



Highways England

A2 Bean and Ebbsfleet Junction Improvements

Scheme Assessment Report - Volume 2 Drawings

August 2017

HA543917-HHJV-GEN-PCF-0017



Document Control

The Project Manager is responsible for production of this document, based on the contributions made by his/her team existing at each Stage.

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Author	Kingsley Chapman
Owner	Hugh Coakley
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1.0	26/05/17	First draft	Kingsley Chapman
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1.4	18/08/17	Final for sign off	Kingsley Chapman

Reviewer List

Name	Role
Mike Jones	Highways England TAME
Ellen Bedford	Highways England SES Environment
Nicholas Bentall	Highways England SES
Hugh Coakley	Highways England Integrated Project Team – Project Manager

Approvals

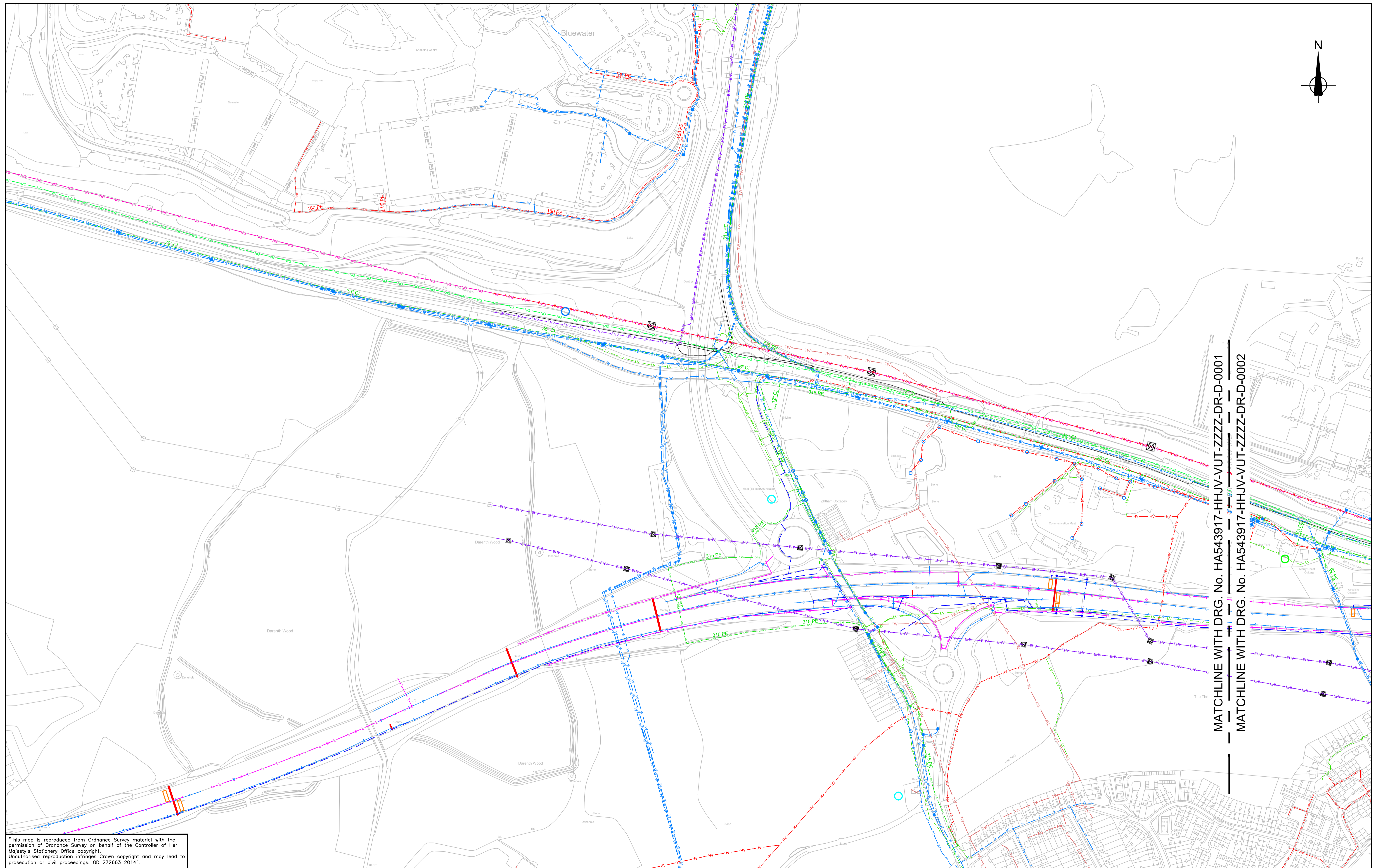
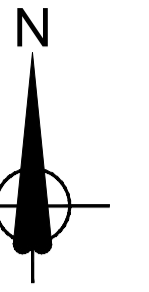
The Project SRO is accountable for the content of this document.

Name	Signature	Title	Date of Issue	Version
Andy Salmon		Senior Responsible Owner		

Volume 2 Drawings:

Drawing Number	Title
Existing Conditions	
HA543917-HHJV-VUT-ZZZZ-DR-D-0001	Existing Services Sheet 1 of 4
HA543917-HHJV-VUT-ZZZZ-DR-D-0002	Existing Services Sheet 2 of 4
HA543917-HHJV-VUT-ZZZZ-DR-D-0003	Existing Services Sheet 3 of 4
HA543917-HHJV-VUT-ZZZZ-DR-D-0004	Existing Services Sheet 4 of 4
HA543917-HHJV-HGN-XXXX-DR-D-0144	Existing Road Layout Sheet 1 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0145	Existing Road Layout Sheet 2 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0146	Existing Road Layout Sheet 3 of 3
HA543917-HHJV-GEN-ZZZZ-DR-D-0167	Highways England Existing Maintenance Area Sheet 1 of 4
HA543917-HHJV-GEN-ZZZZ-DR-D-0168	Highways England Existing Maintenance Area Sheet 2 of 4
HA543917-HHJV-GEN-ZZZZ-DR-D-0169	Highways England Existing Maintenance Area Sheet 3 of 4
HA543917-HHJV-GEN-ZZZZ-DR-D-0170	Highways England Existing Maintenance Area Sheet 4 of 4
HA543917-HHJV-SGN-ZZZZ-DR-Z-1700	Existing Structures Sheet 1 of 3
HA543917-HHJV-SGN-ZZZZ-DR-Z-1701	Existing Structures Sheet 2 of 3
HA543917-HHJV-SGN-ZZZZ-DR-Z-1702	Existing Structures Sheet 3 of 3
HA543917-HHJV-HDG-ZZZZ-DR-D-0001	Existing Drainage Catchments
HA543917-HHJV-HGT-ZZZZ-DR-GE-0007	Superficial Geology
HA543917-HHJV-HGT-ZZZZ-DR-GE-0008	Bedrock Geology
HA543917-HHJV-HGT-ZZZZ-DR-GE-0009	Soluble Rock and Natural Cavities Bean Junction
HA543917-HHJV-HGT-ZZZZ-DR-GE-0010	Soluble Rock and Natural Cavities Ebbsfleet Junction
HA543917-HHJV-HGT-ZZZZ-DR-GE-0011	Historic Mining and Quarrying Bean Junction
HA543917-HHJV-HGT-ZZZZ-DR-GE-0012	Historic Mining and Quarrying Ebbsfleet Junction
Planning Factors	
HA543917-HHJV-HGN-XXXX-DR-D-0051	Engineering Constraints Sheet 1 of 4
HA543917-HHJV-HGN-XXXX-DR-D-0052	Engineering Constraints Sheet 2 of 4
HA543917-HHJV-HGN-XXXX-DR-D-0053	Engineering Constraints Sheet 3 of 4
HA543917-HHJV-HGN-XXXX-DR-D-0054	Engineering Constraints Sheet 4 of 4
Description of Junction Options	
HA543917-HHJV-HGN-XXXX-DR-D-0147	Bean Junction Concept Option 1
HA543917-HHJV-HGN-XXXX-DR-D-0148	Bean Junction Concept Option 2
HA543917-HHJV-HGN-XXXX-DR-D-0149	Bean Junction Concept Option 3

HA543917-HHJV-HGN-XXXX-DR-D-0150	Bean Junction Concept Option 4
HA543917-HHJV-HGN-XXXX-DR-D-0151	Ebbsfleet Junction Concept Option 1
HA543917-HHJV-HGN-XXXX-DR-D-0152	Ebbsfleet Junction Concept Option 2
HA543917-HHJV-HGN-XXXX-DR-D-0153	Ebbsfleet Junction Concept Option 3
HA543917-HHJV-HGN-XXXX-DR-D-0154	Ebbsfleet Junction Concept Option 4
HA543917-HHJV-HGN-XXXX-DR-D-0009	Bean Junction Option 1c
HA543917-HHJV-HGN-XXXX-DR-D-0010	Bean Junction Option 2a
HA543917-HHJV-HGN-XXXX-DR-D-0011	Bean Junction Option 3a
HA543917-HHJV-HGN-XXXX-DR-D-0012	Bean Junction Option 4a
HA543917-HHJV-HGN-XXXX-DR-D-0013	Bean Junction Option 4b
HA543917-HHJV-HGN-XXXX-DR-D-0014	Bean Junction Option 4c
HA543917-HHJV-HGN-XXXX-DR-D-0015	Ebbsfleet Junction Option 1
HA543917-HHJV-HGN-XXXX-DR-D-0016	Ebbsfleet Junction Option 2
HA543917-HHJV-HGN-XXXX-DR-D-0129	B03E01b Highway Layout Sheet 1 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0130	B03E01b Highway Layout Sheet 2 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0131	B03E01b Highway Layout Sheet 3 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0132	B04bE01b Highway Layout Sheet 1 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0133	B04bE01b Highway Layout Sheet 2 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0134	B04bE01b Highway Layout Sheet 3 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0135	B05E01b Highway Layout Sheet 1 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0136	B05E01b Highway Layout Sheet 2 of 3
HA543917-HHJV-HGN-XXXX-DR-D-0137	B05E01b Highway Layout Sheet 3 of 3
Safety Assessment	
HA543917-HHJV-GEN-XXXX-DR-D-0031	Hazard Plan Sheet 1 of 4
HA543917-HHJV-GEN-XXXX-DR-D-0032	Hazard Plan Sheet 2 of 4
HA543917-HHJV-GEN-XXXX-DR-D-0033	Hazard Plan Sheet 3 of 4
HA543917-HHJV-GEN-XXXX-DR-D-0034	Hazard Plan Sheet 4 of 4
Comments From Public Consultation	
HA543917-HHJV-GEN-ZZZZ-SK-D-0003	B255\A296 Junction With Restricted Movements



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KEY					
	SOUTHERN GAS - LHP MAIN		NATIONAL GRID - UNDERGROUND CABLE		VIRGIN MEDIA
	SOUTHERN GAS - MP MAIN		NATIONAL GRID - OVERHEAD CABLE		AREA 4 - LIGHTING CABLE
	BT OPENREACH - UNDERGROUND CABLE		UK POWER NETWORKS - EHV		AREA 4 - LIGHTING COLUMN
	BT OPENREACH - OVERHEAD CABLE		UK POWER NETWORKS - HV		GENESYS - DUCT OR CABLE ROUTE
	BT OPENREACH - POLE		UK POWER NETWORKS - LV		GENESYS - CABINET
	SOUTHERN WATER - FOUL WATER		VODAFONE - (Ex Energies)		GENESYS - LOOPS
	THAMES WATER - FOUL WATER		VODAFONE - (Other licensed Operator)		GENESYS - GANTRY
	THAMES WATER - SURFACE WATER		VODAFONE - MAST		GENESYS - EMERGENCY TELEPHONE
	THAMES WATER - WATER MAINS		O2 - MAST		
	THAMES WATER PUMPING STATION / WATER WORKS		H3G/EE - MAST		

Client

Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

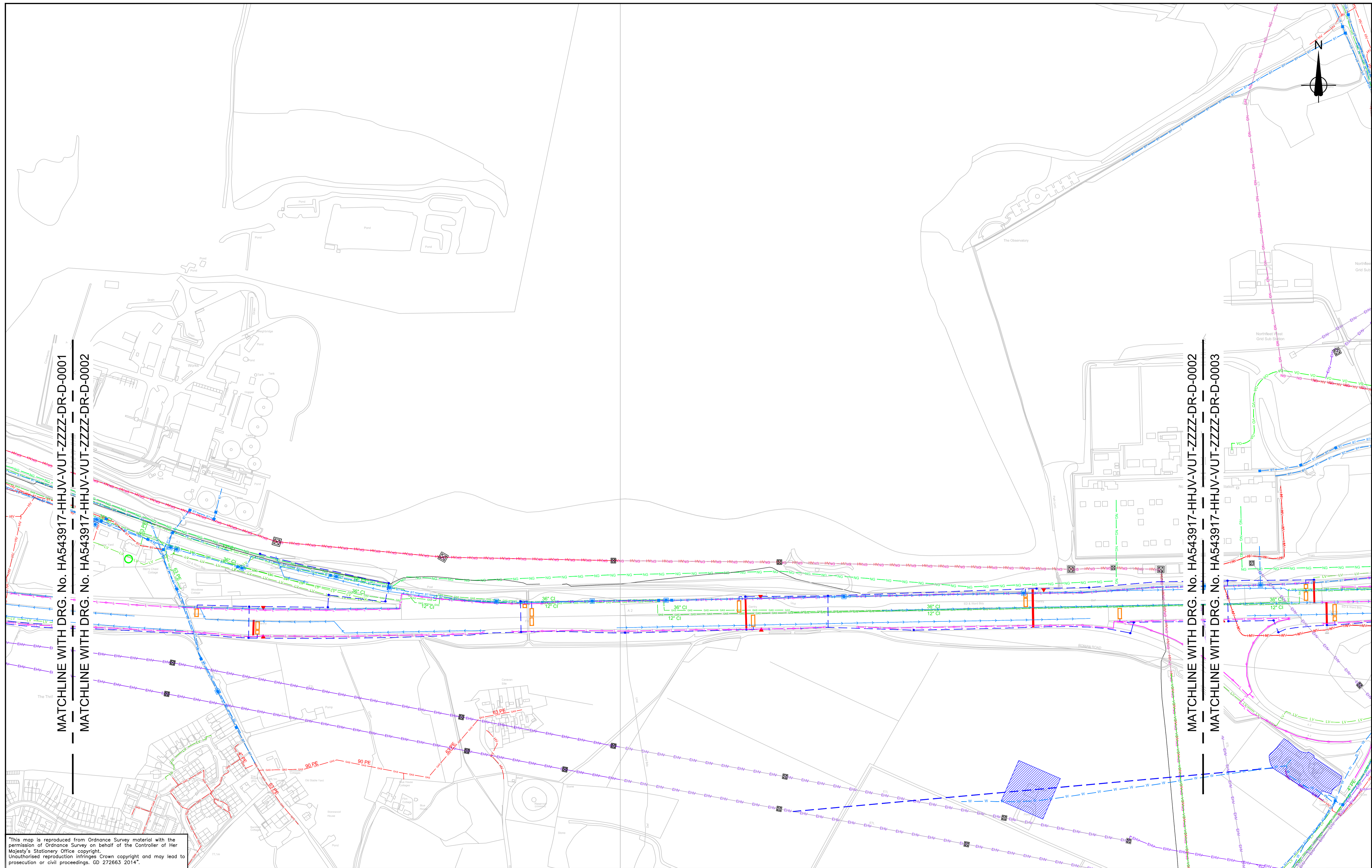
Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING UTILITIES SHEET 1 OF 4**

Status	S4	Revision	P1
Scale	1:2500	Date	11-01-2015
Drawn By	E.S.MILLERSHIP		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Drawing number	VUT-ZZZZ-DR-D-0001		
Original Size	A1		

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 MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0002

MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0002
 MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0003

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KEY					
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	SOUTHERN GAS - MP MAIN		NATIONAL GRID - OVERHEAD CABLE		AREA 4 - LIGHTING CABLE
	BT OPENREACH - UNDERGROUND CABLE		UK POWER NETWORKS - EHV		AREA 4 - LIGHTING COLUMN
	BT OPENREACH - OVERHEAD CABLE		UK POWER NETWORKS - HV		AREA 4 - SURFACE WATER DRAINAGE
	BT OPENREACH - POLE		UK POWER NETWORKS - LV		GENESYS - DUCT OR CABLE ROUTE
	SOUTHERN WATER - FOUL WATER		VODAFONE - (Ex Energies)		GENESYS - CABINET
	THAMES WATER - FOUL WATER		VODAFONE - (Other licensed Operator)		GENESYS - LOOPS
	THAMES WATER - SURFACE WATER		VODAFONE - MAST		GENESYS - GANTRY
	THAMES WATER - WATER MAINS		O2 - MAST		GENESYS - EMERGENCY TELEPHONE
	THAMES WATER PUMPING STATION / WATER WORKS		H3G/EE - MAST		

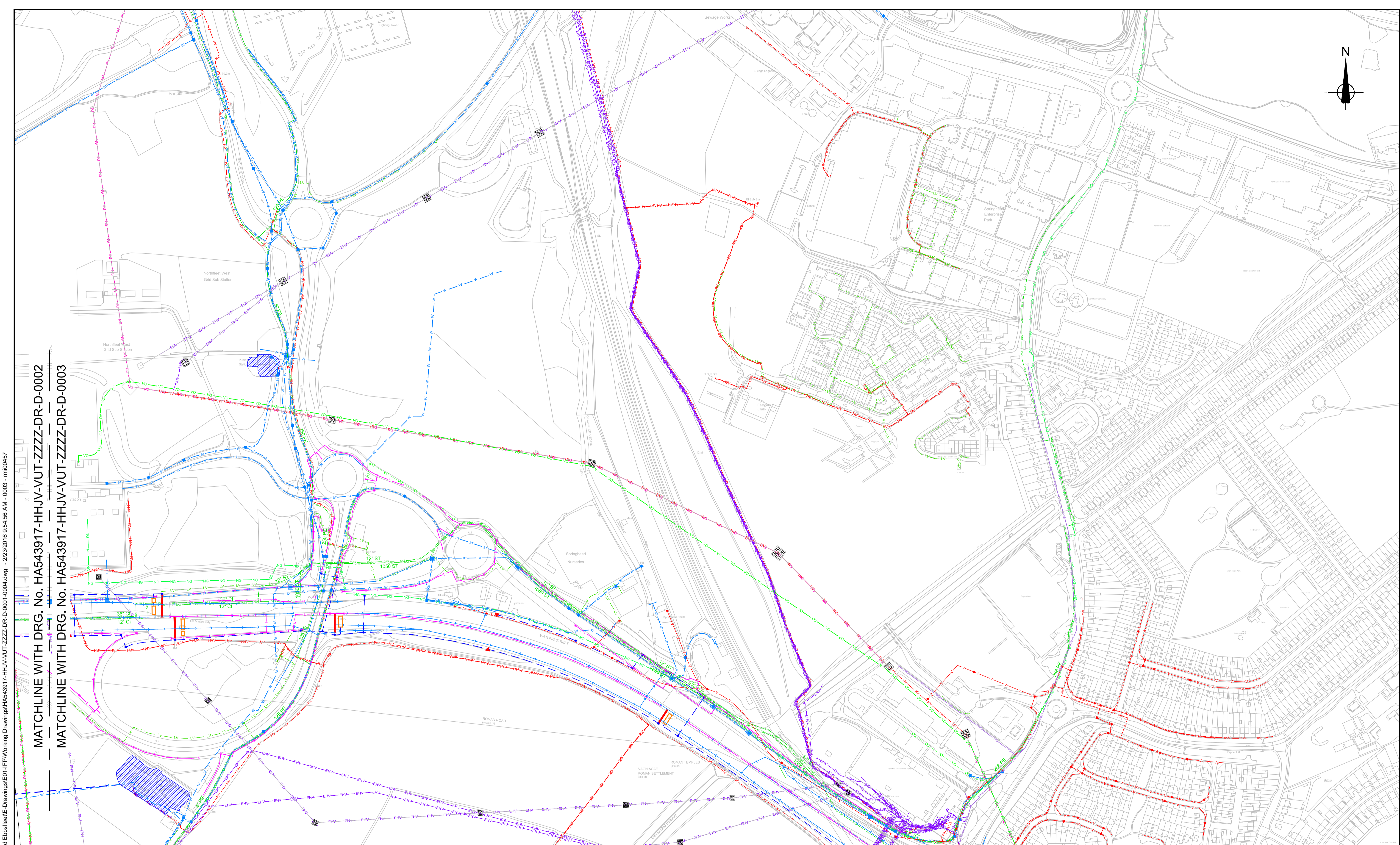
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprvd
P1	S4	22-02-2016	FOR STAGE APPROVAL	ESM	ML	ME

Client

Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**
 Drawing title **EXISTING UTILITIES SHEET 2 OF 4**

Status	Revision
S4	P1
Scale	1:2500
Checked By	E.S.MILLERSHIP
Approved By	M.LUDLAM
Project No.	HA PIN 543917
Originator	HHJV
Original Size	A1
Drawing number VUT-ZZZZ-DR-D-0002	
Date	11-01-2015



MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0002
 MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0003

MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0003

MATCHLINE WITH DRG. No. HA543917-HHJV-VUT-ZZZZ-DR-D-0004

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KEY			
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— S4S S4S S4S	SOUTHERN GAS - MP MAIN	— NG NG NG	NATIONAL GRID - OVERHEAD CABLE
— BT BT BT	BT OPENREACH - UNDERGROUND CABLE	— EHV EHV EHV	UK POWER NETWORKS - EHV
— BT BT BT	BT OPENREACH - OVERHEAD CABLE	— HV HV HV	UK POWER NETWORKS - HV
○	BT OPENREACH - POLE	— LV LV LV	UK POWER NETWORKS - LV
— FW FW FW	SOUTHERN WATER - FOUL WATER	— VO VO VO	VODAFONE - (Ex Energies)
— TW TW TW	THAMES WATER - FOUL WATER	— VO VO VO	VODAFONE - (Other licensed Operator)
— W W W	THAMES WATER - SURFACE WATER	○	VODAFONE - MAST
— W W W	THAMES WATER - WATER MAINS	○	O2 - MAST
■	THAMES WATER PUMPING STATION / WATER WORKS	▲	H3G/EE - MAST
		— V V V	VIRGIN MEDIA
		— L L L	AREA 4 - LIGHTING CABLE
		○	AREA 4 - LIGHTING COLUMN
		— S S S	AREA 4 - SURFACE WATER DRAINAGE
		— D D D	GENESYS - DUCT OR CABLE ROUTE
		□	GENESYS - CABINET
		□	GENESYS - LOOPS
		□	GENESYS - GANTRY
		□	GENESYS - EMERGENCY TELEPHONE

Client

Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

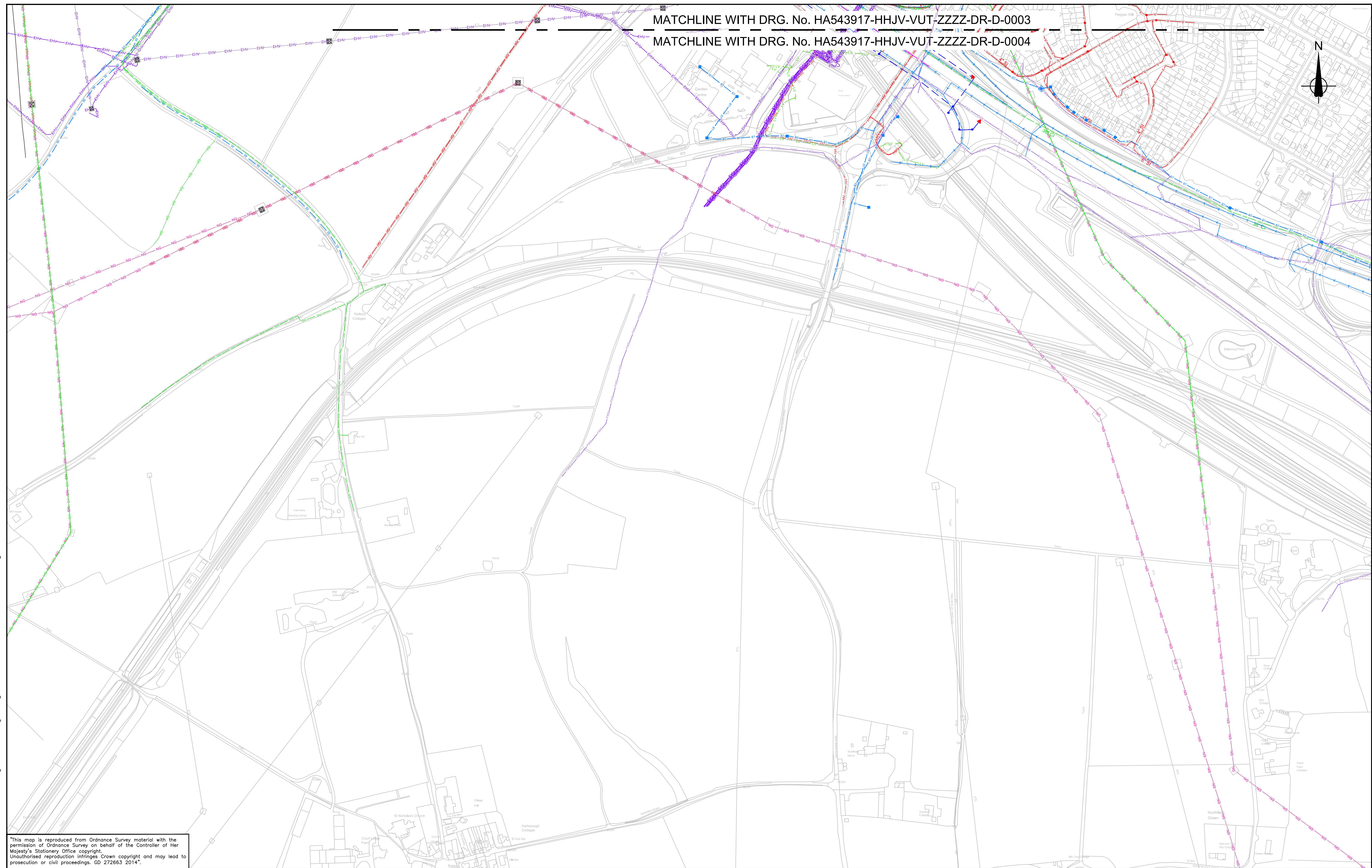
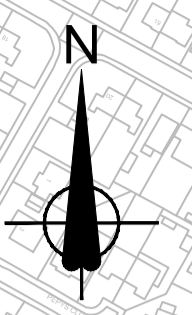
Drawing title **EXISTING UTILITIES SHEET 3 OF 4**

Status	S4	Revision	P1
Scale	1:2500	Date	11-01-2015
Drawn By	E.S.MILLERSHIP	Checked By	M.LUDLAM
Approved By	M.EMERY	Project No.	HA PIN 543917
Originator	HHJV	Original Size	A1
Drawing number	VUT-ZZZZ-DR-D-0003		

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KEY		
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	S4	SOUTHERN GAS - MP MAIN
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	BT	BT OPENREACH - OVERHEAD CABLE
	BT	BT OPENREACH - POLE
	FW	SOUTHERN WATER - FOUL WATER
	TW	THAMES WATER - FOUL WATER
	TW	THAMES WATER - SURFACE WATER
	W	THAMES WATER - WATER MAINS
		THAMES WATER PUMPING STATION / WATER WORKS
	NG	NATIONAL GRID - UNDERGROUND CABLE
	NG	NATIONAL GRID - OVERHEAD CABLE
	EHV	UK POWER NETWORKS - EHV
	HV	UK POWER NETWORKS - HV
	LV	UK POWER NETWORKS - LV
	VO	VODAFONE - (Ex Energies)
	VO	VODAFONE - (Other licensed Operator)
	VO	VODAFONE - MAST
	O2	O2 - MAST
	H3G/EE	H3G/EE - MAST
	VM	VIRGIN MEDIA
	L	AREA 4 - LIGHTING CABLE
	L	AREA 4 - LIGHTING COLUMN
	S	AREA 4 - SURFACE WATER DRAINAGE
	D	GENESYS - DUCT OR CABLE ROUTE
	C	GENESYS - CABINET
	L	GENESYS - LOOPS
	G	GENESYS - GANTRY
	E	GENESYS - EMERGENCY TELEPHONE

Client

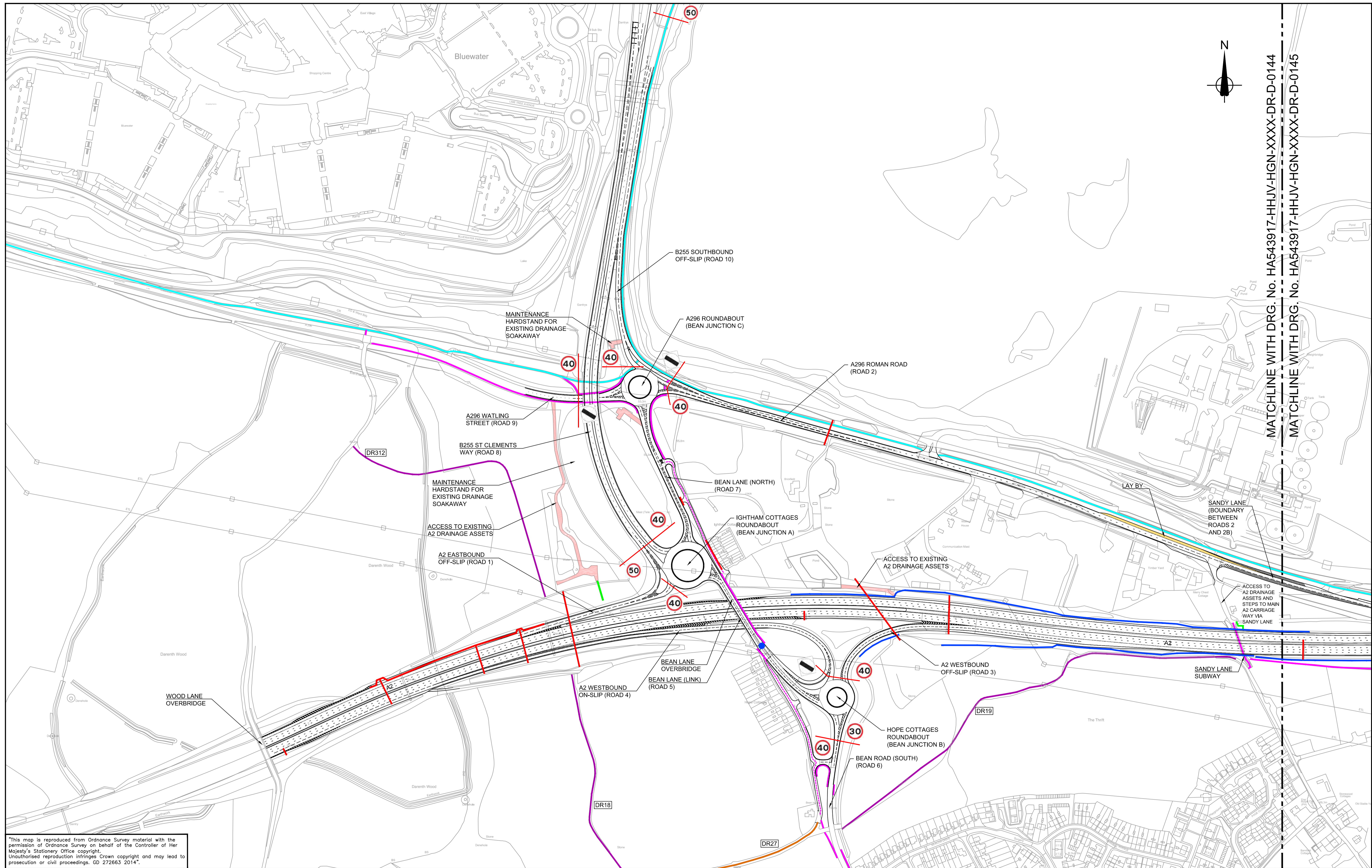
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 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING UTILITIES SHEET 4 OF 4**

Status	S4	Revision	P1
Scale	1:2500	Date	11-01-2015
Drawn By	E.S.MILLERSHIP		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Drawing number	VUT-ZZZZ-DR-D-0004		
Original Size	A1		

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Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Appr'd
P1	S3	02-08-2016	FOR COMMENTS AND REVIEW	RMS	ML	ME
P1.1	SO	27-05-2016	FIRST DRAFT	RMS	ML	ME

TRAFFIC SIGNAL CONTROLLED CROSSING	LAY BY	PUBLIC FOOTPATH
EXISTING SIGN AND SIGNAL GANTRY	MAINTENANCE ACCESS AND HARDSTAND	BYWAY
FOOTWAY / CYCLEWAY	NOISE BARRIER	0 50 100 150 200 250m
FOOTWAY	SPEED LIMIT CHANGE	1 : 2500
SHARED SURFACE / N/MU ROUTE		
MAINTENANCE ACCESS STEPS		

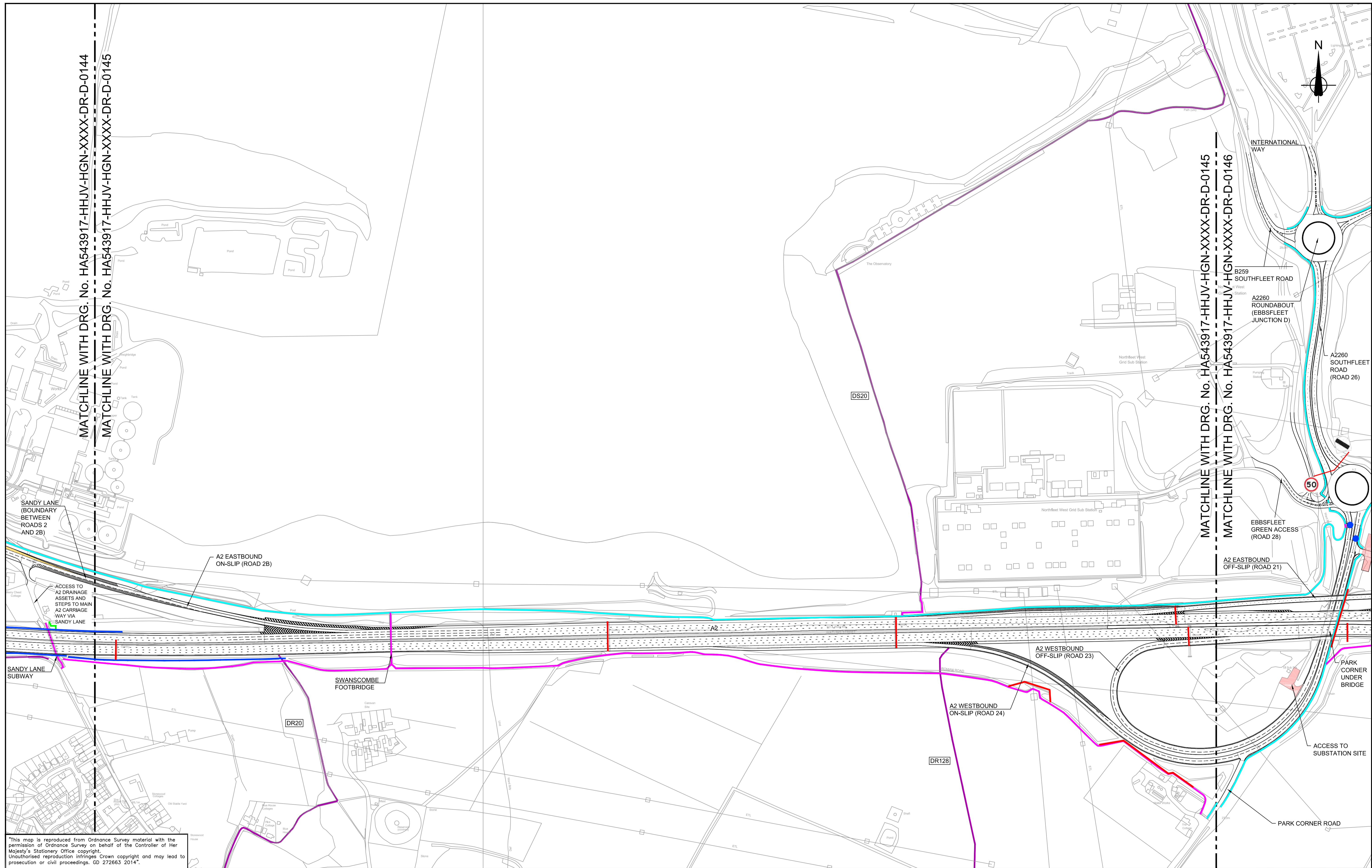
Client **highways england**
Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**
 Drawing title **EXISTING ROAD LAYOUT SHEET 1 OF 3**

Status	S3	Revision	P1
Scale	1:2500	Date	02-08-2016
Drawn By	RAVITEJA M.S	Checked By	M.LUDLAM
Approved By	M.EMERY	Project No.	HA PIN 543917
Originator	HHJV	Original Size	A1
Drawing number HGN-XXXX-DR-D-0144			

MATCHLINE WITH DRG. No. HA543917-HHJV-HGN-XXXX-DR-D-0144
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P1	S3	02-08-2016	FOR COMMENTS AND REVIEW	RMS	ML	ME
P1.1	SO	27-05-2016	FIRST DRAFT	RMS	ML	ME
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chk'd	Apprv'd

TRAFFIC SIGNAL CONTROLLED CROSSING	LAY BY	PUBLIC FOOTPATH
EXISTING SIGN AND SIGNAL GANTRY	MAINTENANCE ACCESS AND HARDSTAND	BYWAY
FOOTWAY / CYCLEWAY	NOISE BARRIER	0 50 100 150 200 250m
FOOTWAY	SPEED LIMIT CHANGE	1 : 2500
SHARED SURFACE / NMI ROUTE		
MAINTENANCE ACCESS STEPS		

Client

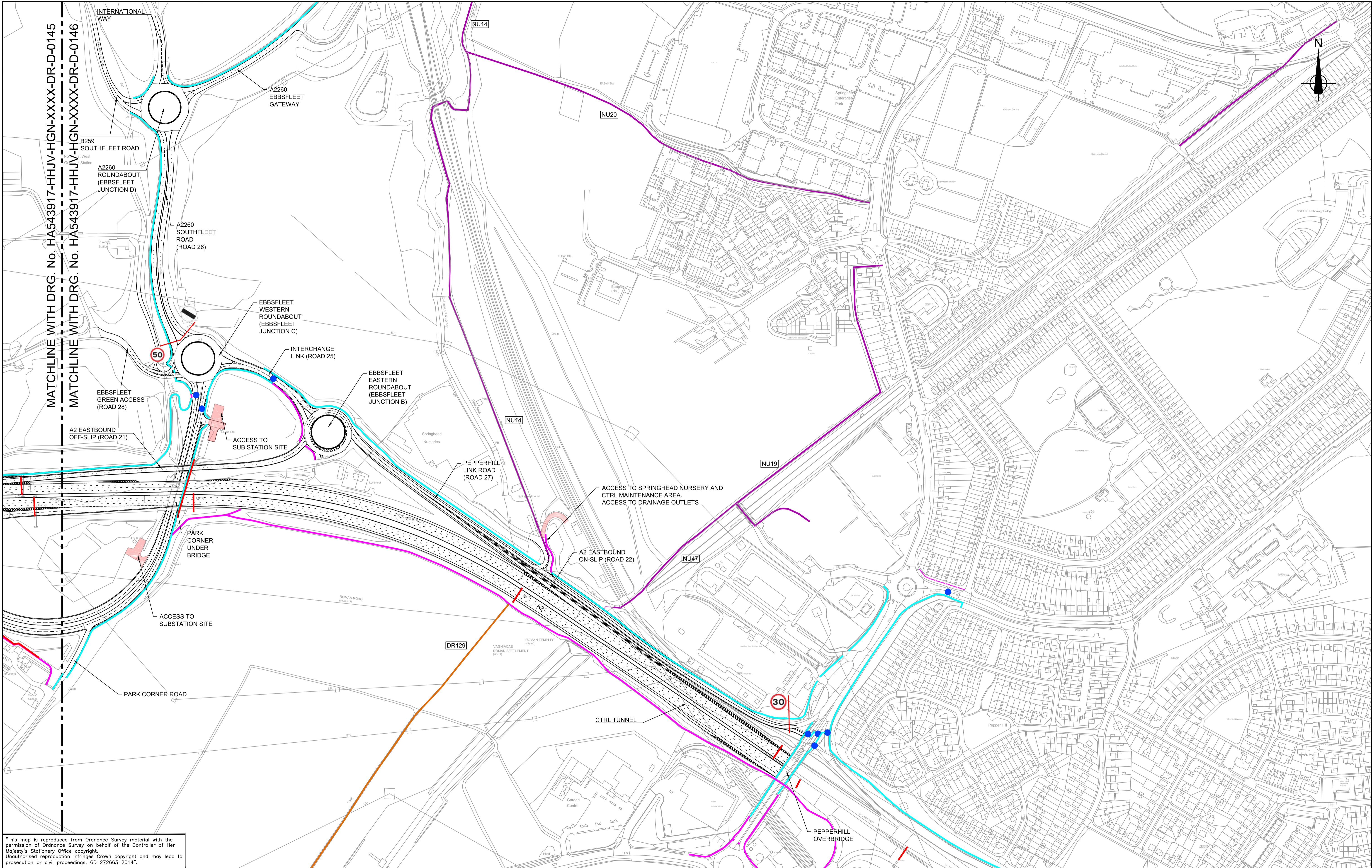
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 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING ROAD LAYOUT SHEET 2 OF 3**

Status	S3	Revision	P1
Scale	1:2500	Date	02-08-2016
Drawn By	RAVITEJA M.S		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Drawing number	HGN-XXXX-DR-D-0145		
Original Size	A1		

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Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Appr'd
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P1.1	S0	27-05-2016	FIRST DRAFT	RMS	ML	ME

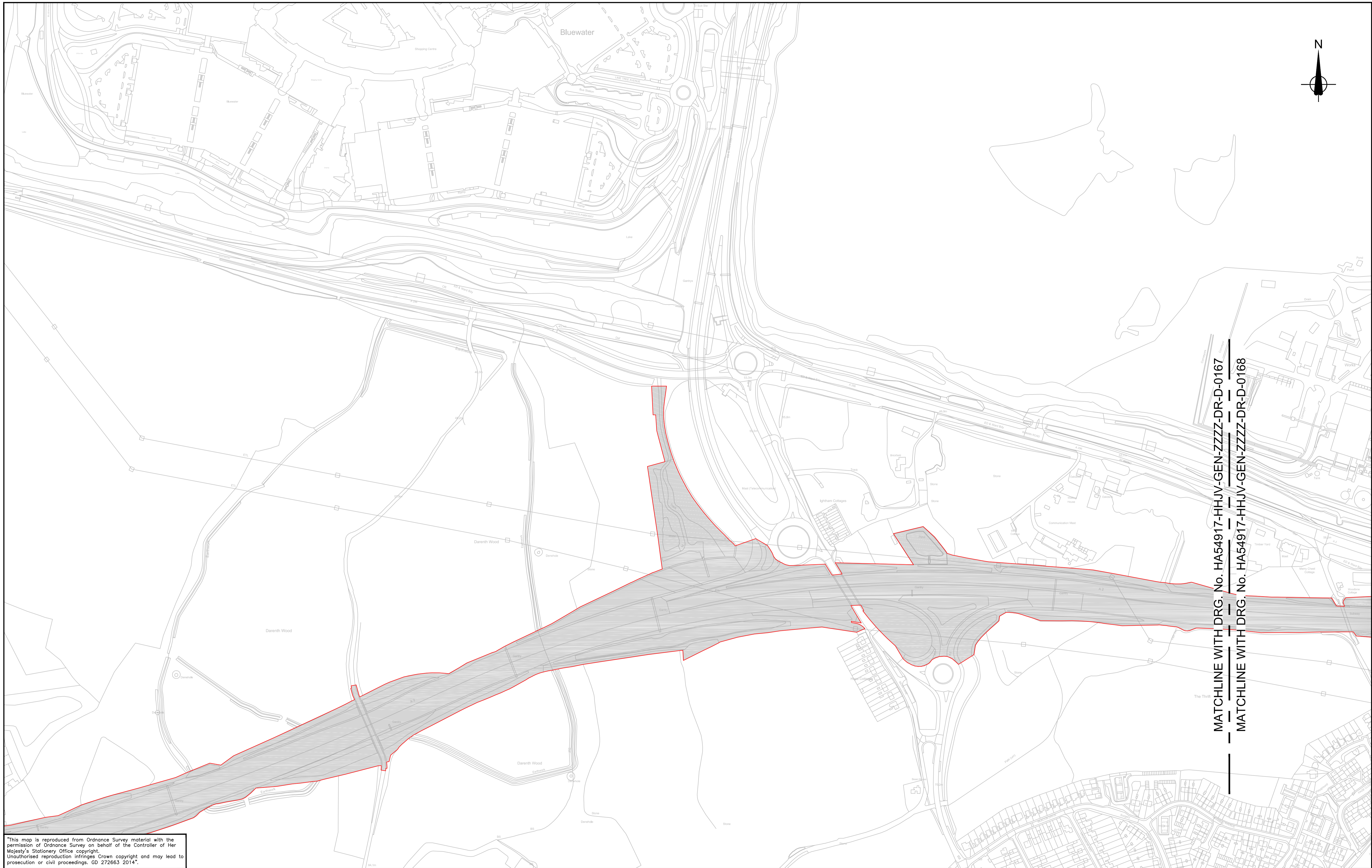
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EXISTING SIGN AND SIGNAL GANTRY	MAINTENANCE ACCESS AND HARDSTAND	BYWAY
FOOTWAY / CYCLEWAY	NOISE BARRIER	0 50 100 150 200 250m
FOOTWAY	SPEED LIMIT CHANGE	1 : 2500
SHARED SURFACE / N/MU ROUTE		
MAINTENANCE ACCESS STEPS		

Client
Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0GD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**
 Drawing title **EXISTING ROAD LAYOUT SHEET 3 OF 3**

Status	S3	Revision	P1
Scale	1:2500	Date	02-08-2016
Drawn By	RAVITEJA M.S	Checked By	M.LUDLAM
Approved By	M.EMERY	Project No.	HA PIN 543917
Originator	HHJV	Original Size	A1
Drawing number HGN-XXXX-DR-D-0146			

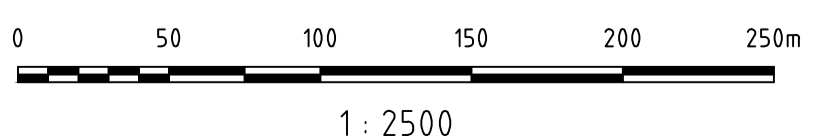
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MATCHLINE WITH DRG. No. HA54917-HHJV-GEN-ZZZZ-DR-D-0167
 MATCHLINE WITH DRG. No. HA54917-HHJV-GEN-ZZZZ-DR-D-0168

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Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd
P1	S3	12-08-2016	FOR REVIEW AND COMMENTS	RMS	ML	ME
P1.1	SO	09-08-2016	FIRST DRAFT	RMS	ML	ME



Client

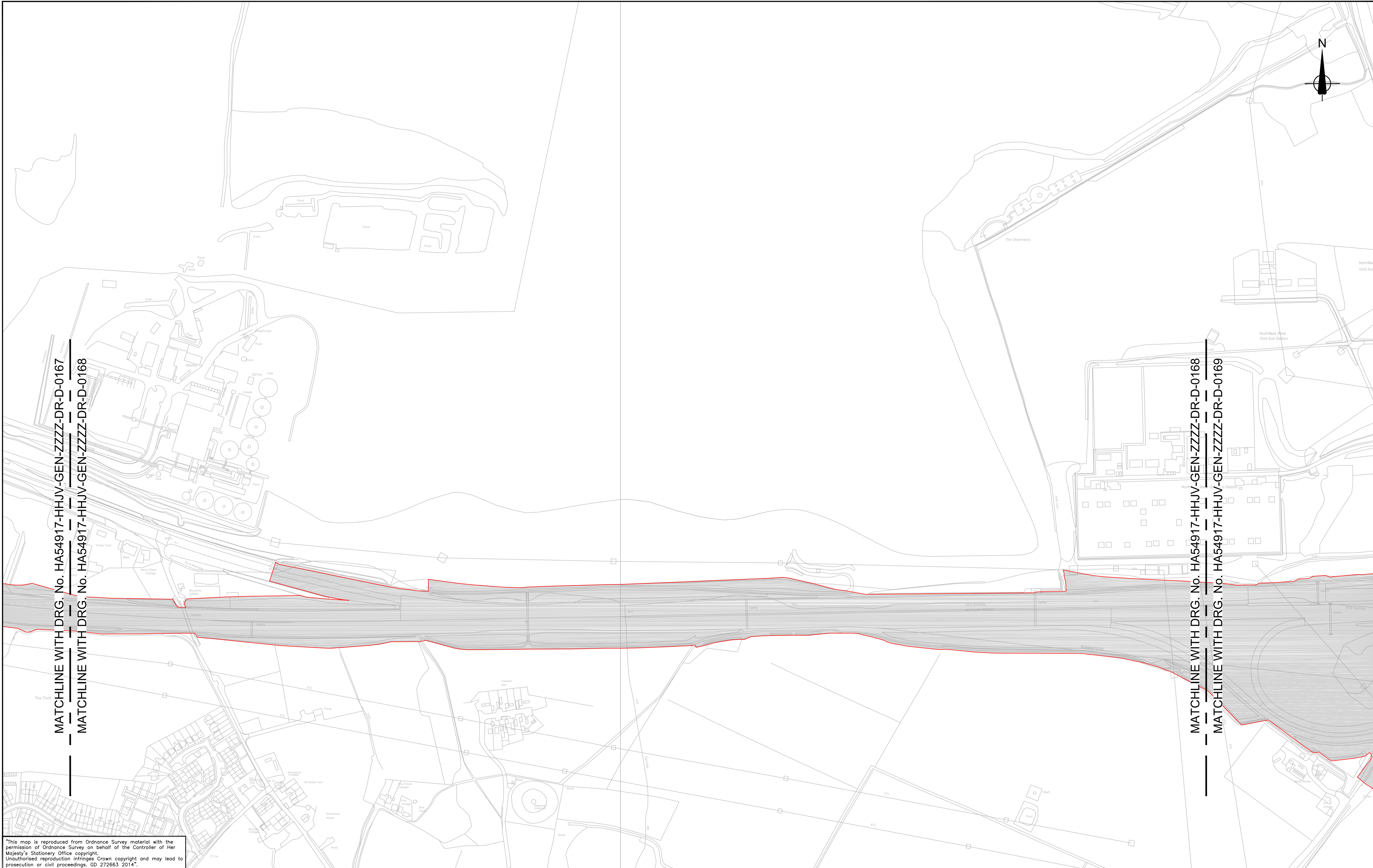
Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **HIGHWAYS ENGLAND EXISTING MAINTENANCE AREA SHEET 1 OF 4**

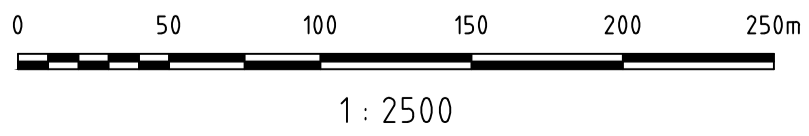
Status	S3	Revision	P1
Scale	1:2500	Date	12-08-2016
Drawn By	RAVITEJA M S		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Original Size	A1		
Drawing number	GEN-ZZZZ-DR-D-0167		

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Rev	Status	Rev. Date	Purpose of revision	Drawn	Chkd	Apprv'd
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P1.1	SO	09-08-2016	FIRST DRAFT	RMS	ML	ME

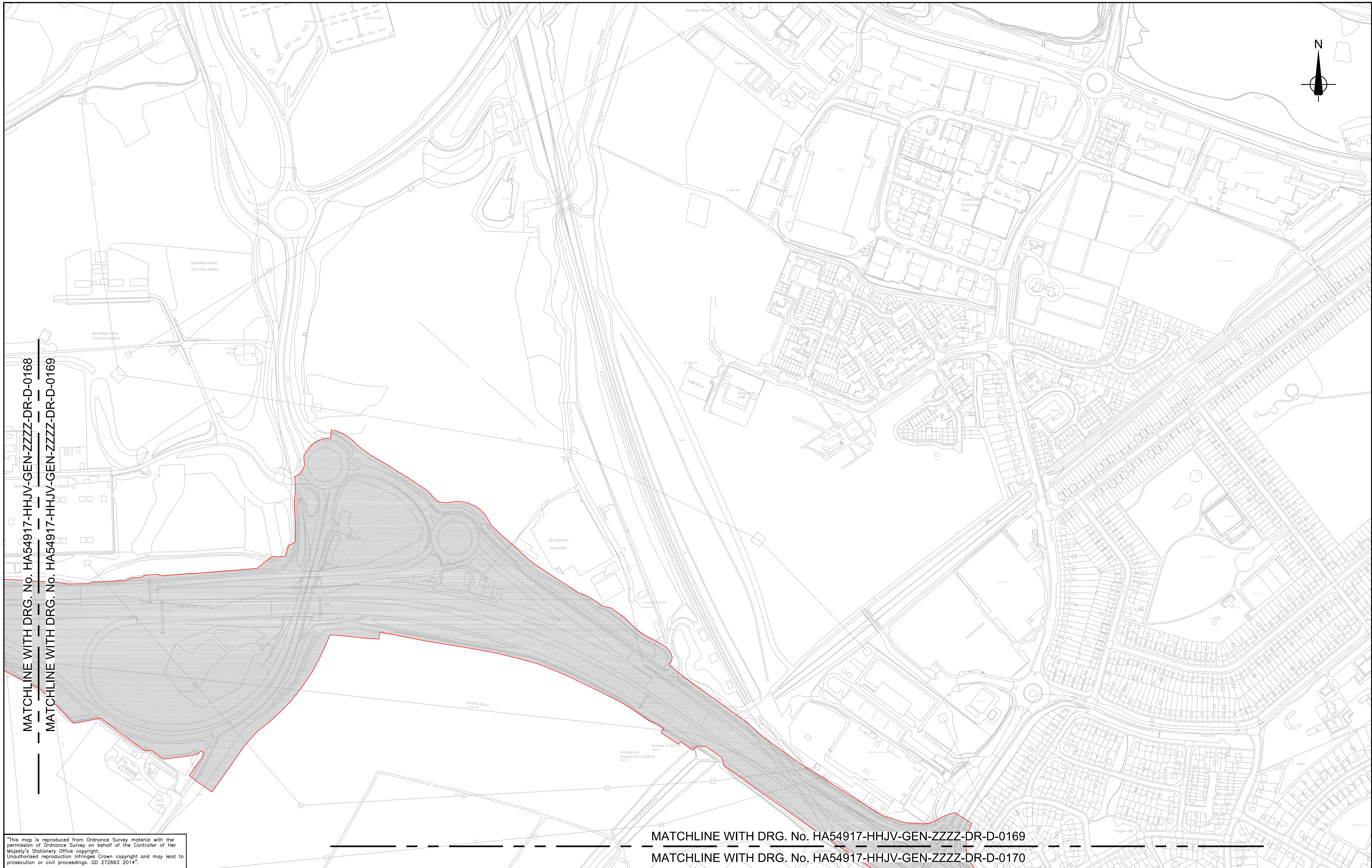


Client **highways england**
Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479
Halcrow Hyder

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**
 Drawing title **HIGHWAYS ENGLAND EXISTING MAINTENANCE AREA SHEET 2 OF 4**

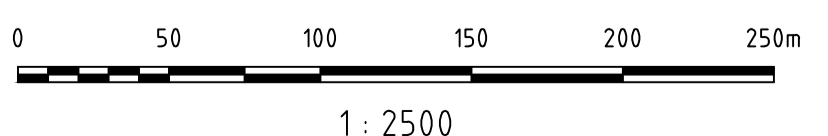
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Scale	1:2500	Date	12-08-2016
Drawn By	RAVITEJA M S		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Original Size	A1		
Drawing number	GEN-ZZZZ-DR-D-0168		

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Rev	Status	Rev. Date	Purpose of revision	Drawn	Chk'd	Appr'd
P1	S3	12-08-2016	FOR REVIEW AND COMMENTS	RMS	ML	ME
P1.1	SO	09-08-2016	FIRST DRAFT	RMS	ML	ME



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Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

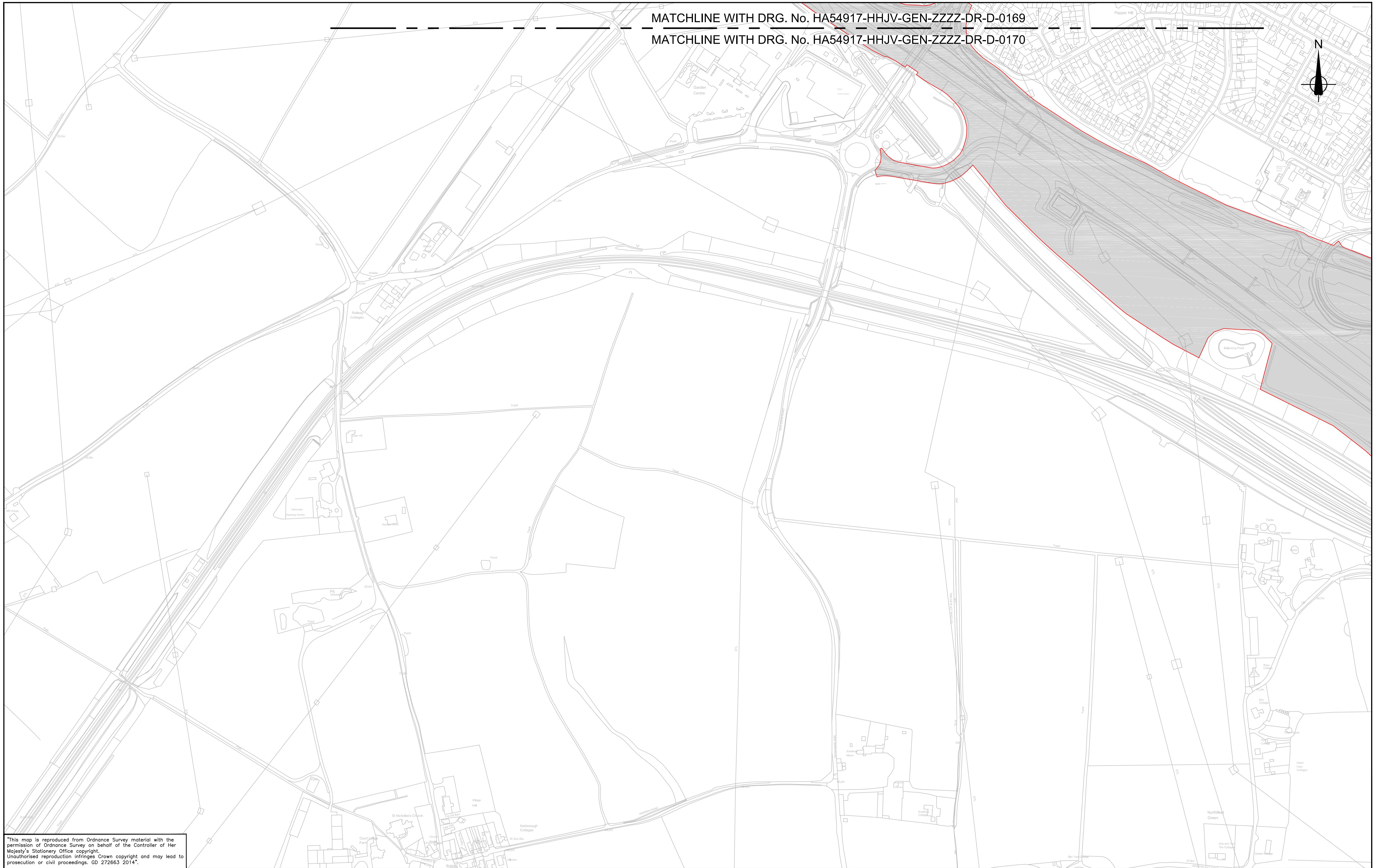
Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **HIGHWAYS ENGLAND EXISTING MAINTENANCE AREA SHEET 3 OF 4**

Status	S3	Revision	P1
Scale	1:2500	Date	12-08-2016
Drawn By	RAVITEJA M S		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Original Size	A1		
Drawing number	GEN-ZZZZ-DR-D-0169		

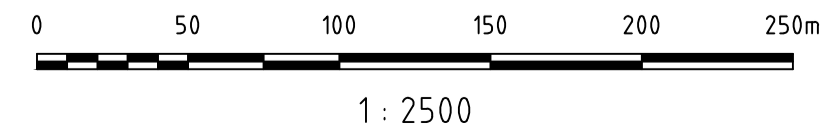
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MATCHLINE WITH DRG. No. HA54917-HHJV-GEN-ZZZZ-DR-D-0170



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Rev	Status	Rev. Date	Purpose of revision	Drawn	Chk'd	Appr'd
P1	S3	12-08-2016	FOR REVIEW AND COMMENTS	RMS	ML	ME
P1.1	S0	09-08-2016	FIRST DRAFT	RMS	ML	ME



Client



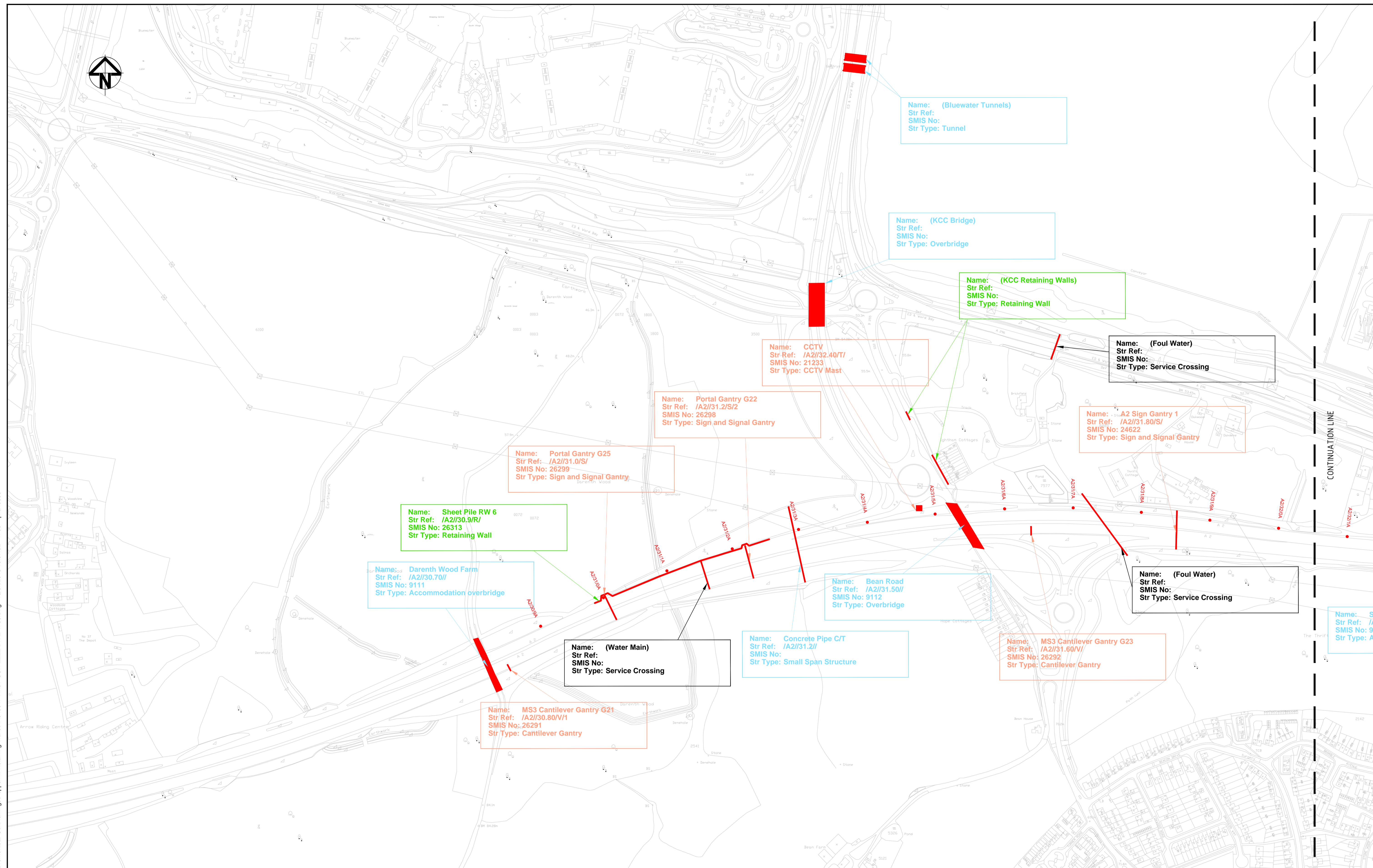
Halcrow Hyder Joint Venture
Burderop Park
Swindon, SN4 0QD
Tel. +44(0)1793 812479




Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **HIGHWAYS ENGLAND EXISTING MAINTENANCE AREA SHEET 4 OF 4**

Status	S3	Revision	P1
Scale	1:2500	Date	12-08-2016
Drawn By	RAVITEJA M S		
Checked By	M.LUDLAM		
Approved By	M.EMERY		
Project No.	HA PIN 543917	Originator	HHJV
Original Size	A1		
Drawing number	GEN-ZZZZ-DR-D-0170		



NOTES:
1. KNOWN STRUCTURES NOT OWNED BY HE ARE SHOWN IN BRACKETS

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Appr'd
P1	13/07/2016	FOR INFORMATION	QM	GH	GH
P1.1	02/11/2015	FOR INFORMATION	QM	GH	GH

Client **highways england**

Halcrow Hyder Joint Venture
Burdorpe Park
Swindon, SN4 0QD
Tel. +44(0)1793 812479

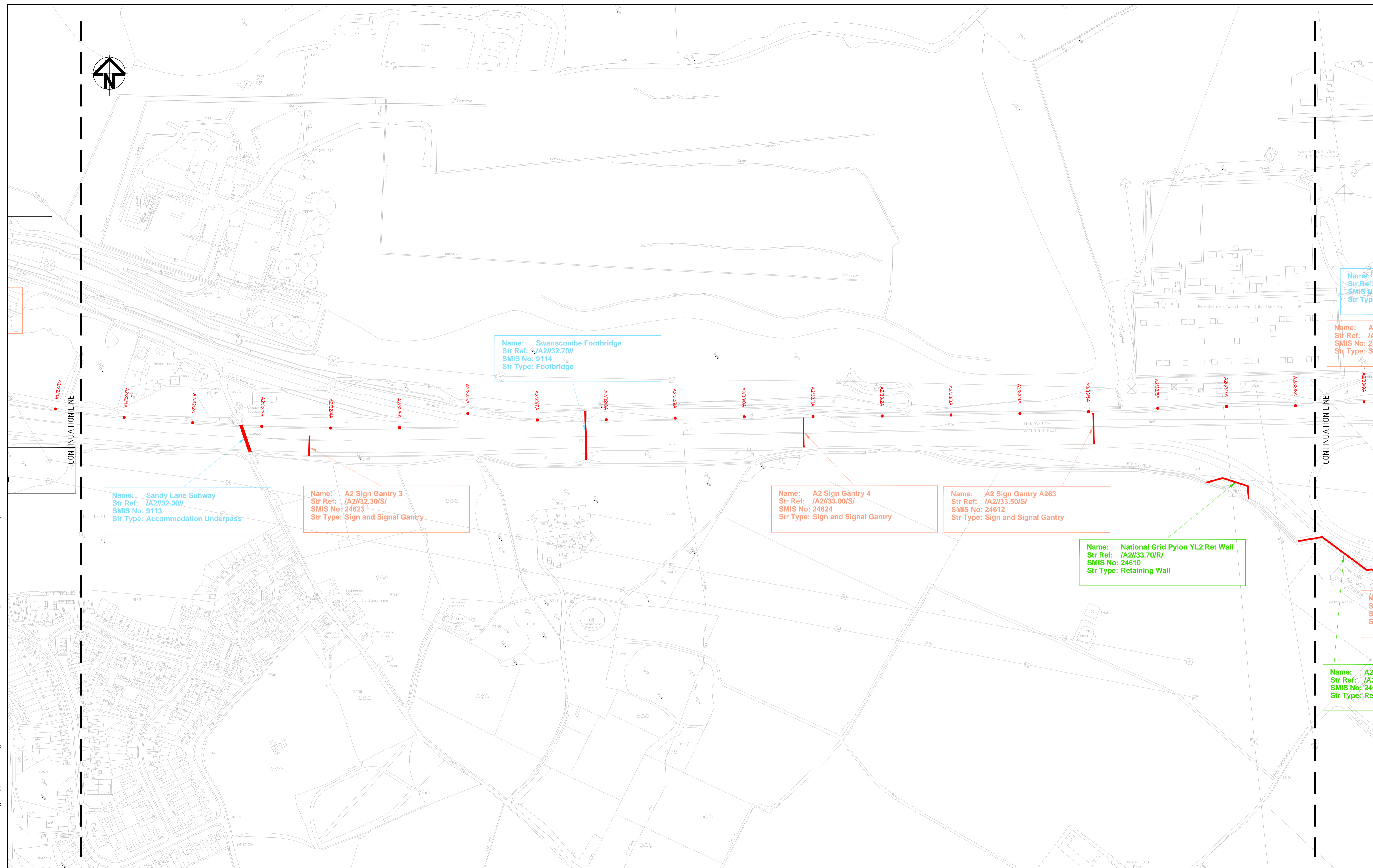
Halcrow **Hyder**

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING STRUCTURES KEY PLAN SHEET 1 OF 3**

Status	Revision
S4	P1
Scale	1:2500 @ A1
Drawn By	Q.MAHMOOD
Checked By	G.HUNT
Approved By	G.HUNT
Project No.	HA PIN Originator
HA543917 HHJV	Original Size
Drawing number	A1
SGN-ZZZZ-DR-Z-1700	

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Name: Swanscombe Footbridge
 Str Ref: /A2/32.70//
 SMIS No: 9114
 Str Type: Footbridge

Name: Sandy Lane Subway
 Str Ref: /A2/32.30//
 SMIS No: 9113
 Str Type: Accommodation Underpass

Name: A2 Sign Gantry 3
 Str Ref: /A2/32.30/S/
 SMIS No: 24623
 Str Type: Sign and Signal Gantry

Name: A2 Sign Gantry 4
 Str Ref: /A2/33.00/S/
 SMIS No: 24624
 Str Type: Sign and Signal Gantry

Name: A2 Sign Gantry A263
 Str Ref: /A2/33.50/S/
 SMIS No: 24612
 Str Type: Sign and Signal Gantry

Name: National Grid Pylon YL2 Ret Wall
 Str Ref: /A2/33.70/R/
 SMIS No: 24610
 Str Type: Retaining Wall

Name: A2 W
 Str Ref: /A2/
 SMIS No: 2461
 Str Type: Ret

NOTES:
 1. KNOWN STRUCTURES NOT OWNED BY HE ARE SHOWN IN BRACKETS

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Appr'd
P1	13/07/2016	FOR INFORMATION	QM	GH	GH
P1.1	02/11/2015	FOR INFORMATION	QM	GH	GH

Client **highways england**

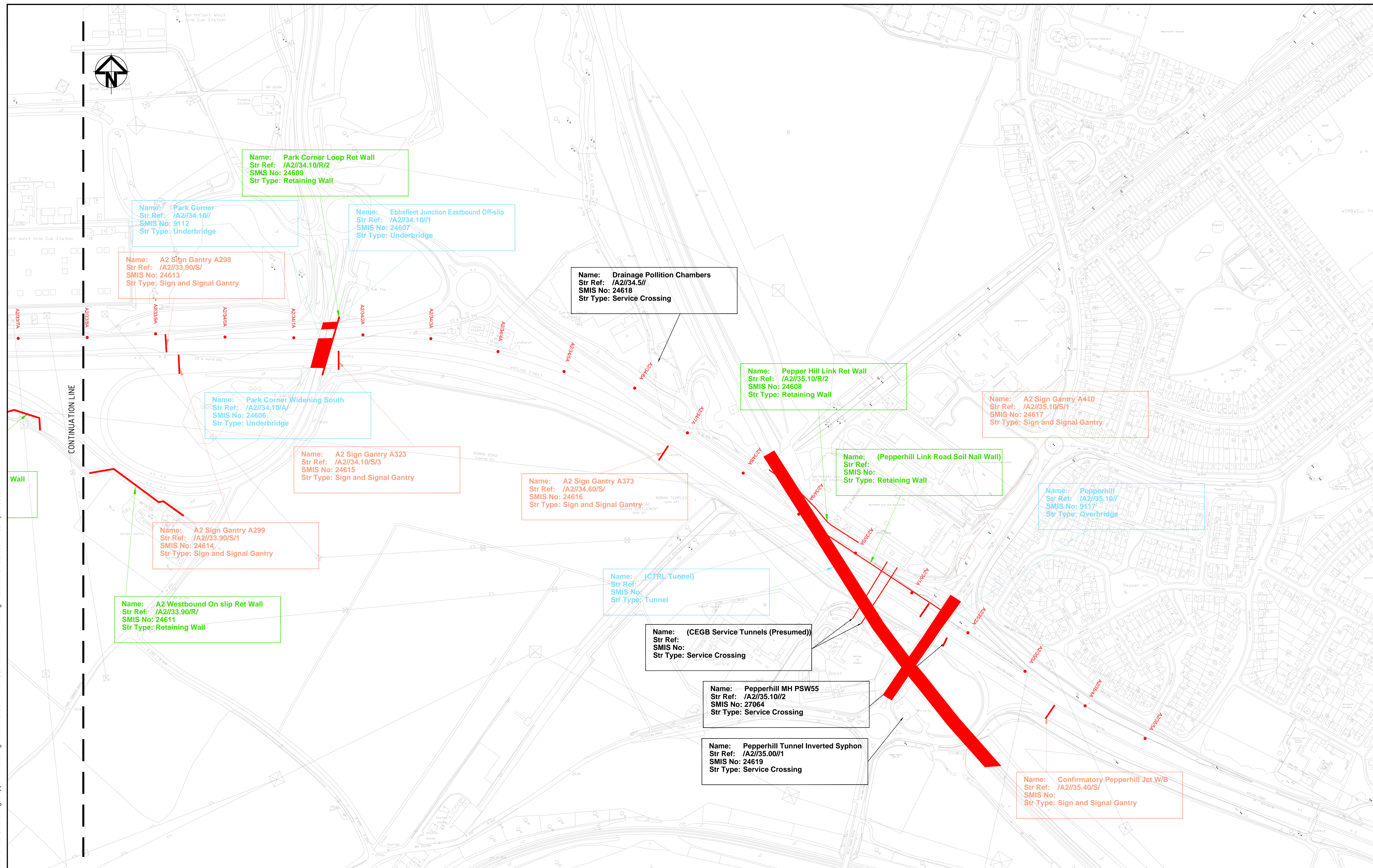
Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING STRUCTURES KEY PLAN SHEET 2 OF 3**

Status	S4	Revision	P1
Scale	1:2500 @ A1	Date	02-11-2015
Drawn By	Q.MAHMOOD		
Checked By	G.HUNT		
Approved By	G.HUNT		
Project No.	HA PIN Originator	Original Size	A1
HA PIN	HA543917 HHJV		
Drawing number	SGN-ZZZZ-DR-Z-1701		

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Name: Park Corner Loop Ret Wall
 Str Ref: /A2/34.10/R/2
 SMS No: 24609
 Str Type: Retaining Wall

Name: Park Corner
 Str Ref: /A2/34.10/I
 SMS No: 9112
 Str Type: Underbridge

Name: Ebbsfleet Junction Eastbound Off-slip
 Str Ref: /A2/34.10/I
 SMS No: 24607
 Str Type: Underbridge

Name: A2 Sign Gantry A298
 Str Ref: /A2/33.90/S/
 SMS No: 24613
 Str Type: Sign and Signal Gantry

Name: Drainage Pollution Chambers
 Str Ref: /A2/34.5//
 SMS No: 24618
 Str Type: Service Crossing

Name: Pepper Hill Link Ret Wall
 Str Ref: /A2/35.10/R/2
 SMS No: 24608
 Str Type: Retaining Wall

Name: A2 Sign Gantry A410
 Str Ref: /A2/35.10/S/1
 SMS No: 24617
 Str Type: Sign and Signal Gantry

Name: Park Corner Widening South
 Str Ref: /A2/34.10/A/
 SMS No: 24606
 Str Type: Underbridge

Name: A2 Sign Gantry A323
 Str Ref: /A2/34.10/S/3
 SMS No: 24615
 Str Type: Sign and Signal Gantry

Name: A2 Sign Gantry A373
 Str Ref: /A2/34.60/S/
 SMS No: 24616
 Str Type: Sign and Signal Gantry

Name: (Pepperhill Link Road Soil Nail Wall)
 Str Ref:
 SMS No:
 Str Type: Retaining Wall

Name: Pepperhill
 Str Ref: /A2/35.10//
 SMS No: 9117
 Str Type: Overbridge

Name: A2 Sign Gantry A299
 Str Ref: /A2/33.90/S/1
 SMS No: 24614
 Str Type: Sign and Signal Gantry

Name: (CTRL Tunnel)
 Str Ref:
 SMS No:
 Str Type: Tunnel

Name: A2 Westbound On slip Ret Wall
 Str Ref: /A2/33.90/R/
 SMS No: 24611
 Str Type: Retaining Wall

Name: (CEGB Service Tunnels (Presumed))
 Str Ref:
 SMS No:
 Str Type: Service Crossing

Name: Pepperhill MH PSW55
 Str Ref: /A2/35.10//2
 SMS No: 27064
 Str Type: Service Crossing

Name: Pepperhill Tunnel Inverted Syphon
 Str Ref: /A2/35.00//1
 SMS No: 24619
 Str Type: Service Crossing

Name: Confirmatory Pepperhill Jct W/B
 Str Ref: /A2/35.40/S/
 SMS No:
 Str Type: Sign and Signal Gantry

NOTES:
 1. KNOWN STRUCTURES NOT OWNED BY HE ARE SHOWN IN BRACKETS

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Appr'd
P1	13/07/2016	FOR INFORMATION	QM	GH	GH
P1.1	02/11/2015	FOR INFORMATION	QM	GH	GH

Client

Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project

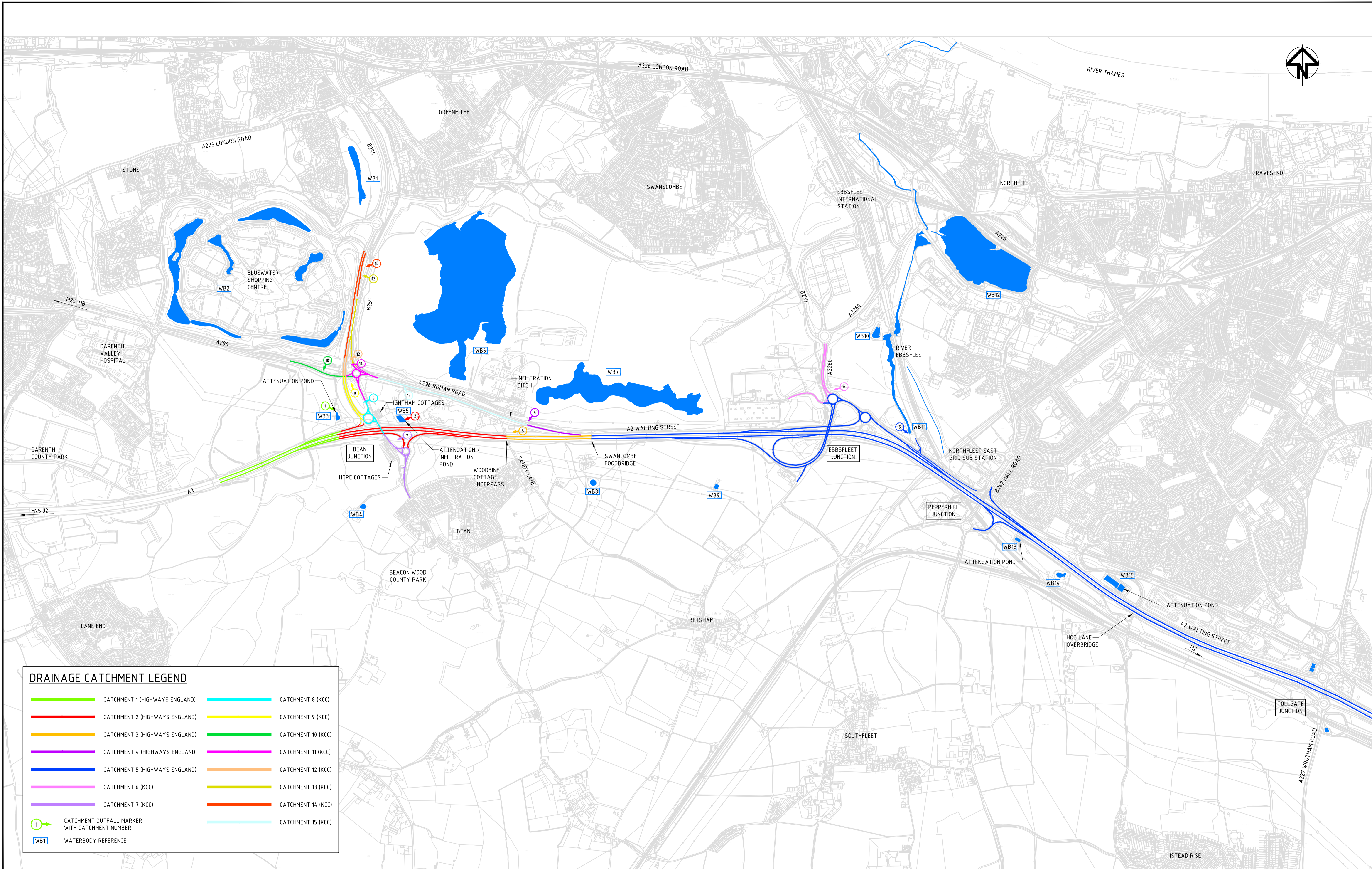
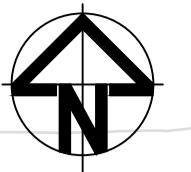
A2 BEAN AND EBBSFLEET
 JUNCTION IMPROVEMENTS

Drawing title

EXISTING
 STRUCTURES KEY PLAN
 SHEET 3 OF 3

Status	S4	Revision	P1
Scale	1:2500 @ A1	Date	02-11-2015
Drawn By	Q.MAHMOOD		
Checked By	G.HUNT		
Approved By	G.HUNT		
Project No.	HA PIN	I Originator	Original Size
HA543917 HHJV			A1
Drawing number	SGN-ZZZZ-DR-Z-1702		

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DRAINAGE CATCHMENT LEGEND

	CATCHMENT 1 (HIGHWAYS ENGLAND)		CATCHMENT 8 (KCC)
	CATCHMENT 2 (HIGHWAYS ENGLAND)		CATCHMENT 9 (KCC)
	CATCHMENT 3 (HIGHWAYS ENGLAND)		CATCHMENT 10 (KCC)
	CATCHMENT 4 (HIGHWAYS ENGLAND)		CATCHMENT 11 (KCC)
	CATCHMENT 5 (HIGHWAYS ENGLAND)		CATCHMENT 12 (KCC)
	CATCHMENT 6 (KCC)		CATCHMENT 13 (KCC)
	CATCHMENT 7 (KCC)		CATCHMENT 14 (KCC)
	CATCHMENT OUTFALL MARKER WITH CATCHMENT NUMBER		CATCHMENT 15 (KCC)
	WATERBODY REFERENCE		

P1	S3	08/08/16	For review and comment	WL	SW	ME
P1.2	SO	29/06/16	Minor Changes	WL	SW	ME
P1.1	SO	12/05/16	Drawing Created	WL	SW	ME
Rev	Status	Rev. Date	Purpose of revision	Drawn	Chk'd	Apprv'd

Client **highways england**

Halcrow Hyder Joint Venture
 Burderop Park
 Swindon, SN4 0QD
 Tel. +44(0)1793 812479

Project **A2 BEAN AND EBBSFLEET JUNCTION IMPROVEMENTS**

Drawing title **EXISTING WATERBODIES AND DRAINAGE CATCHMENT PLAN**

Status	S3	Revision	P1
Scale	10,000	Date	08-08-2016
Drawn By	W.LI		
Checked By	S.WARREN		
Approved By	M.MEMERY		
Project No.	HA PIN 543917	Originator	HHJV
Original Size			A1
Drawing number	HDG-ZZZZ-DR-D-0001		01

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