

A27
Arundel Bypass
Scheme Assessment Report

May 2018

TABLE OF CONTENTS

APPENDICES

A P P E N D I X B S C H E M E L A Y O U T D R A W I N G S

APPENDIX B-1 OPTION 1

APPENDIX B-2 OPTION 3

APPENDIX B-3 OPTION 5A

A P P E N D I X C S C H E M E L A Y O U T D R A W I N G S M O D I F I E D O P T I O N S

APPENDIX C-1 OPTION 1(V)

APPENDIX C-2 OPTION 5A(V3)

A P P E N D I X D A S T ' S

APPENDIX D-1 AST'S

A P P E N D I X E N N N P S C O M P L I A N C E T A B L E

APPENDIX E-1 NNNNPS COMPLIANCE TABLE

Appendix B

SCHEME LAYOUT DRAWINGS

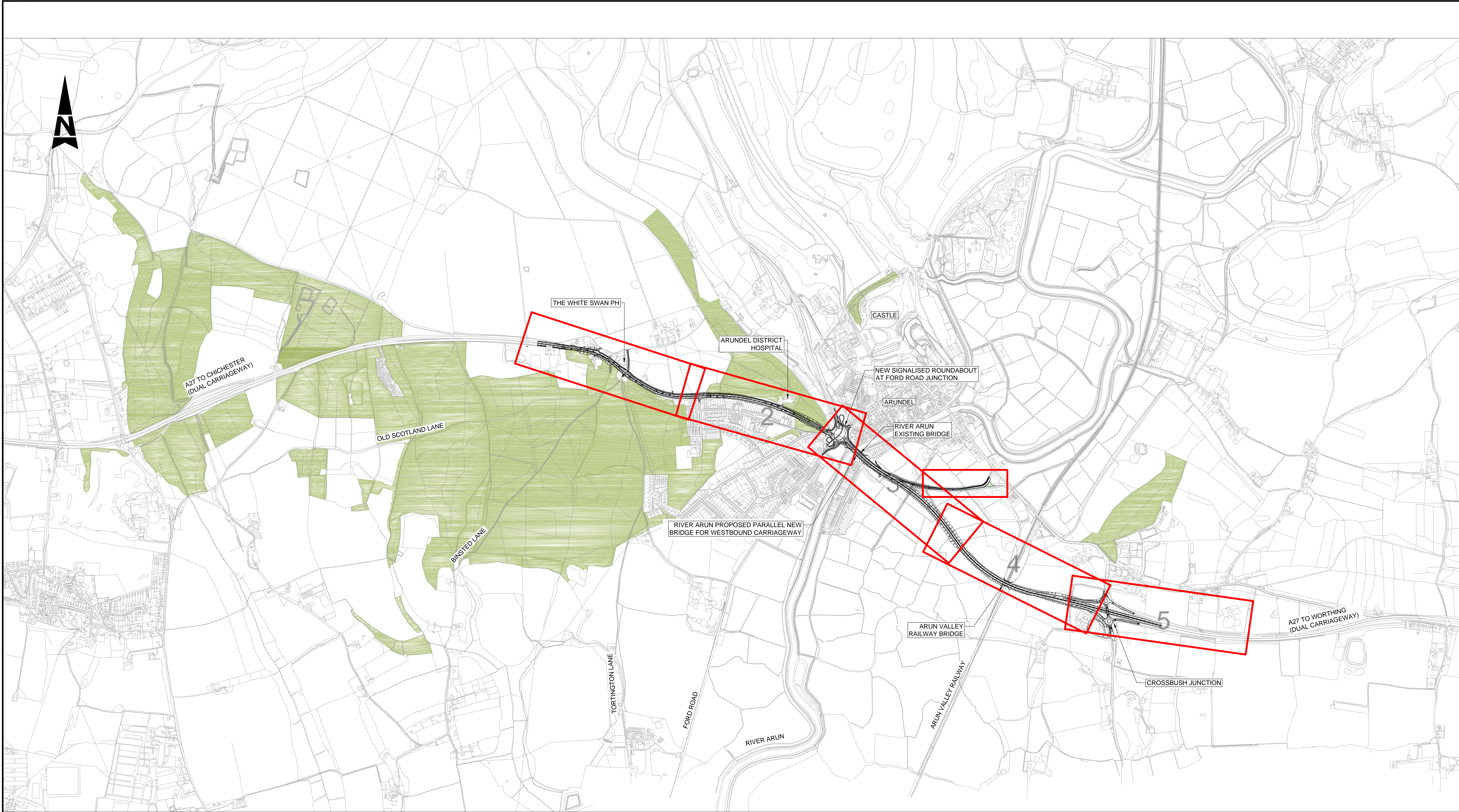
APPENDIX B-1

OPTION 1

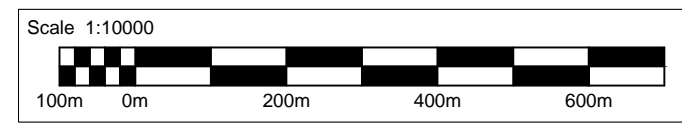
DO NOT SCALE

Millimetres

0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2018.



NOTES:
1. FOR LAYOUTS REFER TO DRG. NOS. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0101 TO 0105.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	27/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION** Suitability: **S2**



No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com



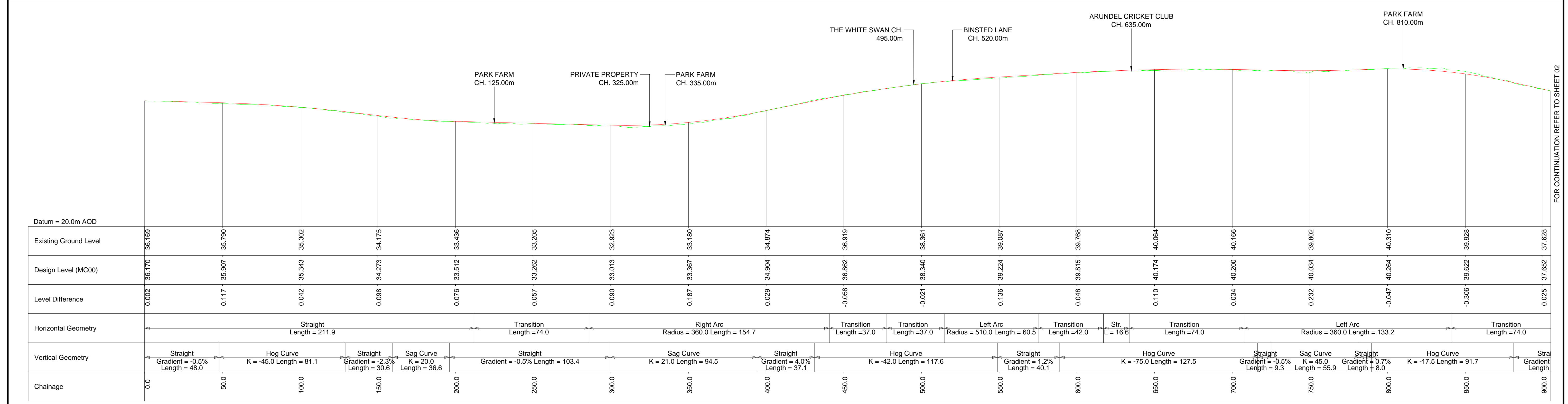
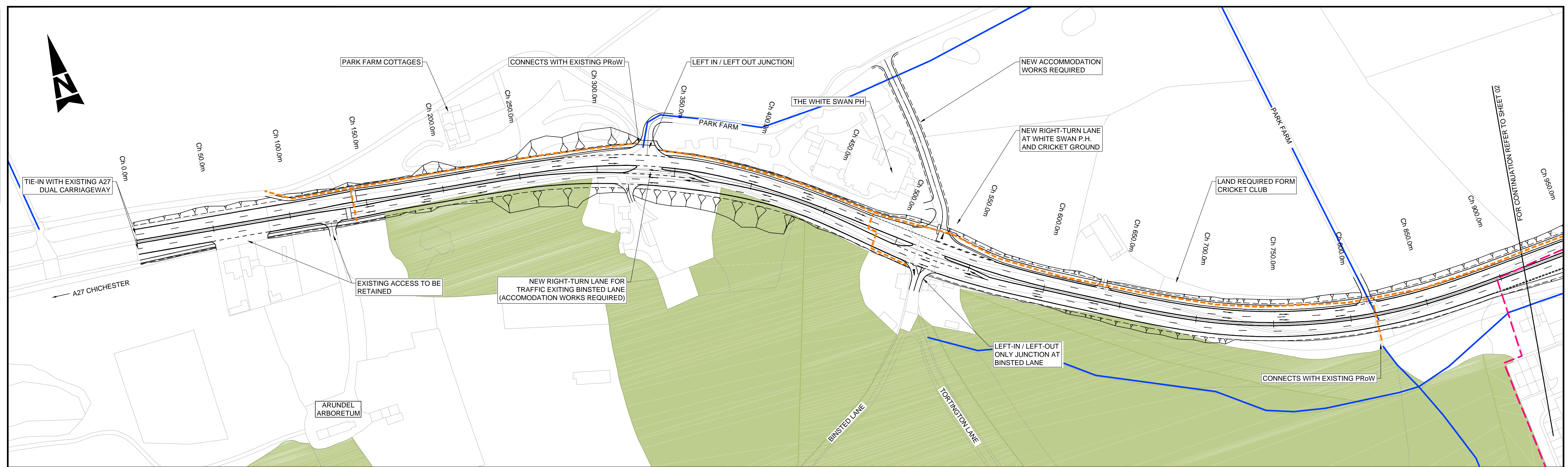
Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 OVERVIEW PLAN**

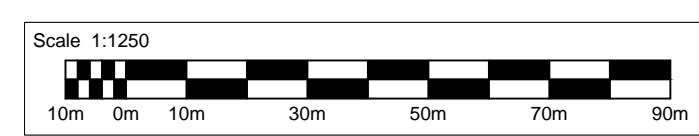
Scale	Drawn	Checked	Approved	Authorised
1:10000	TC	KM	BS	AM
Original Size	Date	Date	Date	Date
A1	27/04/18	27/04/18	27/04/18	27/04/18
Drawing Number	Originator	Volume	Project Ref. No.	Revision
A27AR_OP1_DR_CH_0100	HE551523 - WSP - HGN -	A27AR_OP1_DR_CH_0100	70015214	P01
Location	Type	Role	Number	

DO NOT SCALE

Millimetres



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATION PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION			
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).			
Construction			
Maintenance / Cleaning			
Use			
Decommissioning / Demolition			
Rev.	Date	Description	By

Rev.	Date	Description	By	Chkd	App'd
P01	27/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Subsidiary: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 SHEET 1 OF 5**

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 27/04/18

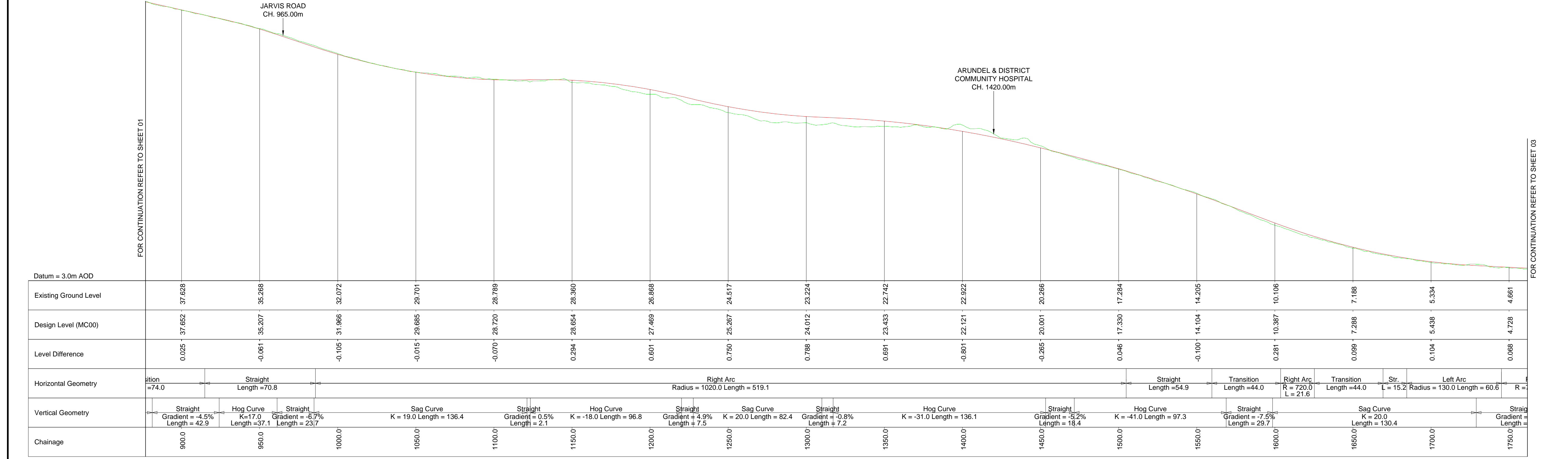
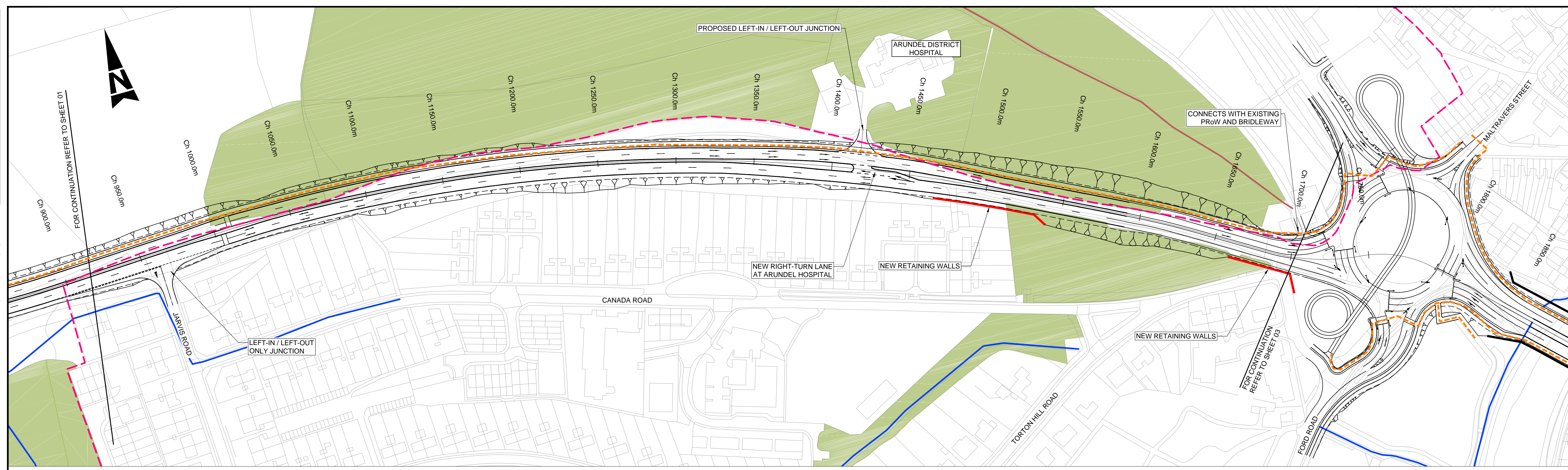
Client: **Working on behalf of highways england**

Project: HE551523 - WSP - HGN - A27AR_OP1 - DR - CH - 0101

Project Ref. No.	Revision
70015214	P01

DO NOT SCALE

Millimetres



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATION PARK OUTLINE
- EXISTING PROW
- EXISTING BRIDLEWAYS
- EXISTING CYCLE LANES
- PROPOSED PROW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Rev.	Date	Description	TC	KM	BS
P01	27/04/18	First Issue			

FOR INFORMATION

wsp No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com

Working on behalf of highways england

REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 SHEET 2 OF 5

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

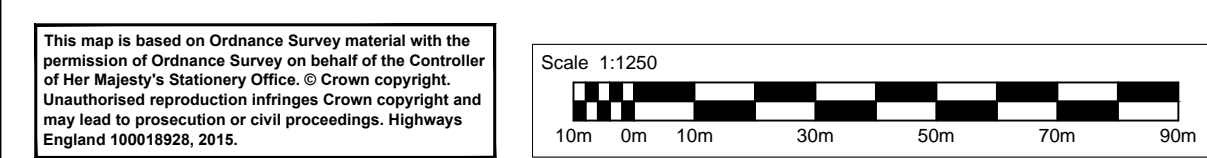
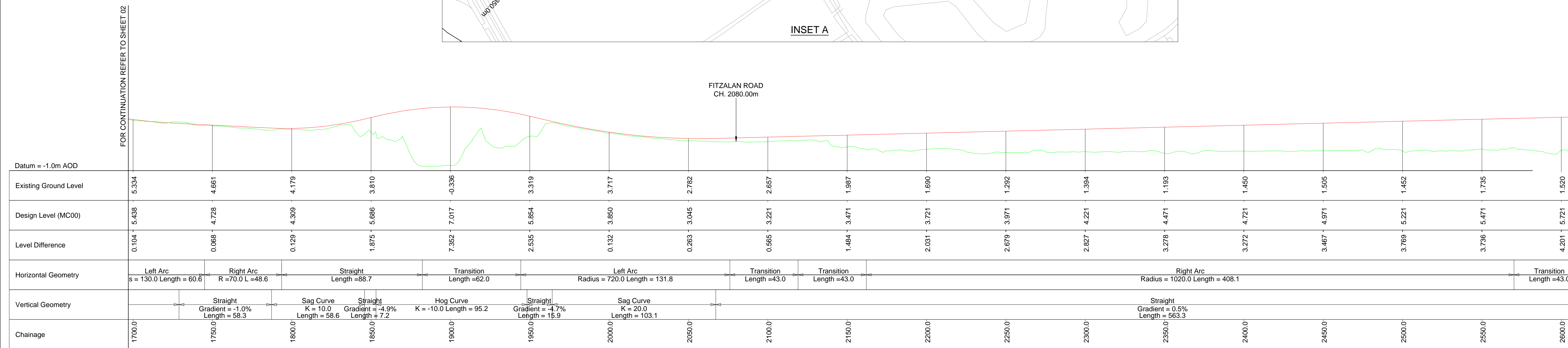
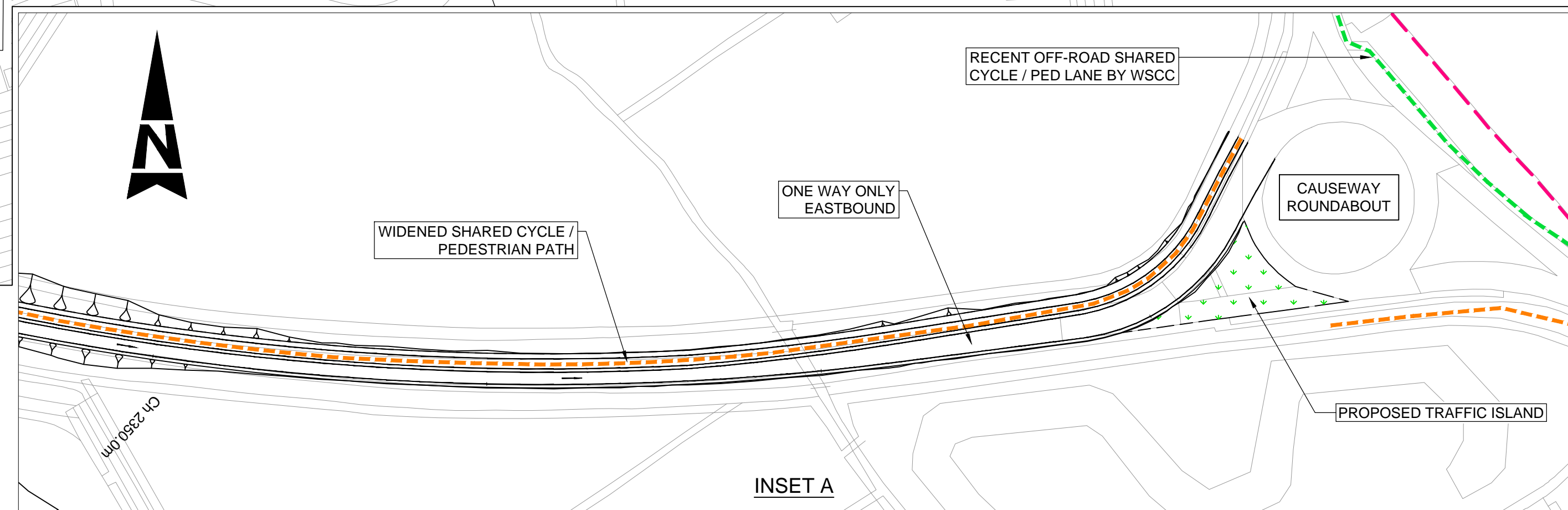
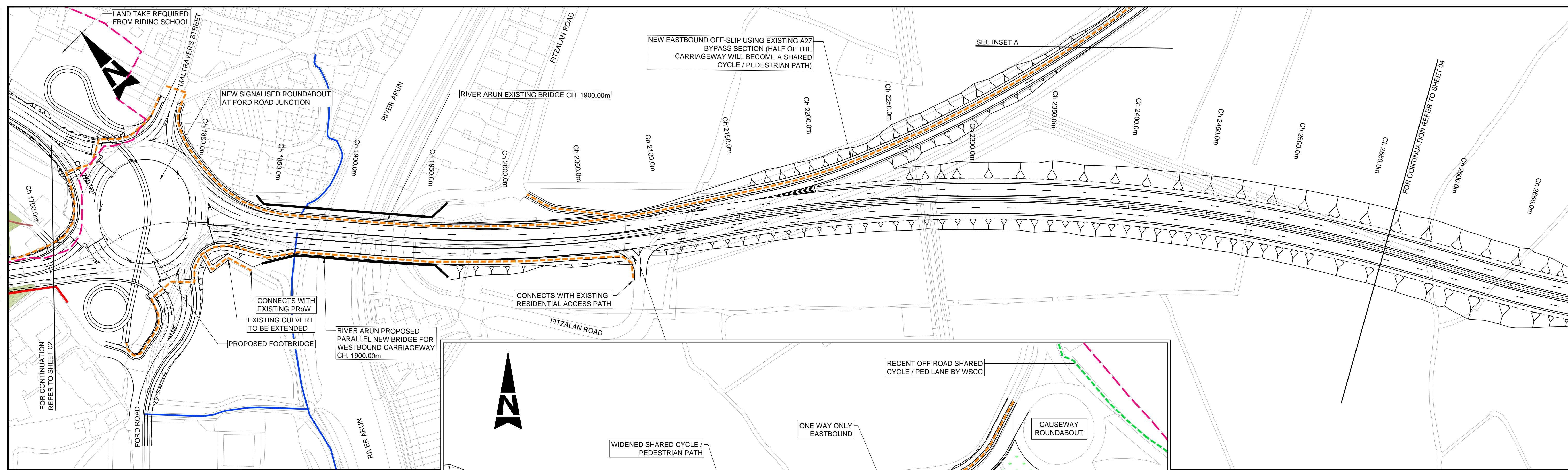
Original Size	Date	Date	Date	Date
A1	27/04/18	27/04/18	27/04/18	---

Drawing Number	Project	Originator	Volume	Project Ref. No.
A27AR_OP1_DR_CH_0102	HE551523 - WSP - HGN - A27AR_OP1_DR_CH_0102	WSP	HGN	70015214

Location: Type: Role: Number: P01

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATION PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- EXISTING CYCLE LANES
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction
Maintenance / Cleaning
Use
Decommissioning / Demolition

Rev.	Date	Description	By	Chkd	App'd	
P01	27/04/18	First Issue		TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 SHEET 3 OF 5**

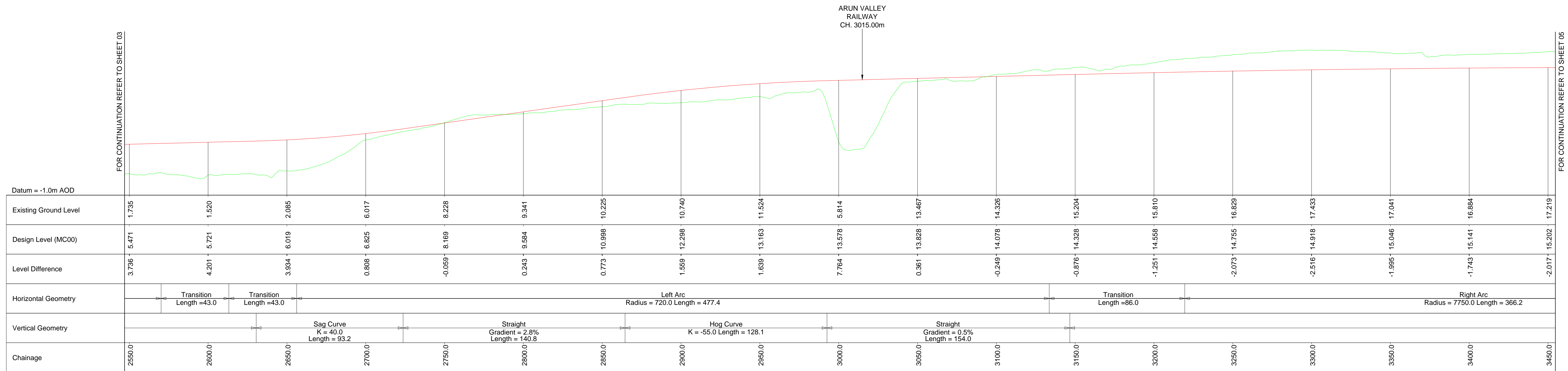
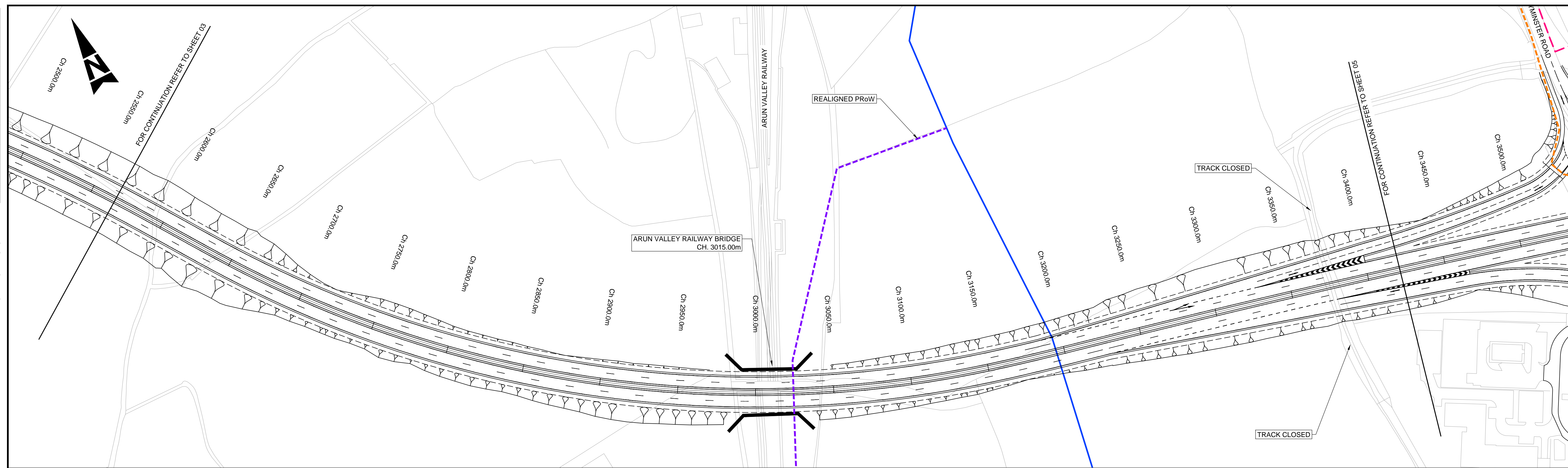
Client: **Working on behalf of highways england**

WSP logo and address: No. 2 London Square, Cross Lanes, Guildford, GU1 1UN, T+ 44 (0) 1483 528400, wsp.com

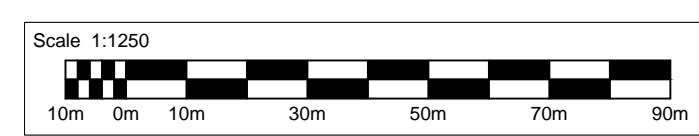
Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---
Original Size	Date	Date	Date	Date
A1	27/04/18	27/04/18	27/04/18	---
Drawing Number	Project	Originator	Volume	Project Ref. No.
	HE551523 - WSP - HGN - A27AR_OP1 - DR - CH - 0103			70015214
Location	Type	Role	Number	Revision
				P01

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATION PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	27/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 SHEET 4 OF 5**

Scale: 1:1250

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

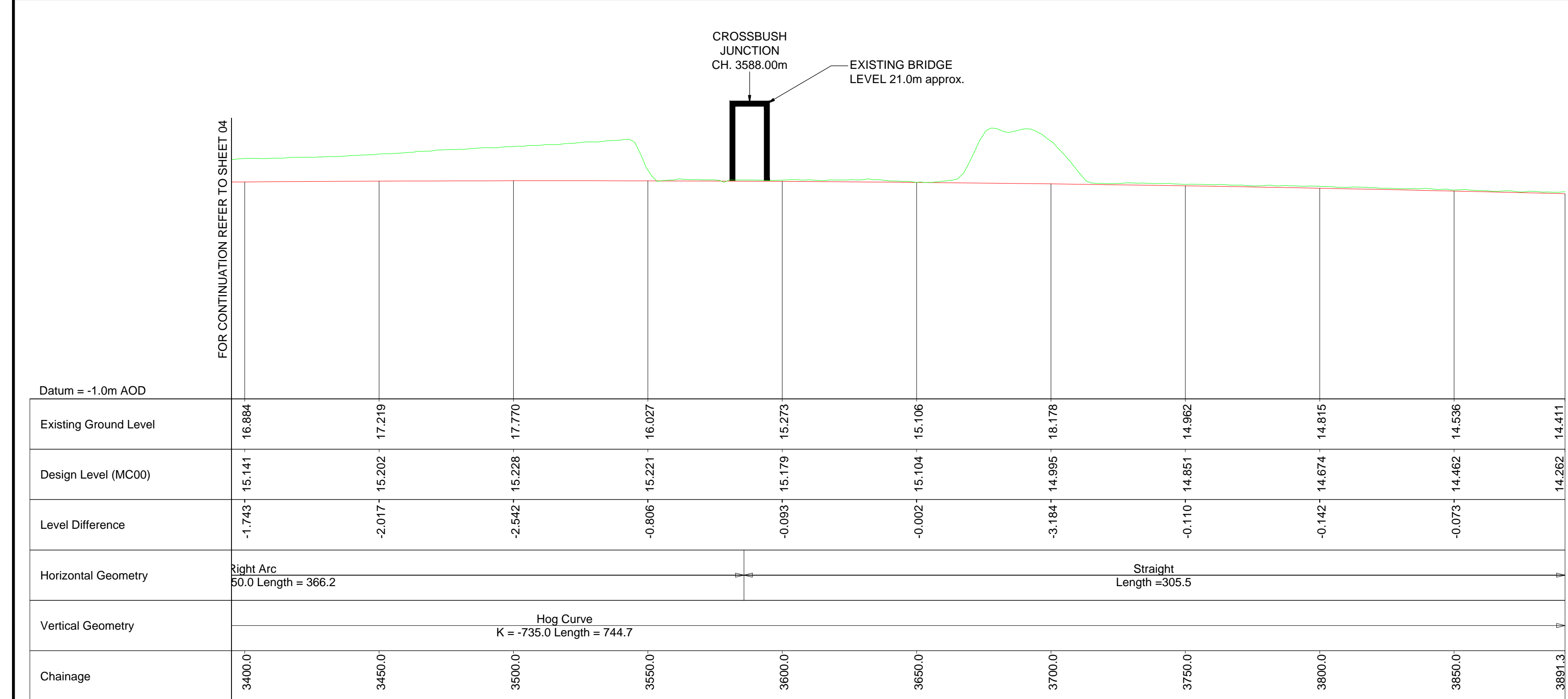
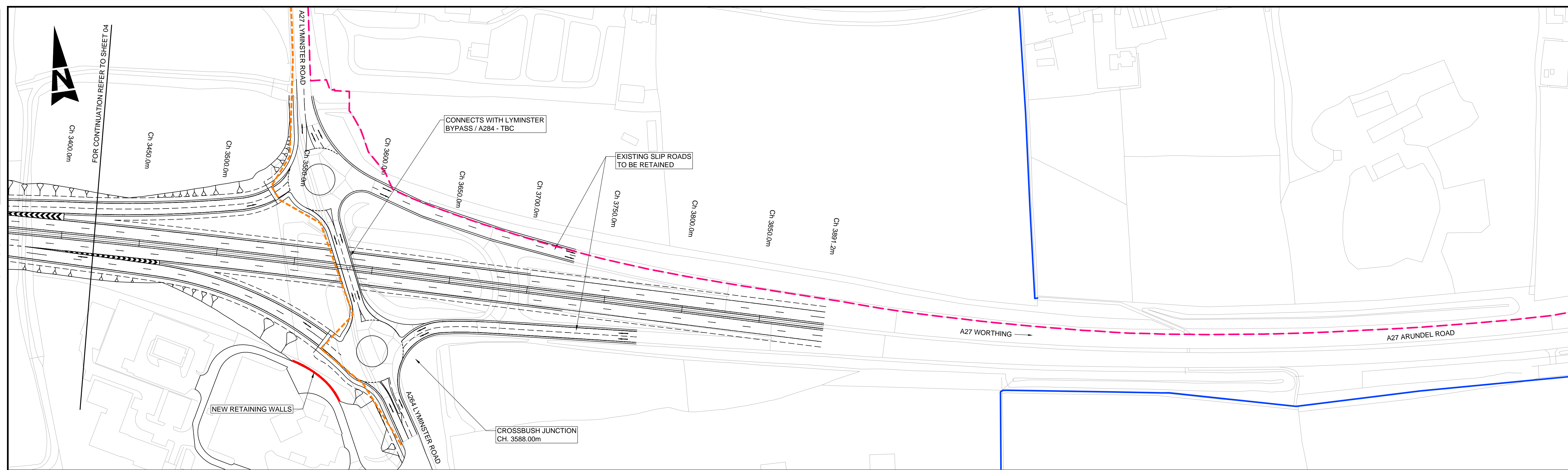
Original Size	Date	Checked	Approved	Authorised
A1	27/04/18	KM	BS	---

Drawing Number	Project	Originator	Volume	Project Ref. No.
HE55123 - WSP - HGN - A27AR_OP1 - DR - CH - 0104				70015214

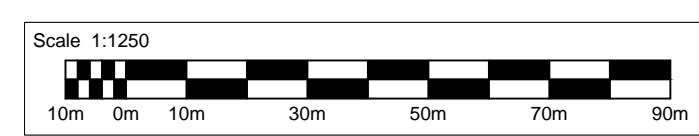
Revision	Number
P01	1

DO NOT SCALE

Millimetres



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATION PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED PROW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION		
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).		
Construction		
Maintenance / Cleaning		
Use		
Decommissioning / Demolition		

Rev.	Date	Description	By	Chkd	App'd
P01	27/04/18	First Issue			

FOR INFORMATION

wsp

No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Working on behalf of

highways england

Drawing Status		Suitability	Project Title				
FOR INFORMATION		S2	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS				
Drawing Number		Drawing Title					
A1		ALIGNMENT PROPOSALS - STAGE 2 OPTION 1 SHEET 5 OF 5					
Scale	Drawn	Checked	Approved	Authorised			
1:1250	TC	KM	BS	---			
Original Size	Date	Date	Date	Date	Date		
A1	27/04/18	27/04/18	27/04/18	---	---		
Project	Originator	Volume		Project Ref. No.			
HE551523 - WSP - HGN - A27AR_OP1 - DR - CH - 0105				70015214			
Location	Type	Role	Number	Revision			
				P01			

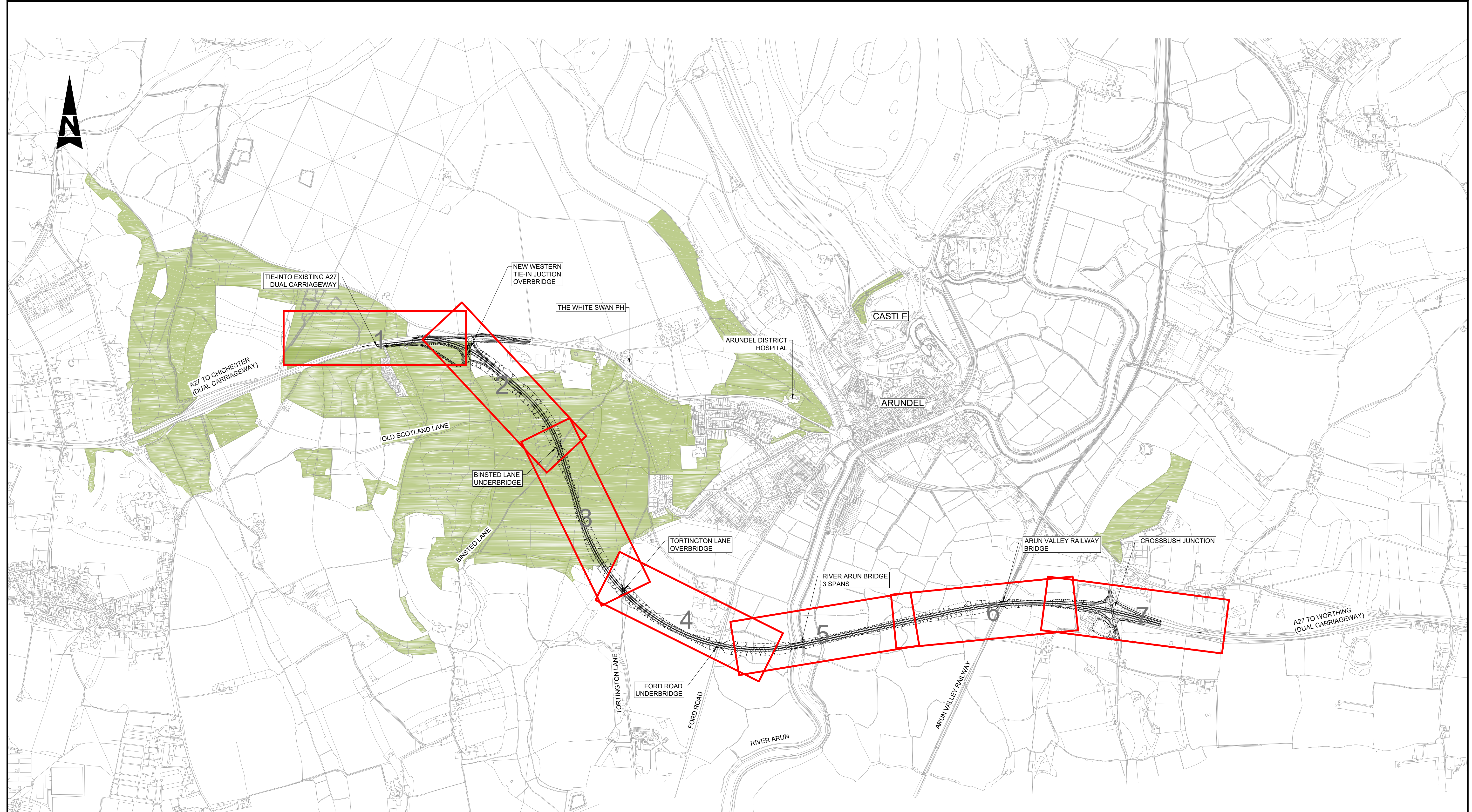
APPENDIX B-2

OPTION 3

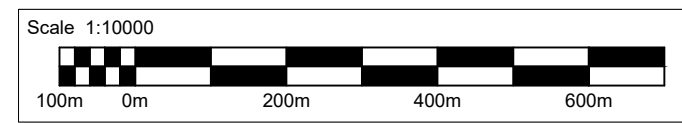
DO NOT SCALE

Millimetres

0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2016.



NOTES:
1. FOR LAYOUTS REFER TO DRG. NOS. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0101 TO 0107.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

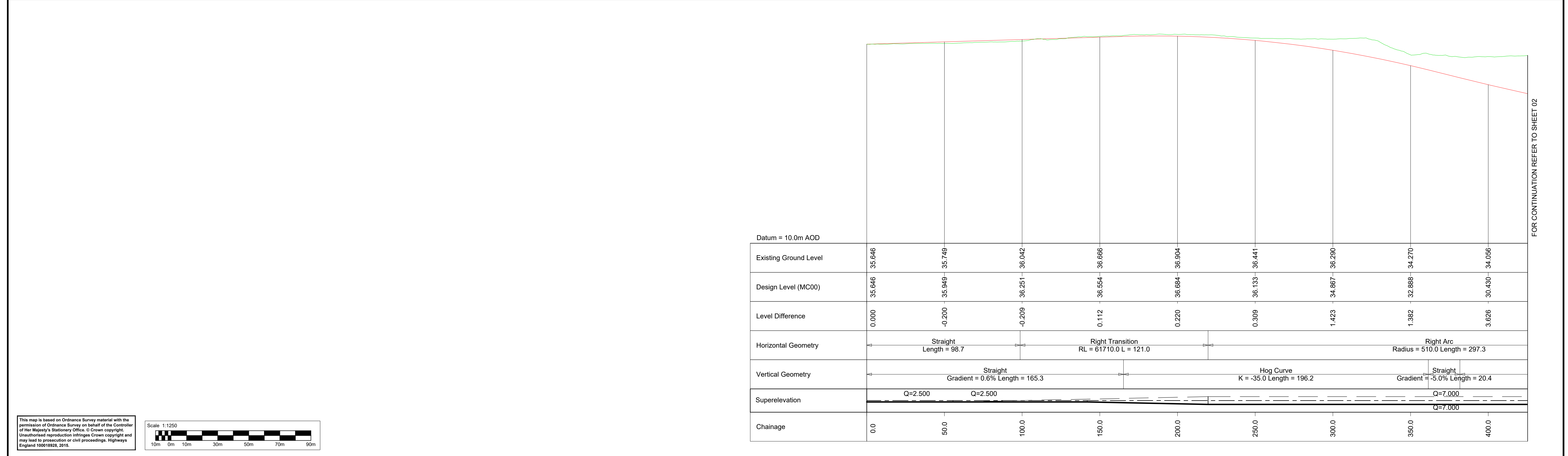
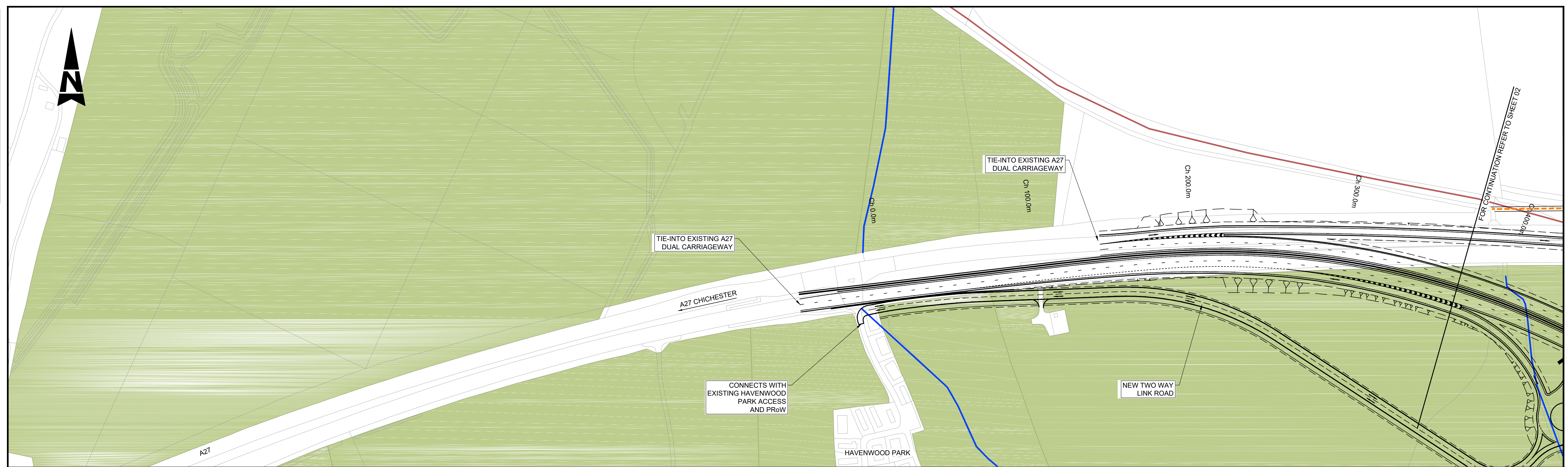
No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

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

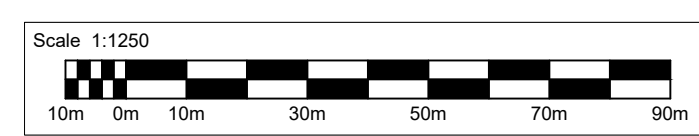
Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS					
Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 OVERVIEW PLAN					
Scale: 1:10000	Drawn: TC	Checked: KM	Approved: BS	Authorised: AM	
Original Size: A1	Date: 05/04/18	Date: 05/04/18	Date: 05/04/18	Date: 05/04/18	Date: 05/04/18
Drawing Number: HE551523 - WSP - HGN - A27AR_OP3 - DR - CH - 0100	Project Ref. No.: 70015214	Revision: P01			

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

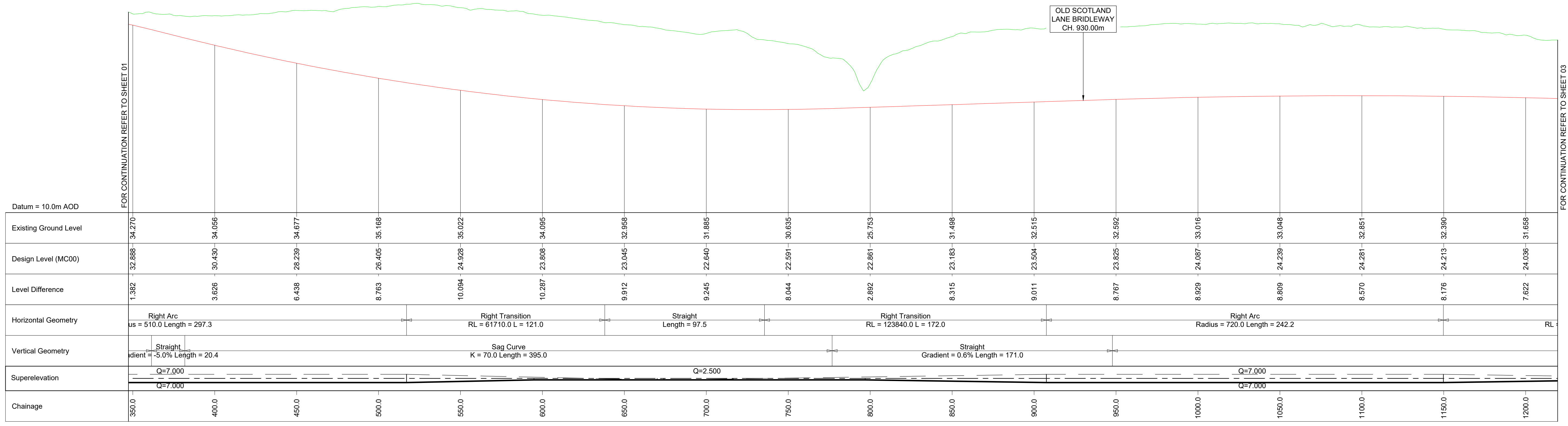
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION						
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).						
Construction						
Maintenance / Cleaning						
Use						
Decommissioning / Demolition						
Rev.	Date	Description	By	Chk'd	App'd	
P01	05/04/18	First Issue				

Drawing Status			Sutability		
FOR INFORMATION			S2		
			No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		
Working on behalf of 					

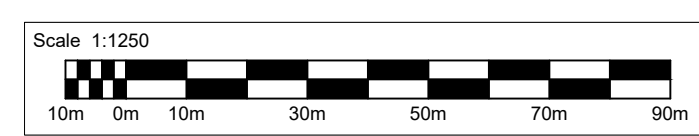
REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS					
ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 1 OF 7					
Scale	Drawn	Checked	Approved	Authorised	
1:1250	TC	KM	BS	---	
Original Size	Date	Date	Date	Date	
A1	05/04/18	05/04/18	05/04/18	---	
Drawing Number	Originator	Volume	Project Ref. No.		
Project	HE551523 - WSP - HGN - A27AR_OP3 - DR - CH - 0101		70015214		
Location	Type	Role	Revision		
			P01		

DO NOT SCALE

Millimetres
0 10



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 2 OF 7

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 05/04/18

Client: Working on behalf of highways england

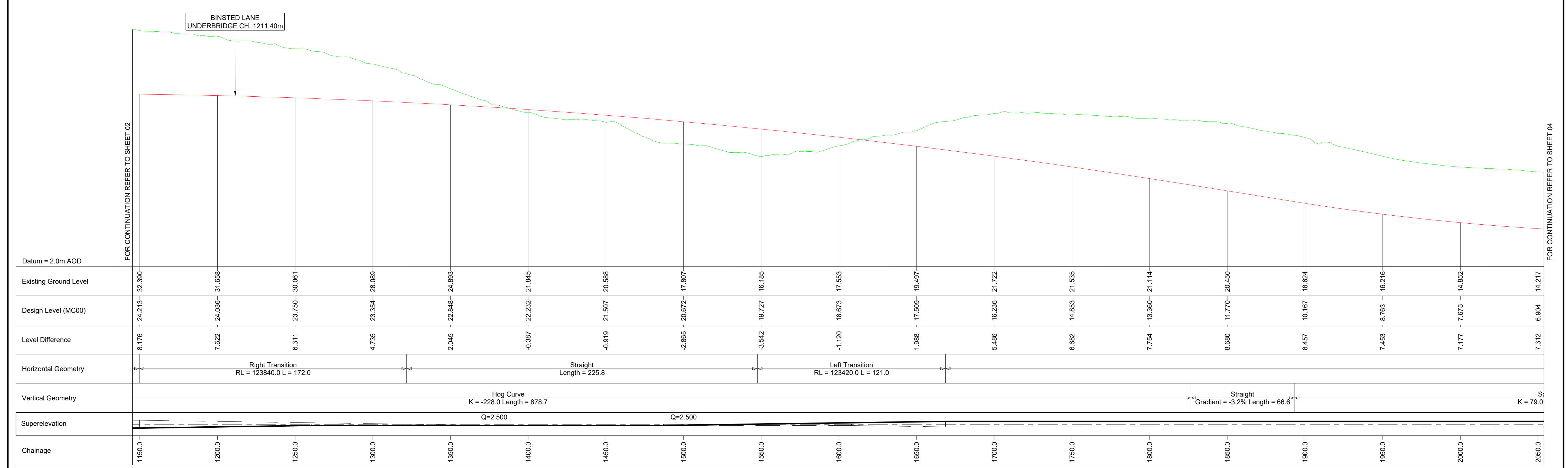
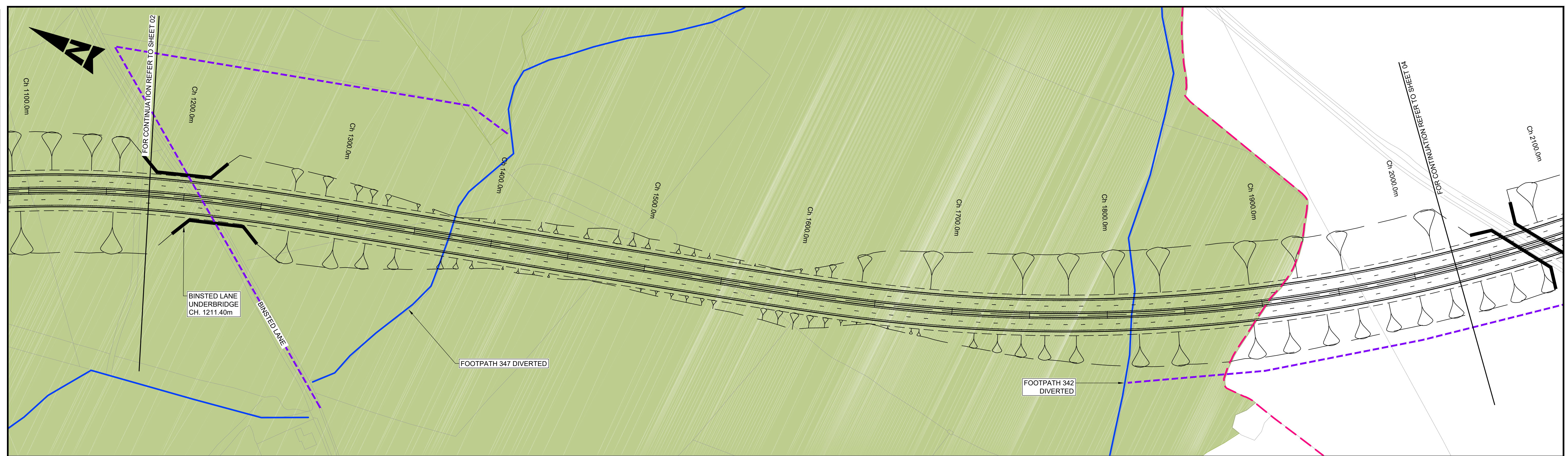
Project: HE551523 - WSP - HGN - A27AR_OP3 - DR - CH - 0102

Project Ref. No.: 70015214

Revision: P01

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2015.

Scale 1:1250

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PROW
- EXISTING BRIDLEWAYS
- PROPOSED PROW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue			

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 3 OF 7**

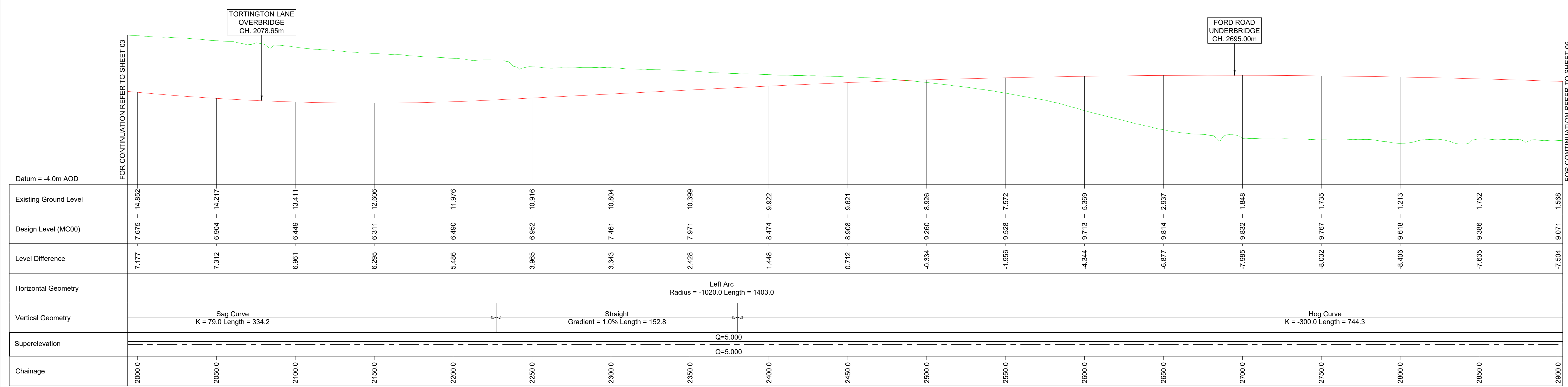
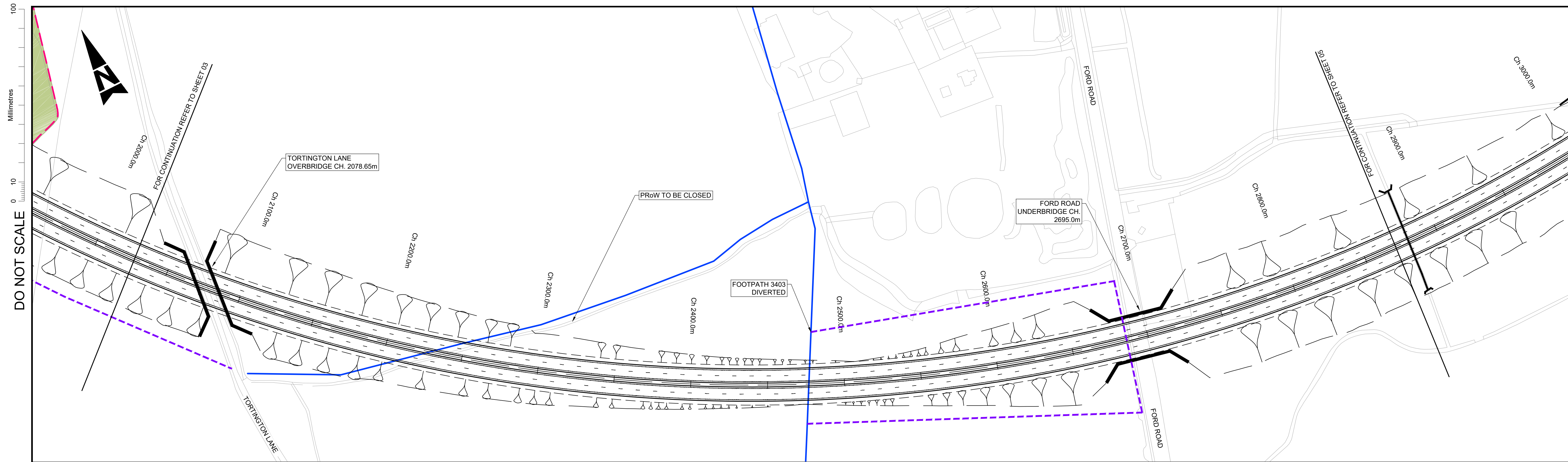
Scale: 1:1250

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

Project: HE551523 - WSP - HGN - A27AR_OP3-DR-CH-0103

Original Size	Date	Checked	Approved	Authorised
A1	05/04/18	KM	BS	---

Project Ref. No.	Revision
70015214	P01



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2018.

Scale 1:1250

NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PROW
- EXISTING BRIDLEWAYS
- PROPOSED PROW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Activity	Residual Risk
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 4 OF 7

Scale: 1:1250

Original Size	Date	Checked	Approved	Authorised
A1	05/04/18	KM	BS	---

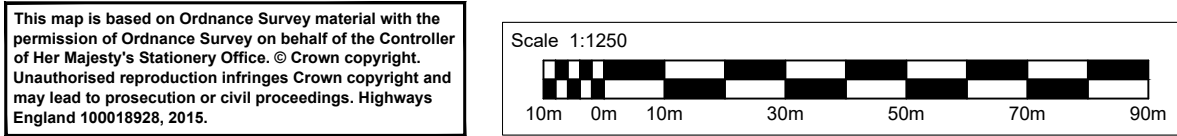
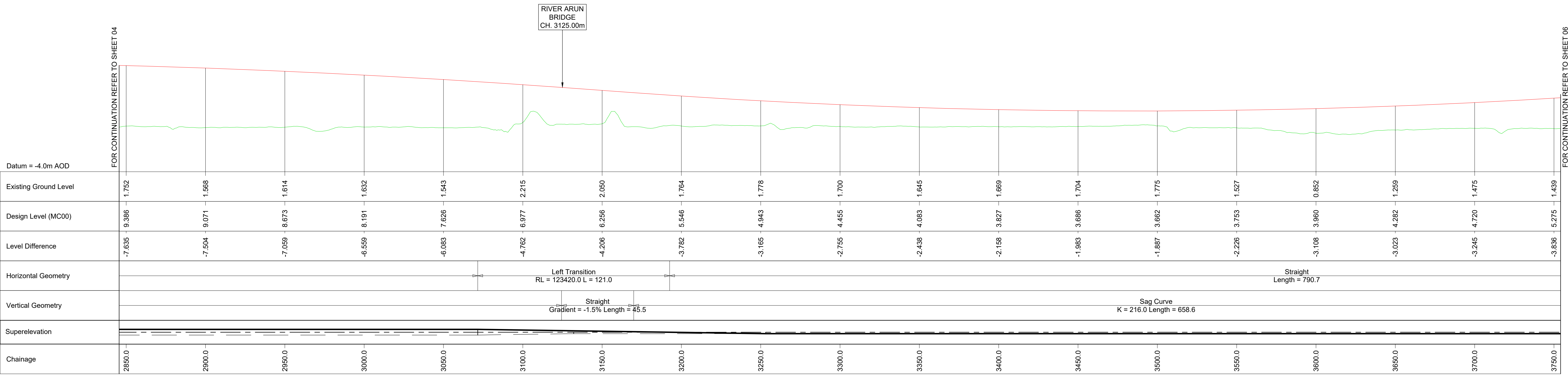
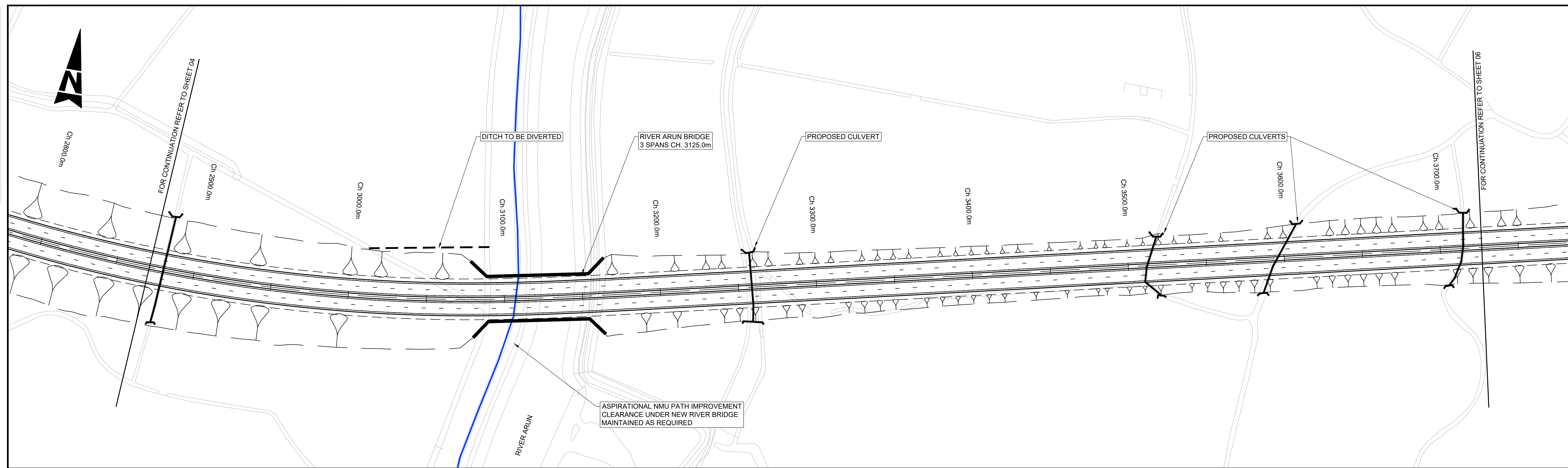
Client: Working on behalf of highways england

Project	Originator	Volume	Project Ref. No.
HE551523 - WSP - HGN - A27AR_OP3-DR-CH-0104			70015214

Revision: P01

DO NOT SCALE

Millimetres



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Activity	Residual Risk
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

FOR INFORMATION

WSP No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com

Working on behalf of highways england

REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 5 OF 7

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

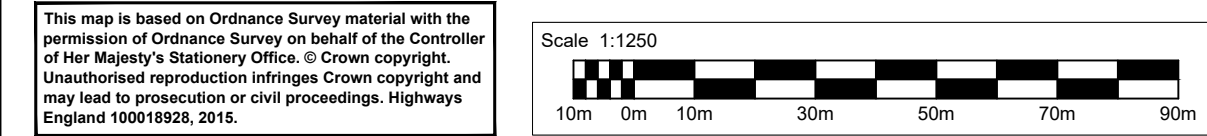
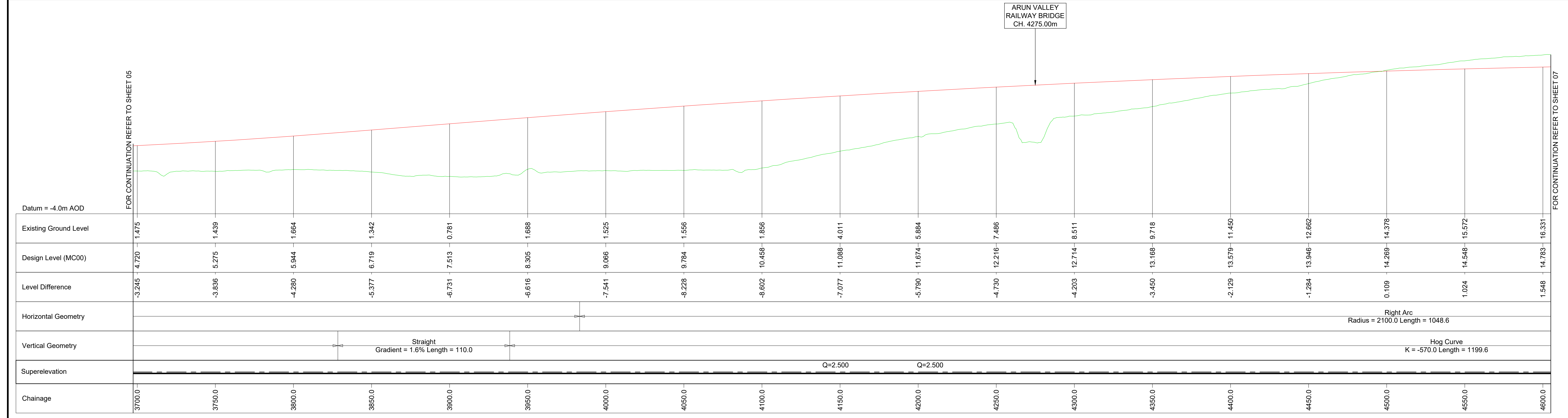
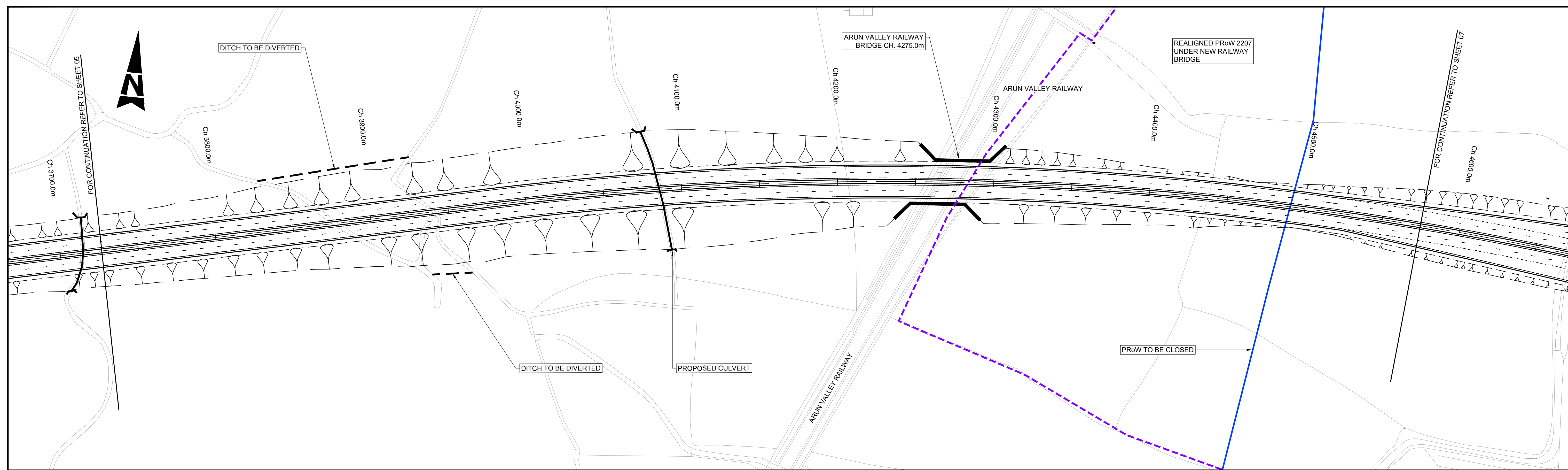
Original Size	Date	Date	Date	Date
A1	05/04/18	05/04/18	05/04/18	---

Drawing Number	Project	Originator	Volume	Project Ref. No.
A27AR_OP3_DR_CH_0105	HE551523 - WSP - HGN - A27AR_OP3_DR_CH_0105	---	---	70015214

Revision	Number
P01	---

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION			
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).			
Construction			
Maintenance / Cleaning			
Use			
Decommissioning / Demolition			
Rev.	Date	Description	By
P01	05/04/18	First Issue	TC

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

FOR INFORMATION

wsp

No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Working on behalf of
highways england

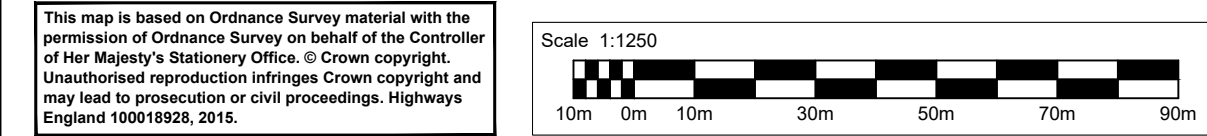
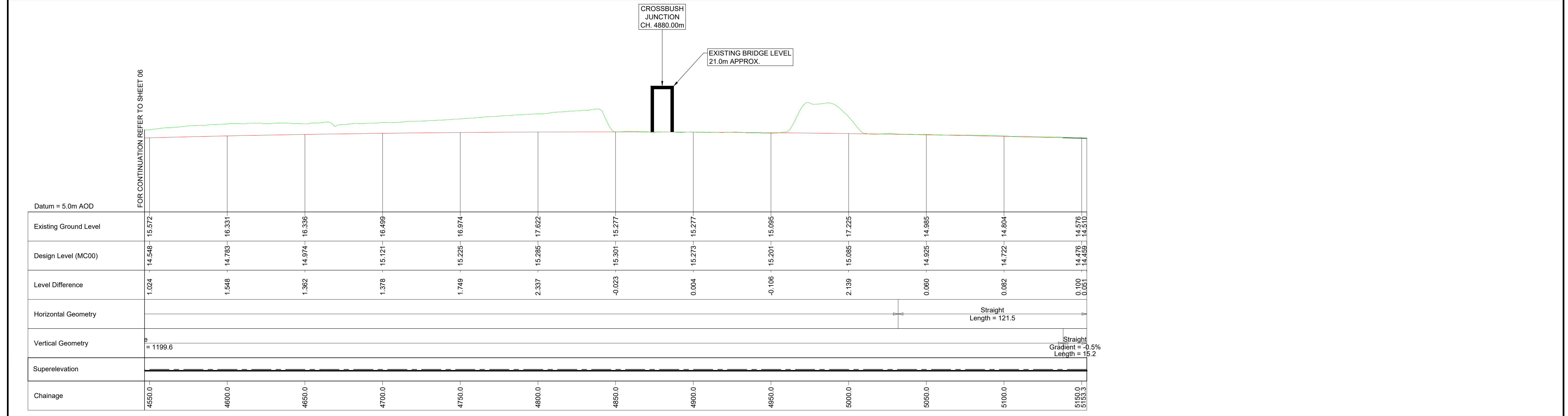
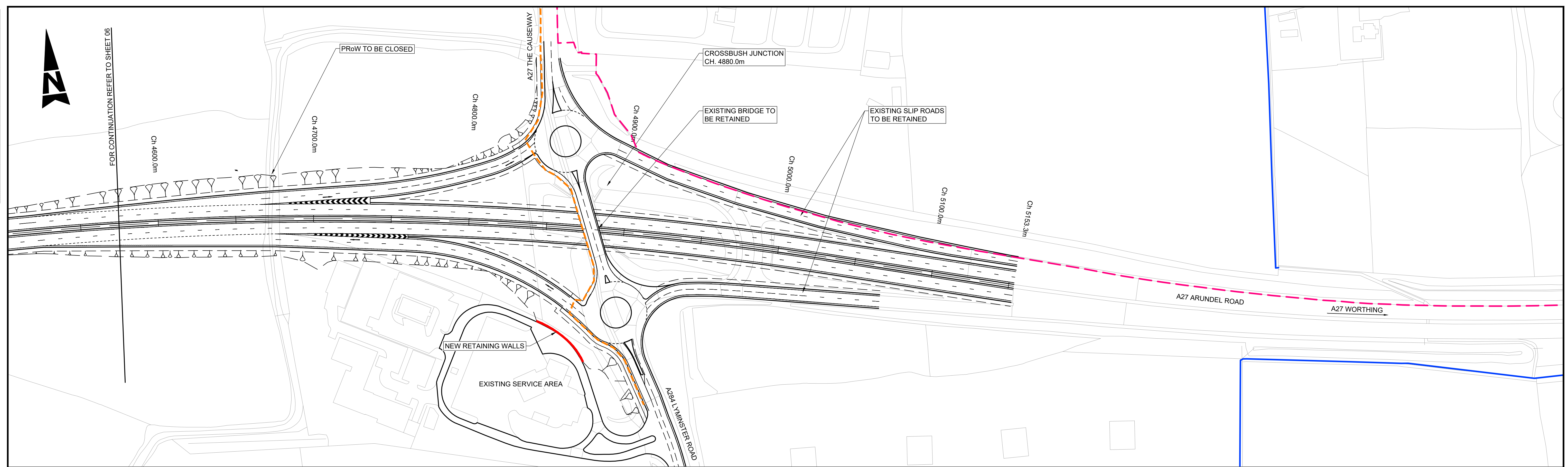
**REGIONAL INVESTMENT PROGRAMME
A27 ARUNDEL BYPASS**

**ALIGNMENT PROPOSALS - STAGE 2
OPTION 3
SHEET 6 OF 7**

Scale	1:1250	Drawn	TC	Checked	KM	Approved	BS	Authorised	---
Original Size	A1	Date	05/04/18	Date	05/04/18	Date	05/04/18	Date	---
Drawing Number	HE551523 - WSP - HGN - A27AR_OP3 - DR - CH - 0106		Project Ref. No.	70015214		Revision	P01		

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP3-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION		
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).		
Construction		
Maintenance / Cleaning		
Use		
Decommissioning / Demolition		

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status		S2		Project Title			
FOR INFORMATION				REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS			
 No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		Drawing Title		ALIGNMENT PROPOSALS - STAGE 2 OPTION 3 SHEET 7 OF 7			
		Client		Working on behalf of highways england			
Scale	1:1250	Drawn	TC	Checked	KM	Approved	BS
Original Size	A1	Date	05/04/18	Date	05/04/18	Date	05/04/18
Drawing Number	Project		Initiator		Volume		Project Ref. No.
	HE551523 - WSP - HGN - A27AR_OP3-DR-CH-0107						70015214
Location	Type	Role	Number	Revision		P01	

APPENDIX B-3

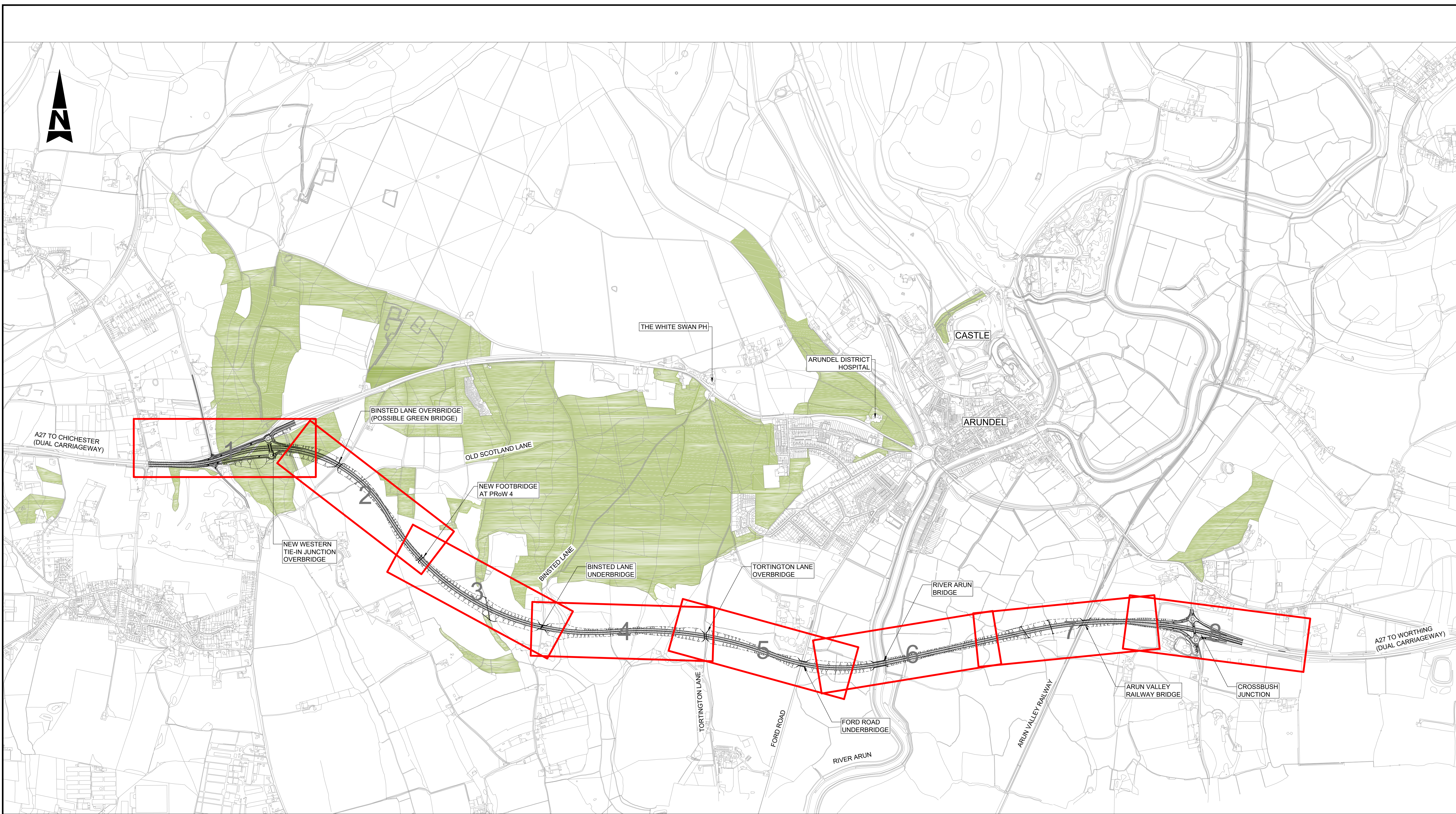
OPTION 5A

DO NOT SCALE

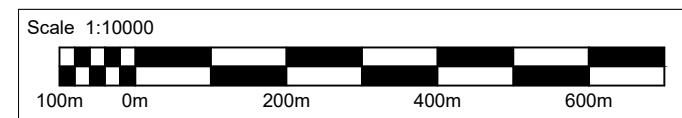
Millimetres

0 10

100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



NOTES:

1. FOR LAYOUTS REFER TO DRG. NOS. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0101 TO 0108.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).



Construction

Maintenance / Cleaning

Use

Decommissioning / Demolition

Rev.	Date	Description	By	CHK'd	App'd
P01	23/04/18	First Issue	TC	KM	BS

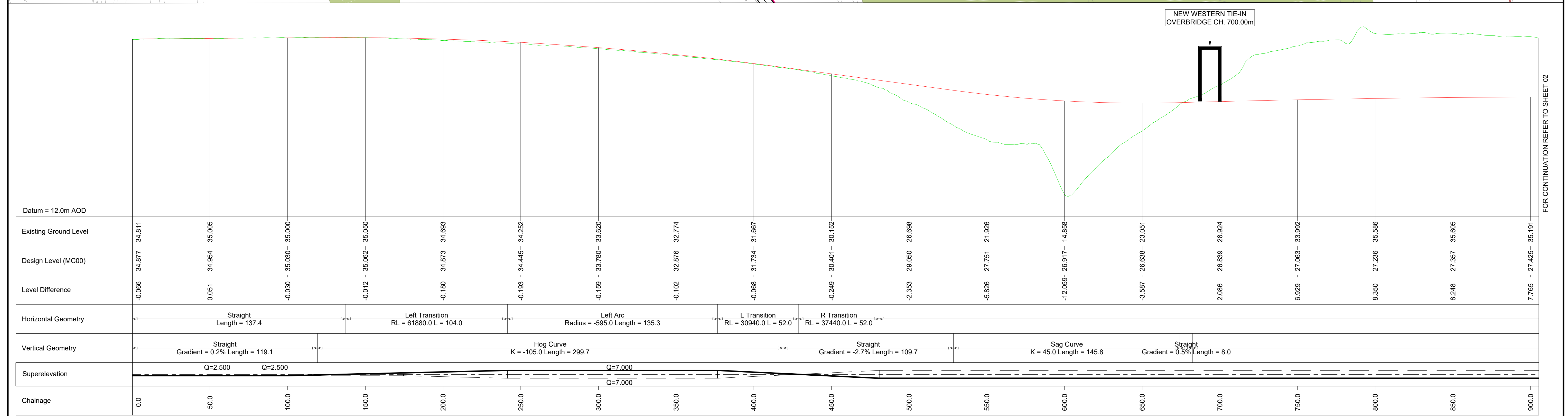
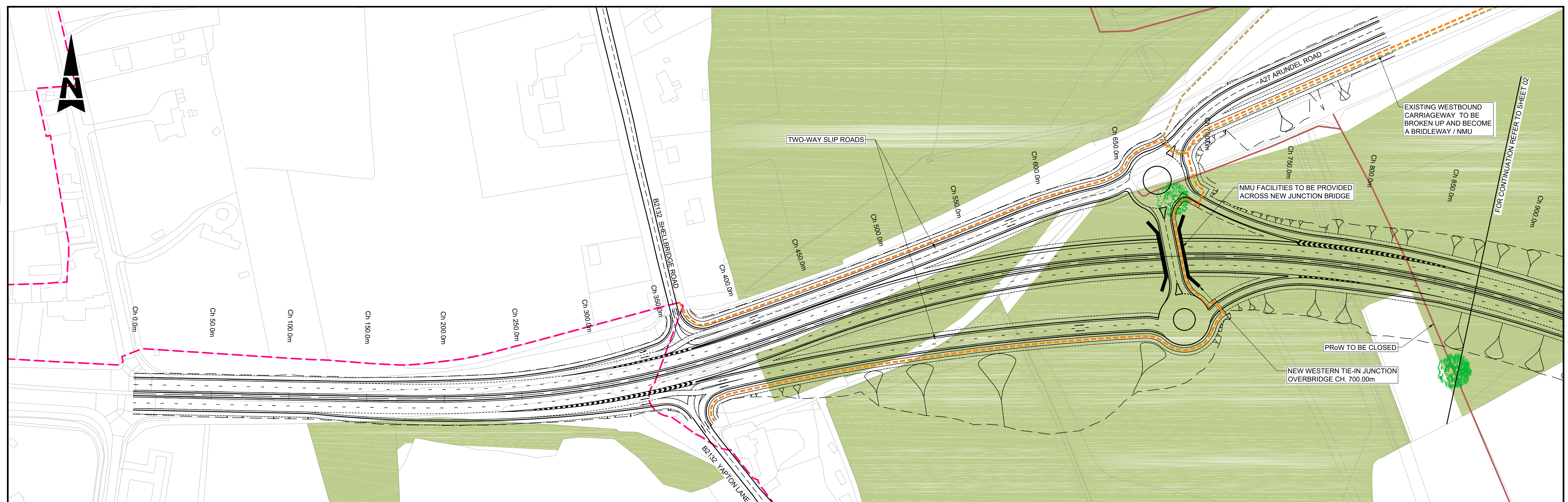
Drawing Status	Suitability	Project Title		
FOR INFORMATION	S2	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS		
 No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		Drawing Title		
		ALIGNMENT PROPOSALS - STAGE 2 OPTION 5A OVERVIEW PLAN		
Client	 Working on behalf of highways england			
Scale	Drawn	Checked	Approved	Authorised
1:10000	TC	KM	BS	AM
Original Size	Date	Date	Date	Date
A1	23/04/18	23/04/18	23/04/18	23/04/18
Drawing Number	Project	Originator	Volume	Project Ref. No.
	HE551523 - WSP - HGN - A27AR_OP5A - DR - CH - 0100			70015214
Location	Type	Role	Number	Revision
				P01

DO NOT SCALE

Millimetres

0 10

100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

Scale 1:1250

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018920, 2015.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PrW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PrW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

Rev.	Date	Description	By	Chkd	App'd
P01	23/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Subsidiary: **S2**

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

No. 2 London Square, Cross Lanes, Guildford, GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 1 OF 8**

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

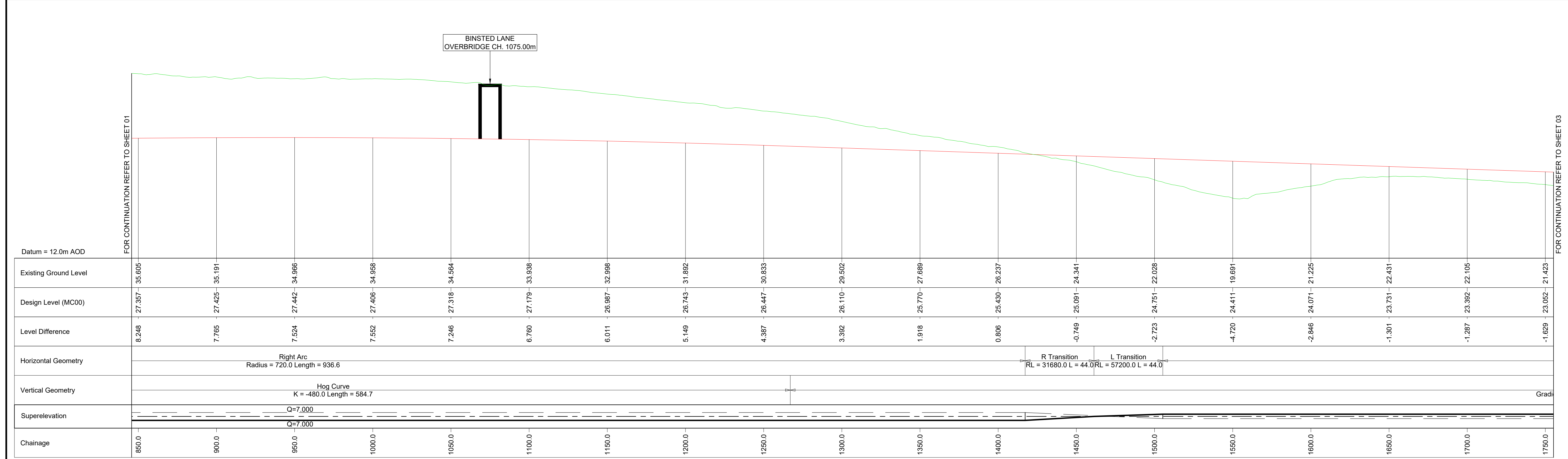
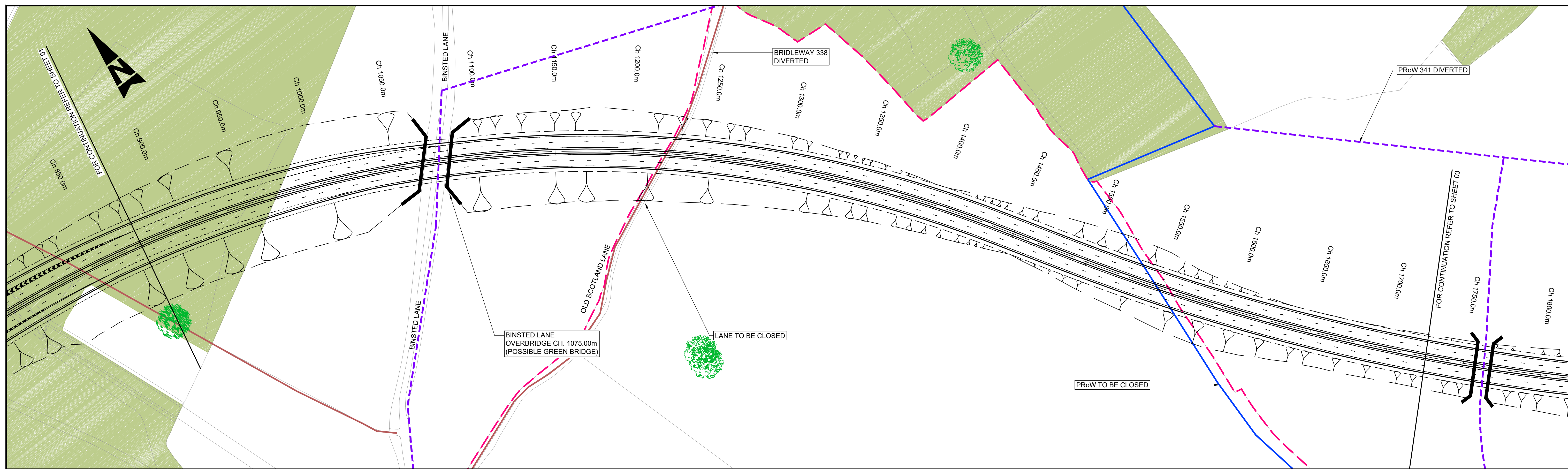
Original Size	Date	Date	Date	Date
A1	23/04/18	23/04/18	23/04/18	---

Drawing Number	Originator	Volume	Project Ref. No.
A27AR_OP5A-DR-CH-0101	WSP - HGN	---	70015214

Location	Type	Role	Number
---	---	---	P01

DO NOT SCALE

Millimetres



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- EXISTING CYCLE LANES
- PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
- PROPOSED PRoW DIVERSION
- NEW BRIDLEWAY
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

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

FOR INFORMATION

WSP No. 2 London Square, Cross Lanes, Guildford, GU1 1UN, T+ 44 (0) 1483 528400, wsp.com

REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 2 OF 8

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

Original Size	Date	Date	Date	Date
A1	23/04/18	23/04/18	23/04/18	---

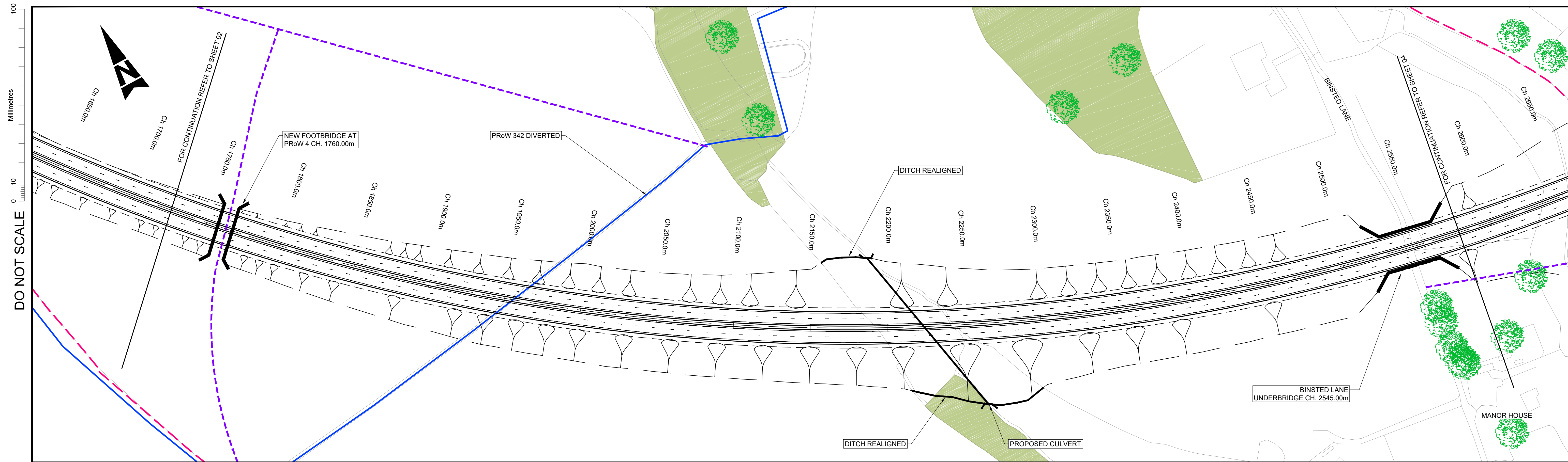
Project	Originator	Volume	Project Ref. No.
HE551523 - WSP - HGN - A27AR_OP5A - DR - CH - 0102	---	---	70015214

Revision	Number	Type	Role	Number
P01	---	---	---	---

Scale 1:1

0.01m 0m 0.02m 0.04m 0.06m

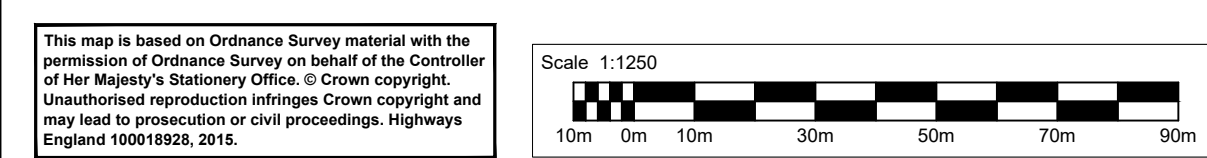
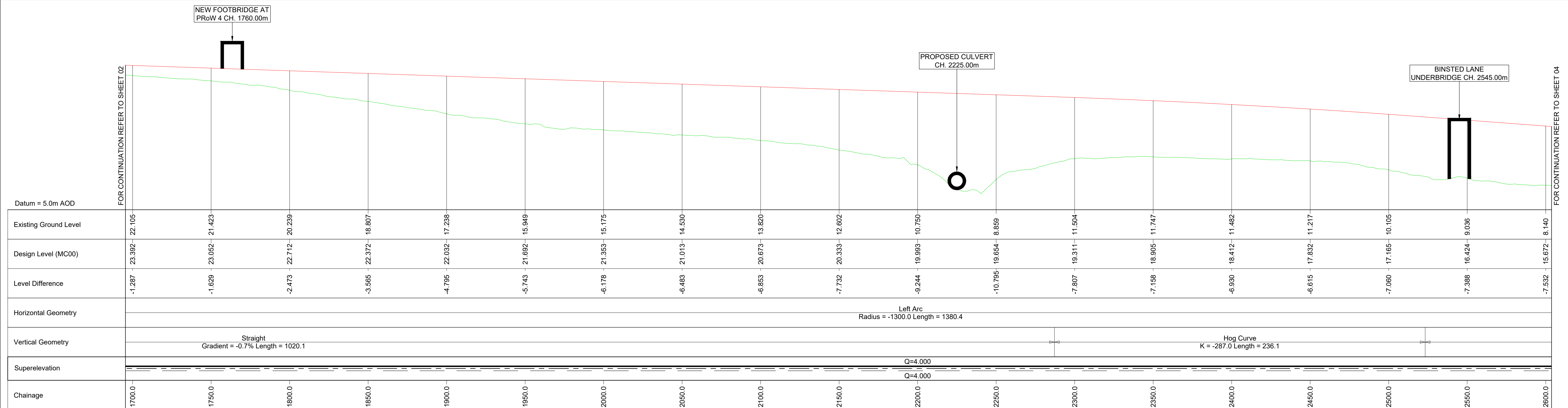
This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018920, 2015.



DO NOT SCALE

Millimetres

0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

KEY:

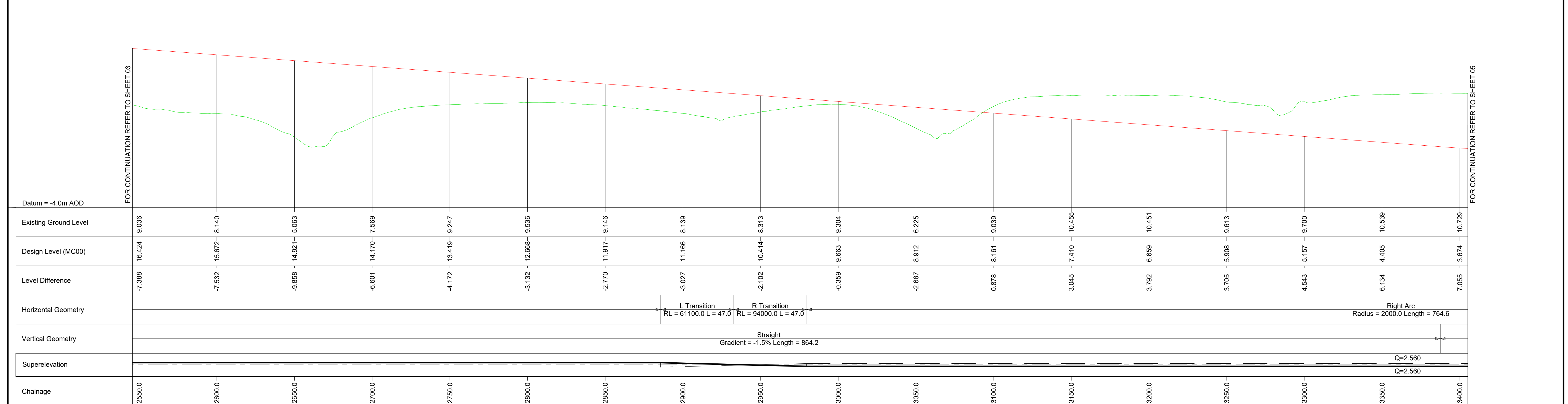
- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- EXISTING CYCLE LANES
- PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
- PROPOSED PRoW DIVERSION
- NEW BRIDLEWAY
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION			
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).			
Construction			
Maintenance / Cleaning			
Use			
Decommissioning / Demolition			
Rev.	Date	Description	By
P01	23/04/18	First Issue	TC
			KM
			BS

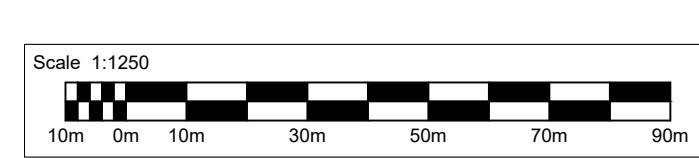
Drawing Status		S2		Project Title			
FOR INFORMATION				REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS			
 No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		Client		Drawing Title			
		Working on behalf of		INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 3 OF 8			
		Scale	1:1250	Drawn	TC	Checked	KM
		Original Size	A1	Date	23/04/18	Date	23/04/18
		Approved	BS	Date	23/04/18	Authorised	---
		Project Number	HE551523 - WSP - HGN - A27AR_OP5A - DR - CH - 0103		Project Ref. No.		
		Volume	70015214		Revision		
		Location	P01				

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PRoW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	CHK'd	App'd
P01	23/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 4 OF 8**

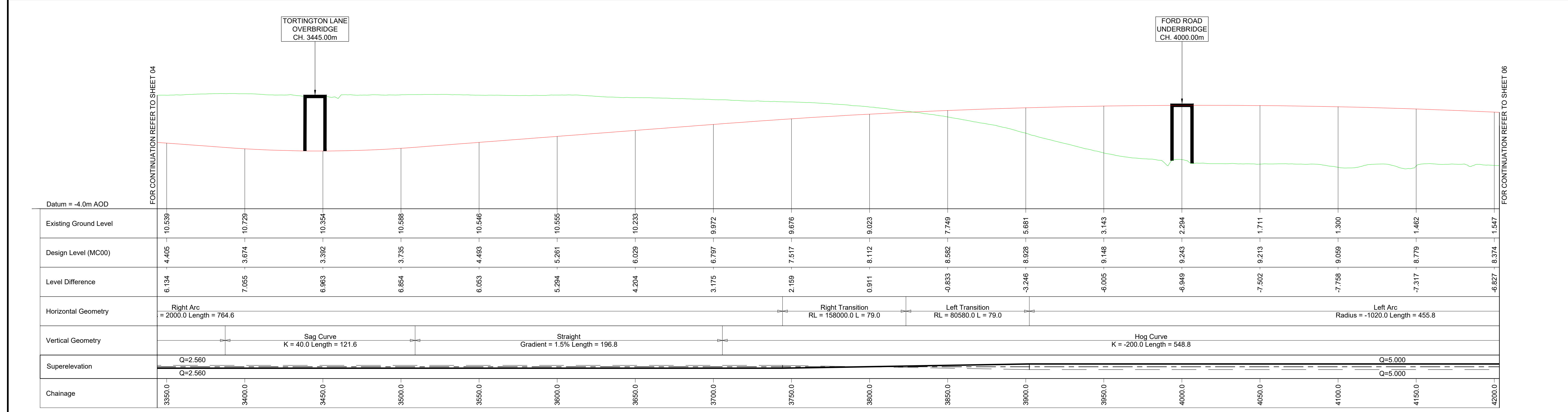
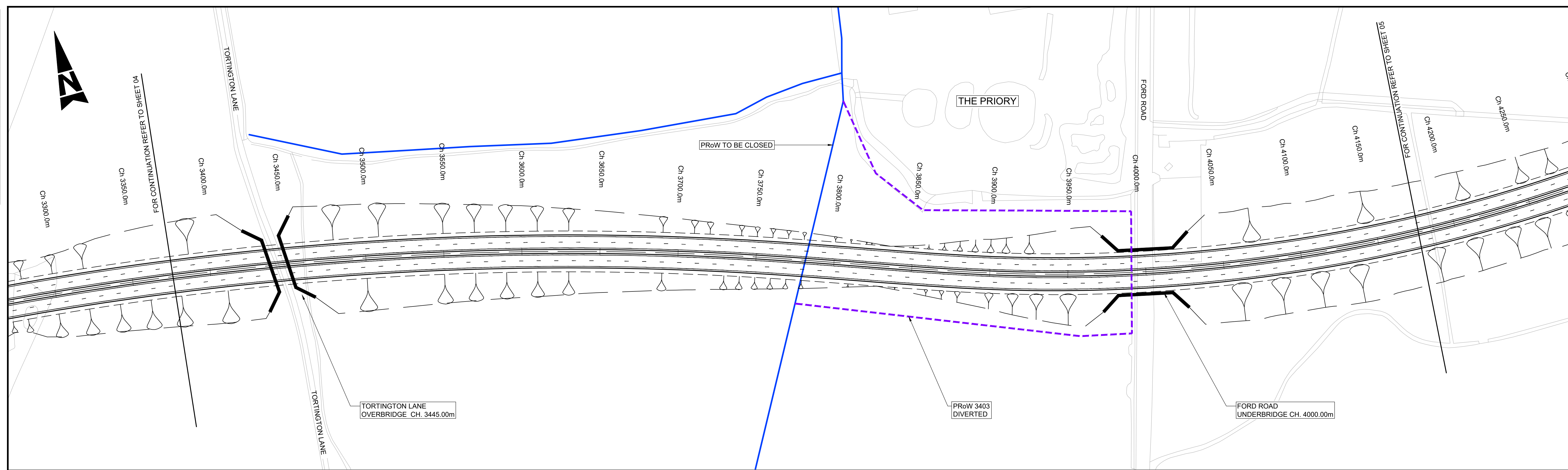
Client: **Working on behalf of highways england**

WSP logo and contact info: No. 2 London Square, Cross Lanes, Guildford, GU1 1UN, T+ 44 (0) 1483 528400, wsp.com

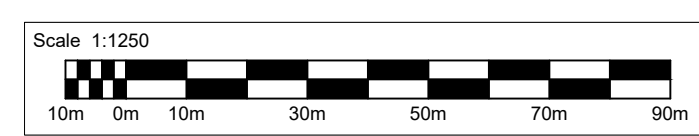
Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---
Original Size	Date	Date	Date	Date
A1	23/04/18	23/04/18	23/04/18	---
Drawing Number	Project	Originator	Volume	Project Ref. No.
	HE55123 - WSP - HGN - A27AR_OP5A - DR - CH - 0104			70015214
Location	Type	Role	Number	Revision
				P01

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PRoW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION		
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).		
Construction		
Maintenance / Cleaning		
Use		
Decommissioning / Demolition		

Rev.	Date	Description	By	Chkd	App'd
P01	23/04/18	First Issue	TC	KM	BS

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 5 OF 8

Scale: 1:1250

Client: Working on behalf of highways england

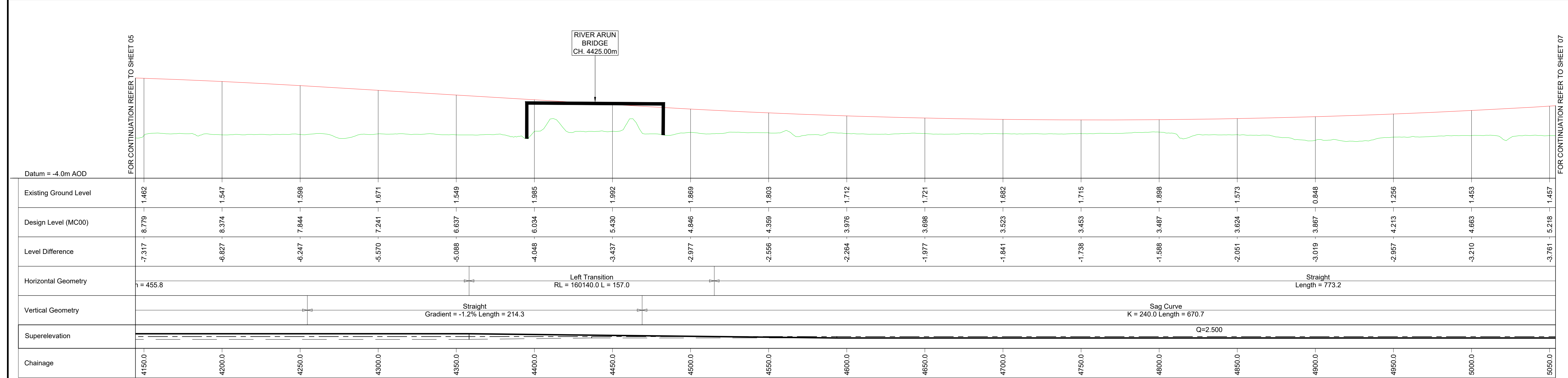
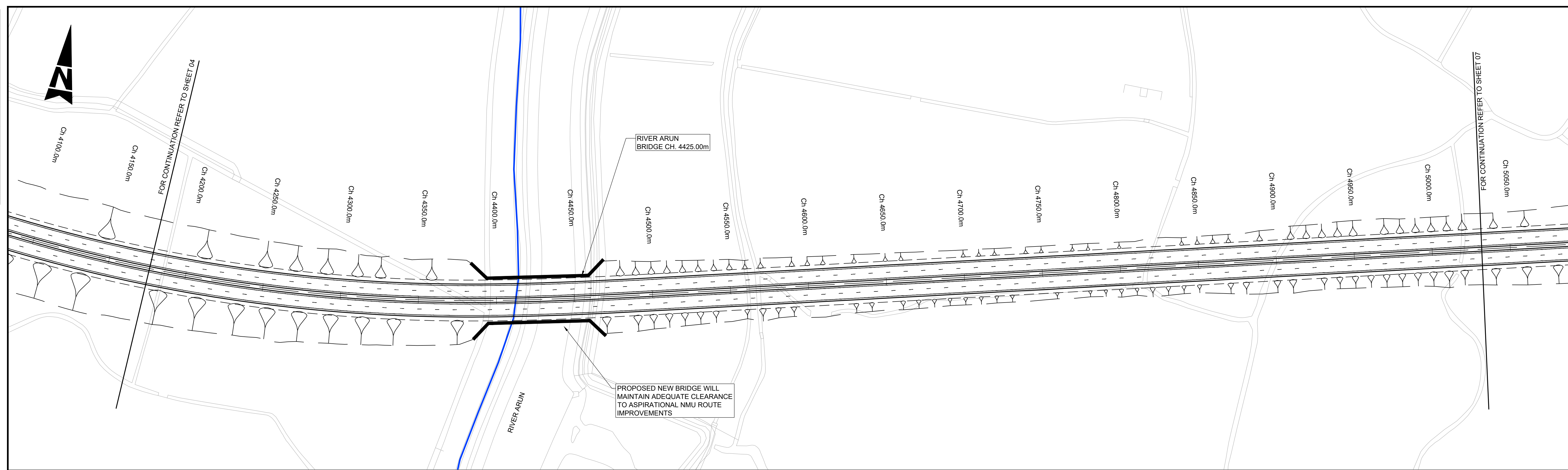
Original Size	Date	Checked	Approved	Authorised
A1	23/04/18	KM	BS	---

Project Ref. No. 70015214

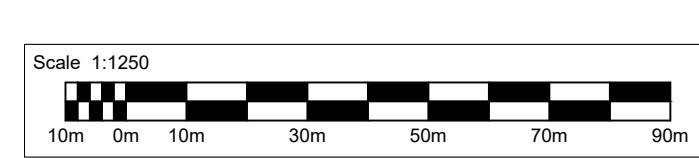
Revision: P01

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PROW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

Rev.	Date	Description	By	Chkd	App'd
P01	23/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

wsp No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com

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

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 6 OF 8**

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

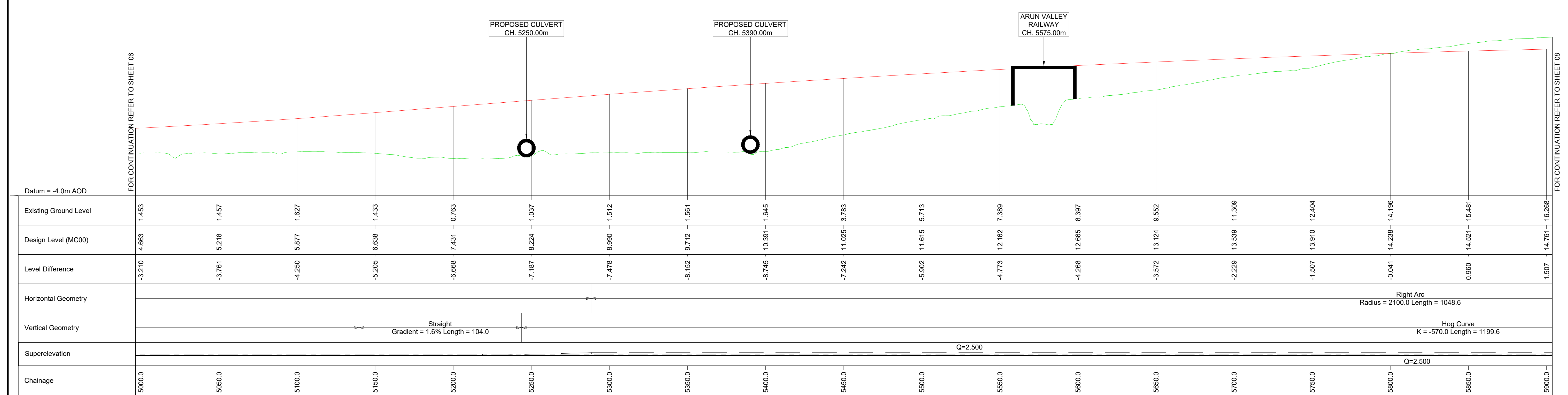
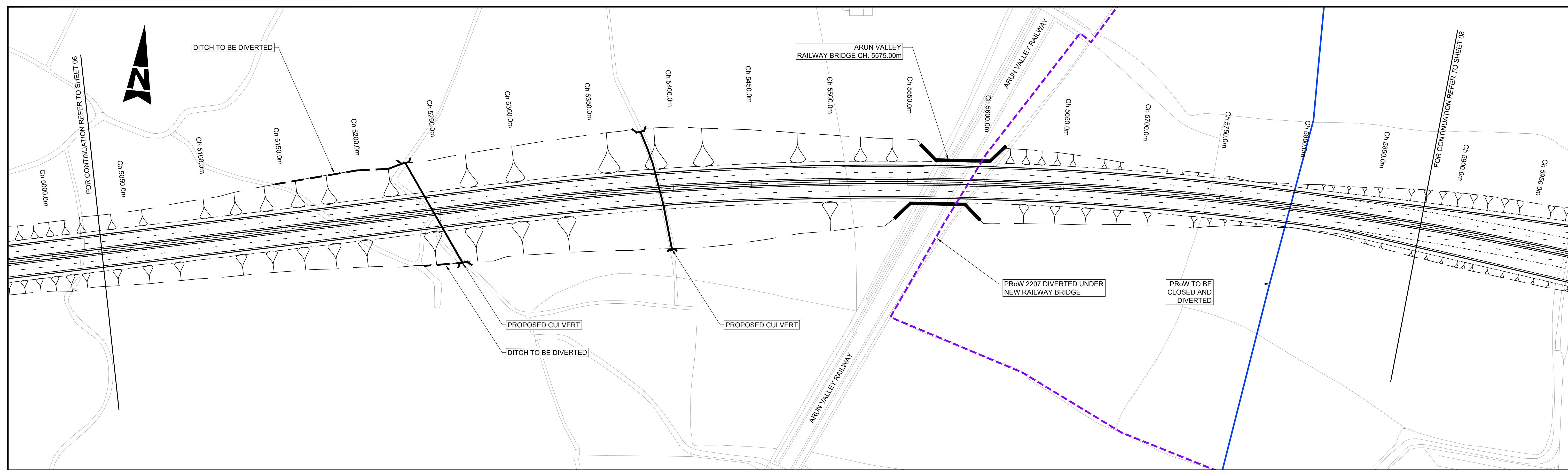
Original Size	Date	Date	Date	Date
A1	23/04/18	23/04/18	23/04/18	---

Drawing Number	Project	Originator	Volume	Project Ref. No.
HE55123 - WSP - HGN - A27AR_OP5A - DR - CH - 0106				70015214

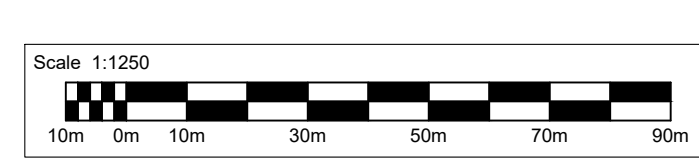
Revision	Project Ref. No.
P01	70015214

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2015.



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PROW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	CHK'd	App'd
P01	23/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 7 OF 8

Scale: 1:1250

Original Size: A1

Drawn: TC, 23/04/18

Checked: KM, 23/04/18

Approved: BS, 23/04/18

Authorised: ---

Client: Working on behalf of highways england

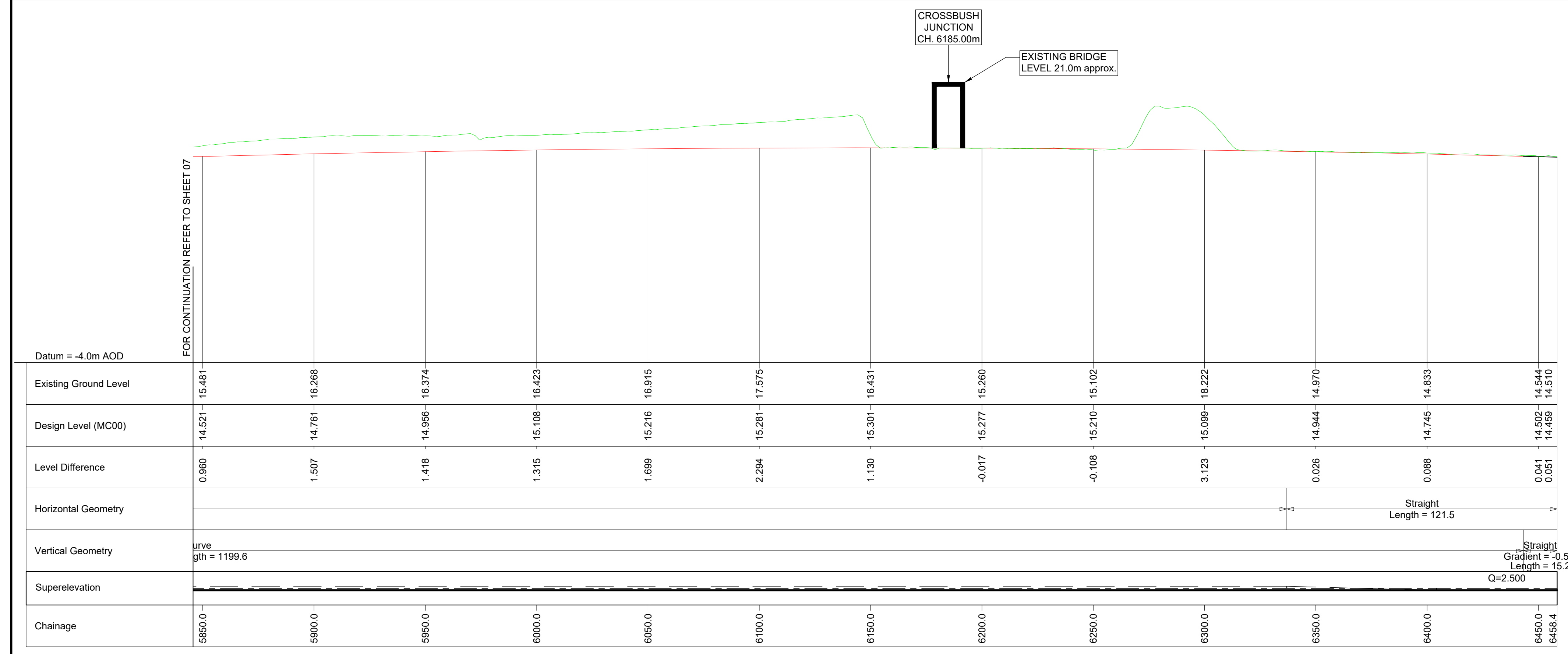
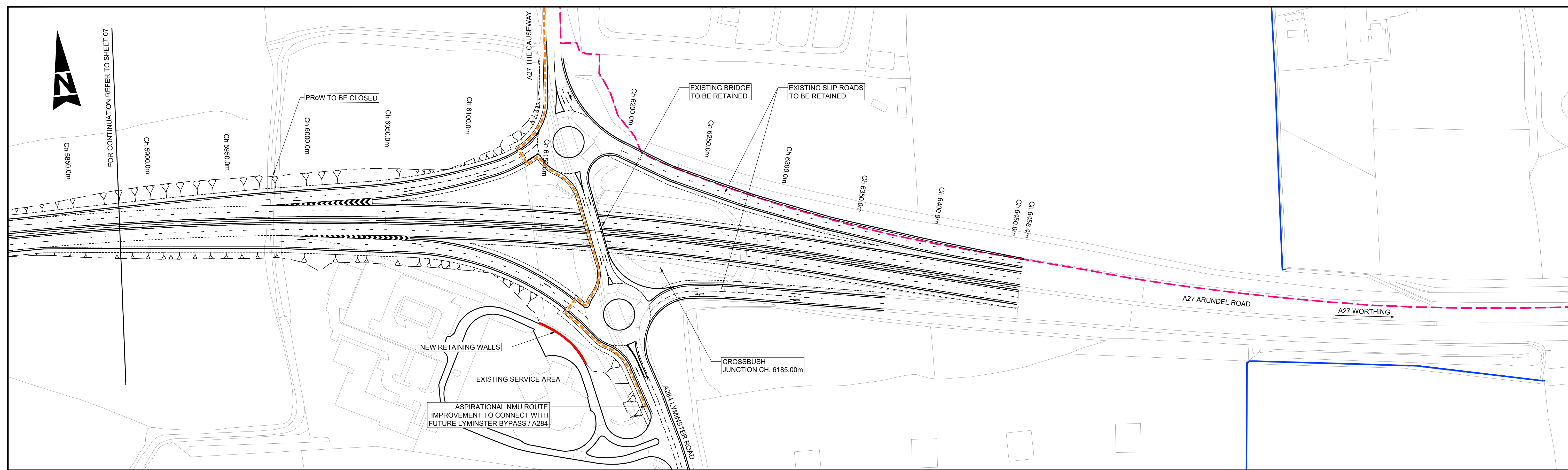
Project: HE551523 - WSP - HGN - A27AR_OP5A - DR - CH - 0107

Project Ref. No.: 70015214

Revision: P01

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5A-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

Scale 1:1250

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 10001820, 2015.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - EXISTING CYCLE LANES
 - PROPOSED SEGREGATED PEDESTRIAN AND CYCLE PATH
 - PROPOSED PRoW DIVERSION
 - NEW BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Category	Description
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	23/04/18	First Issue			

TC	KM	BS

Drawing Status	S2	Project Title	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS			
FOR INFORMATION		Client	INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5A SHEET 8 OF 8			
wsp		No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		Scale	1:1250	
Working on behalf of highways england		Drawn	TC	Checked	KM	
		Date	23/04/18	Date	23/04/18	
		Approved	BS	Date	23/04/18	
		Authorised		Date	---	
		Project Ref. No.	70015214			
		Revision	P01			

Appendix C

SCHEME LAYOUT DRAWINGS MODIFIED OPTIONS

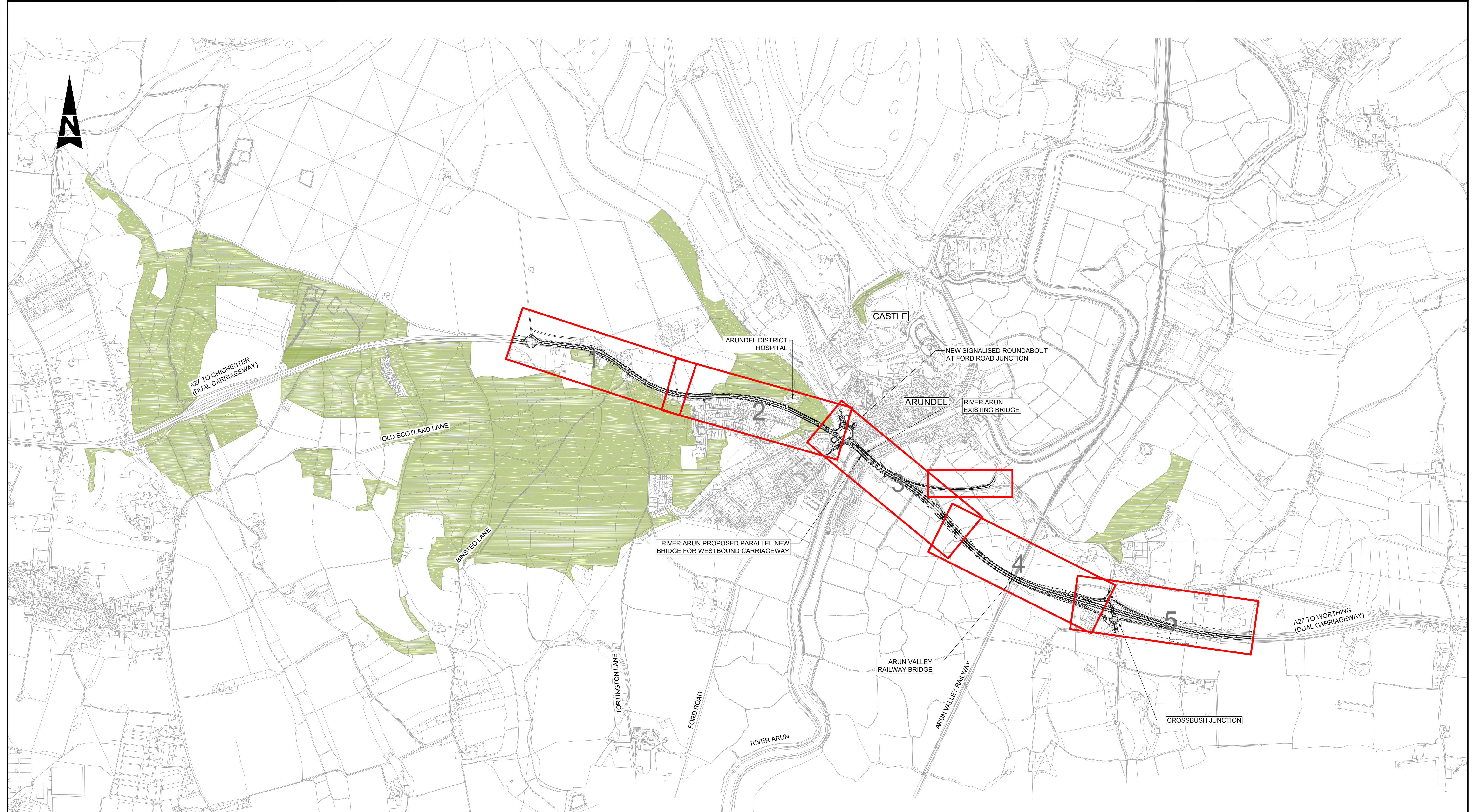
APPENDIX C-1

OPTION 1(V)

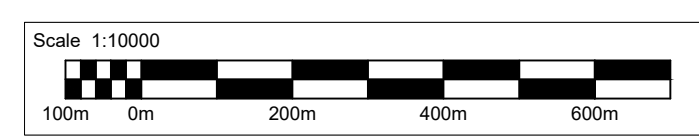
DO NOT SCALE

Millimetres

0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2018.



NOTES:
1. FOR LAYOUTS REFER TO DRG. NOS. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0101 TO 0105.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue			

Drawing Status: **FOR INFORMATION**

No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

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

Subsidiary: **S2**

Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

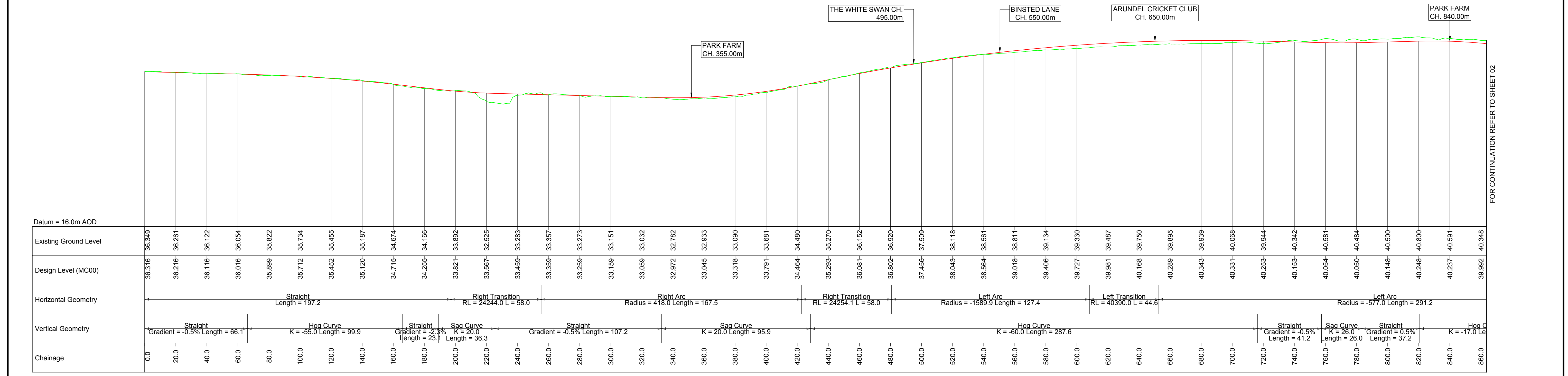
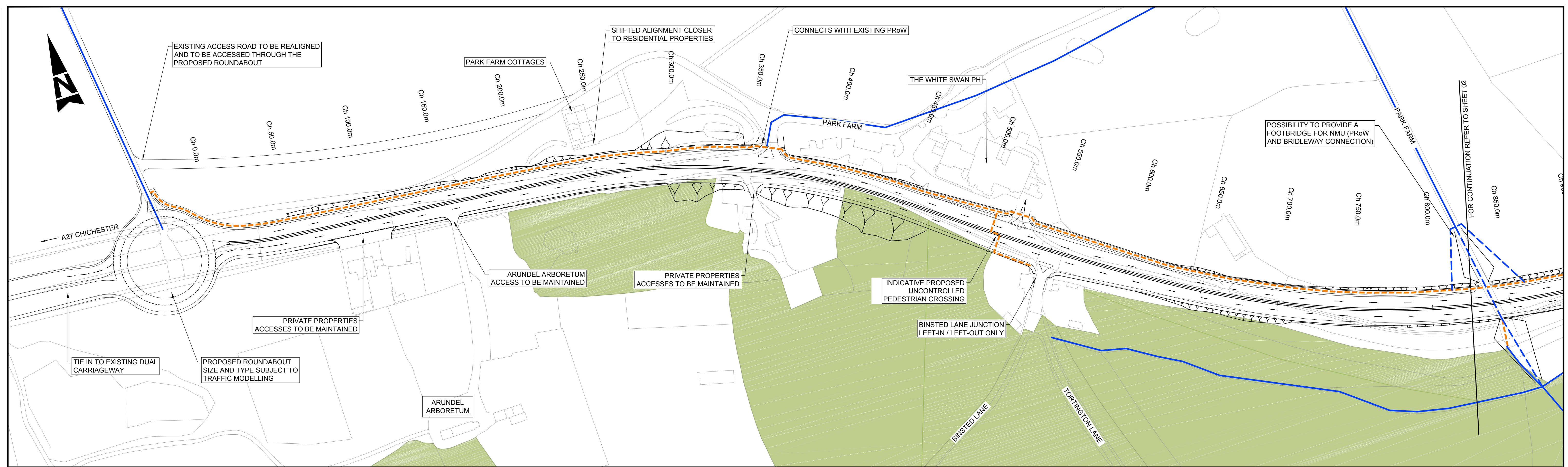
Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V OVERVIEW PLAN					
Scale	Drawn	Checked	Approved	Authorised	
1:10000	TC	KM	BS	AM	
Original Size	Date	Date	Date	Date	Date
A1	05/04/18	05/04/18	05/04/18	05/04/18	05/04/18
Drawing Number	Project		Originator	Volume	Project Ref. No.
	HE55123 - WSP - HGN - A27AR_OP1V - DR - CH - 0100				70015214
Location	Type	Role	Number	Revision	
				P01	

DO NOT SCALE

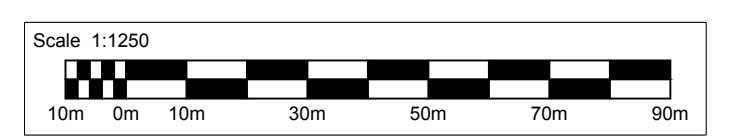
Millimetres

0 10

100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - POSSIBLE FOOTBRIDGE
 - PROPOSED PROW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED NOISE BARRIERS
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

Rev.	Date	Description	By	CHK'd	App'd	TC	KM	BS
P01	05/04/18	First Issue						

Drawing Status: FOR INFORMATION

Subsidiary: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V SHEET 1 OF 5

Scale: 1:1250

Drawn: AC

Checked: BS

Approved: BS

Authorised: ---

Original Size: A1

Date: 05/04/18

Date: 05/04/18

Date: 05/04/18

Date: ---

Drawing Number: HE551523 - WSP - HGN - A27AR_OP1V-DR-CH-0101

Project: HE551523 - WSP - HGN - A27AR_OP1V-DR-CH-0101

Location: ---

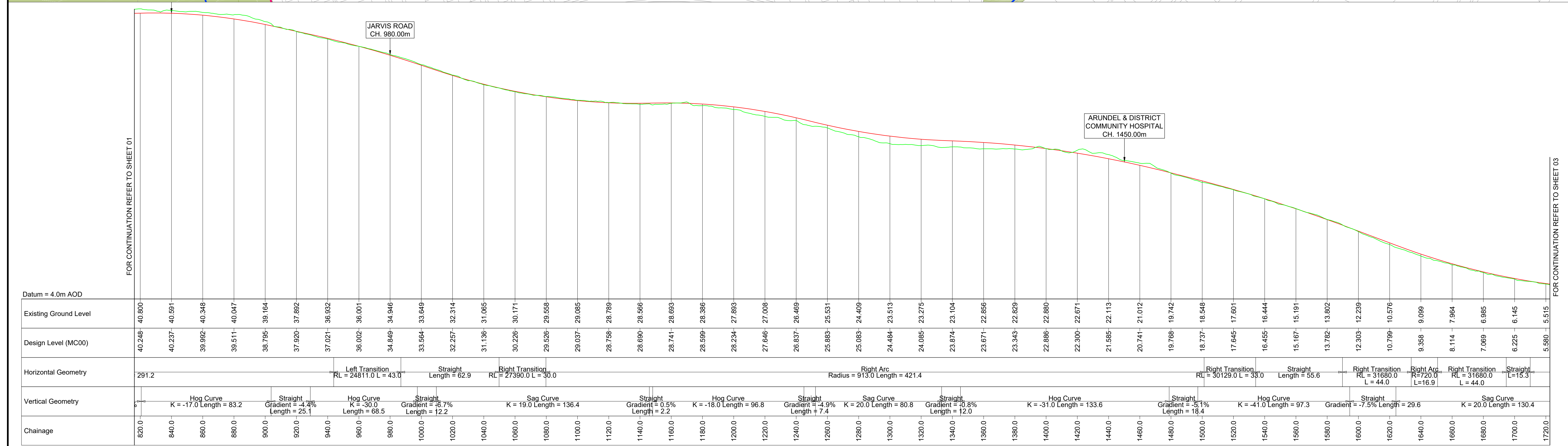
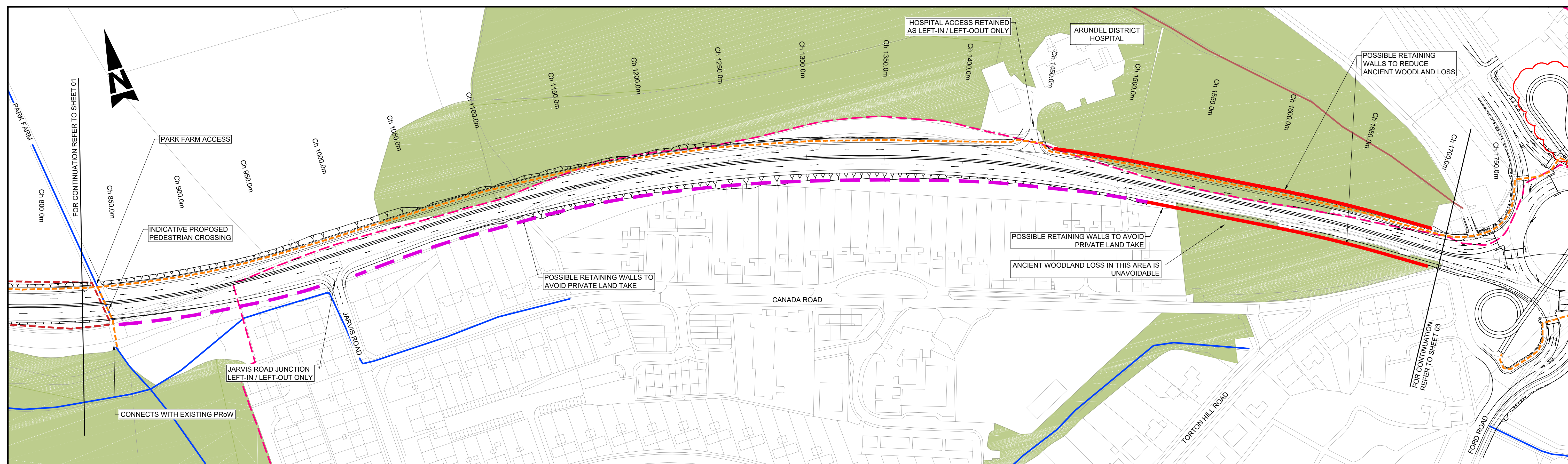
Project Ref. No.: 70015214

Revision: P01

Client: Working on behalf of highways england

DO NOT SCALE

Millimetres



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - POSSIBLE FOOTBRIDGE
 - PROPOSED PROW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED NOISE BARRIERS
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Category	Description
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status: FOR INFORMATION

Suitability: S2

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

No. 2 London Square, Cross Lanes, Guildford, GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V SHEET 2 OF 5

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

Original Size	Date	Date	Date	Date
A1	05/04/18	05/04/18	05/04/18	---

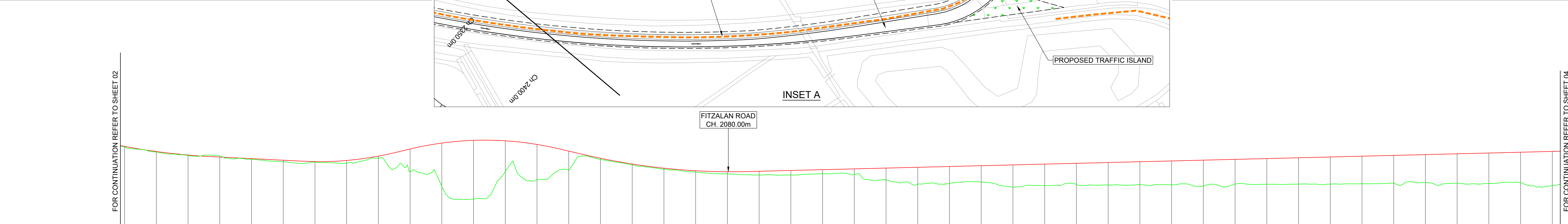
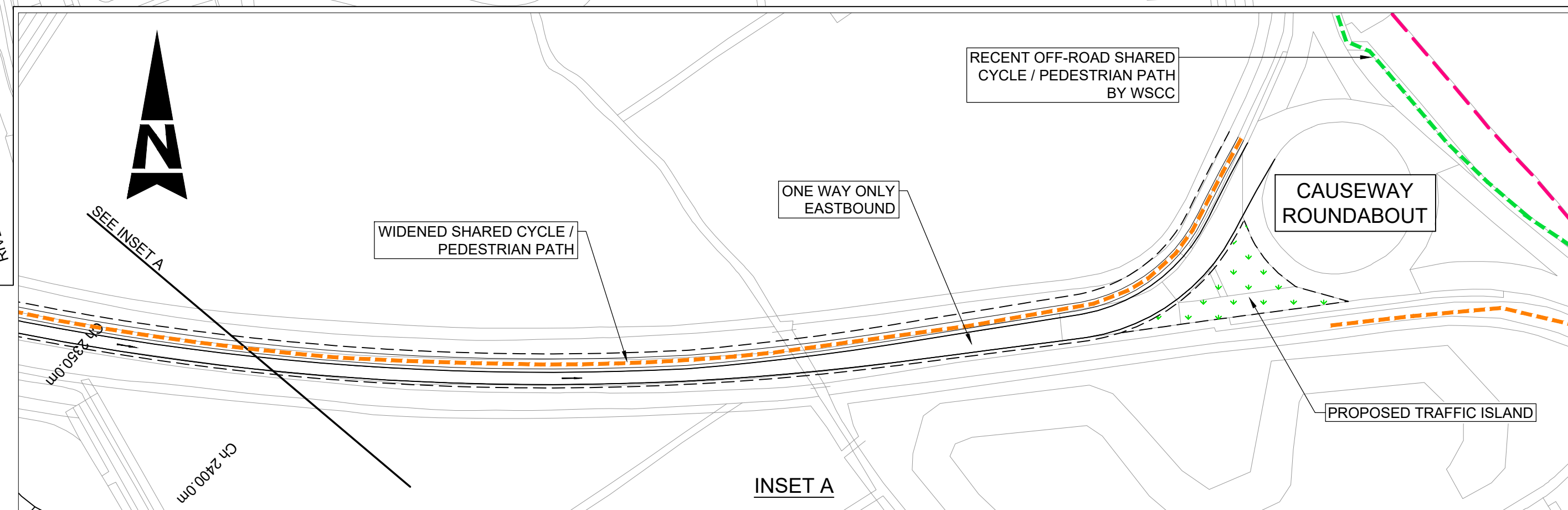
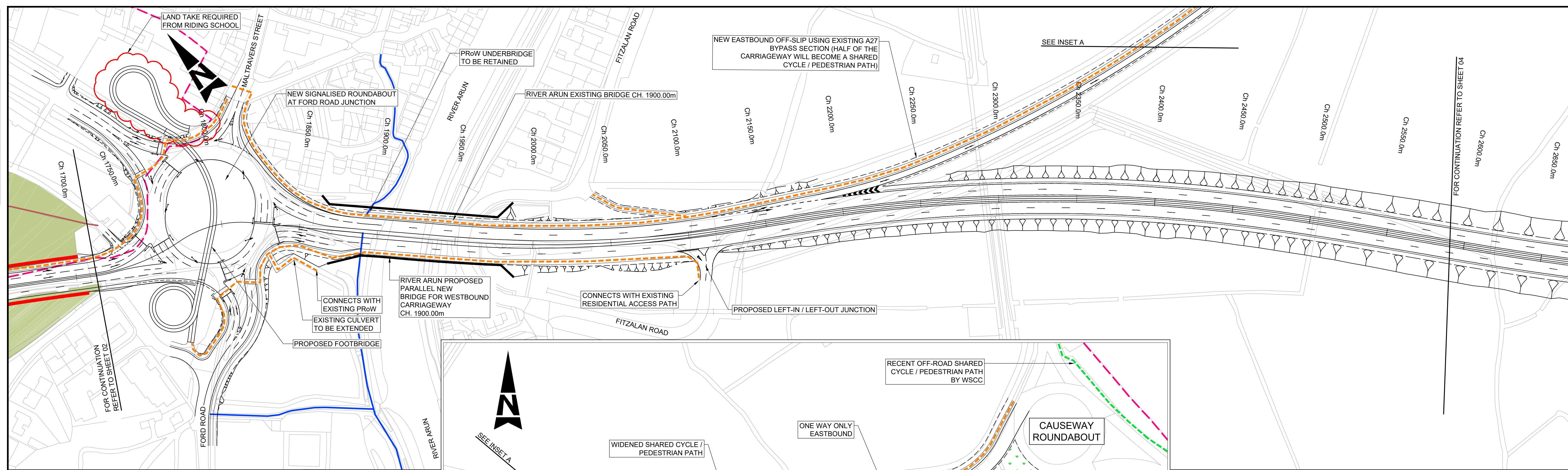
Drawing Number: HE551523 - WSP - HGN - A27AR_OP1V-DR-CH-0102

Project Ref. No: 70015214

Revision: P01

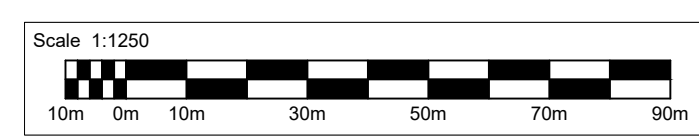
DO NOT SCALE

Millimetres
0 10 100



Chainage	Existing Ground Level	Design Level (MC00)
1700.0	6.145	6.225
1720.0	5.515	5.580
1740.0	5.077	5.136
1760.0	5.012	4.883
1780.0	4.606	4.663
1800.0	4.286	4.483
1820.0	4.233	4.309
1840.0	4.126	4.453
1860.0	4.757	4.997
1880.0	2.997	5.903
1900.0	1.164	6.645
1920.0	-0.418	6.987
1940.0	3.053	6.930
1960.0	2.027	6.472
1980.0	3.256	5.634
2000.0	4.585	4.732
2020.0	3.906	4.007
2040.0	3.352	3.482
2060.0	2.989	3.157
2080.0	2.763	3.033
2100.0	2.608	3.094
2120.0	2.619	3.194
2140.0	2.793	3.284
2160.0	2.693	3.394
2180.0	1.999	3.494
2200.0	1.471	3.594
2220.0	1.574	3.694
2240.0	1.737	3.794
2260.0	1.092	3.894
2280.0	1.275	3.994
2300.0	1.432	4.094
2320.0	1.353	4.194
2340.0	1.395	4.294
2360.0	1.377	4.394
2380.0	1.240	4.494
2400.0	1.477	4.594
2420.0	1.458	4.694
2440.0	1.475	4.794
2460.0	1.473	4.894
2480.0	1.513	4.994
2500.0	1.592	5.094
2520.0	1.682	5.194
2540.0	1.589	5.294
2560.0	1.553	5.394
2580.0	1.629	5.494
2600.0	1.272	5.594

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROw
 - EXISTING BRIDLEWAYS
 - POSSIBLE FOOTBRIDGE
 - PROPOSED PROw DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED NOISE BARRIERS
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	Maintenance / Cleaning	Use	Decommissioning / Demolition

Rev.	Date	Description	By	Chkd	App'd	TC	KM	BS
P01	05/04/18	First Issue						

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V SHEET 3 OF 5

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 05/04/18

Drawing Number: HE551523 - WSP - HGN - A27AR_OP1V - DR - CH - 0103

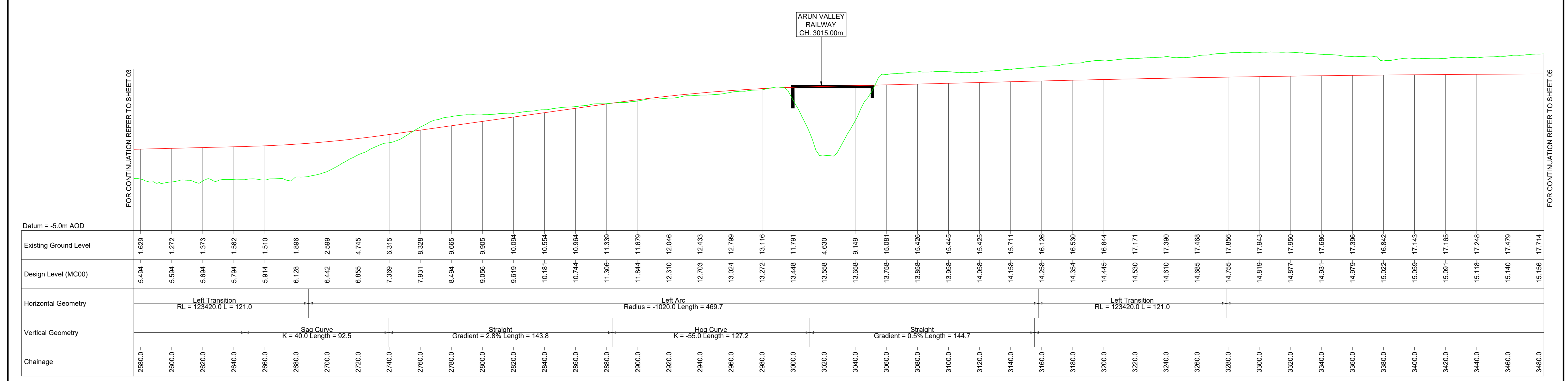
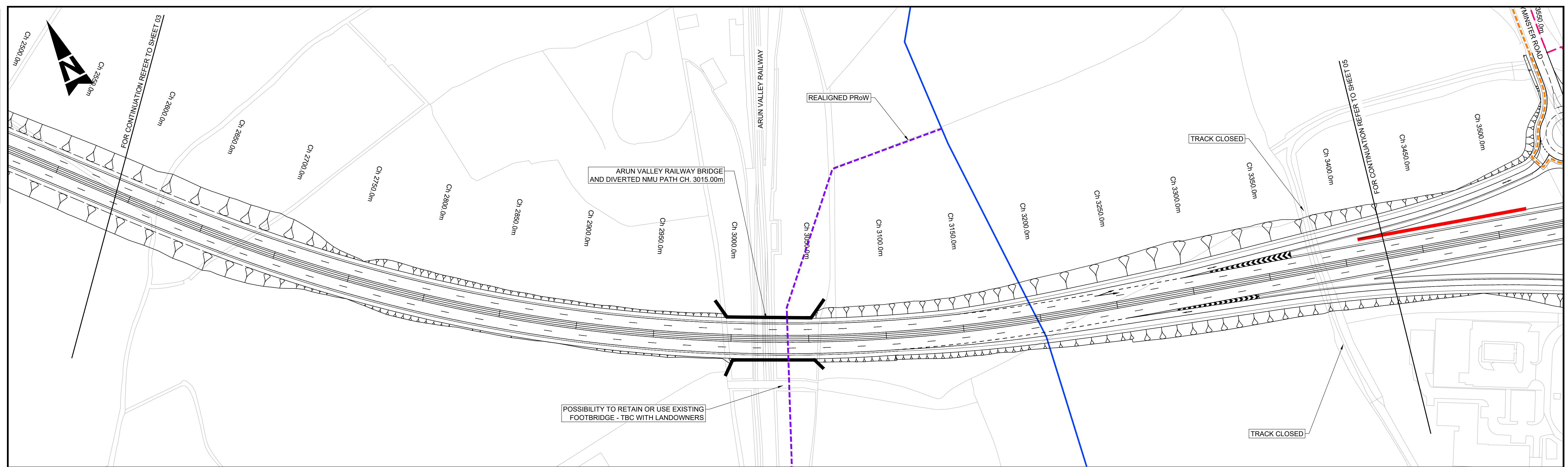
Project Ref. No.: 70015214

Revision: P01

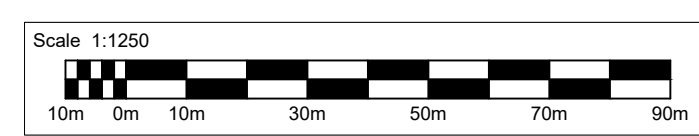
Client: Working on behalf of highways england

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PrOw
 - EXISTING BRIDLEWAYS
 - POSSIBLE FOOTBRIDGE
 - PROPOSED PrOw DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED NOISE BARRIERS
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V SHEET 4 OF 5

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 05/04/18

Project: HE551523 - WSP - HGN - A27AR_OP1V-DR-CH-0104

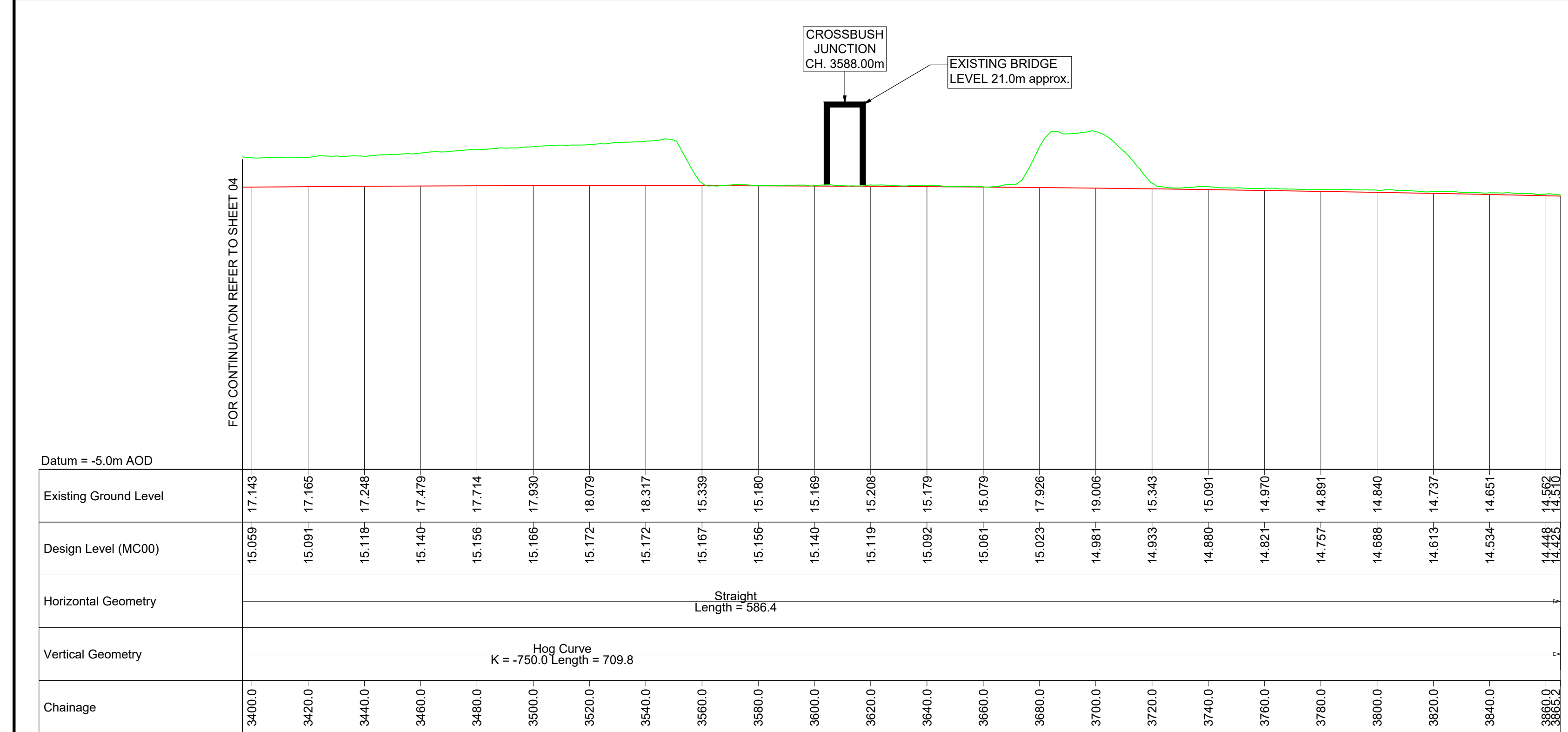
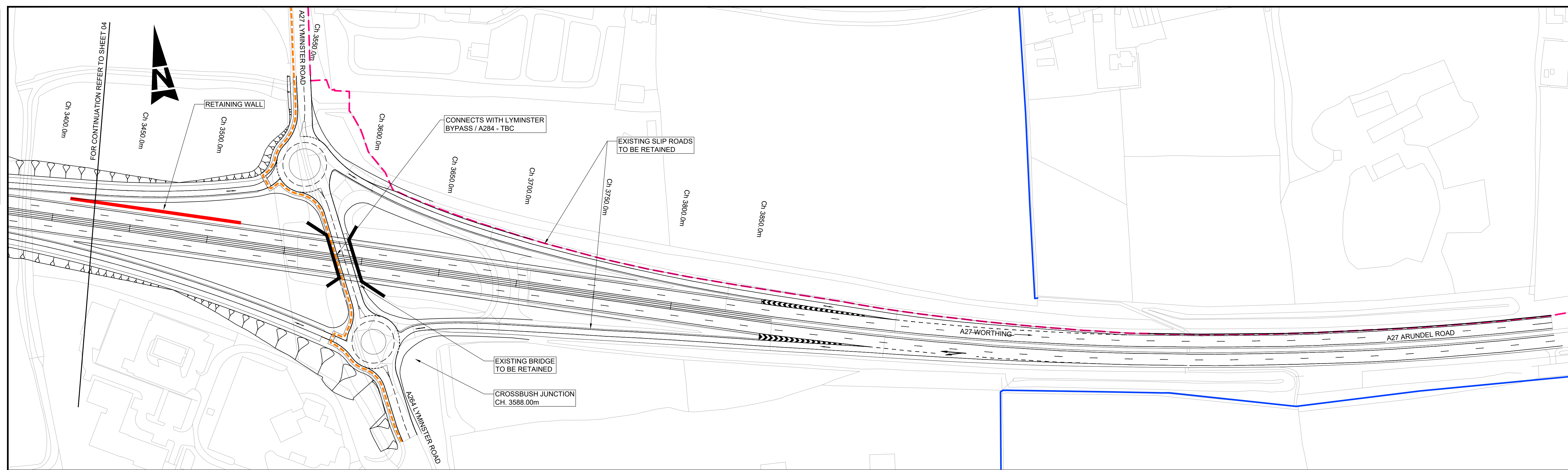
Project Ref. No.: 70015214

Revision: P01

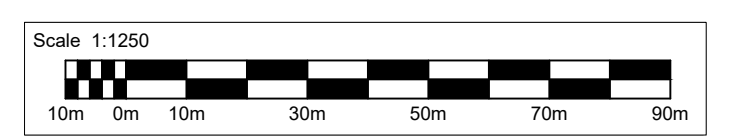
Client: Working on behalf of highways england

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP1V-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - POSSIBLE FOOTBRIDGE
 - PROPOSED PROW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED NOISE BARRIERS
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status		Suitability	Project Title			
FOR INFORMATION		S2	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS			
<p>No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com</p>		Drawing Title				
		ALIGNMENT PROPOSALS - STAGE 2 OPTION 1V SHEET 5 OF 5				
Client		Scale	Drawn	Checked	Approved	Authorised
Working on behalf of 		1:1250	TC	KM	BS	---
Project		Original Size	Date	Date	Date	Date
HE551523 - WSP - HGN - A27AR_OP1V - DR - CH - 0105		A1	05/04/18	05/04/18	05/04/18	---
Location		Drawing Number	Project Ref. No.		Revision	
Type Role Number		70015214	70015214		P01	

APPENDIX C-2

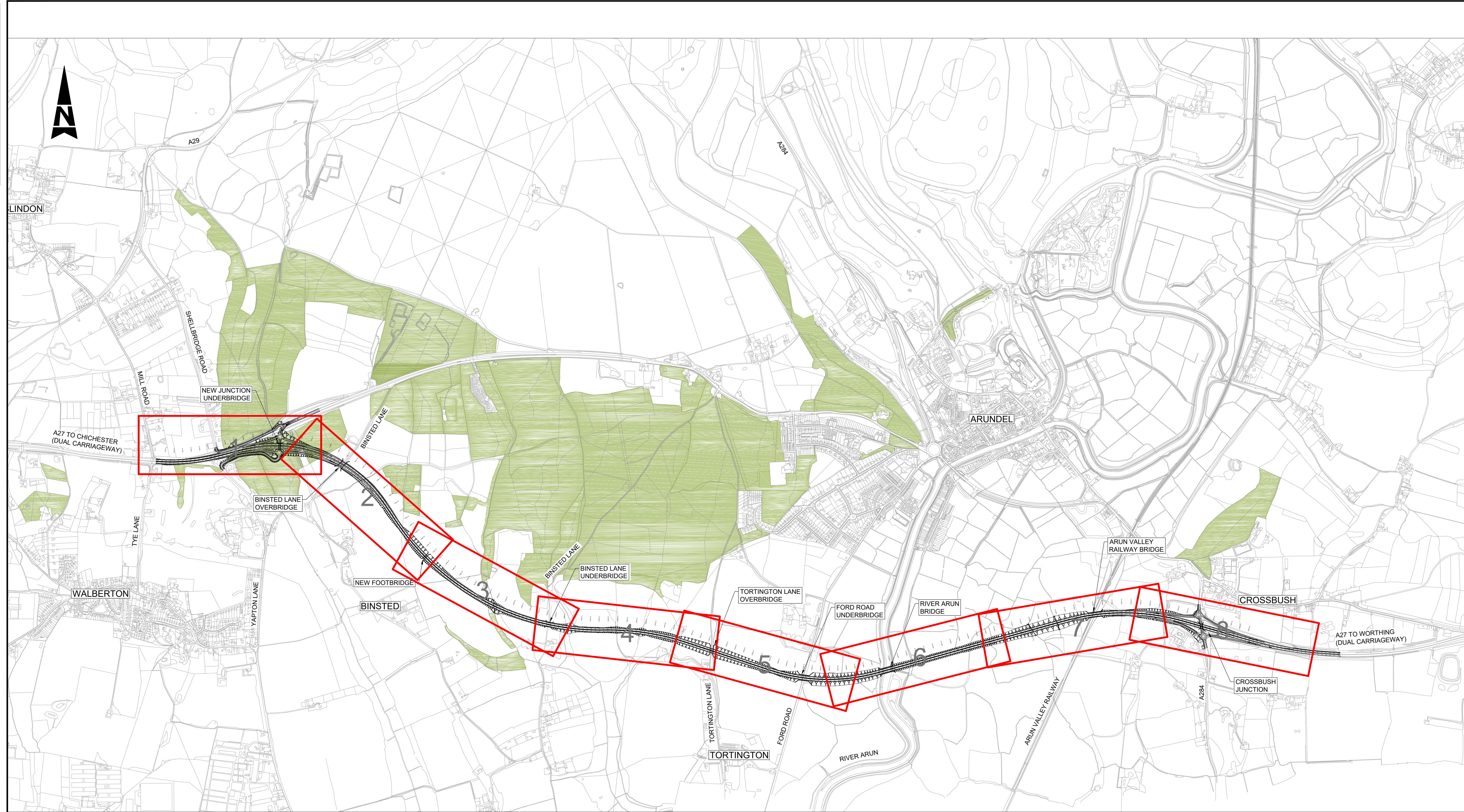
OPTION 5A(V3)

DO NOT SCALE

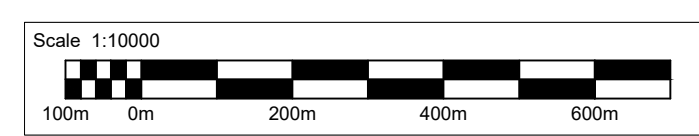
Millimetres

0 10

100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.





NOTES:
1. FOR LAYOUTS REFER TO DRG. NOS. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0101 TO 0108.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction					
Maintenance / Cleaning					
Use					
Decommissioning / Demolition					

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue			

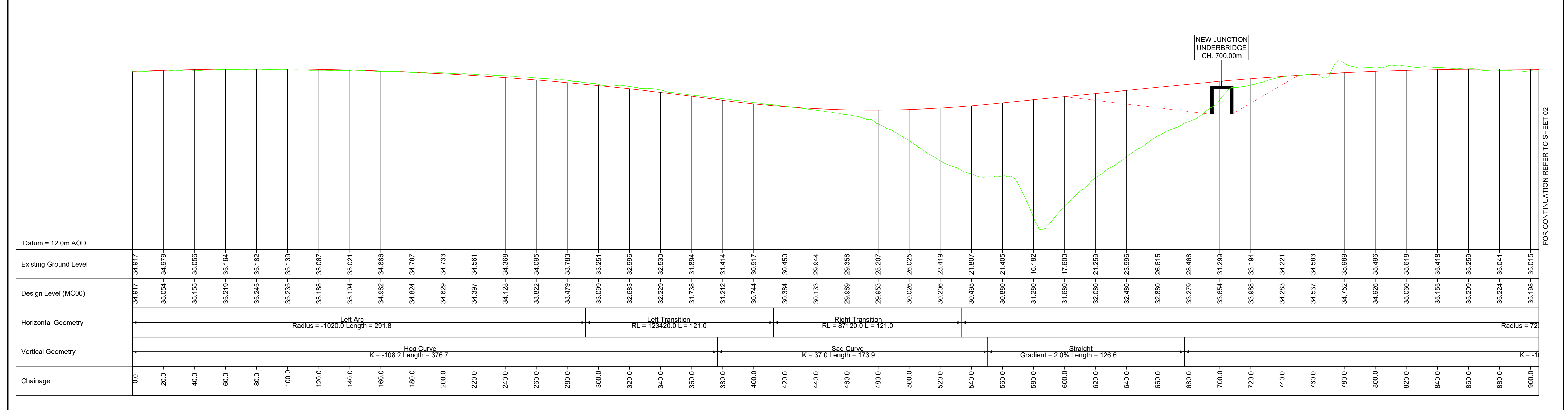
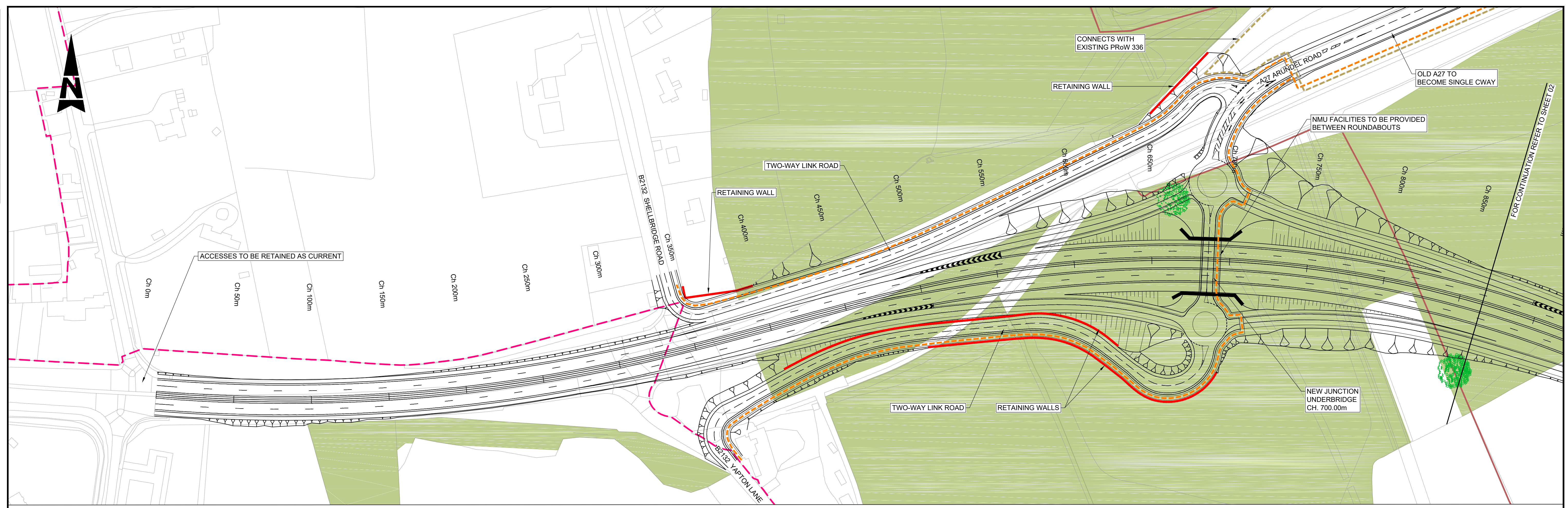
Drawing Status	FOR INFORMATION	Suitability	S2	Project Title	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS				
 No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com		Drawing Title ALIGNMENT PROPOSALS - STAGE 2 OPTION 5AV OVERVIEW PLAN			Scale 1:10000 Original Size A1				
Client	 Working on behalf of highways england		Drawn TC Date 05/04/18	Checked KM Date 05/04/18	Approved BS Date 05/04/18	Authorised AM Date 05/04/18	Project Ref. No. 70015214	Drawing Number HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0100	Project Ref. No. 70015214 Revision P01

DO NOT SCALE

Millimetres

0 10

100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

Scale 1:1250

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 10001828, 2018.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PROW
- EXISTING BRIDLEWAYS
- PROPOSED PROW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- PROPOSED BRIDLEWAY
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Category	Description
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue	TC	KM	BS

FOR INFORMATION

wsp

No. 2 London Square,
Cross Lanes, Guildford,
GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Working on behalf of
highways england

**REGIONAL INVESTMENT PROGRAMME
A27 ARUNDEL BYPASS**

**INDICATIVE ALIGNMENT PROPOSALS
LAYOUT OPTION 5AV
SHEET 1 OF 8**

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

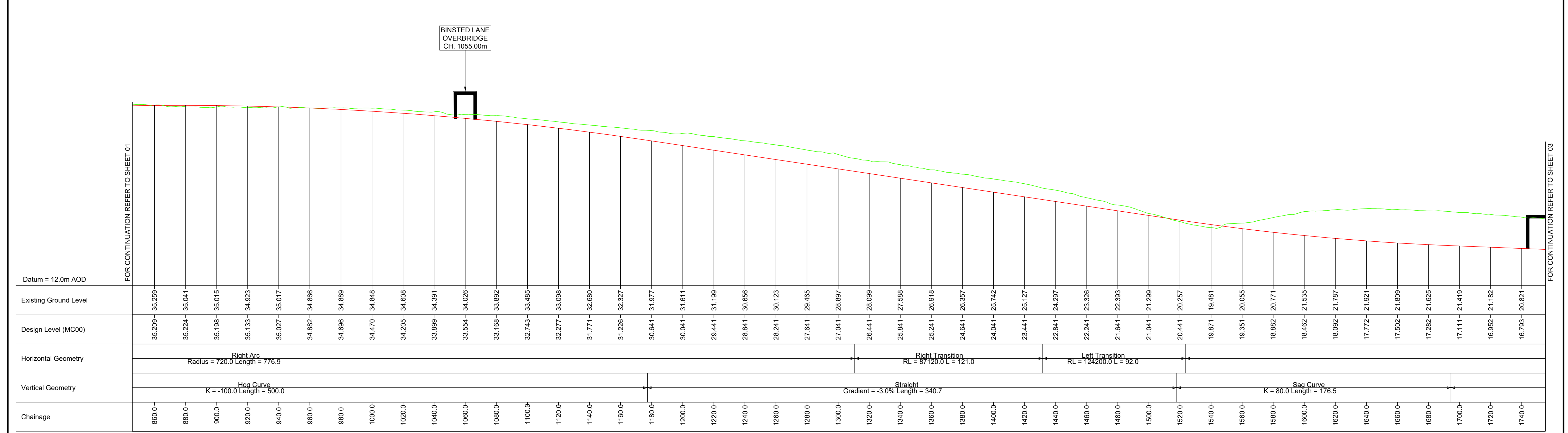
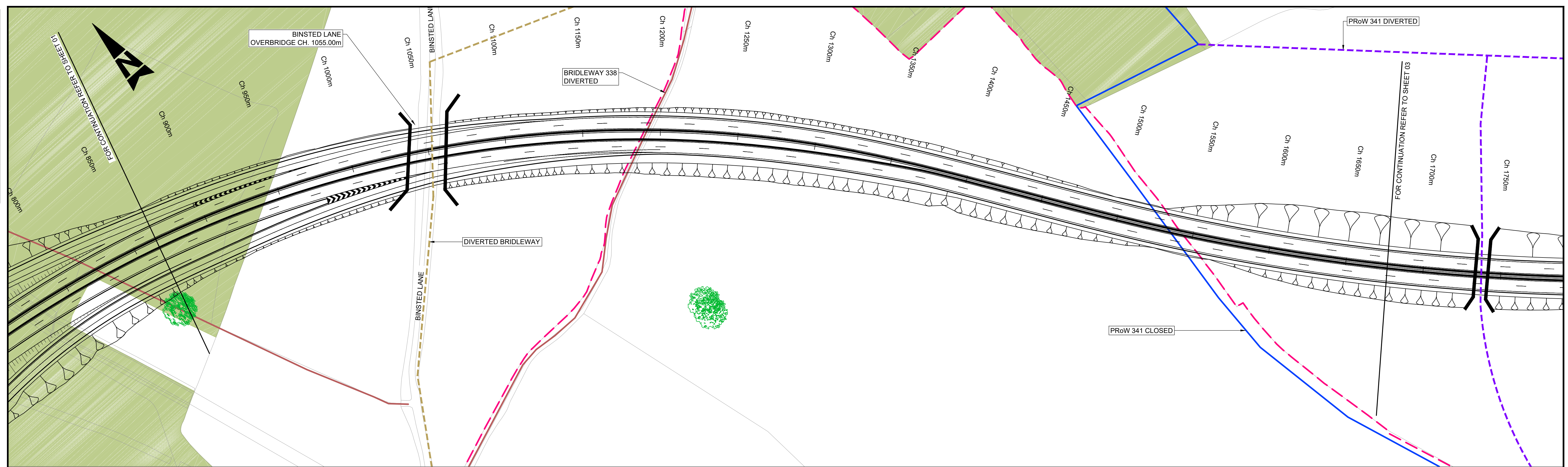
Original Size	Date	Date	Date	Date
A1	05/04/18	05/04/18	05/04/18	---

Project	Originator	Volume	Project Ref. No.
HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0101			70015214

Location	Type	Role	Number
			P01

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorized reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018920, 2015.

Scale 1:1250

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- PROPOSED BRIDLEWAY
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue			

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

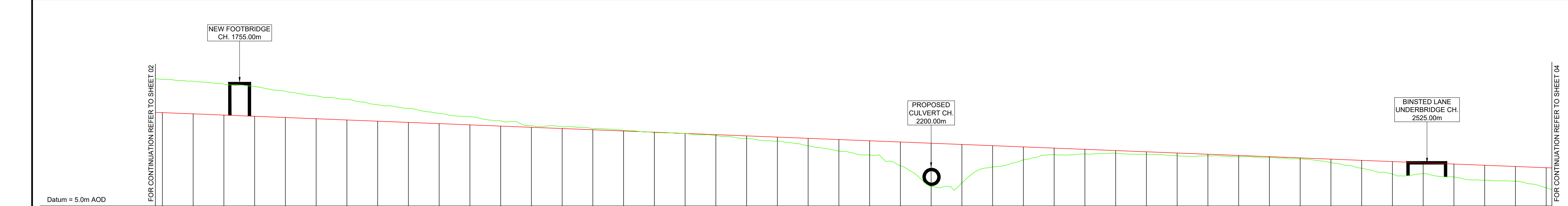
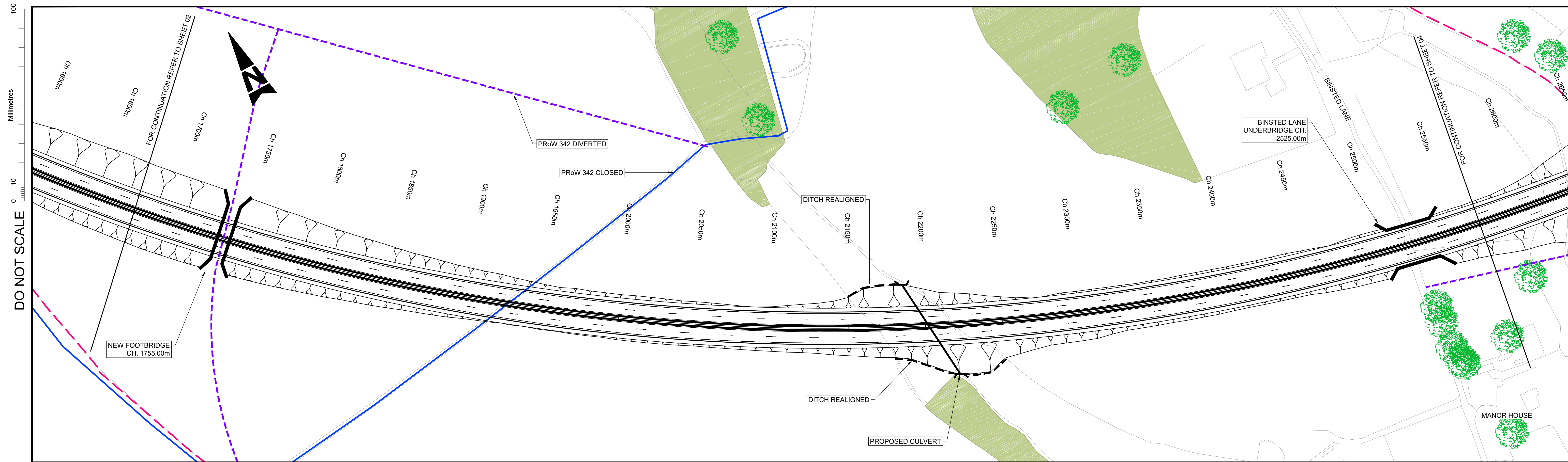
Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 2 OF 8**

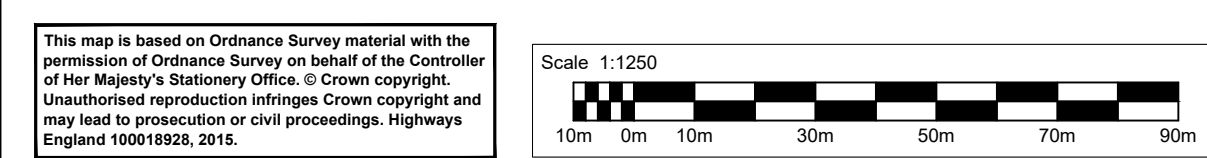
Client: **Working on behalf of highways england**

No. 2 London Square, Cross Lanes, Guildford, GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Scale	1:1250	Drawn	TC	Checked	KM	Approved	BS	Authorised	---
Original Size	A1	Date	05/04/18	Date	05/04/18	Date	05/04/18	Date	---
Drawing Number	Project		Originator	Volume		Project Ref. No.		70015214	
HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0102		P01		P01		P01		P01	



Existing Ground Level	21.419	21.182	20.821	20.500	19.868	19.285	18.825	18.125	17.688	17.026	16.583	16.049	15.427	15.274	15.048	14.800	14.521	14.399	14.139	13.774	13.431	12.813	12.128	11.612	10.209	7.534	7.985	10.059	12.665	10.969	12.506	11.681	12.347	11.759	12.189	11.848	12.030	11.698	11.871	11.517	11.712	11.508	11.553	11.386	11.395	11.276	11.236	11.095	11.077	10.631	10.918	9.899	10.760	9.142	10.601	9.196	8.752	8.341	8.206	9.966
Design Level (MC00)	17.111	16.952	16.793	16.634	16.475	16.317	16.158	15.999	15.840	15.682	15.523	15.364	15.205	15.047	14.888	14.729	14.570	14.411	14.253	14.094	13.935	13.776	13.618	13.459	13.300	13.141	12.982	12.824	12.665	12.506	12.347	12.189	12.030	11.871	11.712	11.553	11.395	11.236	11.077	10.918	10.760	10.601	10.442	10.283	10.124	9.966														
Horizontal Geometry	Left Arc Radius = -1350.0 Length = 1271.6																																																											
Vertical Geometry	Straight Gradient = -0.8% Length = 975.7																																																											
Chainage	1700.0	1720.0	1740.0	1760.0	1780.0	1800.0	1820.0	1840.0	1860.0	1880.0	1900.0	1920.0	1940.0	1960.0	1980.0	2000.0	2020.0	2040.0	2060.0	2080.0	2100.0	2120.0	2140.0	2160.0	2180.0	2200.0	2220.0	2240.0	2260.0	2280.0	2300.0	2320.0	2340.0	2360.0	2380.0	2400.0	2420.0	2440.0	2460.0	2480.0	2500.0	2520.0	2540.0	2560.0	2580.0	2600.0														



NOTES:
 1. FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
 2. THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 3 OF 8

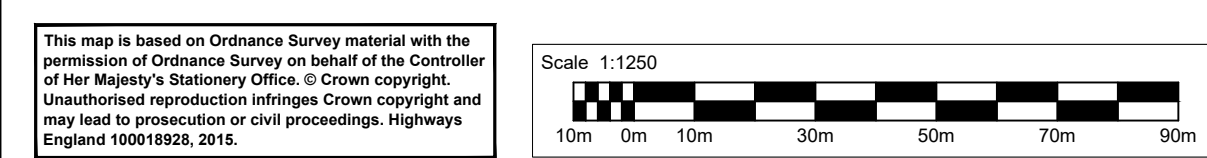
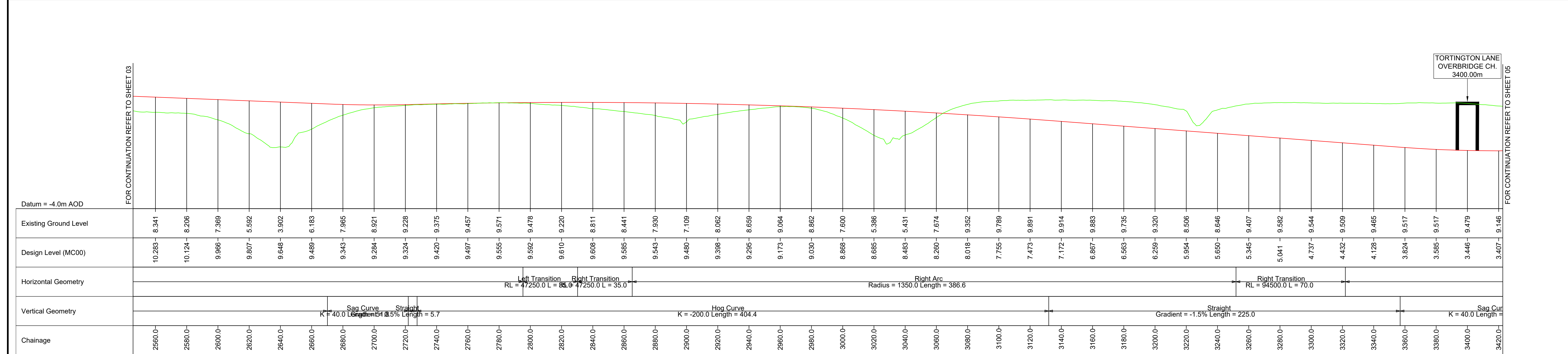
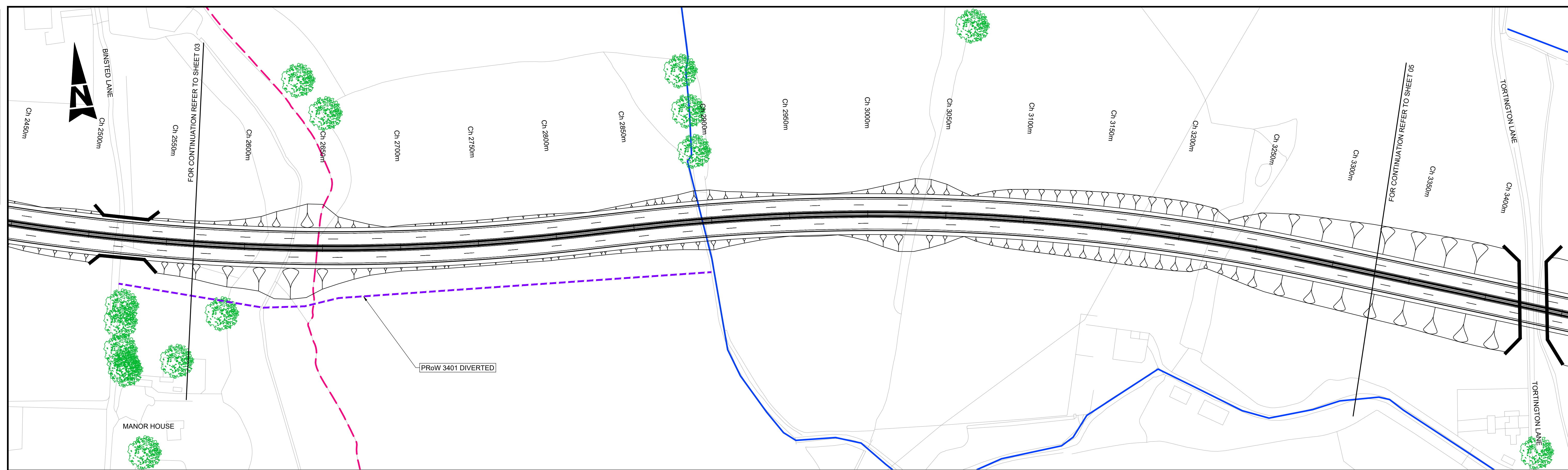
Scale: 1:1250

Client: Working on behalf of highways england

Scale	1:1250	Drawn	TC	Checked	KM	Approved	BS	Authorised	---
Original Size	A1	Date	05/04/18	Date	05/04/18	Date	05/04/18	Date	---
Drawing Number	HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0103		Project Ref. No.	70015214					
Revision	P01								

DO NOT SCALE

Millimetres
0 10 100



NOTES:
 1. FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
 2. THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Construction
Maintenance / Cleaning
Use
Decommissioning / Demolition

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status: **FOR INFORMATION**

Suitability: **S2**

wsp No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com

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

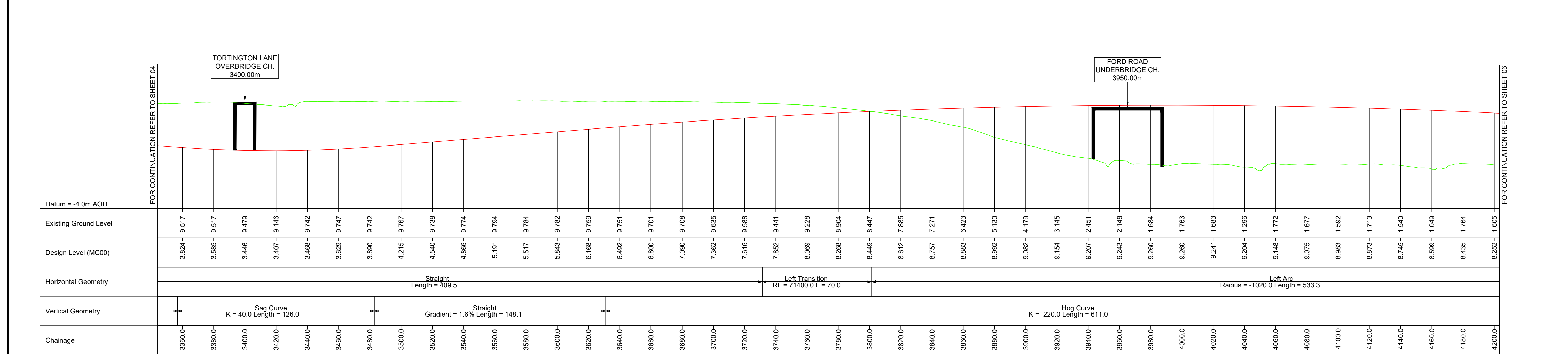
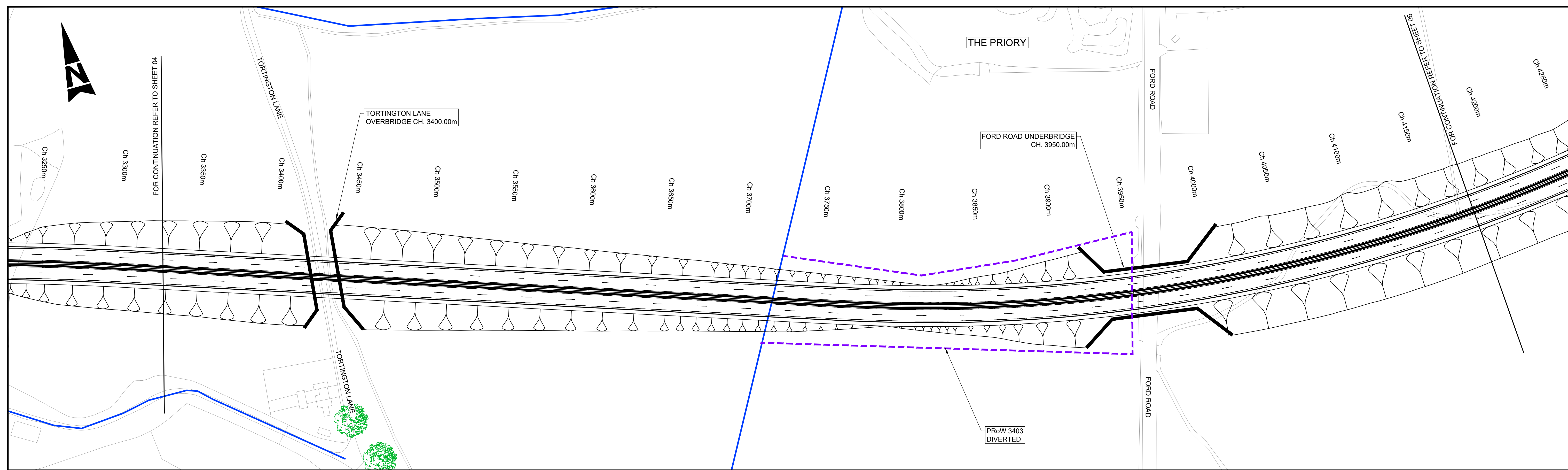
Project Title: **REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS**

Drawing Title: **INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 4 OF 8**

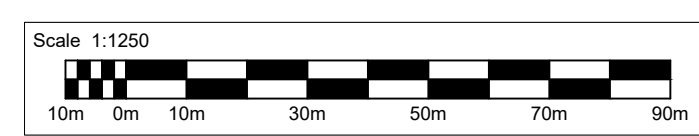
Scale: 1:1250	Drawn: TC	Checked: KM	Approved: BS	Authorised: ---
Original Size: A1	Date: 05/04/18	Date: 05/04/18	Date: 05/04/18	Date: ---
Drawing Number: HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0104	Project Ref. No.: 70015214	Revision: P01		

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018926, 2018.



- NOTES:
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION	
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).	
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status: FOR INFORMATION

Suitability: S2

Client: Working on behalf of highways england

No. 2 London Square, Cross Lanes, Guildford, GU1 1UN
T+ 44 (0) 1483 528400
wsp.com

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 5 OF 8

Scale	Drawn	Checked	Approved	Authorised
1:1250	TC	KM	BS	---

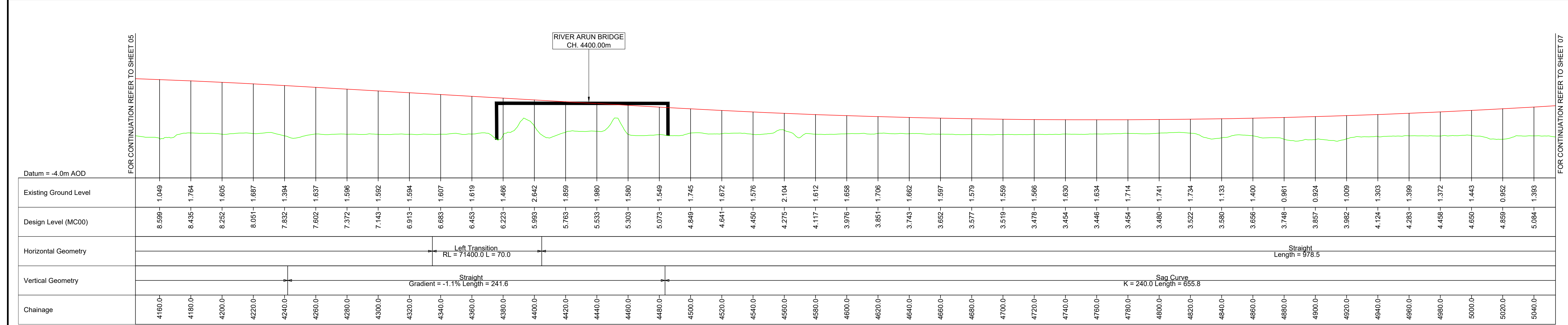
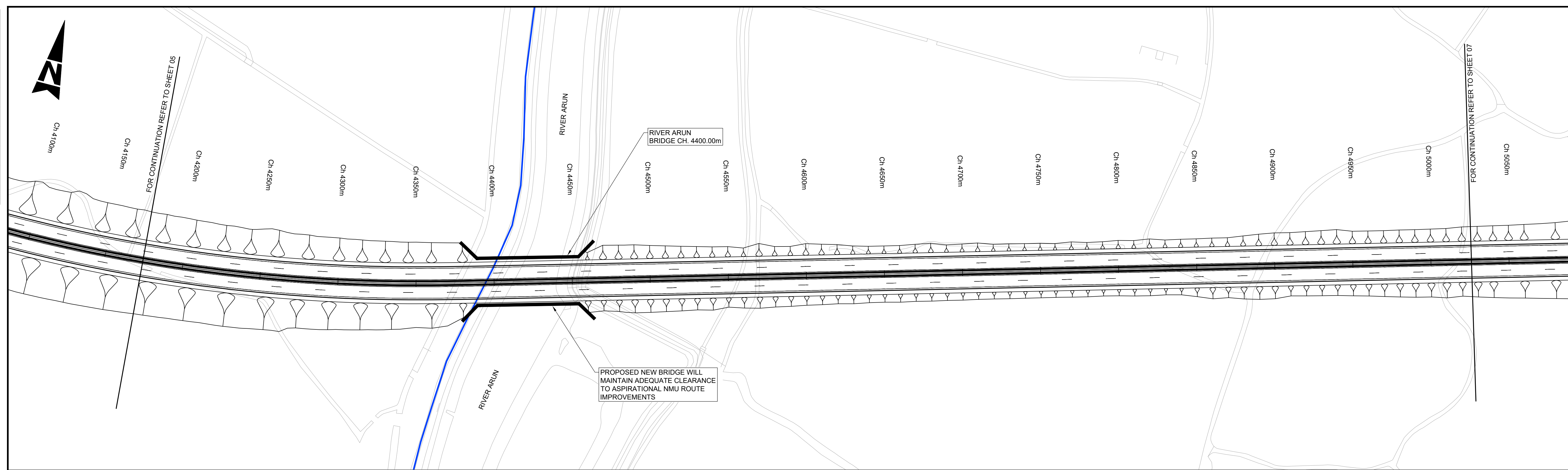
Original Size	Date	Date	Date	Date
A1	05/04/18	05/04/18	05/04/18	---

Drawing Number	Project	Project Ref. No.	Revision
HE55123 - WSP - HGN - A27AR_OP5AV - DR - CH - 0105		70015214	P01

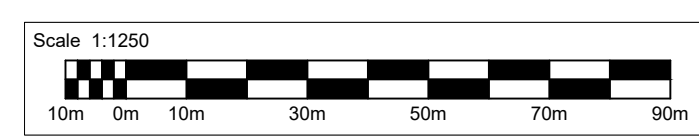
DO NOT SCALE

Millimetres

0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PRoW
 - EXISTING BRIDLEWAYS
 - PROPOSED PRoW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION		
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).		
Construction		
Maintenance / Cleaning		
Use		
Decommissioning / Demolition		

Rev.	Date	Description	By	Chk'd	App'd
P01	05/04/18	First Issue			

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 6 OF 8

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 05/04/18

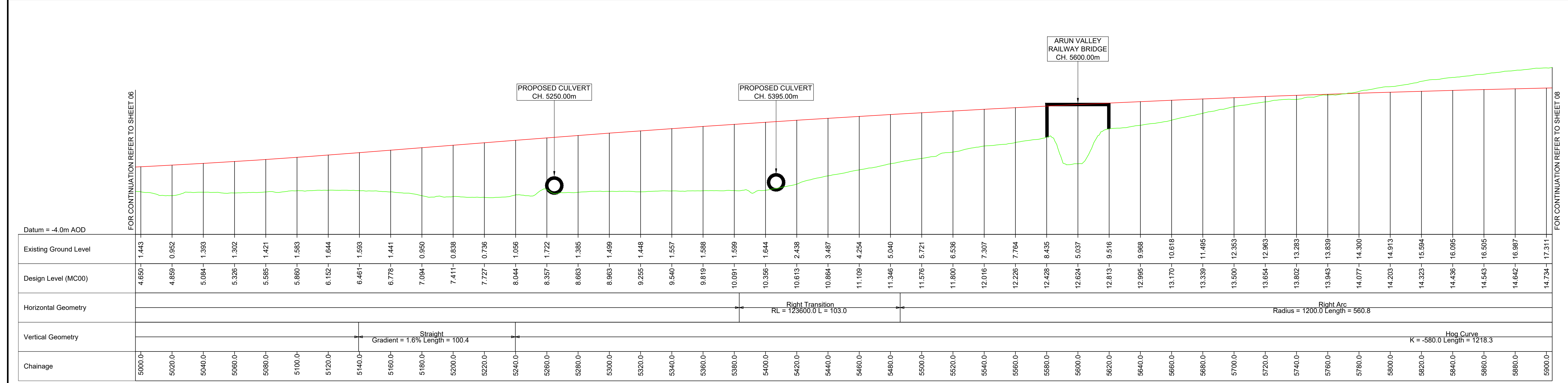
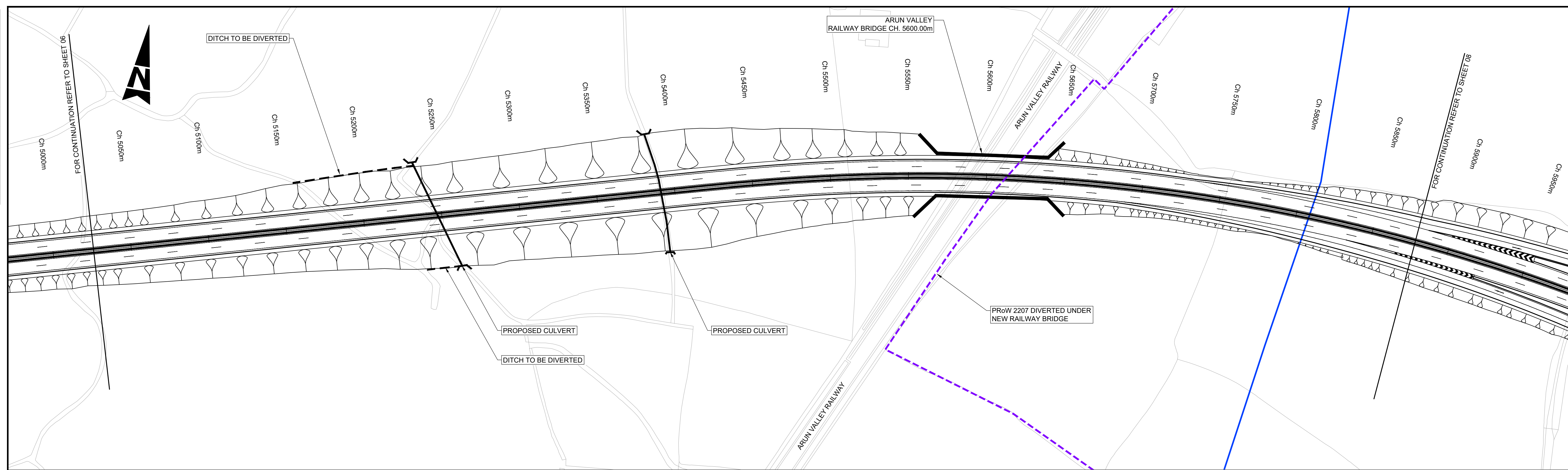
Project: HE55123 - WSP - HGN - A27AR_OP5AV - DR - CH - 0106

Project Ref. No.: 70015214

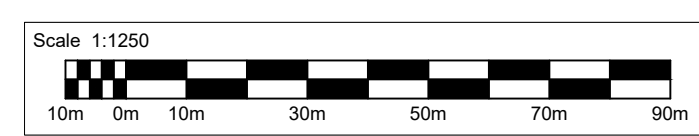
Revision: P01

DO NOT SCALE

Millimetres
0 10 100



This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 100018928, 2018.



- NOTES:**
- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
 - THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

- KEY:**
- DESIGN LEVEL
 - EXISTING LEVEL
 - SOUTH DOWNS NATIONAL PARK OUTLINE
 - EXISTING PROW
 - EXISTING BRIDLEWAYS
 - PROPOSED PROW DIVERSION
 - PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
 - PROPOSED BRIDLEWAY
 - ANCIENT WOODLAND
 - VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Activity	Residual Risk
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	Chkd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status: FOR INFORMATION

Suitability: S2

Project Title: REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS

Drawing Title: INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 7 OF 8

Scale: 1:1250

Drawn: TC, Checked: KM, Approved: BS, Authorised: ---

Original Size: A1, Date: 05/04/18

Drawing Number: HE551523 - WSP - HGN - A27AR_OP5AV - DR - CH - 0107

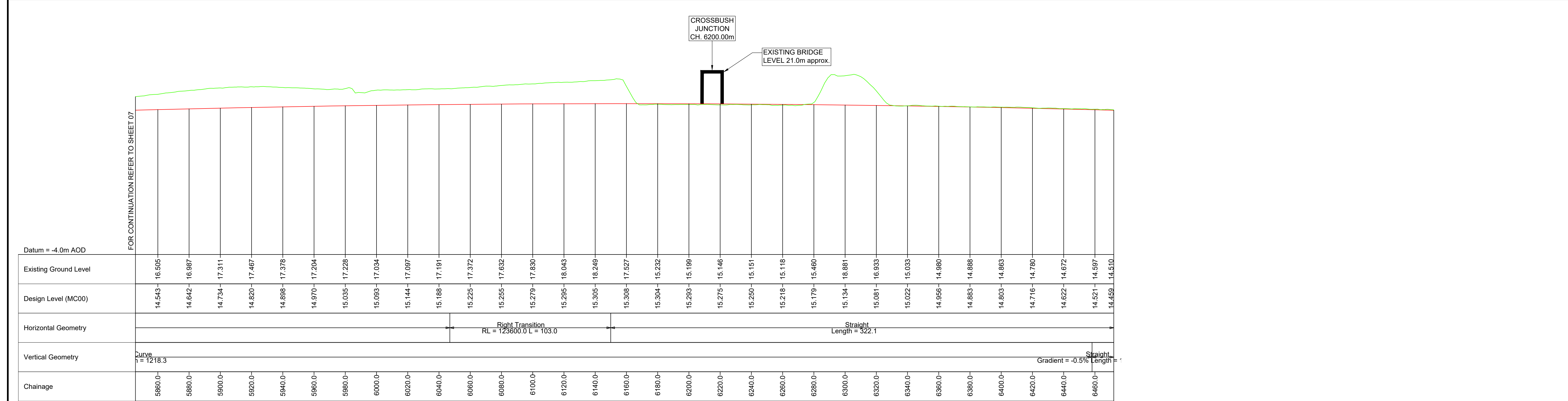
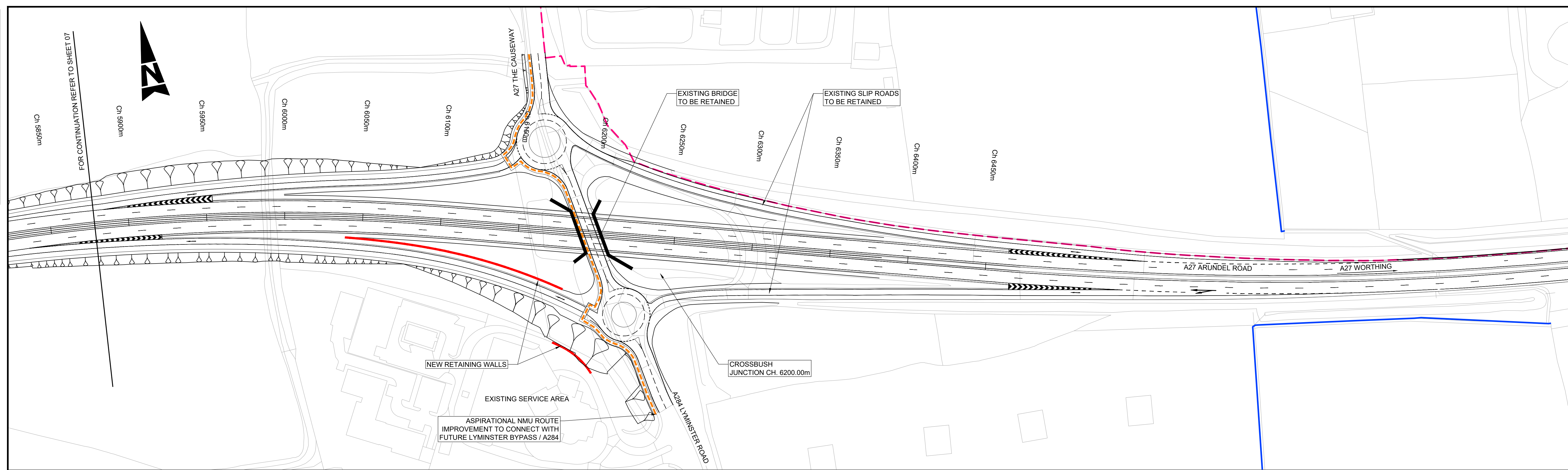
Project Ref. No.: 70015214

Revision: P01

Client: Working on behalf of highways england

DO NOT SCALE

Millimetres
0 10 100



NOTES:

- FOR KEY PLAN REFER TO DRG. NO. HE55123-WSP-HGN-A27AR_OP5AV-DR-CH-0100.
- THE ACCURACY OR THE ASSESSMENT OF OFFSETS, SETBACKS, PROXIMITY, FOOTPRINT AND SURFACE AREAS BETWEEN PROPOSED ROUTE AND EXISTING FEATURES IN SITE IS SUBJECT TO FORMAL OS MAPPING ACCURACY INFORMATION AND HIGH-LEVEL LIDAR DATA USED AT THIS STAGE OF THE DESIGN. NO ADDITIONAL ELEMENTS TO THE ONES ALREADY SHOWN ON THE PLANS (DRAINAGE FEATURES, ACCOMMODATION WORKS, LANDSCAPING, FENCING, OTHER STRUCTURES, ETC) ARE CONSIDERED AT THIS STAGE AS THEY WILL BE DEVELOPED AND INCLUDED IN THE NEXT STAGES OF THE DESIGN.

Scale 1:1250

This map is based on Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office. © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Highways England 10001820, 2015.

KEY:

- DESIGN LEVEL
- EXISTING LEVEL
- SOUTH DOWNS NATIONAL PARK OUTLINE
- EXISTING PRoW
- EXISTING BRIDLEWAYS
- PROPOSED PRoW DIVERSION
- PROPOSED SHARED PEDESTRIAN AND CYCLE PATH
- PROPOSED BRIDLEWAY
- ANCIENT WOODLAND
- VETERAN TREE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).

Category	Description
Construction	
Maintenance / Cleaning	
Use	
Decommissioning / Demolition	

Rev.	Date	Description	By	CHK'd	App'd
P01	05/04/18	First Issue	TC	KM	BS

Drawing Status		Suitability	Project Title			
FOR INFORMATION		S2	REGIONAL INVESTMENT PROGRAMME A27 ARUNDEL BYPASS			
<p>No. 2 London Square, Cross Lanes, Guildford, GU1 1UN T+ 44 (0) 1483 528400 wsp.com</p>		Drawing Title				
		INDICATIVE ALIGNMENT PROPOSALS LAYOUT OPTION 5AV SHEET 8 OF 8				
Scale	Drawn	Checked	Approved	Authorised		
1:1250	TC	KM	BS	---		
Original Size	Date	Date	Date	Date		
A1	05/04/18	05/04/18	05/04/18	---		
Drawing Number	Originator	Volume	Project Ref. No.			
Project	HE551523 - WSP - HGN -	A27AR_OP5AV - DR - CH - 0108	70015214			
Location	Type	Role	Number	Revision		
				P01		

Working on behalf of

Appendix D

AST'S

APPENDIX D-1

AST'S

Appraisal Summary Table		Date produced:	25 May 2018		Contact:						
Name of scheme:		A27 Arundel Bypass (Option 1)			Name	Sophie Hartfield					
Description of scheme:		Junction improvements at Ford Road Roundabout and Crossbush Junction, and online dualling with a short off-line section between these two junctions, bypassing Arundel station.			Organisation	Highways England					
Impacts		Summary of key impacts			Assessment (See Footnotes)						
		Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp				
Economy	Business users & transport providers	Time savings from a decrease in congestion are expected for most business users; a significant proportion of users will also have a reduction in journey time by travelling a distance at higher average speeds (using the bypass links). Journey time reductions are greatest during the PM peak period, but there are also significant benefits in the inter-peak and AM peak periods. It is also likely that there will be journey time reductions during non-modelled periods, at the weekend and during the off-peak period, although benefits to business users are likely to be relatively small given fewer number of business related trips during these periods. The journey time and operating cost savings for business users and transport providers including construction delays are £54.489m.			Value of journey time changes(£)	£57.831m	Not applicable	£54.489M	To be confirmed		
	Reliability impact on Business users	The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.			-					Moderate beneficial	Not assessed
	Regeneration	Not assessed.			-					Not applicable	Not applicable
	Wider Impacts	The wider impacts of the scheme have been calculated following the latest DfT guidance. These impacts are primarily driven by the reduction of journey times for individuals accessing employment and for businesses to move goods and services between one another. This reduction of friction within the economy is expected to boost trade and employment levels, with the resultant increase in overall output. The wider impacts reported on this scheme are Agglomeration Benefits and Labour Market Impacts			Agglomeration - £47.5m Labour Market Impacts (GDP) - £5.2m Labour Market impacts (Tax Wedge) - £2.1m		Not applicable	£54.8m			
Environmental	Noise	Sensitive receptors are primarily located within Arundel town, with some residential properties in the surrounding rural areas. The existing A27, which is a dominant source of noise in the baseline / do-minimum scenarios, follows a route through Arundel town from east to west. The following Noise Important Areas (NIAs) are within the study area: 5487, 5488, 12488, 5485, 5486, 5484, 6457, 12487 and 12486. With the implementation of noise mitigation measures adverse impacts within Arundel town are likely to be major in the short term and moderate in the long term. There are no major impacts predicted in the long term. Beneficial impacts are primarily minor along The Causeway, Queen Street and High Street. NIAs within the study area will experience a varying level of impact, with some NIAs experiencing increased levels (NIAs: 12486, 12487, 12488, 5486, 5487 and 5485), and three with reduced levels (NIAs: 5484, 5488 and 6157).			There are 1567 households expected to experience increased daytime noise levels in the forecast year, and 41 households expected to experience reduced daytime noise in forecast year.		Not applicable	£-9,966,530	To be confirmed		
	Air Quality	Overall, there is likely to be a beneficial impact with regard to local air quality concentrations decreasing at considered sensitive receptors within 200m of the local air quality affected road network. On a regional context, total mass emissions are predicted to increase as a result of the scheme. There are a number of receptors contained within designated AQMAs within 200m of the local air quality affected road network.			Local Air Quality: Opening Year Concentrations NO2 Overall Assessment Score = -1166.70. Properties with Improvement: 13094; deterioration: 12269; no change: 876 PM10 Overall Assessment Score = -3154.50. Properties with Improvement: 19648; deterioration: 3612; no change: 2981 Regional Air Quality: Emissions - The change in emissions of NOx is 725 tonnes over the 60 year appraisal period. Rail Emissions have not been taken into account.		Not applicable	Monetary Value of Change in NO _x = £402,681 Monetary Value of Change in PM ₁₀ = £9,654,623 Total Value of change in Air Quality = £9,251,942	To be confirmed		
	Greenhouse gases	Overall increase of 8,449 tonnes of CO2 in Opening Year (between 'with scheme' and 'without scheme' scenarios) and an increase of 6,939 tonnes of CO2 in 2041. The increase is associated with an overall increase in total vehicle kilometres travelled and speed changes on road links as a result of the scheme.			Change in non-traded carbon over 60y (CO2e)	430,675	Not applicable	Disbenefit £19,144,931			
				Change in traded carbon over 60y (CO2e)	0						
	Landscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape through appropriate screen planting on embankments and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to mitigate potentially significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Despite these measures, significant effects are anticipated to arise on the landscape associated with the setting of the South Downs National Park.			Not Applicable		Moderate Adverse	Not Applicable			
	Townscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape through appropriate screen planting on embankments and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to mitigate potentially significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Detailed mitigation measures will be identified during the design development and assessment at PCF Stage 3. Despite these measures, substantial change is anticipated to arise within the townscape associated with Arundel, due to changes in the scale and form that the A27 is anticipated to take.			Not Applicable		Moderate Adverse	Not Applicable			
	Historic Environment	The proposed off-line section of the scheme will cause disturbance during the construction phase through what is currently meadowland. Ground disturbance activities will include the widening of existing roads, the excavation of new roads and the excavation of associated services and compounds. There is the potential for adverse effects on earthworks or below ground heritage assets. These effects can be mitigated through an appropriate archaeological investigation. There is potential for adverse impacts on the setting of designated assets, including the Scheduled Arundel Castle, Arundel Conservation Area and the Grade II* Listed Priory Farmhouse in addition to the historic landscape of Brooks Innings. The impacts are likely to include harm to the relationship between the asset and its setting so that the appreciation or understanding of that setting is either slightly, significantly or substantially degraded. Further assessment will be undertaken at PCF Stage 3 to determine detailed mitigation strategies to reduce negative impacts. At this stage the overall impact of Option 1 is expected to be Large Adverse.			Not Applicable		Large Adverse	Not Applicable			
	Biodiversity	Option 1 is likely to result in moderate adverse ecological effects on a number of ecological features including: a Notable Road Verges, wetlands and watercourses; waterbodies (some of which may be Pond HP); Birds; Fish; invertebrates; reptiles; and water vole.			Not Applicable		Moderate Adverse	Not Applicable			
	Water Environment	Negligible impact is predicted to the quality of surface water and groundwater features during operation. Detailed mitigation will be developed during detailed design including an appropriate drainage system to provide treatment of runoff prior to discharge. However, given the sensitivity of groundwater resources to the north of Option 1 (comprising Principal Aquifer and a groundwater Source Protection Zone) and in accordance with WebTAG assessment guidance, a Low Significance impact is still recorded. The route across the River Arun will comprise a clear span bridge along the alignment of the existing A27. The route will also comprise a new crossing of the River Arun floodplain, to the east of Arundel, assumed to comprise an earth embankment. Without mitigation the structure will introduce a physical barrier to the movement of water and potentially groundwater and displace floodplain storage which could result in a large adverse impact. Appropriate mitigation will be included in the scheme design and will include, but is not limited to, floodplain compensation, maintaining flood flow and groundwater conveyance, provision of adequate drainage and pollution controls and appropriate culvert design. With appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be of Low Significance. The construction of supporting piles/footings for the embankment option, as well as the operational phase of the embankment could have a Slight Adverse impact on groundwater baseflow conveyance within the floodplain; however, with appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be insignificant.			Not Applicable		Low Significance	Not Applicable			
	Social	Commuting and Other users	Time savings from a decrease in congestion are expected for most commuter and other users; a significant proportion of users will also have a reduction in journey time by travelling distances at higher average speeds (using the bypass links). Journey time reductions are greatest during the PM peak period, but there are also significant benefits in the Inter-peak and AM peak periods. It is also likely that there will be journey time reductions during non-modelled periods, at the weekend and during the off-peak period, and benefits to 'other' users are likely to be significant given the higher proportion of these user related trips during these periods. The journey time and operating cost savings for commuting and other users including construction delays are £98.404m.			Value of journey time changes(£)	£118.911m	Not applicable	£98.404m	To be confirmed	
Reliability impact on Commuting and Other users		The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.			-		Moderate beneficial				Not Applicable
Physical activity		The Arundel Bypass will have an indirectly positive impact on physical activity as larger numbers of cyclists will be able to use roads where traffic has transferred away (to the upgraded A27). A simplified benefit calculation was chosen for the physical activity impact as the number of affected people is unknown.			The working population in Arun District is 88,420 and if the scheme encourages 1% of the working population to cycle to work, it would generate a benefit of £148,363 in reduced sick leave and £964,821 in reduced mortality, totalling £1,113,184 in benefits.		Slight Beneficial				Not Applicable
Journey quality		Journey quality improvements will include the reduction in drivers' 'stress' levels associated with the much improved travel conditions and characteristics on the A27. Reducing noise and air pollution would also have a positive effect on the journey quality. These will be beneficial across all income and social groups. The requirement for land acquisition, which when considered in isolation, could have a negative impact on journey quality, but this would be addressed through design mitigation measures.			Not quantified		Slight Beneficial	Not Applicable			
Accidents		COBALT assessment has shown that Option 1 would bring about significant accident benefits. Evidence indicates that people living in more deprived areas are more vulnerable to accidents on the road network. Therefore, a reduction in accidents would have a relatively high impact in Arun, given that several wards in this area are amongst the most deprived in West Sussex.			Total number of accidents along the new scheme between Mill Road/Tye Lane and Crossbush junction during 60 year period (2023-82), as predicted by COBALT, would be 538, compared with 946 for the Do Nothing scenario.		Moderate beneficial	£16.008m	To be confirmed		
Security		The benefits here are indirect in the sense that the scheme will not generate direct security enhancements but will instead enable drivers to feel more secure on a faster flowing, greatly improved section of the A27. Improved security will include less risk and less perceived risk of in-vehicle thefts and other adverse incidents when traffic is stationary (this is particularly relevant for the large numbers of older drivers in the area).			Not quantified		Slight Beneficial	Not Applicable	To be confirmed		
Access to services		Since the scheme does not change public transport services, the change in generalised journey time associated with modelled car trips (from the SATURN traffic model) have been used to assess the access to services. The assessment indicates that accessibility increases for all income groups to the destinations, with the highest accessibility benefits for the lowest income group.			In the opening year 2023, the lowest income group (0% to 20% quintile) would receive the highest accessibility benefits, with a reduction of 5.6% in generalised journey time. The 60-80% income quintile group would receive the lowest accessibility benefit, i.e. a 3.6% reduction in generalised journey time.		Not applicable	Not Applicable	To be confirmed		
Affordability		Since the Arundel improvement scheme is primarily provision of new roads, any changes in affordability are more likely to be indirect impacts rather than as a direct consequence of the scheme. As such, only a qualitative assessment has been undertaken. As the intervention is expected to reduce congestion and thereby the amount of time spent queuing, as well as longer distance travelled to avoid the congestion, this will reduce vehicle operating costs. Examples of these costs include fuel, tyres and the depreciation costs associated with maintenance. These latter costs are dependant on distance travelled and can make travelling more affordable.			Not quantified		Slight Beneficial	Not Applicable	To be confirmed		
Severance		Given the very high traffic volumes on the A27 near Arundel, compounded by the presence of large junctions at Ford Road and Causeway, pedestrian crossing opportunities are very limited. The distances involved and topography of the area make it difficult for vulnerable pedestrians (such as elderly people, children and disabled people) to walk from the residential areas to the south towards the town centre. Under Option 1, the existing alignment would be retained with upgraded carriageway works, with the implication that existing severance issues are unlikely to improve. Higher levels of traffic in the future would mean that severance issues could potentially deteriorate with Option 1.			Not quantified		Slight Adverse	Not Applicable	To be confirmed		
Option and non-use values		Since the scheme will not change the availability of transport services within the study area, option values and non-use values are not applicable for this assessment and have therefore not been assessed.			Not Applicable		Not Applicable	Not Applicable			
Public Accounts	Cost to Broad Transport Budget	All costs are funded by central government.			87,190,000		Not Applicable	£87.190m			
	Indirect Tax Revenues	An increase in indirect tax revenues is predicted as a result of the scheme.			17,056,000		Not Applicable	£17.056m			

Note:

The results for A27 Arundel Bypass (Option 1) are presented for completeness, but it should be borne in mind that the benefits are likely to be over-estimated. This is because the strategic SATURN model currently under-represents the delays which may potentially remain on the scheme section of the A27 - specifically at Ford Road Roundabout - for the current A27 Arundel Bypass (Option 1) scheme design.

All results e.g. Air Quality, Greenhouse Gases, Noise, TUBA, COBALT and Wider Economic Benefits for the A27 Arundel Bypass Option 1 scheme are based on information from strategic SATURN modelling however due to the strategic SATURN model currently under-representing delay at Ford Road roundabout the A27 Arundel Bypass (Option 1) benefits are uncertain.

Accident benefits are likely to be slightly under-estimated, Wider Economic Benefits are likely to be over-estimated with Greenhouse Gases, Air Quality and Noise also affected. Overall, there is uncertainty around the results for the A27 Arundel Bypass (Option 1) scheme. Due to the Transport Economic Efficiency (TEE) impacts making up a substantial proportion of the overall benefit the benefits are likely to be over-estimated.

Appraisal Summary Table		Date produced:	25 May 2018	Contact:					
Name of scheme:		A27 Arundel Bypass (Option 3)		Name	Sophie Hartfield				
Description of scheme:		A new offline dual carriageway south of Arundel tying in to the existing A27 west of Arundel passing through ancient woodland.		Organisation	Highways England				
				Role	Project Manager				
Impacts	Summary of key impacts	Assessment							
		Quantitative			Qualitative	Monetary £(NPV)	Distributional 7-pt scale/ vulnerable grp		
Economy	Business users & transport providers Time savings from a decrease in congestion are expected for most business users; a significant proportion of users will also have a reduction in journey time by travelling a distance at higher average speeds (using the bypass links). Journey time reductions are greatest during the PM peak period, but there are also significant benefits in the inter-peak and AM peak periods. It is also likely that there will be journey time reductions during non-modelled periods, at the weekend and during the off-peak period, although benefits to business users are likely to be relatively small given fewer number of business related trips during these periods. The journey time and operating cost savings for business users and transport providers including construction delays are £51.858m.	Value of journey time changes(£)		£58.445m		Not Applicable	£51.858m	To be confirmed	
		Net journey time changes (£)							
		0 to 2min	2 to 5min	> 5min					
		-153,000	39,630,000	18,968,000					
Reliability impact on Business users	The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.	Not quantified			Moderate beneficial	Not assessed			
Regeneration	Not assessed.				Not applicable	Not Applicable			
Wider Impacts	The wider impacts of the scheme have been calculated following the latest DfT guidance. These impacts are primarily driven by the reduction of journey times for individuals accessing employment and for businesses to move goods and services between one another. This reduction of friction within the economy is expected to boost trade and employment levels, with the resultant increase in overall output. The wider impacts reported on this scheme are Agglomeration Benefits and Labour Market Impacts	Agglomeration - £20.8m Labour Market Impacts (GDP) - £3.7m Labour Market Impacts (Tax Wedge) - £1.4m				Not applicable	£25.90m		
Noise	Sensitive receptors are primarily located within Arundel town, with some residential properties in the surrounding rural areas. The existing A27, which is a dominant source of noise in the baseline / do-minimum scenario, follows a route through Arundel town from east to west. The following Noise Important Areas (NIAs) are within the study area are 5490, 12489, 5487, 5488, 12488, 5484, 6157, 12487 and 12486. With the implementation of noise mitigation measures beneficial impacts within Arundel town are likely to be major in the short term and moderate in the long term. Major adverse impacts, follow the route of the proposed bypass to the south of Arundel town. NIAs within the study area will have a varying level of impact, with most seeing a beneficial change along the existing A27 route. Exceptions include NIA 12486 along Lyminster Road which experiences a minor adverse impact.	There are 568 households expected to experience increased daytime noise levels in the forecast year, and 192 households expected to experience reduced daytime noise in forecast year.				Not Applicable	£1,334,042	To be confirmed	
Air Quality	Overall, there is likely to be a beneficial impact with regard to local air quality concentrations decreasing at considered sensitive receptors within 200m of the local air quality affected road network. On a regional context, total mass emissions are predicted to increase as a result of the scheme. There are a number of receptors contained within designated AQMAs within 200m of the local air quality affected road network.	Local Air Quality: Opening Year Concentrations NO ₂ Overall Assessment Score = -845.30. Properties with Improvement: 15442; deterioration: 8714; no change: 1312 PM ₁₀ Overall Assessment Score = -3231.80. Properties with Improvement: 21479 deterioration: 2618; no change: 1371 Regional Air Quality: Emissions - The change in emissions of NO _x is 984 tonnes across the 60 year appraisal period. Rail Emissions have not been taken into account.				Not Applicable	Monetary Value of Change in NO _x = £ 782,645 Monetary Value of change in PM ₁₀ = £9,799,002 Total Value of change in Air Quality = £9,016,356	To be confirmed	
Greenhouse gases	Overall Increase of 11,534 tonnes of CO ₂ in Opening Year (between 'with scheme' and 'without scheme' scenarios) and an increase of 9,058 tonnes of CO ₂ in 2041. The increase is associated with an overall increase in total vehicle kilometres travelled and speed changes on road links as a result of the scheme.	Change in non-traded carbon over 60y (CO ₂ e)		566975		The emissions of CO ₂ increase as a result of the scheme by 566,975 tonnes for a projection of 60 years. The increase in CO ₂ due to opening the scheme is predicted to be 11,534 tonnes in the opening year.	Disbenefit £25,180,794		
		Change in traded carbon over 60y (CO ₂ e)		0					
Landscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape through appropriate screen planting on embankments and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to reduce potentially significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Detailed mitigation measures will be identified during the design development and assessment at PCF Stage 3 and in consultation with South Downs National Park Authority. Despite these measures, impacts are anticipated to remain significant due to the permanent loss of ancient woodland and presence of a substantial infrastructure corridor giving rise to changes within the South Downs National Park.	Not Applicable		Large Adverse		Not Applicable			
Townscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape and townscape through appropriate screen planting and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to reduce potentially significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Detailed mitigation measures will be identified during the design development and assessment at PCF Stage 3. Option 3 would avoid substantial changes arising within the townscape associated with Arundel.	Not Applicable		Neutral		Not Applicable			
Historic Environment	The proposed scheme will cause disturbance during the construction phase through what is currently greenfield or woodland. Ground disturbance activities will include the widening of existing roads, the excavation of new roads and the excavation of associated services. There is the potential for adverse effects on earthworks or below ground heritage assets. The removal of Ancient Woodland areas within Binsted Wood will almost certainly disturb archaeological features relating to occupational activity and historic stock management from the Prehistoric Period onwards including remains associated with the Chichester to Arundel Romano-British Road. Further to this, the proposed scheme is likely to have an adverse effect on the social value of the woods in particular on the practice of religious activities. These effects can be mitigated through an appropriate archaeological investigation. During the operation phase, there is the potential for adverse impacts upon the setting of designated assets, including two Grade II* listed buildings, two Grade II listed buildings, the Arundel Conservation Area, the Grade II* Park and Garden and the scheduled site of Tortington Augustinian Priory. The impacts are likely to include harm to the relationship between the asset and its setting so that the relationship is no longer readily appreciable; the interpretability of the significance of the asset is significantly reduced; a loss or reduction of rural tranquillity and / or where noise and air pollutants are likely to increase. Further assessment will be undertaken at PCF Stage 3 to determine detailed mitigation strategies to reduce negative impacts. At this stage the overall impact of Option 3 is expected to be Large Adverse.	Not Applicable		Large Adverse		Not Applicable			
Biodiversity	Option 3 is likely to result in numerous very large adverse ecological effects on ecological features, including: two Local Wildlife Sites, Ancient Woodland, woodland bats, hazel dormouse, water vole, notable plant species and wetland habitats. Placing the scheme on a viaduct over an embankment has a number of benefits for multiple ecological feature types relating to reduced footprint (reduced habitat loss) and reduced severance. However, a viaduct solution is unlikely to change the overall magnitude of predicted impacts.	Not Applicable		Very Large Adverse		Not Applicable			
Water Environment	Detailed mitigation will be developed during detailed design including an appropriate drainage system to provide treatment of runoff prior to discharge. However, given the sensitivity of groundwater resources to the north and east of the scheme (comprising Principal Aquifer) and in accordance with WebTAG assessment guidance, a Low Significance impact is still recorded. To the east of Arundel the road will pass through extensive floodplain associated with a network of land drains. The works could result in the loss of fluvial floodplain storage although, as above, mitigation has been considered. If appropriate floodplain compensation is provided and flood flow conveyance maintained, the residual risk is likely to be Negligible. Option 3 will also cross several land drains and watercourses to the west of Arundel. It is considered likely that the connectivity and flow capacity of these features can be maintained and hence the impact magnitude is likely to be Negligible and the overall impact will be Insignificant. Embankment Option - The new crossing of the River Arun will introduce a physical barrier to the movement of water and potentially groundwater and will displace floodplain storage. Without the inclusion of robust mitigation, the magnitude of the impact could be Large Adverse. Appropriate mitigation will be included in the scheme design and will include, but is not limited to, floodplain compensation, maintaining flood and groundwater flow conveyance, provision of adequate drainage and pollution controls and appropriate culvert design. With appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be of Low Significance. The supporting piles/footings for the embankment option could have a Large Adverse impact on groundwater baseflow conveyance within the floodplain; however, with appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be Insignificant. Viaduct Option - The structure should have limited impact to the movement of water and displace floodplain storage, although some compensation for bridge abutments and viaduct piers may be required. Without the inclusion of mitigation, the magnitude of the impact could be slight adverse. Appropriate mitigation will be included in the scheme design and will include, but is not limited to, floodplain compensation, maintaining flood flow conveyance, provision of adequate drainage and pollution controls and appropriate culvert design. With appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be of Low Significance.	Not Applicable		Low Significance		Not Applicable			
Commuting and Other users	Time savings from a decrease in congestion are expected for most commuter and other users; a significant proportion of users will also have a reduction in journey time by travelling distances at higher average speeds (using the bypass links). Journey time reductions are greatest during the PM peak period, but there are also significant benefits in the inter-peak and AM peak periods. It is also likely that there will be journey time reductions during non-modelled periods, at the weekend and during the off-peak period, and benefits to other users are likely to be significant given the higher proportion of these user related trips during these periods. The journey time and operating cost savings for commuting and other users including construction delays are £113.515m.	Value of journey time changes(£)		£142.471m		Not Applicable	£113.515m	To be confirmed	
		Net journey time changes (£)							
		0 to 2min	2 to 5min	> 5min					
		16,925,000	84,667,000	40,879,000					
Reliability impact on Commuting and Other users	The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.	Not quantified			Moderate beneficial	Not Applicable			
Physical activity	The Arundel Bypass will have an indirectly positive impact on physical activity as larger numbers of cyclists will be able to use roads where traffic has transferred away (to the upgraded A27). A simplified benefit calculation was chosen for the physical activity impact as the number of affected people is unknown.	The working population in Arun District is 88,420 and if the scheme encourages 1% of the working population to cycle to work, it would generate a benefit of £148,363 in reduced sick leave and £964,821 in reduced mortality, totalling £1,113,184.				Slight Beneficial	Not Applicable		
Journey quality	Journey quality improvements will include the reduction in drivers' 'stress' levels associated with the much improved travel conditions and characteristics on the A27. Reducing noise and air pollution would also have a positive effect on the journey quality. These will be beneficial across all income and social groups. The requirement for land acquisition, which when considered in isolation, could have a negative impact on journey quality, but this would be addressed through design mitigation measures.	Not quantified				Slight Beneficial	Not Applicable		
Accidents	COBAL assessment has shown that Option 3 would bring about significant accident benefits. Evidence indicates that people living in more deprived areas are more vulnerable to accidents on the road network. Therefore, a reduction in accidents would have a relatively high impact in Arun, given that several wards in this area are amongst the most deprived in West Sussex.	Total number of accidents along the new scheme between Mill Road/Tye Lane and Crossbush junction during 60 year period (2023-82), as predicted by COBAL, would be 219, compared with 346 for the Do Nothing scenario.				Large Beneficial	£34.778m	To be confirmed	
Security	The benefits here are indirect in the sense that the scheme will not generate direct security enhancements but will instead enable drivers to feel more secure on a faster flowing, greatly improved section of the A27. Improved security will include less risk and less perceived risk of in-vehicle thefts and other adverse incidents when traffic is stationary (this is particularly relevant for the large numbers of older drivers in the area).	Not quantified				Slight Beneficial	Not Applicable	To be confirmed	
Access to services	Since the scheme does not change public transport services, the change in generalised journey time associated with modified car trips (from the SATURN traffic model) have been used to assess the access to services. The assessment indicates that accessibility increases for all income groups to the destinations, with the highest accessibility benefits for the lowest income group.	In the opening year 2023, the lowest income group (0% to 20% quintile) would receive the highest accessibility benefits, with a reduction of 5.0% in generalised journey time. The 80-100% income quintile group would receive the lowest accessibility benefit, i.e. a 3.2% reduction in generalised journey time.				Not Applicable	Not Applicable	To be confirmed	
Affordability	Since the Arundel improvement scheme is primarily provision of new roads, any changes in affordability are more likely to be indirect impacts rather than as a direct consequence of the scheme. As such, only a qualitative assessment has been undertaken. As the intervention is expected to reduce congestion, and thereby the amount of time spent queuing, as well as longer distance travelled to avoid the congestion, this will reduce vehicle operating costs. Examples of these costs include fuel, tyres and the depreciation costs associated with maintenance. These latter costs are dependant on distance travelled and can make travelling more affordable.	Not quantified				Slight Beneficial	Not Applicable	To be confirmed	
Severance	For the Option 3 although completely new sections of road will be constructed away from areas of population, the current A27 alignment will be retained for 'local' traffic and will continue to act as a barrier between residential areas to the south and the town centre (albeit residual traffic volumes on the retained alignment will be lower than what they are today, thus reducing severance to a relatively limited extent).	Not quantified				Slight Beneficial	Not Applicable	To be confirmed	
Option and non-use values	Since the scheme will not change the availability of transport services within the study area, option values and non-use values are not applicable for this assessment and have therefore not been assessed.	Not Applicable				Not Applicable	Not Applicable		
Public Account	Cost to Broad Transport Budget	All costs are funded by central government.		166,997,000		Not Applicable	£166.997m		
	Indirect Tax Revenues	An increase in indirect tax revenues is predicted as a result of the scheme.		23,821,000		Not Applicable	£23.821m		

Appraisal Summary Table		Date produced:	25 May 2018	Contact:			
Name of scheme:		A27 Arundel Bypass (Option 5A)		Name	Sophie Hartfield		
Description of scheme:		A new off-ramp dual carriageway passing south of Tortington Priory, combining the eastern section of Option 3 and the western section of Option 5 to reduce visual intrusion and proximity to properties along Ford Road, Shellbridge Road and Yaptin Lane etc in with the existing A27 via the slip roads west of the dumb-bell roundabouts.		Organisation	Highways England		
				Role	Project Manager		
Impacts	Summary of key impacts	Assessment					
		Quantitative			Qualitative	Monetary (£NPV)	Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	Value of journey time changes (£)		£66,752m		To be confirmed	
		Net journey time changes (£)			Not Applicable		£66,889m
		0 to 2min	2 to 5min	> 5min			
		-917,000	38,428,000	29,241,000			
Reliability impact on Business users	The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.	-		Moderate beneficial	Not assessed		
Regeneration	Not assessed	-		Not applicable	Not Applicable		
Wider Impacts	The wider impacts of the scheme have been calculated following the latest DTI guidance. These impacts are primarily driven by the reduction of journey times for individuals accessing employment and for businesses to move goods and services between one another. The reduction of friction within the economy is expected to boost trade and employment levels, with the resultant increase in overall output. The wider impacts reported on this scheme are Agglomeration Benefits and Labour Market Impacts	Agglomeration - £19.3m Labour Market Impacts (GDP) - £2.6m Labour Market impacts (Tax Wedge) - £1.0m		Not applicable	£22.90m		
Noise	Sensitive receptors are primarily located within Arundel town, with some commercial and residential properties in the surrounding rural areas. The existing A27, which is a dominant source of noise in the baseline / do-minimum scenario, follows a route through Arundel town from east to west. The following Noise Important Areas (NIAs) are within the study area are 12490, 5490, 12489, 5487, 5488, 12488, 5484, 6157, 12487, 12486. With the implementation of noise mitigation measures beneficial impacts within Arundel town are likely to be major in the short term and moderate in the long term. Major adverse impacts follow the route of the proposed bypass to the south of Arundel. NIAs within the study area will experience a varying level of impact, with most seeing a beneficial change along the existing A27 route. Exceptions include NIA 12486 along Lymminster Road which experiences a minor adverse impact, and NIA 5490 which experiences a negligible impact.	There are 796 households expected to experience increased daytime noise levels in the forecast year, and 228 households expected to experience reduced daytime noise in forecast year.		Not Applicable	-£1,518,992	To be confirmed	
Air Quality	Overall, there is likely to be a beneficial impact with regard to local air quality concentrations decreasing at considered sensitive receptors within 200m of the local air quality affected road network. On a regional context, total mass emissions are predicted to increase as a result of the scheme. There are a number of receptors contained within designated AQMAs within 200m of the local air quality affected road network.	Local Air Quality: Opening Year Concentrations NO _x Overall Assessment Score = -754.30. Properties with Improvement: 13448; deterioration: 12003; no change: 319 PM ₁₀ Overall Assessment Score = -3189.85. Properties with Improvement: 20825; deterioration: 2240; no change: 2705 Regional Air Quality: Emissions - The change in emissions of NO _x is 974 tonnes across the 60 year appraisal period. Rail Emissions have not been taken into account.		Not Applicable	Monetary Value of Change in NO _x = £-542,997 Monetary Value of change in PM ₁₀ = £10,008,237 Total Value of change in Air Quality = £9,465,240	To be confirmed	
Greenhouse gases	Overall increase of 11,397 tonnes of CO ₂ in Opening Year (between 'with scheme' and 'without scheme' scenarios) and an increase of 8,522 tonnes of CO ₂ in 2041. The increase is associated with an overall increase in total vehicle kilometres travelled and speed changes on road links as a result of the scheme.	Change in non-traded carbon over 60y (CO ₂ e) 538677 Change in traded carbon over 60y (CO ₂ e) 0		The emissions of CO ₂ increase as a result of the scheme by 538,677 tonnes for a projection of 60 years. The increase in CO ₂ due to opening the scheme is predicted to be 11,397 tonnes in the opening year.	Disbenefit of £23,899,268		
Landscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape through appropriate screen planting on embankments and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to reduce significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Detailed mitigation measures for outstanding significant effects will be identified during the design development and in consultation with South Downs National Park Authority. Despite these measures, impacts are anticipated to remain significant due to the permanent loss of ancient woodland and presence of a substantial infrastructure corridor giving rise to changes within the South Downs National Park.	Not Applicable		Large Adverse	Not Applicable		
Townscape	For the purpose of the current assessment the assumption has been that a proposed mitigation strategy would seek to integrate a preferred scheme within the landscape and townscape through appropriate screen planting and adjacent to sensitive receptors, replacement roadside and boundary vegetation, with the aim to reduce potentially significant effects. The assessment assumes that the planting measures within the Arun floodplain would be restricted to grassland, in keeping with the open characteristics of the landscape. Detailed mitigation measures will be identified during the design development and assessment at PCF Stage 3. Option 5A would avoid substantial changes within the townscape associated with Arundel.	Not Applicable		Neutral	Not Applicable		
Historic Environment	The proposed scheme will cause disturbance during the construction phase through what is currently greenfield land. Ground disturbance activities will include the widening of existing roads, the excavation of new roads and the excavation of associated services. There is the potential for adverse effects on earthworks or below ground heritage assets. It is anticipated that the proposed scheme will result in the significant loss of former historic parkland associated with Binsted House, the partial loss of remains associated with the Chichester to Arundel Romano-British Road in addition to the loss of ancient hedgerows as it skirts the edge of a large area of Ancient Woodland. These effects can be mitigated through an appropriate archaeological investigation. During the operation phase, there is the potential for adverse impacts upon the setting of designated assets, including two Grade II* Listed buildings, 13 Grade II listed buildings, the Arundel Conservation Area and associated Grade II* Park and Garden, and the scheduled sites of Arundel Castle and Tortington Priory. The impacts are likely to include harm to the relationship between the asset and its setting so that the relationship is no longer readily appreciable, the interpretability of the significance of the asset is significantly reduced, a loss or reduction of rural tranquility and / or where noise and air pollutants are likely to increase. Further assessment will be undertaken at PCF Stage 3 to determine detailed mitigation strategies to reduce negative impacts. At this stage the overall impact of Option 5A is expected to be Large adverse.	Not Applicable		Large Adverse	Not Applicable		
Biodiversity	Option 5A is likely to result in numerous very large adverse ecological effects on a number of ecological features, including two Local Wildlife Sites, Ancient Woodland, woodland bates, hazel dormouse, water vole, notable plant species and wetland habitats. Placing the scheme on a viaduct over an embankment has a number of benefits for multiple ecological feature types relating to reduced footprint (reduced habitat loss) and reduced severance. However, a viaduct solution is unlikely to change the overall magnitude of predicted impacts.	Not Applicable		Very Large Adverse	Not Applicable		
Water Environment	Negligible impact is predicted to the quality of surface water and groundwater features during operation. Detailed mitigation will be developed during detailed design including an appropriate drainage system to provide treatment of runoff prior to discharge. However, given the sensitivity of groundwater resources to the north and east of the scheme (comprising Principal Aquifer) and in accordance with WebTAG assessment guidance, a Low Significance impact is still recorded. To the east of Arundel the road will pass through extensive floodplain associated with a network of land drains, which could result in the loss of fluvial floodplain storage. Without the inclusion of robust mitigation, the magnitude of the impact could be Moderate Adverse. If appropriate floodplain compensation is provided and flood flow conveyance maintained, the magnitude will be Negligible and the overall impact will be Insignificant. Option 5A will also cross several land drains and watercourses to the west of Arundel, most notably the Main River to the south of Binsted Wood. The design of the Main River crossing is assumed to be a clear span structure. It is considered likely that the connectivity and flow capacity of these features can be maintained and hence the impact magnitude is likely to be Negligible, resulting in an Insignificant impact. Embankment Option - The structure will introduce a physical barrier to the movement of water and potentially groundwater and displace floodplain storage. Without the inclusion of robust mitigation, the magnitude of the impact could be large adverse. Appropriate mitigation will be included in the scheme design and will include, but is not limited to, floodplain compensation, maintaining flood and groundwater flow conveyance, provision of adequate drainage and pollution controls and appropriate culvert design. With appropriate mitigation measures, the magnitude will be Negligible resulting in an overall impact of Low Significance. The construction of supporting piles/footings for the embankment option, as well as the operational phase of the embankment could have a Large adverse impact on groundwater baseflow conveyance within the floodplain; however, with appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be Insignificant. Viaduct Option - The structure should have limited impact to the movement of water and displace floodplain storage, although some compensation for bridge abutments and viaduct piers may be required. Without the inclusion of mitigation, the magnitude of the impact could be Slight Adverse. Appropriate mitigation will be included in the scheme design and will include, but is not limited to, floodplain compensation, maintaining flood flow conveyance, provision of adequate drainage and pollution controls and appropriate culvert design. With appropriate mitigation measures, the magnitude will be Negligible and the overall impact will be of Low Significance.	Not Applicable		Low Significance	Not Applicable		
Social	Commuting and Other users	Value of journey time changes (£)		£164,729m		To be confirmed	
		Net journey time changes (£)			Not Applicable		£141,410m
		0 to 2min	2 to 5min	> 5min			
		22,492,000	76,154,000	66,083,000			
	Reliability impact on Commuting and Other users	The scheme is expected to reduce journey times overall, and journey time variability is also expected to decrease although this has not been fully quantified/assessed.	Not quantified		Moderate beneficial	Not Applicable	
	Physical activity	The Arundel Bypass will have an indirectly positive impact on physical activity as larger numbers of cyclists will be able to use roads where traffic has transferred away (to the upgraded A27). A simplified benefit calculation was chosen for the physical activity impact as the number of affected people is unknown.	The working population in Arun District is 88,420 and if the scheme encourages 1% of the working population to cycle to work, it would generate a benefit of £148,363 in reduced sick leave and £964,821 in reduced mortality, totalling £1,113,184.		Slight Beneficial	Not Applicable	
	Journey quality	Journey quality improvements will include the reduction in drivers' stress levels associated with the much improved travel conditions and characteristics on the A27. Reducing noise and air pollution would also have a positive effect on the journey quality. These will be beneficial across all income and social groups. The requirement for land acquisition, which when considered in isolation, could have a negative impact on journey quality, but this would be addressed through design mitigation measures.	Not quantified		Slight Beneficial	Not Applicable	
	Accidents	COBALT assessment has shown that Option 5A would bring about significant accident benefits. Evidence indicates that people living in more deprived areas are more vulnerable to accidents on the road network. Therefore, a reduction in accidents would have a relatively high impact in Arun, given that several wards in this area are amongst the most deprived in West Sussex.	Total number of accidents along the new scheme between Mill Road/Tye Lane and Crossbush junction during 60 year period (2023-82), as predicted by COBALT, would be 191, compared with 346 for the Do Nothing scenario.		Large Beneficial	£30,042m	To be confirmed
	Security	The benefits here are indirect in the sense that the scheme will not generate direct security enhancements but will instead enable drivers to feel more secure on a faster flowing, greatly improved section of the A27. Improved security will include less risk and less perceived risk of in-vehicle thefts and other adverse incidents when traffic is stationary (this is particularly relevant for the large numbers of older drivers in the area).	Not quantified		Slight Beneficial	Not Applicable	To be confirmed
	Access to services	Since the scheme does not change public transport services, the change in generalised journey time associated with modelled car trips (from the SATURN traffic model) have been used to assess the access to services. The assessment indicates that accessibility increases for all income groups to the destinations, with the highest accessibility benefits for the lowest income group.	In the opening year 2023, the lowest income group (0% to 20% quintile) would receive the highest accessibility benefits, with a reduction of 6.0% in generalised journey time. The 80-100% income quintile group would receive the lowest accessibility benefit, i.e. a 3.9% reduction in generalised journey time.		Not Applicable	Not Applicable	To be confirmed
	Affordability	Since the Arundel improvement scheme is primarily provision of new roads, any changes in affordability are more likely to be indirect impacts rather than as a direct consequence of the scheme. As such, only a qualitative assessment has been undertaken. As the intervention is expected to reduce congestion and thereby the amount of time spent queuing, as well as longer distance travelled to avoid the congestion, this will reduce vehicle operating costs. Examples of these costs include fuel, tyres and the depreciation costs associated with maintenance. These latter costs are dependent on distance travelled and can make travelling more affordable.	Not quantified		Slight Beneficial	Not Applicable	To be confirmed
	Severance	For the Option 5A although completely new sections of road will be constructed away from areas of population, the current A27 alignment will be retained for 'local' traffic and will continue to act as a barrier between residential areas to the south and the town centre (albeit residual traffic volumes on the retained alignment will be lower than what they are today, thus reducing severance to a relatively limited extent).	Not quantified		Slight Beneficial	Not Applicable	To be confirmed
Option and non-use values	Since the scheme will not change the availability of transport services within the study area, option values and non-use values are not applicable for this assessment and have therefore not been assessed.	Not Applicable		Not Applicable	Not Applicable		
Public Access	Cost to Broad Transport Budget	All costs are funded by central government.		162,005,000	Not Applicable	£162,005m	
	Indirect Tax Revenues	An increase in indirect tax revenues is predicted as a result of the scheme.		21,461,000	Not Applicable	£21,461m	

Appendix E

NNPS COMPLIANCE TABLE

APPENDIX E-1

NNNPS COMPLIANCE TABLE

Where the National Policy Statement for National Networks (the NPS NN) specifically directs the Secretary of State to refuse consent

The NPS NN sets out numerous requirements for DCO applicants in their development of the scheme – e.g. in their assessment, stakeholder engagement, design and mitigation work. This document does not cover these. The NPS NN also gives direction for Secretary of State decision-making (and recommendations by the Examining Authority), content which is the focus of this note.

The objectives of the table below is to present where the NPS NN sets out circumstances in which the Secretary of State could refuse to consent the DCO application and to collate internal intelligence on a scheme-level of where these potential “show-stoppers” could be.

Project teams and their suppliers however must review the whole NPS NN. This includes other paragraphs dealing with the same topics as those in the table below, along with the other topics covered in the NPS NN but not listed below. Please also see the PCF product “*DCO Application - Planning Statement & National Policy Statement Accordance*” for further guidance.

Where the NPS NN sets out circumstances in which the Secretary of State could refuse to consent the DCO application - scheme-level assessment form

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
1	Safety	4.66	<p>The Secretary of State should not grant development consent unless satisfied that all reasonable steps have been taken and will be taken to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> minimise the risk of road casualties arising from the scheme; and <input type="checkbox"/> contribute to an overall improvement in the safety of the Strategic Road Network. 	<p>A scheme objective is improving safety for travellers along A27. Passes through urban area.</p> <p>The 60 year area wide benefits for this option is £16,008,000.</p> <p>In terms of total number of accidents with casualties along this option between Mill Road / Tye Lane and Crossbush Junction during the 60 year period will be 549. This is more than the ‘do minimum case’ which will lead to 346 accidents with casualties over the same period.</p> <p>The accident analysis in COBALT for this option is based on traffic flows from SATURN modelling, therefore due to capacity issues at Ford Road roundabout the accident benefits are likely to be under-estimated.</p>	<p>This option will address the need set out in the NPS NN. A scheme objective is improving safety for travellers along A27.</p> <p>This option improves safety by increasing capacity along the A27, and consequently reducing re-routing through the smaller villages, particularly along the B2233. This options diverts traffic away from Arundel, reducing the likelihood of incidents with pedestrians, and cyclists alongside the section of carriageway within the urban area.</p> <p>The 60 year area wide benefit for this option is £34,778,000.</p> <p>In terms of total number of accidents with casualties along this option between Mill Road / Tye Lane and Crossbush Junction during the 60 year period will be 219. This is less than the ‘do minimum case’ which will lead to 346 accidents with casualties over the same period.</p>	<p>This option will address the need set out in the NPS NN. A scheme objective is improving safety for travellers along A27.</p> <p>This option improves safety by increasing capacity along the A27, and consequently reducing re-routing through the smaller villages, particularly along the B2233.</p> <p>This options diverts traffic away from Arundel, reducing the likelihood of incidents with pedestrians, and cyclists alongside the section of carriageway within the urban area.</p> <p>The 60 year area wide benefit for this option is £30,042,000.</p> <p>In terms of total number of accidents with casualties along this option between Mill Road / Tye Lane and Crossbush Junction during the 60 year period will be 190. This is less than the ‘do minimum case’ which will lead to 346 number of accidents with casualties over the same period.</p>
2	Air quality	5.13	<p>The Secretary of State should refuse consent where, after taking into account mitigation, the air quality impacts of the scheme will:</p> <ul style="list-style-type: none"> <input type="checkbox"/> result in a zone/agglomeration which is currently reported as being compliant with the Air Quality Directive becoming non-compliant; or <input type="checkbox"/> affect the ability of a non-compliant area to achieve compliance within the most recent timescales reported to the European Commission at the time of the decision. 	No zones/agglomerations relevant	No zones/agglomerations relevant	No zones/agglomerations relevant

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
3	Sites of Special Scientific Interest (includes National Nature Reserves)	5.29	Where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect on the site's notified special interest features is likely, an exception should be made only where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs.....	Arundel Park SSSI within 0.5 km. Effects unlikely but not ruled out	Two SSSIs lie at some distance, not likely to be affected. The closest being Arundel Park and Fairmile Bottom SSSIs both over 1 kilometre away at their closest points.	Two SSSIs lie at some distance, not likely to be affected. The closest being Arundel Park and Fairmile Bottom SSSIs both over 1 kilometre away at their closest points.
4	Irreplaceable habitats including ancient woodland and veteran trees	5.32	The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss...	Loss of Ancient Woodland. Any loss will need to be compensated for.	Loss of Ancient Woodland. Any loss will need to be compensated for.	Loss of Ancient Woodland. Any loss will need to be compensated for.
5	Protection of other habitats and species ***	5.35 (+ 4.22– 4.25 + 5.27)	... The Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm.	Severance of woodland/hedgerow habitats may affect Annex 2/4 species (certain bats). Small loss of Habitats of Principal Importance Coastal Grazing Marsh.	Severance of woodland/hedgerow habitats may affect Annex 2/4 species (certain bats, and hazel dormouse). Could affect conservation status (an overriding legal consideration). Numerous other protected species affected. Loss of areas of Habitats of Principal Importance Coastal Grazing Marsh and deciduous woodland.	Severance of woodland/hedgerow habitats may affect Annex 2/4 species (certain bats, and hazel dormouse). Could affect conservation status (an overriding legal consideration). Numerous other protected species affected. Loss of areas of Habitats of Principal Importance Coastal Grazing Marsh and deciduous woodland.
6	Civil and military aviation and defence interests	5.62	Where, after reasonable mitigation, operational changes and planning obligations and requirements have been proposed, development consent should not be granted if the Secretary of State considers that: <ul style="list-style-type: none"> <input type="checkbox"/> a development would prevent a licensed aerodrome from maintaining its licence; <input type="checkbox"/> the benefits of the proposed development are outweighed by the harm to aerodromes serving business, training or emergency service needs; or <input type="checkbox"/> the development would significantly impede or compromise the safe and effective use of defence assets or significantly limit military training. 	Not believed to affect aerodromes. However, the Civil Aviation Authority has not yet been consulted.	Not believed to affect aerodromes. However, the Civil Aviation Authority has not yet been consulted.	Not believed to affect aerodromes. However, the Civil Aviation Authority has not yet been consulted.
7	Coastal change	5.75	When assessing applications in a CCMA, [Coastal Change Management Area], the Secretary of State should not grant development consent unless it is demonstrated that the development: <ul style="list-style-type: none"> <input type="checkbox"/> will be safe over its planned lifetime and will not have an unacceptable impact on coastal change; <input type="checkbox"/> will not compromise the character of the coast covered by designations; <input type="checkbox"/> provides wider sustainability benefits; and <input type="checkbox"/> does not hinder the creation and maintenance of a continuous signed and managed route around the coast. 	Not near coast	Not near coast	Not near coast

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
8	Flood risk	5.99 & 5.108	<p>When determining an application the Secretary of State should be satisfied that flood risk will not be increased elsewhere and only consider development appropriate in areas at risk of flooding where (informed by a flood risk assessment, following the Sequential Test and, if required, the Exception Test), it can be demonstrated that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location; and <input type="checkbox"/> development is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and priority is given to the use of sustainable drainage systems. <p>Both elements of the test will have to be passed for development to be consented. For the Exception Test to be passed:</p> <ul style="list-style-type: none"> <input type="checkbox"/> it must be demonstrated that the project provides wider sustainability benefits to the community⁹⁵ that outweigh flood risk; and <input type="checkbox"/> a FRA must demonstrate that the project will be safe for its lifetime, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall. 	<p>Increased flood risk to urban areas and infrastructure.</p> <p>Embankment causing significant loss of storage within functional flood plain. Compensatory storage, and sequential and exceptional test required.</p> <p>Careful design to maintain conveyance capacity and include compensatory storage will be necessary.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>	<p>Increased flood risk to urban areas and infrastructure.</p> <p>Embankment (or potentially viaduct) causing significant loss of storage within functional flood plain. Compensatory storage, and sequential and exceptional test required.</p> <p>Careful design to maintain conveyance capacity and include compensatory storage will be necessary.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>	<p>Increased flood risk to urban areas and infrastructure.</p> <p>Embankment (or potentially viaduct) causing significant loss of storage within functional flood plain. Compensatory storage, and sequential and exceptional test required</p> <p>Careful design to maintain conveyance capacity and include compensatory storage will be necessary.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>
9	The historic environment (designated heritage assets) ****	5.133	<p>Where the proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the Secretary of State should refuse consent unless it can be demonstrated that the substantial harm or loss of significance is necessary in order to deliver substantial public benefits that outweigh that loss or harm, or alternatively that all of the following apply:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the nature of the heritage asset prevents all reasonable uses of the site; and <input type="checkbox"/> no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and <input type="checkbox"/> conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and <input type="checkbox"/> the harm or loss is outweighed by the benefit of bringing the site back into use. 	<p>A total of four heritage assets are expected to be harmed as a result of this option. These include one Scheduled Monument (<i>large adverse permanent effect</i>), one Grade II* Listed Building (<i>large adverse permanent effect</i>), one conservation area (<i>large adverse permanent effect</i>) and one historic landscape (<i>Moderate adverse permanent effect</i>).</p> <p>Adverse effects are also anticipated on hitherto unknown below-ground archaeology.</p> <p>With implementation of mitigation measures the severity of effects will likely be reduced.</p>	<p>A total of 13 heritage assets are expected to be harmed as a result of Option 3 including 9 large adverse permanent effects.</p> <p>These include two Scheduled Monuments, two Grade II* and three Grade II Listed Buildings, one conservation area and five non-designated heritage assets including three historic landscapes.</p> <p>Adverse effects are also anticipated on hitherto unknown below-ground archaeology.</p> <p>With implementation of mitigation measures the severity of effects will likely be reduced.</p>	<p>A total of 23 heritage assets are expected to be harmed as a result of Option 5A including 8 large adverse permanent effects.</p> <p>These include two Scheduled Monuments, two Grade II* and 13 Grade II Listed Buildings, one conservation area, four non-designated heritage assets included two historical landscapes.</p> <p>Adverse effects are also anticipated on hitherto unknown below-ground archaeology.</p> <p>With implementation of mitigation measures the severity of effects will likely be reduced.</p>

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
10	Nationally designated areas: National Parks, the Broads & Areas of Outstanding Natural Beauty	5.151 & 5.152	<p>The Secretary of State should refuse development consent in these areas except in exceptional circumstances and where it can be demonstrated that it is in the public interest. Consideration of such applications should include an assessment of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the need for the development, including in terms of any national considerations, and the impact of consenting, or not consenting it, upon the local economy; <input type="checkbox"/> the cost of, and scope for, developing elsewhere, outside the designated area, or meeting the need for it in some other way; and <input type="checkbox"/> any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated. <p>There is a strong presumption against any significant road widening or the building of new roads and strategic rail freight interchanges in a National Park, the Broads and Areas of Outstanding Natural Beauty, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Planning of the Strategic Road Network should encourage routes that avoid National Parks, the Broads and Areas of Outstanding Natural Beauty.</p>	<p>Land take in South Downs National Park. Potential impacts on special purposes: wildlife, natural beauty.</p> <p>The potential to detract from the South Downs National Park, its setting and the special qualities of the designated landscape.</p> <p>Option 1 would not create a new component within the South Downs National Park itself. However, it would increase the existing influence of the A27 has on the experiential qualities of the South Downs National Park west of Arundel where it shares the existing alignment.</p> <p>Option 1 would be visible from 12 of the 30 viewpoints representing a range of views and receptors across the study area.</p>	<p>Land take required from South Downs National Park. Potential impacts on special purposes: wildlife, natural beauty, recreation.</p> <p>This option has the potential to detract from the South Downs National Park, its setting and the special qualities of the designated landscape.</p> <p>Options 3 would introduce new and extensive detractions to the setting across a larger extent of the South Downs National Park.</p> <p>Option 3 would be visible from 20 of the 30 viewpoints representing a range of views and receptors across the study area.</p>	<p>Significant land take in South Downs National Park. Potential impacts on special purposes: wildlife, natural beauty, recreation.</p> <p>This option has the potential to detract from the South Downs National Park, its setting and the special qualities of the designated landscape.</p> <p>Option 5A would introduce new and extensive detractions to the setting across a larger extent of the South Downs National Park.</p> <p>Option 5A would be visible from 23 of the 30 viewpoints representing a range of views and receptors across the study area.</p>
11	Land use: Green Belt	5.170 & 5.178	<p>.... Metropolitan Open Land, and land designated as Local Green Space in a local or neighbourhood plan, are subject to the same policies of protection as Green Belt, and inappropriate development should not be approved except in very special circumstances.</p> <p>When located in the Green Belt national networks infrastructure projects may comprise inappropriate development. Inappropriate development is by definition harmful to the Green Belt and there is a presumption against it except in very special circumstances. The Secretary of State will need to assess whether there are very special circumstances to justify inappropriate development. Very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. In view of the presumption against inappropriate development, the Secretary of State will attach substantial weight to the harm to the Green Belt, when considering any application for such development.</p>	Not likely to be affected	Not likely to be affected	Not likely to be affected
12	Land use: open space / sports and recreational buildings and land	5.174	<p>The Secretary of State should not grant consent for development on existing open space, sports and recreational buildings and land, including playing fields, unless an assessment has been undertaken either by the local authority or independently, which has shown the open space or the buildings and land to be surplus to requirements, or the Secretary of State determines that the benefits of the project (including need) outweigh the potential loss of such facilities, taking into account any positive proposals made by the applicant to provide new, improved or compensatory land or facilities.</p>	<p>Option close to urban areas, including houses and the town.</p> <p>Some land involved in this option is in existing highways boundary.</p> <p>Arundel Cricket Club affected. However, overcoming the benefits versus need test is considered to be possible.</p>	<p>Several footpaths severed - impact on recreation.</p>	<p>Severance of Binsted Park (open area used recreationally albeit possibly not formal "public open space"). Small area of common land affected, which would potentially require replacement.</p> <p>Several footpaths severed - impact on recreation.</p>

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
13	Noise and vibration	5.195	<p>The Secretary of State should not grant development consent unless satisfied that the proposals will meet, the following aims, within the context of Government policy on sustainable development:</p> <ul style="list-style-type: none"> <input type="checkbox"/> avoid significant adverse impacts on health and quality of life from noise as a result of the new development; <input type="checkbox"/> mitigate and minimise other adverse impacts on health and quality of life from noise from the new development; and <input type="checkbox"/> contribute to improvements to health and quality of life through the effective management and control of noise, where possible. 	<p>Adverse noise impacts within Arundel town are likely to be major in the short term and moderate in the long term. There are no major impacts predicted in the long term. Beneficial impacts are primarily minor along the Causeway, Queen Street and High Street. NIAs within the study area will have a varying level of impact, with some NIAs experiencing increased levels, and three with reduced levels.</p>	<p>Beneficial noise impacts within Arundel town are likely to be major in the short term and moderate in the long term. Major adverse impacts, follow the route of the proposed bypass to the south of Arundel, as a worst case.</p> <p>NIAs within the study area will have a varying level of impact, but most seeing a beneficial change along the existing A27 route.</p> <p>Exceptions include NIA along Lyminster Road which experiences a minor adverse impact.</p>	<p>Beneficial noise impacts within Arundel town are likely to be major in the short term and moderate in the long term, as a worst case. Major adverse impacts follow the route of the proposed bypass to the south of Arundel, as a worst case.</p> <p>NIAs within the study area will have a varying level of impact, with most seeing a beneficial change along the existing A27 route.</p> <p>Exceptions include NIA along Lyminster Road predicted to experience a minor adverse impact, and 1 NIA experiences a negligible impact.</p>
14	Water quality and resources	5.227	<p>... If the Environment Agency continues to have concerns and objects to the grant of development consent on the grounds of impacts on water quality/resources, the Secretary of State can grant consent, but will need to be satisfied before deciding whether or not to do so that all reasonable steps have been taken by the applicant and the Environment Agency to try to resolve the concerns, and that the Environment Agency is satisfied with the outcome.</p>	<p>Potential adverse - bedrock is primary and secondary aquifer but existing alignment used. 300m from a Source Protection Zone.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>	<p>Potential adverse - bedrock underneath the route is primary and secondary aquifer. Not within a Source Protection Zone but within 200m of three abstractions. New river crossing.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>	<p>Potential adverse - bedrock is primary and secondary aquifer but existing alignment used. Not within a Source Protection Zone but within 500m of three abstractions. New river crossing.</p> <p>With mitigation measures implemented the impacts are envisaged to be neutral.</p>
15	Other	N/A	<p>Opportunity for the project team to raise any other areas of concern following their review of the NN NPS.</p>	<p>At least two overriding legal obligations might also affect the ability of the SoS to make a DCO:</p> <ol style="list-style-type: none"> 1. HE licence duty in relation to AW and other residual environmental impacts - Ancient Woodland loss. Any loss will need to be compensated for. 2. Duty of HE as a public body to have regard to the special purposes of the National Park, which include biodiversity, recreation and landscape (moderately affected) - Ancient Woodland loss and significant land take in National Park and within 0.5km of Arundel SSSI. 	<p>At least three overriding legal obligations might also affect the ability of the SoS to make a DCO:</p> <ol style="list-style-type: none"> 1. HE licence duty in relation to AW and other residual environmental impacts. Takes Ancient Woodland. Any loss will need to be compensated for. 2. Duty of HE as a public body to have regard to the special purposes of the National Park, which include biodiversity, recreation and landscape (all significantly affected) - Ancient Woodland loss and significant land take in National Park and potentially large impacts on special purposes: wildlife, natural beauty, recreation. 3. Duty under the Habitats Regulations 2010 to avoid impacts on conservation status of certain species (Bechstein and Barbastelle bat, potentially hazel dormouse). 	<p>At least two overriding legal obligations might also affect the ability of the SoS to make a DCO:</p> <ol style="list-style-type: none"> 1. HE licence duty in relation to AW and other residual environmental impacts – Takes Ancient Woodland. Any loss will need to be compensated for. 2. Duty of HE as a public body to have regard to the special purposes of the National Park, which include biodiversity, recreation and landscape (all significantly affected) - Ancient Woodland loss and significant land take in National Park and potentially large impacts on special purposes: wildlife, natural beauty, recreation. 3. Duty under the Habitats Regulations 2010 to avoid impacts on conservation status of certain species (Bechstein and Barbastelle bat, potentially hazel dormouse).

No	Topic	NPS NN Para	Wording	Option 1	Option 3	Option 5A
	Preliminary view of planning balance			<p>The current challenges highlighted in this table will need to be carefully considered in design and development of mitigation measures. These issues will be considered during PCF Stage 3 (DCO application).</p> <p>There are a number of legal obligations on Highways England out of which two obligations are likely to be affected.</p>	<p>The current challenges highlighted in this table will need to be carefully considered in design and development of mitigation measures. These issues will be considered during PCF Stage 3 (DCO application).</p> <p>There are a number of legal obligations on Highways England out of which three obligations are likely to be affected.</p>	<p>The current challenges highlighted in this table will need to be carefully considered in design and development of mitigation measures. These issues will be considered during PCF Stage 3 (DCO application).</p> <p>There are a number of legal obligations on Highways England out of which three obligations are likely to be affected.</p>

Notes:

* RAG: Green = no impact / positive impact; Amber = impact TBC dependent e.g. on option selection and / or Stage 3 design and / or EIA; Red = definite negative impact with all / chosen option(s) and irrespective of level of design and EIA.

** RAG Comment: Any Amber or Red ratings require *brief* clarifying comment e.g. name of receptor(s) for Red rating and name of receptor(s) + identification of uncertainty e.g. “Norfolk Broads - option-dependent (Option 1 only)”.

*** Protection of other habitats and species: Lists of habitats and species of principal importance for the conservation of biological diversity in England published in response to Section 41 of the Natural Environment and Rural Communities Act 2006 are available from the Biodiversity Action Reporting System website.) For ease, this section also should be used to accommodate consideration of European / International sites identified through international conventions and European Directives and given protection under the Habitats Regulations, e.g. Ramsar sites, Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas. See paragraphs 4.22 – 4.25 and 5.27 of the NN NPS.

**** Designated heritage assets categories: World Heritage Sites; Scheduled Monuments; Listed Buildings; Protected Wreck Sites; Protected Military Remains; Registered Parks and Gardens; and Registered Battlefields; Conservation Areas. Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments, should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.

Legal Tests

In developing our schemes, Highways England also must take into account the need to satisfy various legal tests, many of which stem from European legislation. References to these are provided in the appropriate areas of the NN NPS. These include (amongst others) the pieces of legislation commonly referred to as:

- The Environmental Impact Assessment Directive (transposed through updated EIA Regulations 2017)
- The Habitats Directive
- The Water Framework Directive
- The Air Quality Directive

Moreover, legislation also gives protection to species and habitats, e.g. the National Parks and Access to Countryside Act 1949 and the Countryside and Rights of Way Act 2000

If you need help accessing this or any other Highways England information, please call **0300 123 5000** and we will help you.

