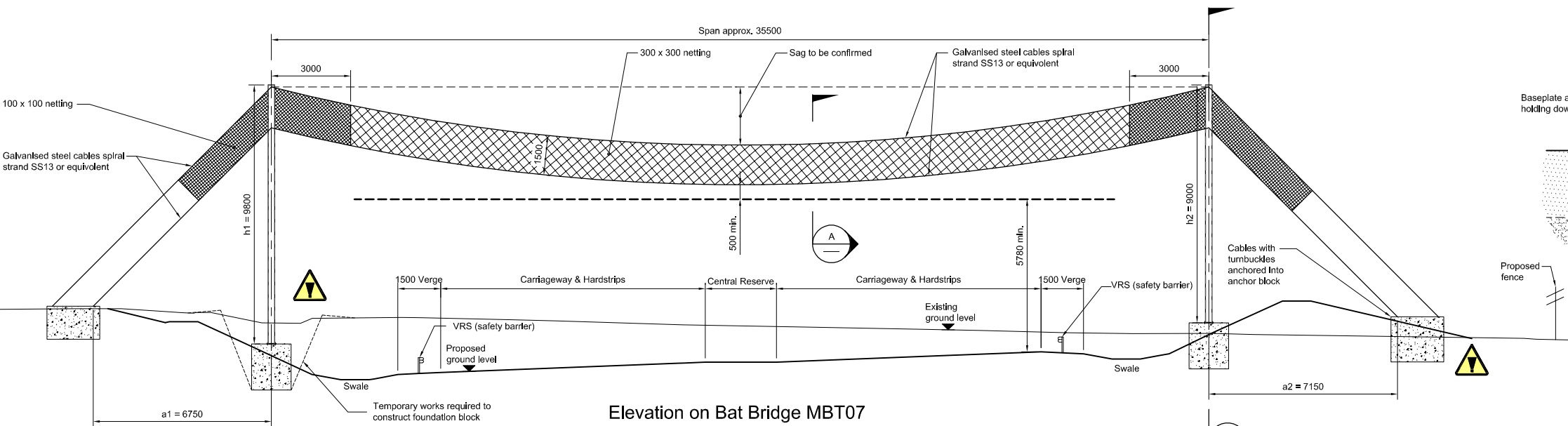
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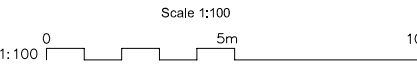
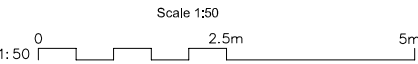
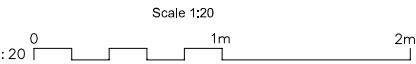
Plan on Bat Bridge 07
1:100



Section B-B
'V' Shaped Option
1:50

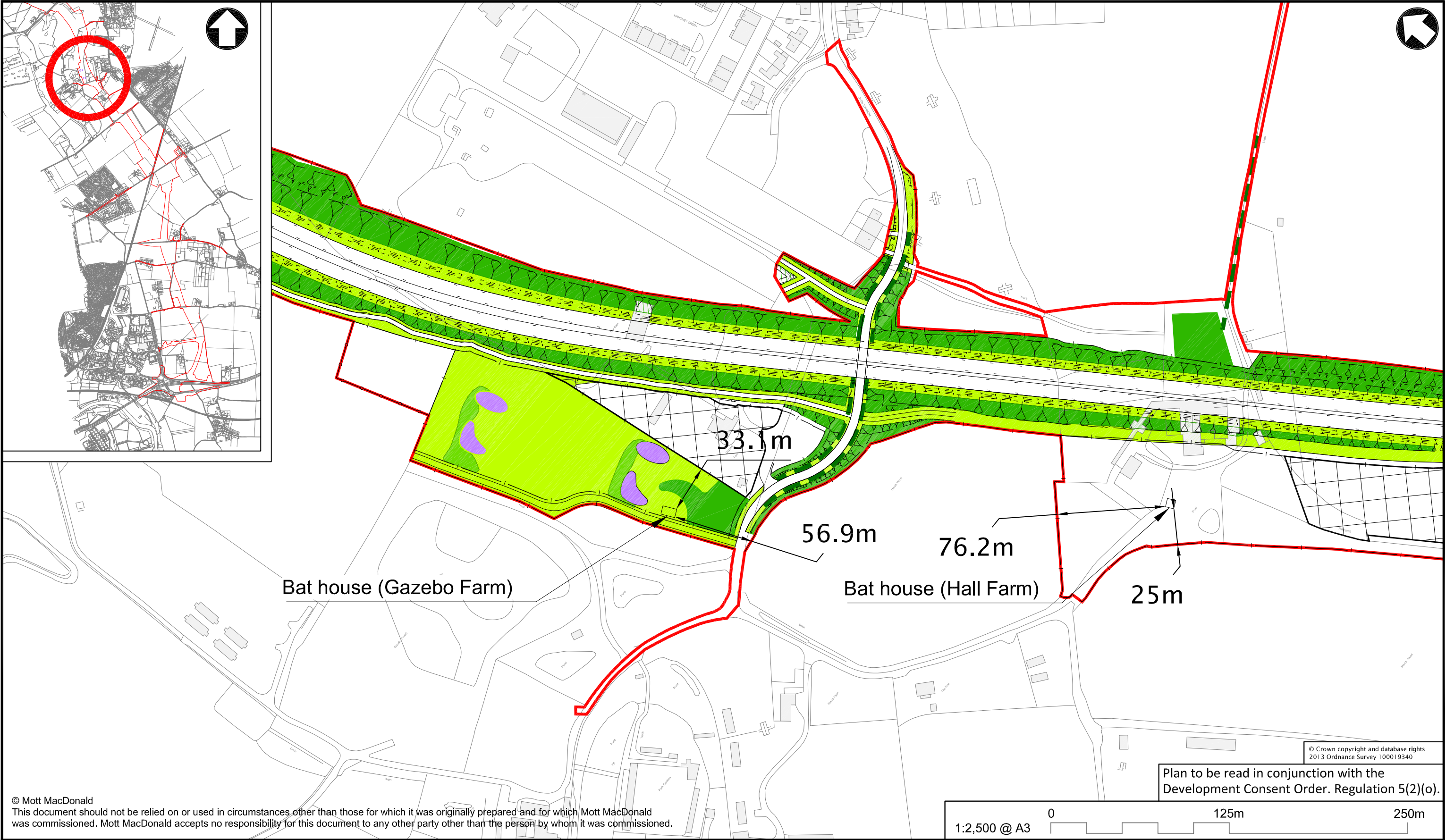


Elevation on Bat Bridge MBT07
1:100



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A	25/11/13	Revision for Submission
Rev	Date	Description
Tom McCabe Interim Director of Environment, Transport and Development Norfolk County Council County Hall Martineau Lane Norwich NR1 2SG		
Project Norwich Northern Distributor Road		
Title Bat Gantry 07 General Arrangement		
Bridge Number MBT07		
Scale	Date	Drawn/Design
As Shown	18.06.13	SRV
Checked	JP	Approved
GAK	A1	Sheet
Drawing Number 233906-EC01-0007		Status PRE



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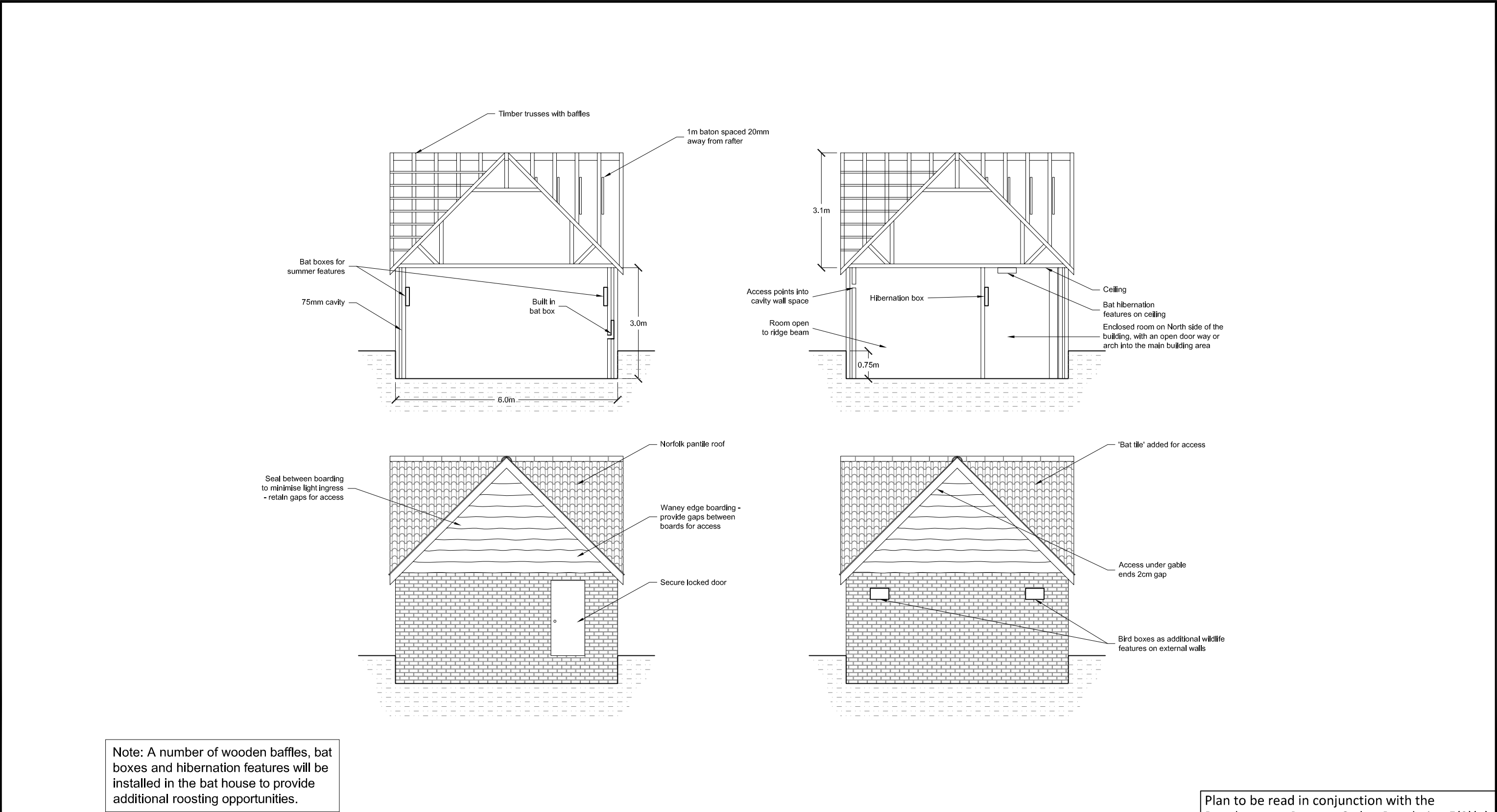
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Norwich, NR1 2SG



Rev	Date	Drawn	Description	Ch'k'd	App'd
0	08/13	AW	Revision for Submission	SA	JF

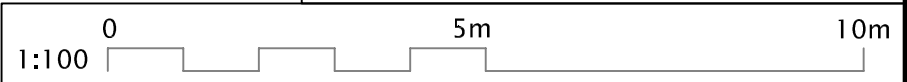
Title	Drawn	AW
Norwich Northern Distributor Road Bat House Location Plan	Checked	SA
	Approved	JF
	Scale at A3	1:2500
Drawing Number	Rev	Status
MMD-233906-DT-0859	0	INF





Note: A number of wooden baffles, bat boxes and hibernation features will be installed in the bat house to provide additional roosting opportunities.

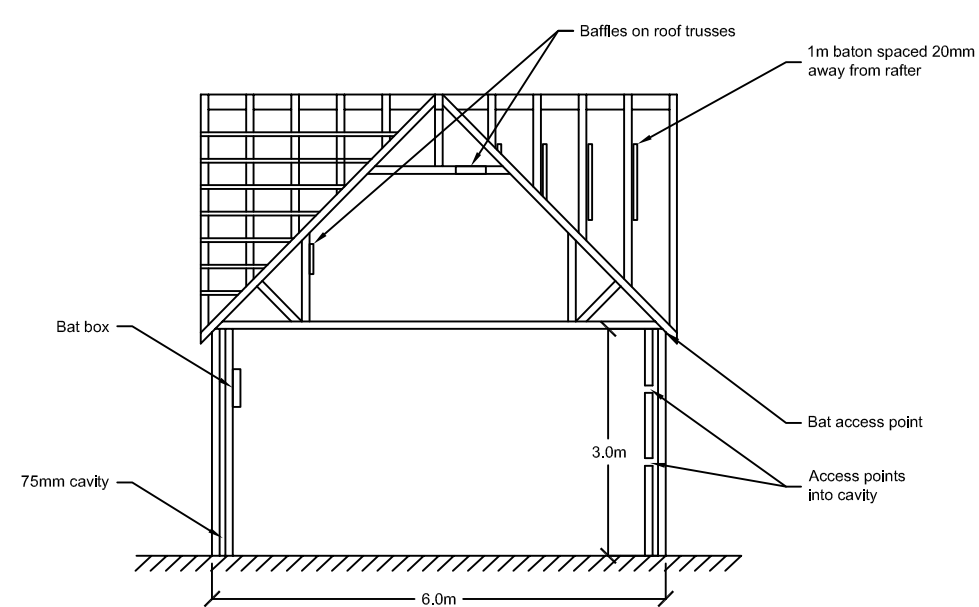
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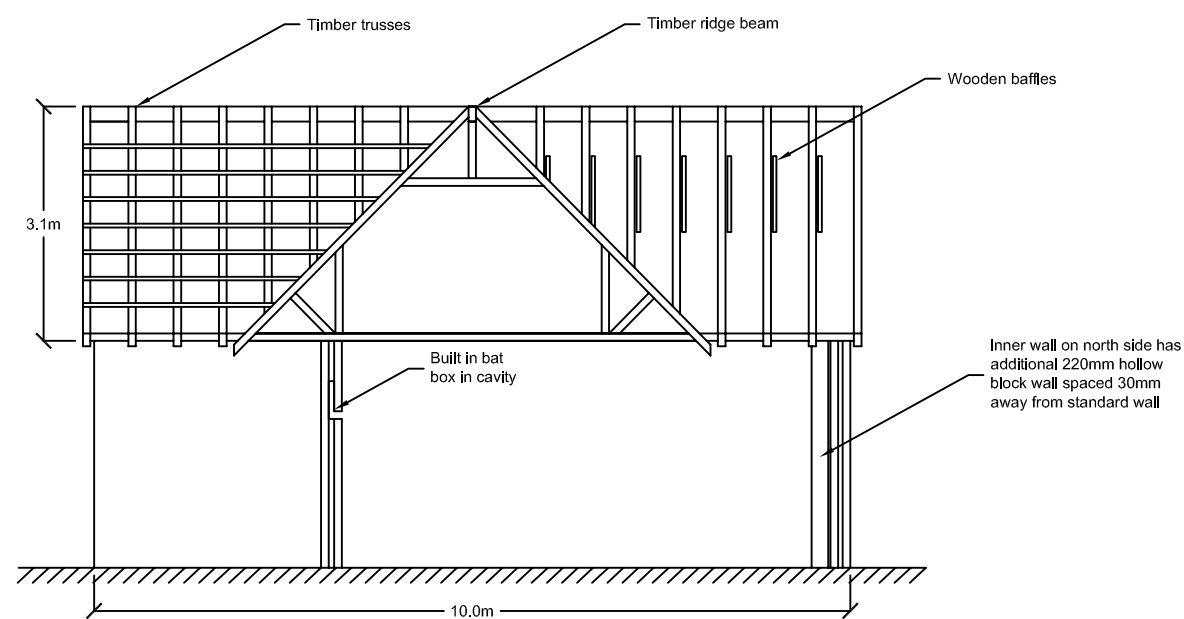


<div><p>1st Floor East Wing, 69-75 Thorpe Road Norwich, NR1 1UA United Kingdom</p><p>T +44 (0)1603 226780 F +44 (0)1603 619365 W www.mottmac.com</p></div>	<div><p>Client</p><p>Norfolk County Council County Hall Martineau Lane NR1 2SG</p> Norfolk County Council</div>	Rev	Date	Drawn	Description	Ch'k'd	App'd	Title Norwich Northern Distributor Route Bat Mitigation Hall Farm Bat House	Drawn	AW
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									Approved	JF
									Scale at A3 1:100	
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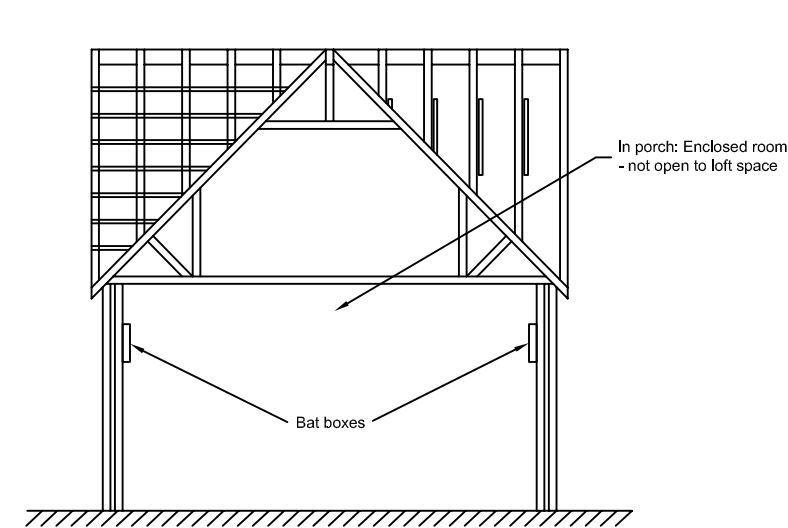
Note: A number of wooden baffles and bat boxes to be placed inside the bat house to provide additional roosting opportunities



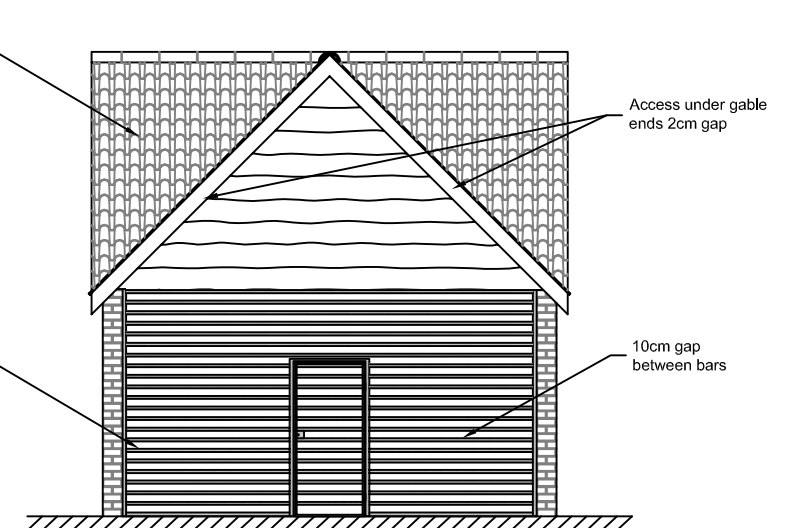
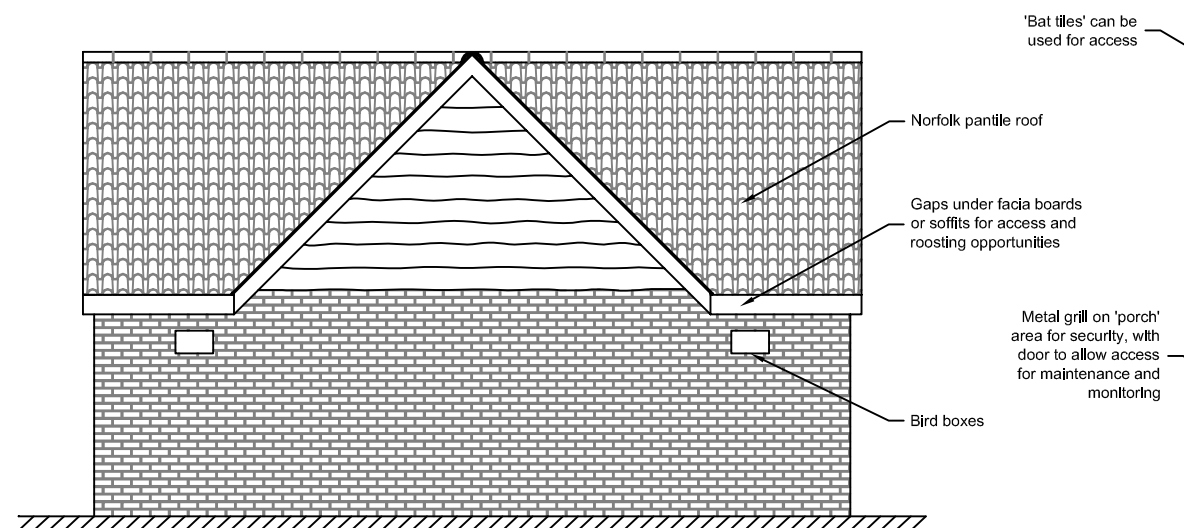
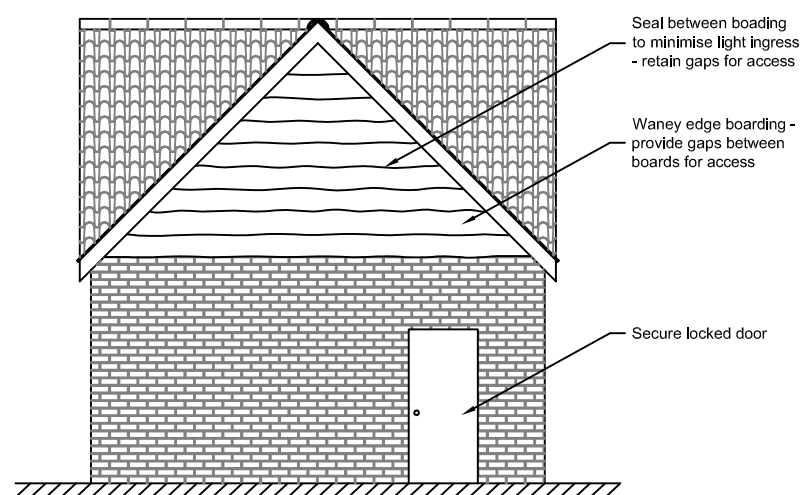
North Face



East Aspect

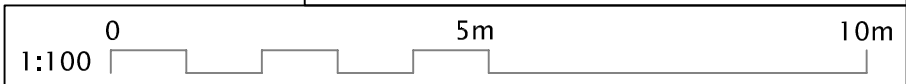




South Face



Plan to be read in conjunction with the Development Consent Order. Regulation 5(2)(o).

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		0	11/13	AW	Revision for Submission	SA	JF		Checked	SA
									Approved	JF
									Scale at A3 1:100	
									Rev	Status
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