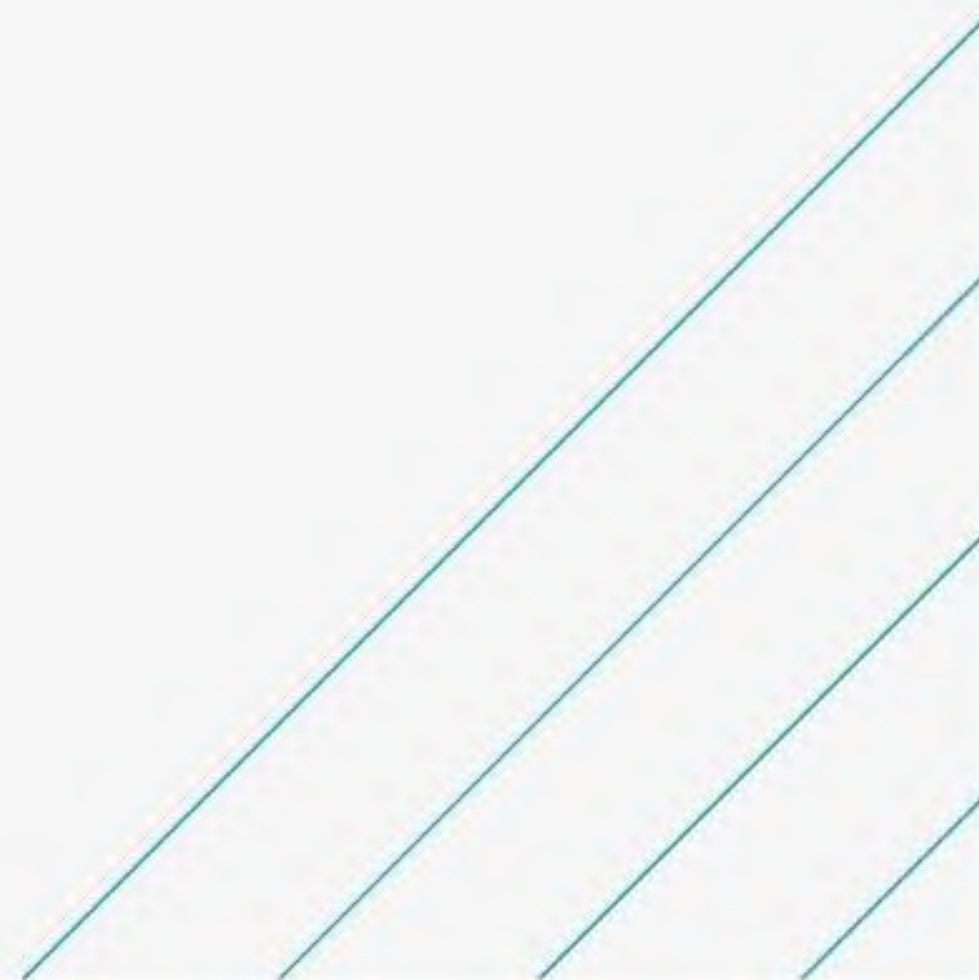


Havant Thicket Reservoir Project

Environmental Statement Volume 3 : **Revised** Chapter 15 Water Figures

Portsmouth Water Ltd.

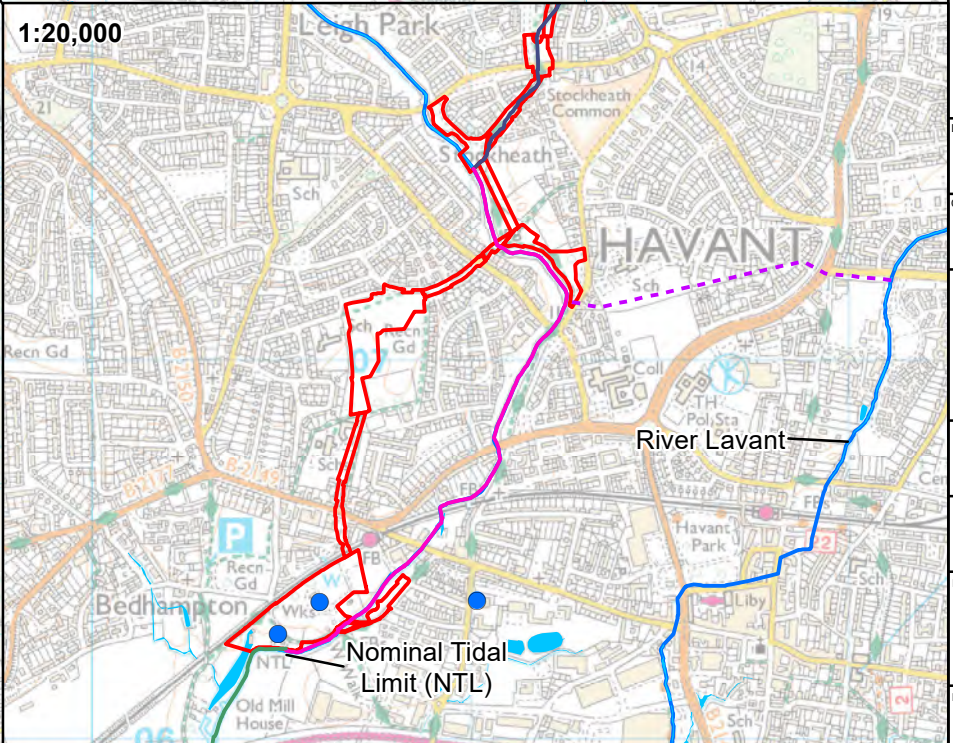
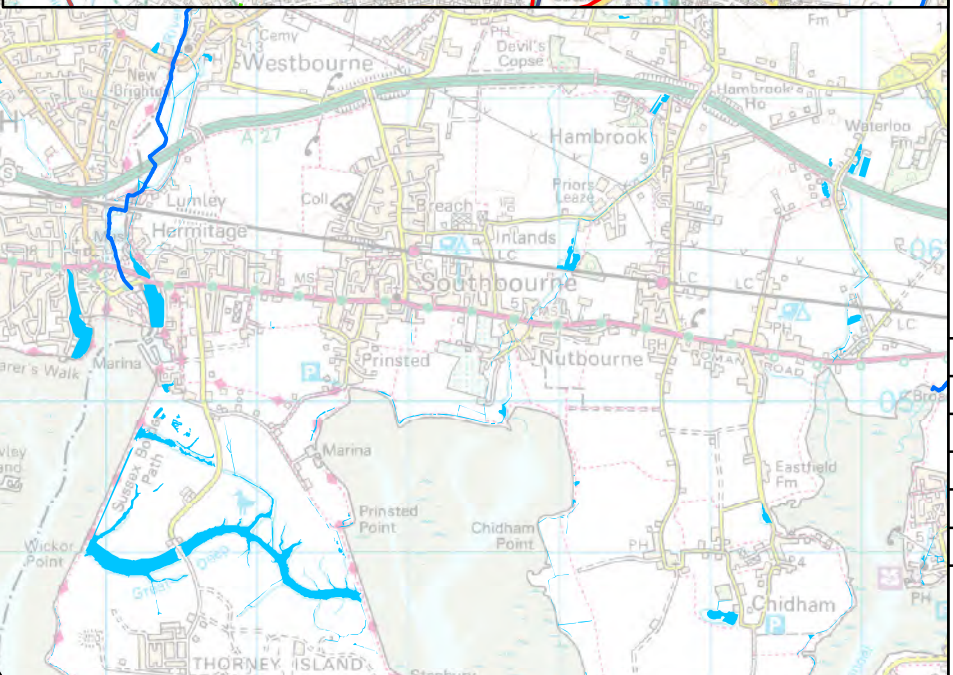
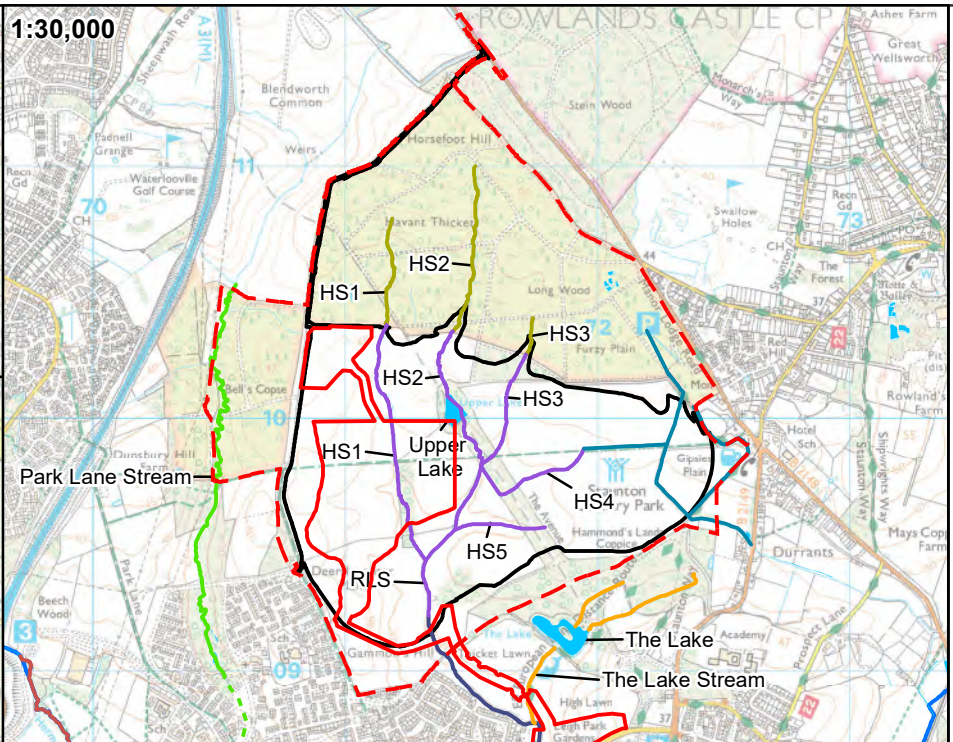
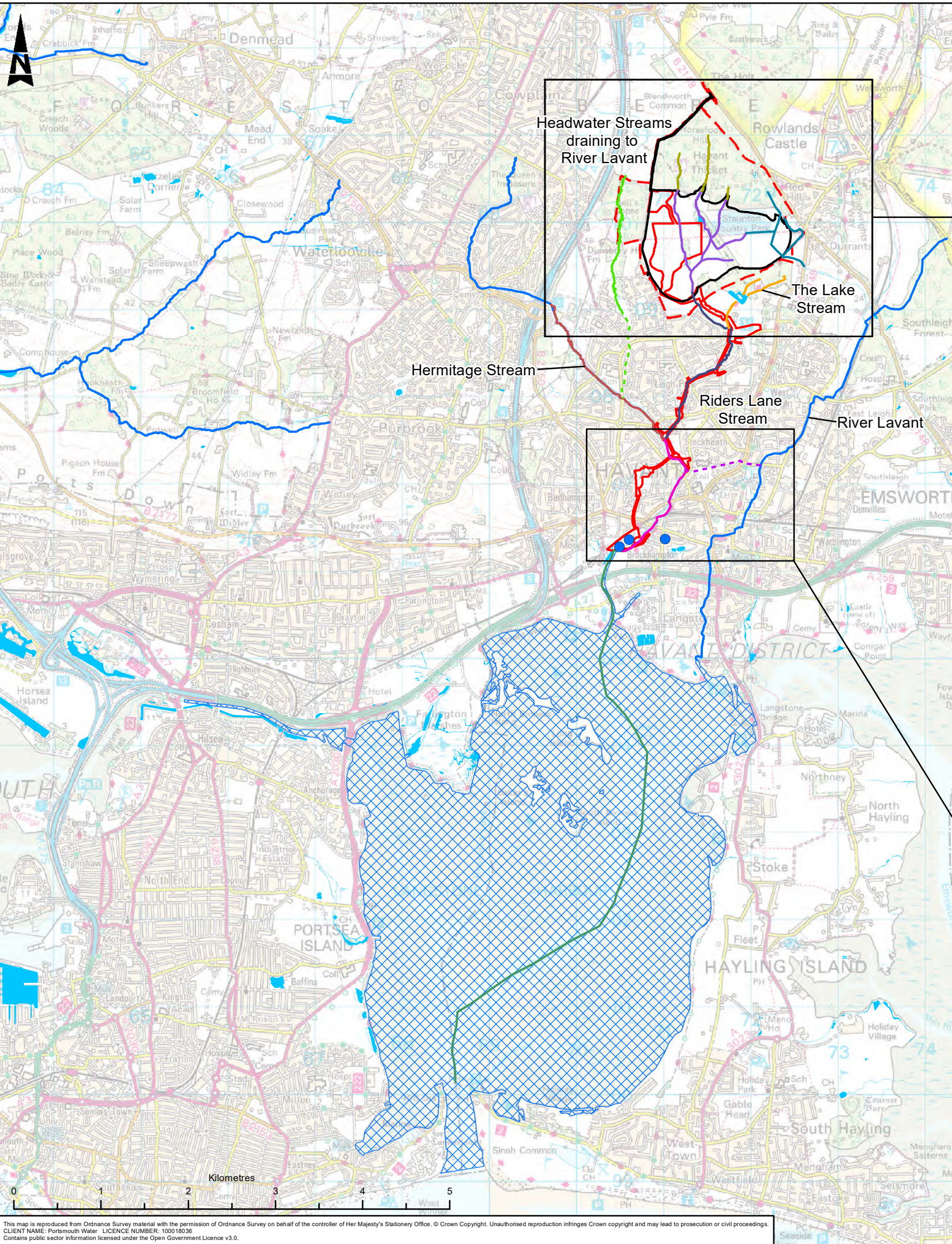
May 2024





Schedule of Drawings included in this application:

Drawing title	Drawing number
Figure 15.1 Surface Waterbodies and WFD Waterbodies (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0033
Figure 15.2 Surface Water Hydrology (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0034
Figure 15.3 Surface Water Quality (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0035
Figure 15.4 Flood Map for Planning (Rivers and Sea) (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0061
Figure 15.5 Flood Risk from Surface Water (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0062
Figure 15.6 Baseline Flood Risk - 1% (1 in 100) Annual Probability (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0063
Figure 15.7 Operational Flood Risk - 1% (1 in 100) Annual Probability (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0064
Figure 15.8	NOT USED
Figure 15.9	NOT USED
Figure 15.10 Geology and Hydrogeology (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0054
Figure 15.11 Reservoir Geology (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0057
Figure 15.12 WFD Groundwater Bodies (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0055
Figure 15.13 Groundwater Designations (rev)	HTR-ATK-ZZ-ZZ-GS-Z-0056
Figure 15.14 Pipeline Infrastructure Relevant to Study Sections (new)	HTR-ATK-ZZ-ZZ-GS-Z-182



- Pipeline Red Line Boundary
- Reservoir Red Line Boundary
- Bedhampton Springs
- Study Section 1
- Study Section 2
- Study Section 3a
- Study Section 3b
- Study Section 4
- Study Section 5
- Study Section 6
- Study Section 7
- Study Section 8
- Park Lane Stream - Culverted
- River Lavant to Hermitage Stream Pipeline Connection
- Reservoir Footprint
- WFD River, Canal and Surface Water Transfer Waterbody
- Langstone Harbour - WFD Coastal Waterbody

C03	MMN	NW	AR	JF	PUBLISHED	23/04/2024
C02	NW	LL	AR	JF	PUBLISHED	28/06/2023
C01	FD	PM	MB	LB	PUBLISHED	24/08/2020
Rev.	Dm By	Old By	Rev By	Auth By	Description	Date

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 662000
Fax: +44 (0) 1454 663333
www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0033

Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

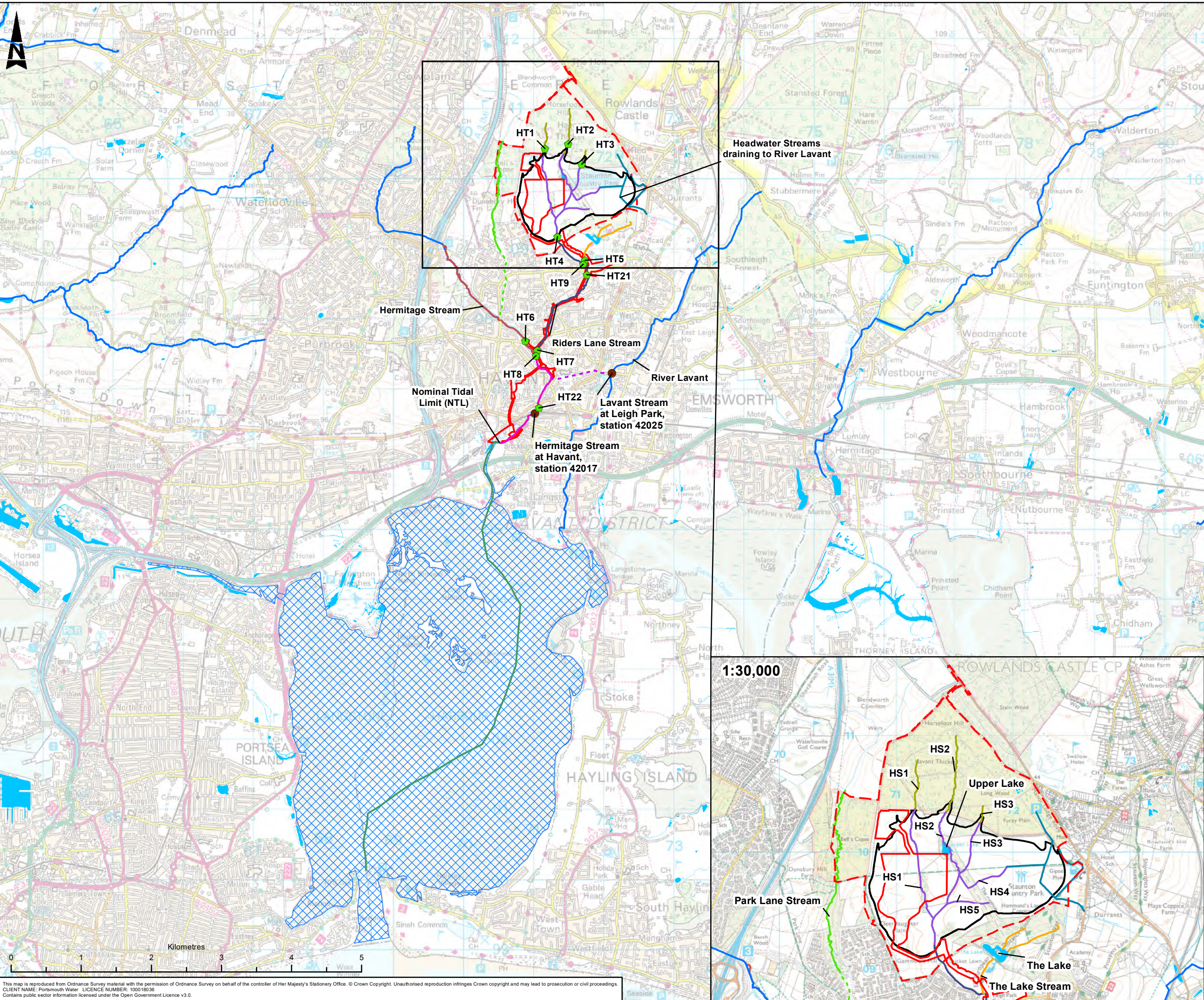
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:50,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
**FIGURE 15.1
SURFACE WATERBODIES AND WFD
WATERBODIES**

Portsmouth Water Drawing Number	Rev
	C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



Reservoir Footprint

Pipeline Red Line Boundary

Reservoir Red Line Boundary

Environment Agency Gauging

Portsmouth Water hydrology monitoring locations (e.g. HT1)

Study Section Start

Study Section 1

Study Section 2

Study Section 3a

Study Section 3b

Study Section 4

Study Section 5

Study Section 6

Study Section 7

Study Section 8

Park Lane Stream - Culverted

River Lavant to Hermitage Stream Pipeline Connection

WFD River, Canal and Surface Water Transfer Waterbody

Langstone Harbour - WFD Coastal Waterbody

C03	MMN	NW	AR	JF	PUBLISHED	23/04/2024
C02	NW	LL	AR	JF	PUBLISHED	28/06/2023
C01	FD	PM	MB	LB	PUBLISHED	24/08/2020
Rev.	Dm By	Old By	Rev By	Auth By	Description	Date

Aztec West

500 Park Avenue

Almondsbury

Bristol

BS32 4RZ

Tel: +44 (0) 1454 662000

Fax: +44 (0) 1454 663333

www.atkinsrealis.com

Drawing Suitability

PUBLISHED

Status

A1

Contractors Drawing Number:

HTR - ATK - ZZ - ZZ - GS - Z - 0034

Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888

Fax: Havant (023) 9245 3632

Website: www.portsmouthwater.co.uk

Registered Office: PO Box 8 West Street

Havant Hampshire PO9 1LG

REGISTERED IN ENGLAND No. 2536455

Project Ref. No

5169117

Sheet

1 of 1

Scale

1:50,000

Sheet Size

A3

Project Title

HAVANT THICKET RESERVOIR

Drawing Title

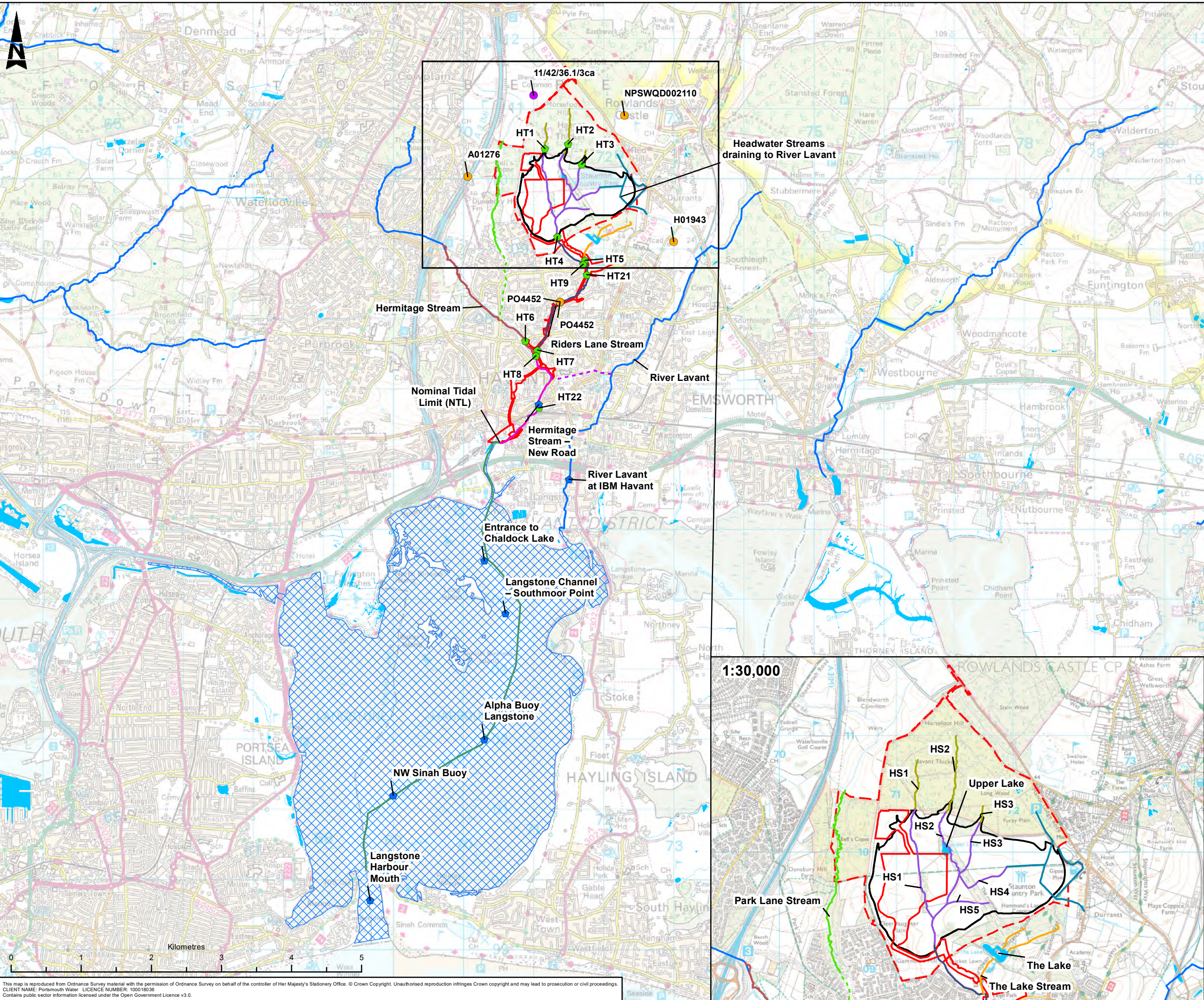
FIGURE 15.2
SURFACE WATER HYDROLOGY

Portsmouth Water Drawing Number

C03

Rev

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



Reservoir Footprint

Pipeline Red Line Boundary

Reservoir Red Line Boundary

Environment Agency water quality monitoring locations

Portsmouth Water water quality monitoring locations (e.g. HT1)

Surface Water Discharges

Surface Water Abstractions

Study Section Start

Study Section 1

Study Section 2

Study Section 3a

Study Section 3b

Study Section 4

Study Section 5

Study Section 6

Study Section 7

Study Section 8

Park Lane Stream - Culverted

River Lavant to Hermitage Stream Pipeline Connection

WFD River, Canal and Surface Water Transfer Waterbody

Langstone Harbour - WFD Coastal Waterbody

C03	MMN	NW	AR	JF	PUBLISHED	23/04/2024
C02	NW	LL	AR	JF	PUBLISHED	23/04/2024
C01	FD	PM	MB	LB	PUBLISHED	24/08/2020
Rev	Dm By	Cld By	Rev By	Auth By	Description	Date

AtkinsRéalis

Aztec West

500 Park Avenue

Almondsbury

Bristol

BS32 4RZ

Tel: +44 (0) 1454 662000

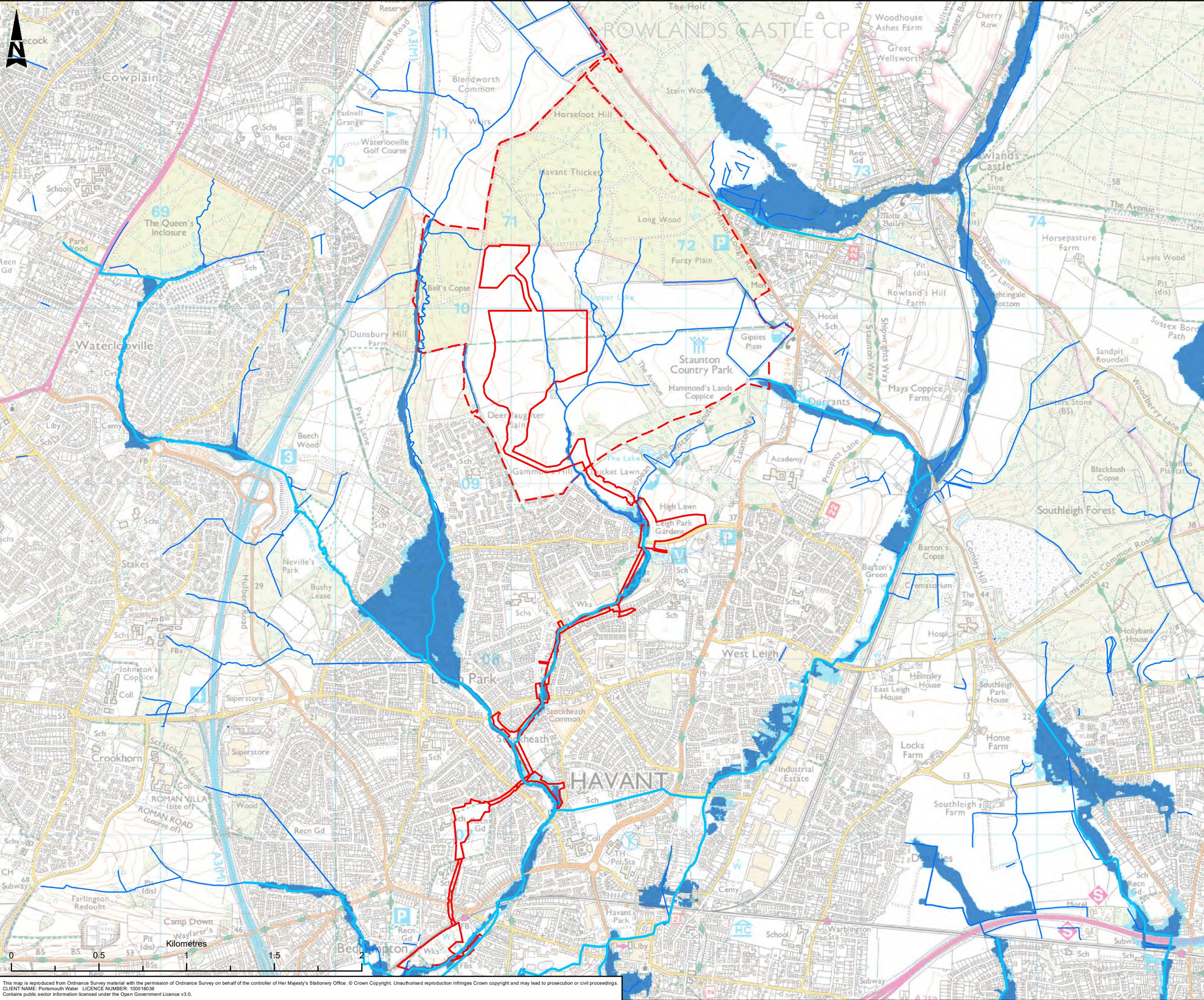
Fax: +44 (0) 1454 663333

www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability		Status	
PUBLISHED		A1	
Contractors Drawing Number:			
HTR - ATK - ZZ - ZZ - GS - Z - 0035			
Project Originator Volume Location Type Role Number			
Telephone: Havant (023) 9249 9888			
Fax: Havant (023) 9245 3632			
Website: www.portsmouthwater.co.uk			
Registered Office: PO Box 8 West Street			
Havant Hampshire PO9 1LG			
REGISTERED IN ENGLAND No. 2536455			
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:50,000	A3
Project Title			
HAVANT THICKET RESERVOIR			
Drawing Title			
FIGURE 15.3 SURFACE WATER QUALITY			
Portsmouth Water Drawing Number		Rev	
		C03	

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



Pipeline Red Line Boundary

Reservoir Red Line Boundary

Main River

Watercourse

Flood Zone 1

Flood Zone 2

Flood Zone 3

C03	MMN	NW	AR	JF	PUBLISHED	03/04/2024
C02	NW	LL	AR	JF	PUBLISHED	28/06/2023
C01	FD	AB	SB	LB	PUBLISHED	10/07/2020
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	16/06/2020

AtkinsRéalis

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 662000
Fax: +44 (0) 1454 663333
www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability		Status	
PUBLISHED		A1	

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0061
Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

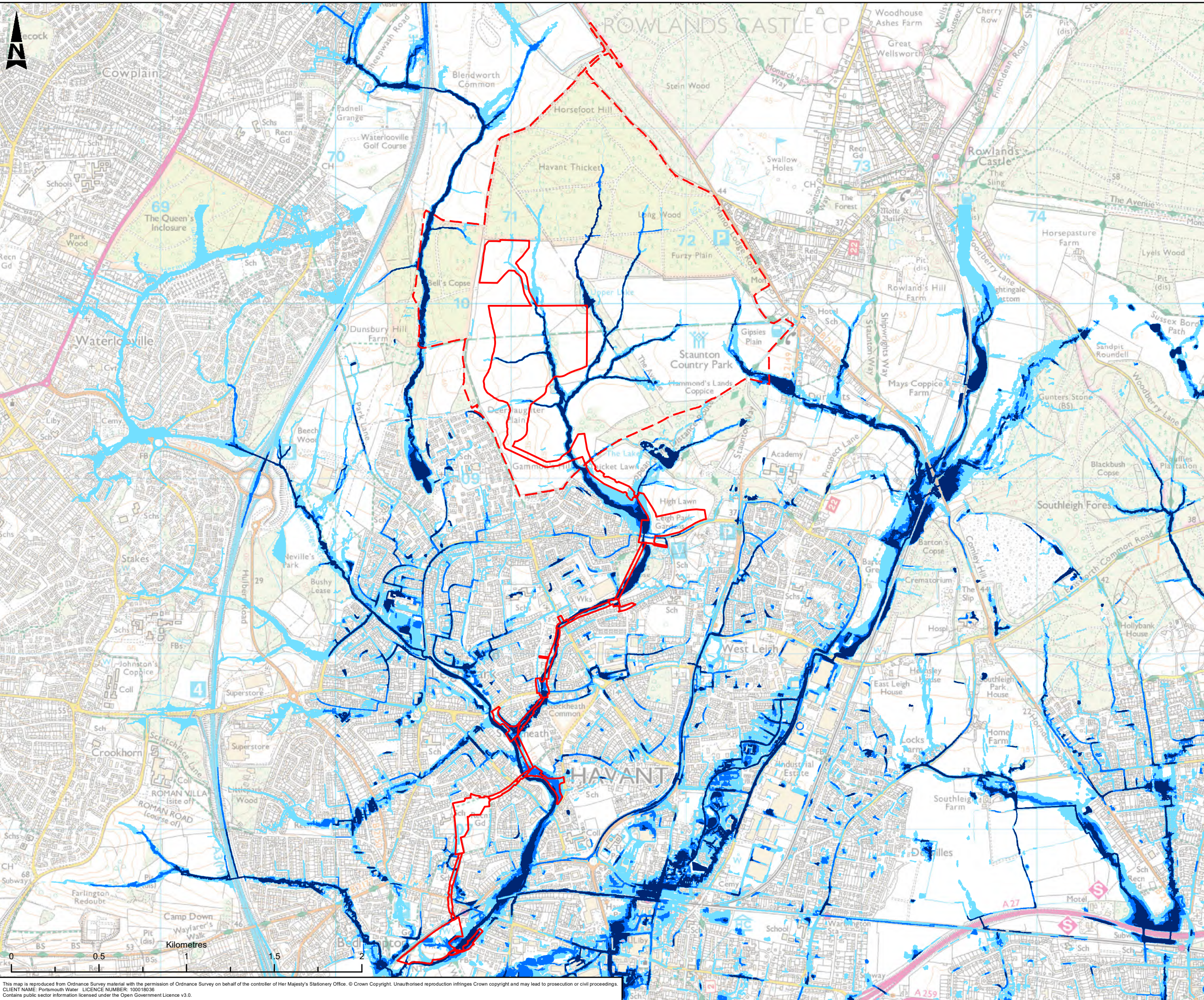
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:20,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.4
FLOOD MAP FOR PLANNING
(RIVERS AND SEA)

Portsmouth Water Drawing Number
C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



- Pipeline Red Line Boundary
- Reservoir Red Line Boundary
- High risk – greater than 3.3% (1 in 30) AP
- Medium risk – between 1% and 3.3% (1 in 100 and 1 in 30) AP
- Low risk – between 0.1% and 1% (1 in 1000 and 1 in 100) AP
- Very low risk – less than 0.1% (1 in 1000) AP

C03	MMN	NW	AR	JF	PUBLISHED	03/04/2024
C02	FD	LL	AR	JF	PUBLISHED	03/04/2024
C01	FD	AB	SB	LB	PUBLISHED	10/07/2020
Rev.	Dwn By	Ckd By	Rev By	Auth By	Description	16/06/2020



Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 662000
Fax: +44 (0) 1454 663333
www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0062
Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

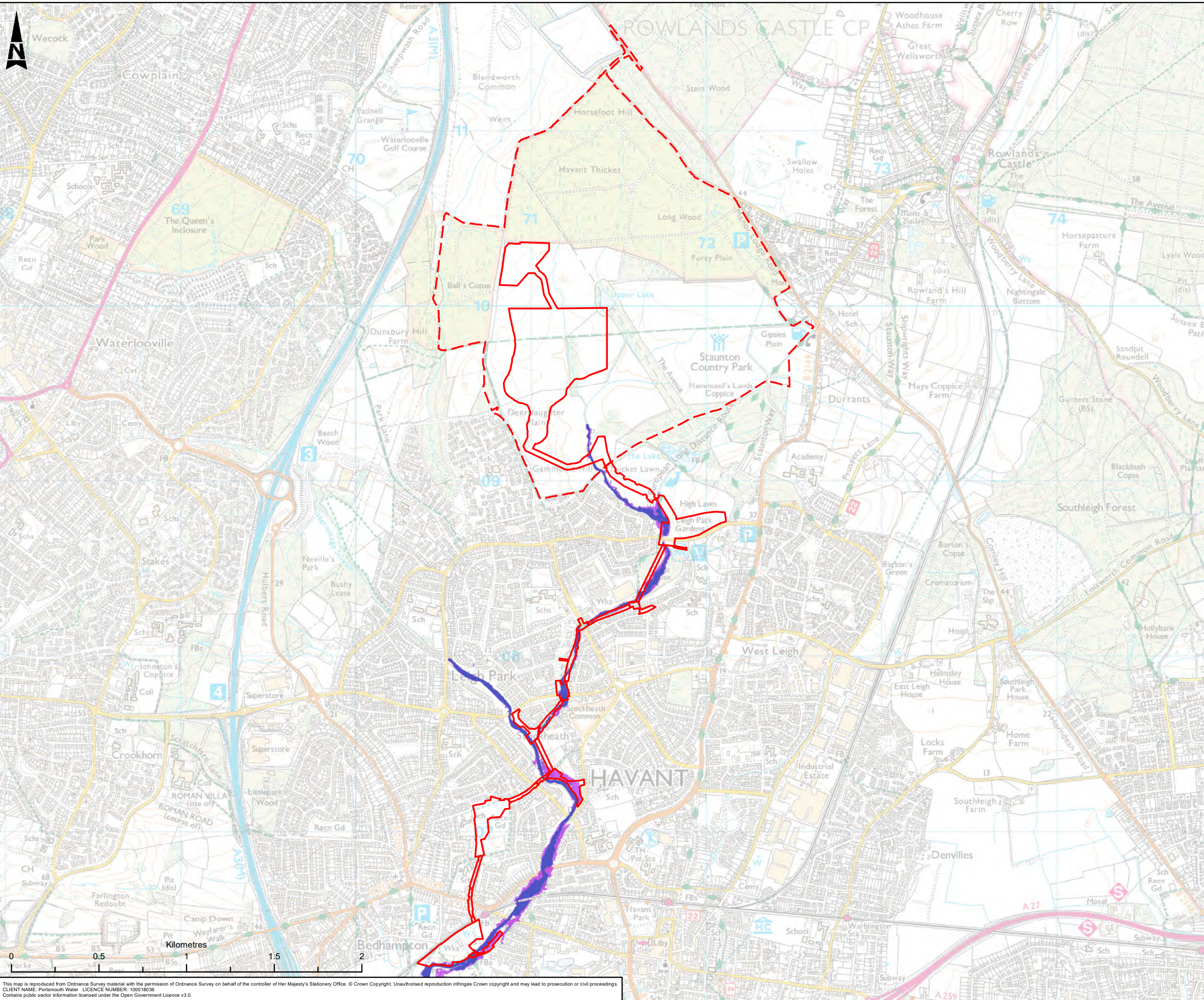


Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:20,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
**FIGURE 15.5
FLOOD RISK FROM SURFACE WATER**

Portsmouth Water Drawing Number	Rev
	C03



Pipeline Scheme Red Line Boundary

Reservoir Red Line Boundary

Baseline 1% (1 in 100) AP Flood Extent

Baseline 1% (1 in 100) + 51% climate change uplift flood extent

C03	NW	LL	AR	JF	PUBLISHED	23/04/2024
C02	NW	LL	AR	JF	PUBLISHED	20/12/2023
C01	FD	AB	SB	LB	PUBLISHED	18/08/2020
Rev.	Drm By	Ckd By	Rev By	Auth By	Description	16/06/2020

AtkinsRéalis

Aztec West

500 Park Avenue

Almondsbury

Bristol

BS32 4RZ

Tel: +44 (0) 1454 6620000

Fax: +44 (0) 1454 663333

www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability		Status	
PUBLISHED		A1	

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0063
Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

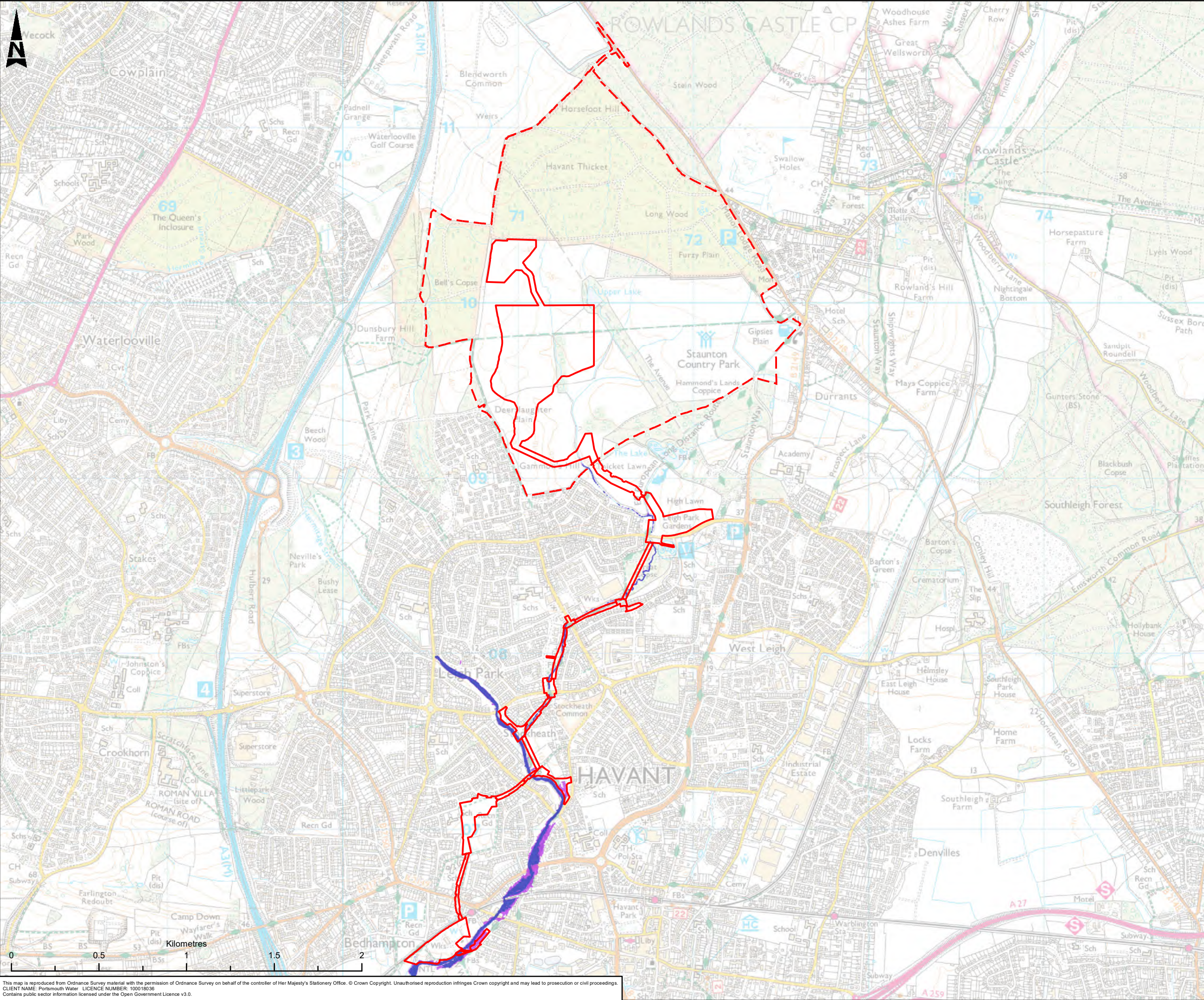
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:20,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.6
BASELINE FLOOD RISK - 1%
(1 IN 100) AP

Portsmouth Water Drawing Number
C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



Pipeline Scheme Red Line Boundary

Reservoir Red Line Boundary

Operational 1% (1 in 100) AP flood extent

Operational 1% (1 in100) + 51% climate change uplift flood extent

C03	NW	LL	AR	JF	PUBLISHED	23/04/2024
C02	NW	LL	AR	JF	PUBLISHED	20/12/2023
C01	FD	AB	SB	LB	PUBLISHED	18/08/2020
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	16/06/2020

AtkinsRéalis

Aztec West

500 Park Avenue

Almondsbury

Bristol

BS32 4RZ

Tel: +44 (0) 1454 662000

Fax: +44 (0) 1454 663333

www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability		Status	
PUBLISHED		A1	

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0064
Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

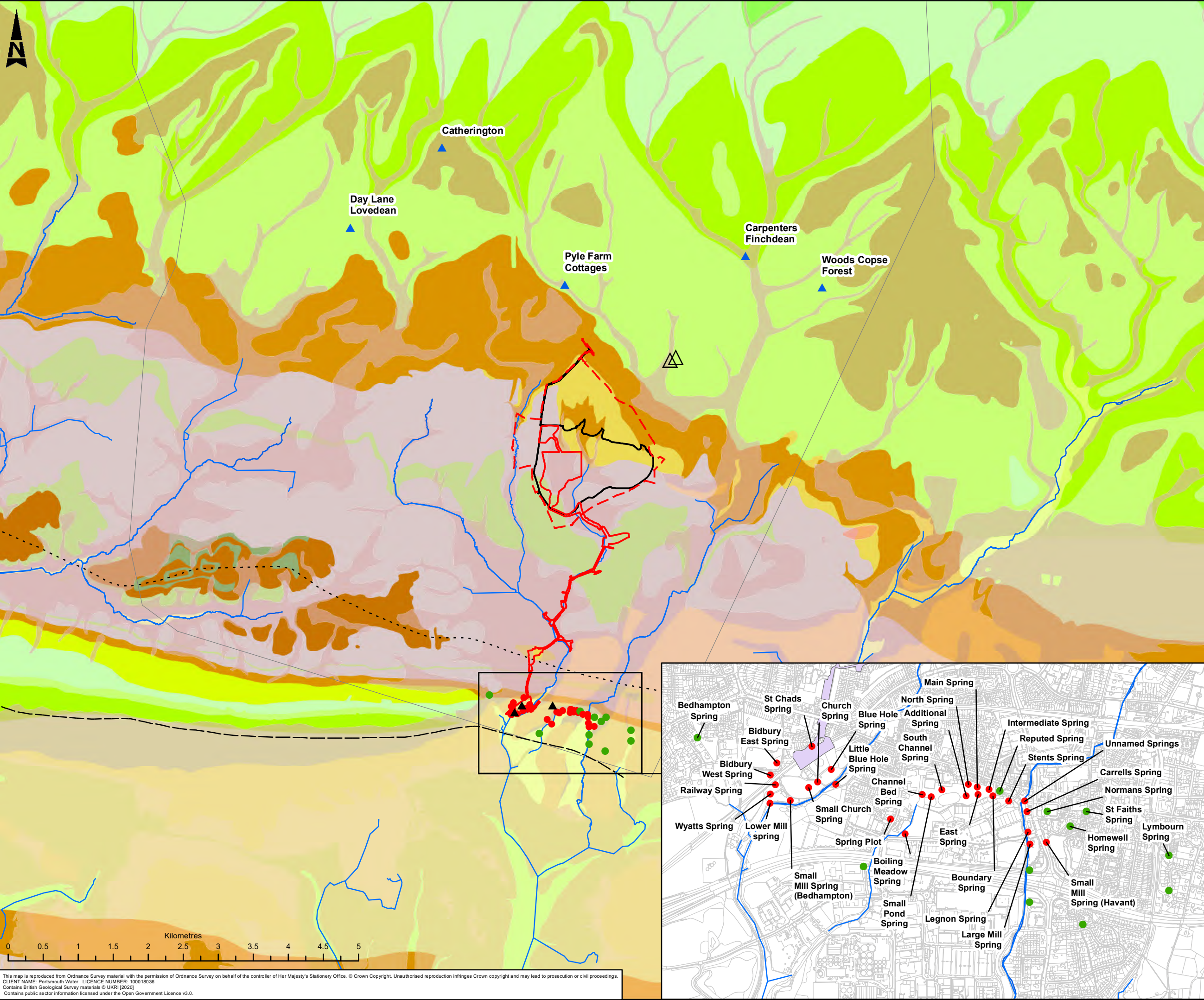
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:20,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.7
OPERATIONAL FLOOD RISK - 1%
(1 IN 100) AP

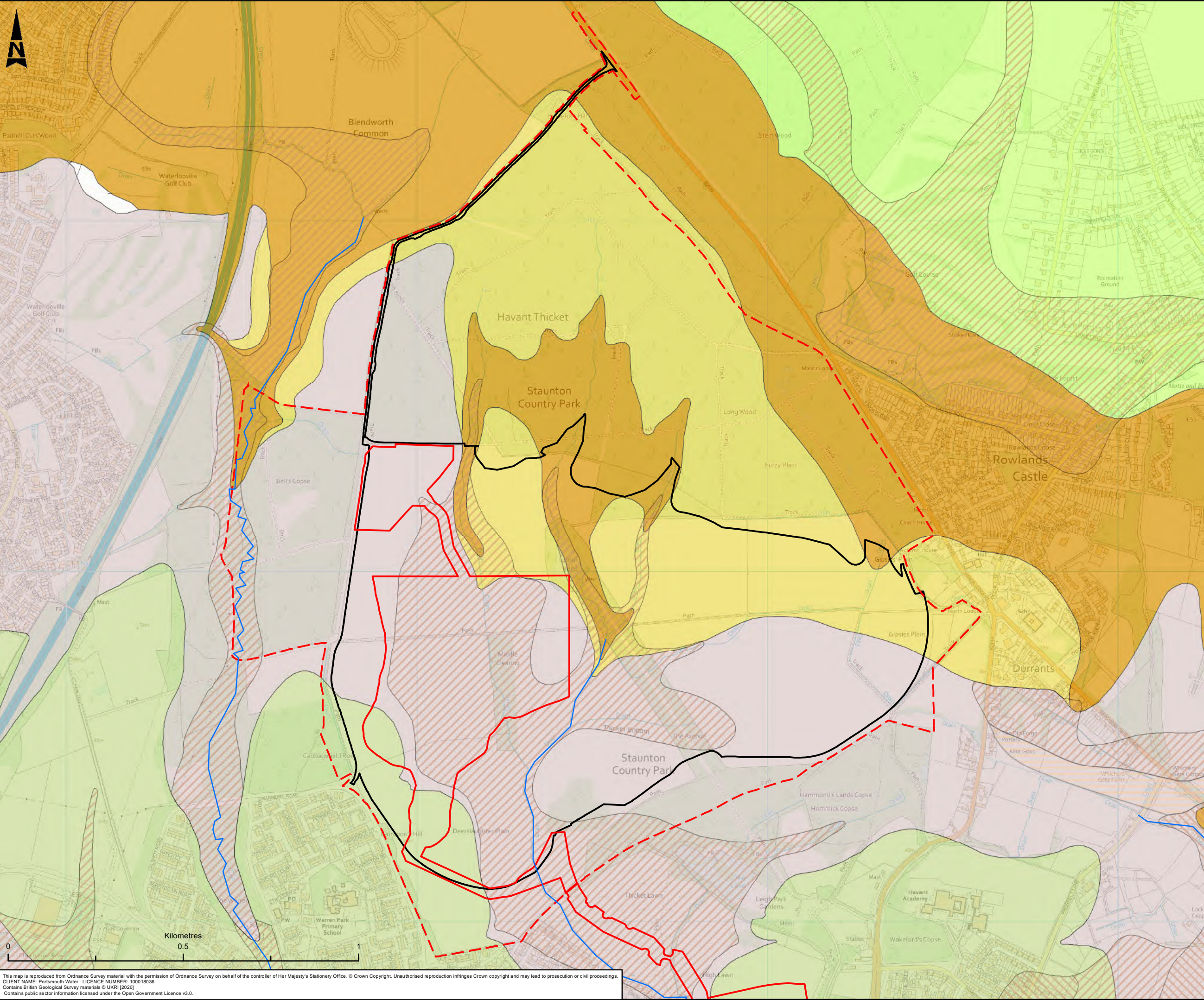
Portsmouth Water Drawing Number
C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



	Reservoir Footprint						
	Pipeline Red Line Boundary						
	Reservoir Red Line Boundary						
	Chalk OBHs						
	PWS Groundwater Abstraction						
	Non-PWS Groundwater Abstraction						
	Springs Used for Water Supply						
	Springs Not Used for Water Supply						
	Portsdown Anticline						
	Chichester Syncline						
	Watercourse						
	Groundwater Catchment Boundary						
Superficial Geology							
	Alluvium - Clay, silt, sand and gravel						
	Beach And Tidal Flat Deposits (Undifferentiated) - Clay, silt, sand and gravel						
	Head - Clay and gravel						
	Head - Clay, silt, sand and gravel						
	Raised Marine Deposits - Sand and gravel						
	River Terrace Deposits (Undifferentiated) - Sand, silt and clay						
Bedrock Geology							
	London Clay Formation - Sand						
	London Clay Formation - Clay, silt and sand						
	Wittering Formation - Sand						
	Wittering Formation - Sand, silt and clay						
	Bognor Sand Member - Sand						
	Lambeth Group - Clay, silt and sand						
	Whitecliff Sand Member - Sand						
	Portsdown Chalk Formation - Chalk						
	Spetisbury Chalk Member - Chalk						
	Tarrant Chalk Member - Chalk						
	Newhaven Chalk Formation - Chalk						
	Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation And Portsdown Chalk Formation (Undifferentiated) - Chalk						
C03	MMN	NW	AR	JF		PUBLISHED	23/04/2024
C02	NW	LL	AR	JF		PUBLISHED	23/04/2024
C01	FD	LH	EE	LB		PUBLISHED	10/07/2020
Rev.	Dm By	Ckd By	Rev By	Auth By		Description	Date
 Aztec West 500 Park Avenue Almondsbury Bristol BS32 4RZ Tel: +44 (0) 1454 6620000 Fax: +44 (0) 1454 663333 www.atkinsrealis.com Copyright © AtkinsRéalis Limited (2023)							
Drawing Suitability							Status
PUBLISHED							A1
Contractors Drawing Number:							
HTR - ATK - ZZ - ZZ - GS - Z - 0054							
Project Originator Volume Location Type Role Number							
Telephone: Havant (023) 9249 9888 Fax: Havant (023) 9245 3632 Website: www.portsmouthwater.co.uk Registered Office: PO Box 8 West Street Havant Hampshire PO9 1LG REGISTERED IN ENGLAND No. 2536455							
Project Ref. No		Sheet		Scale		Sheet Size	
5169117		1 of 1		1:50,000		A3	
Project Title							
HAVANT THICKET RESERVOIR							
Drawing Title							
FIGURE 15.10 GEOLOGY AND HYDROGEOLOGY							
Portsmouth Water Drawing Number							Rev
							C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains British Geological Survey materials © UKRI [2020]
Contains public sector information licensed under the Open Government Licence v3.0.



Reservoir Footprint

Pipeline Red Line Boundary

Reservoir Red Line Boundary

Watercourse

Superficial Geology

Head - Clay and gravel

Head - Clay, silt, sand and gravel

River Terrace Deposits (Undifferentiated) - Sand, silt and clay

Bedrock Geology

London Clay Formation - Sand

London Clay Formation - Clay, silt and sand

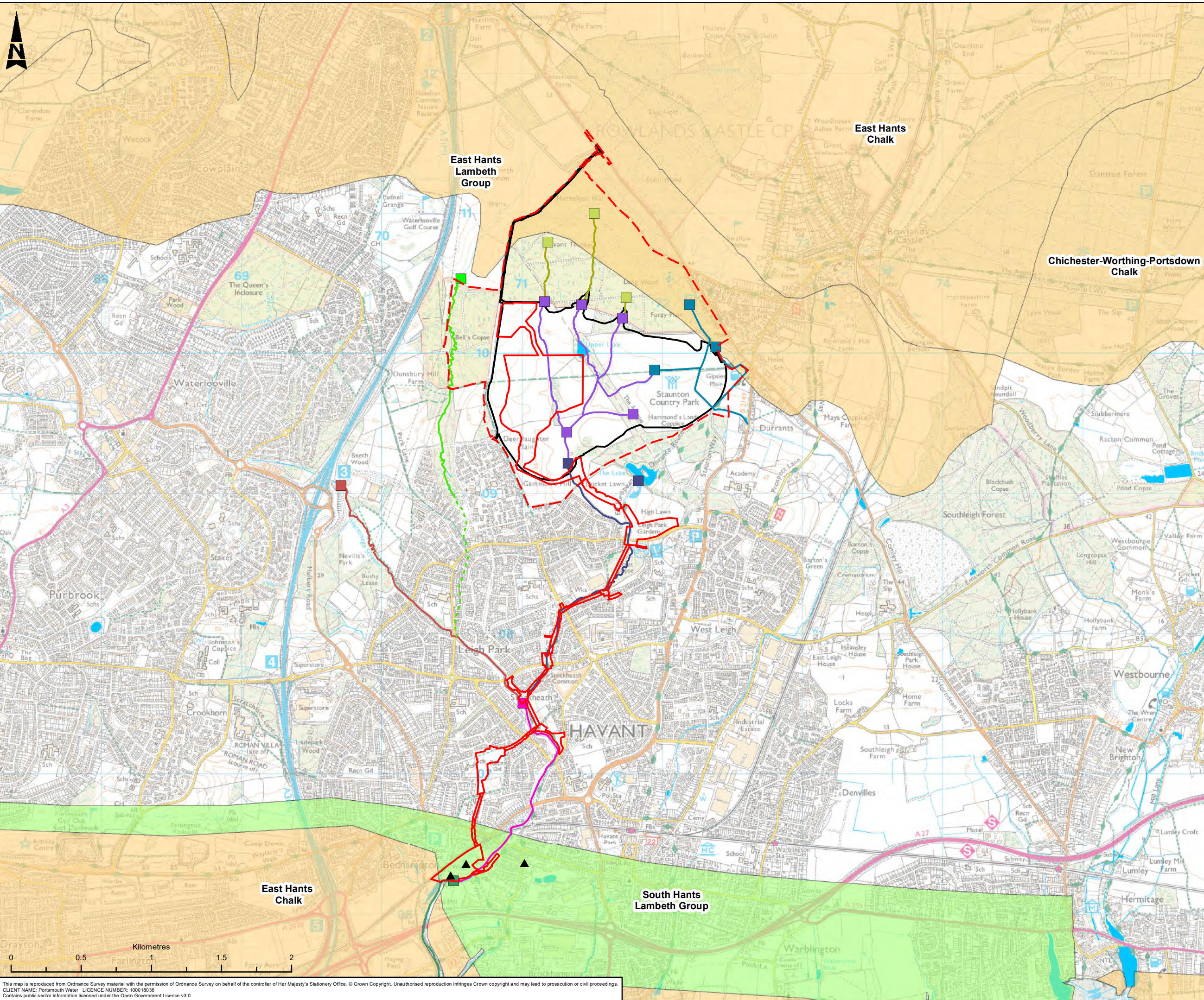
Bognor Sand Member - Sand

Lambeth Group - Clay, silt and sand

Tarrant Chalk Member - Chalk

C03	MMN	NW	AR	JF	PUBLISHED	03/04/2024
C02	NW	LL	AR	JF	PUBLISHED	28/06/2023
C01	FD	LH	EE	LB	PUBLISHED	10/07/2020
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	Date
AtkinsRéalis Aztec West 500 Park Avenue Almondsbury Bristol BS32 4RZ Tel: +44 (0) 1454 662000 Fax: +44 (0) 1454 663333 www.atkinsrealis.com Copyright © AtkinsRéalis Limited (2023)						
Drawing Suitability					Status	
PUBLISHED					A1	
Contractors Drawing Number:						
HTR - ATK - ZZ - ZZ - GS - Z - 0057						
Project Originator Volume Location Type Role Number						
Telephone: Havant (023) 9249 9888						
Fax: Havant (023) 9245 3632						
Website: www.portsmouthwater.co.uk						
Registered Office: PO Box 8 West Street						
Havant Hampshire PO9 1LG						
REGISTERED IN ENGLAND No. 2536455						
Project Ref. No		Sheet		Scale		Sheet Size
5169117		1 of 1		1:10,000		A3
Project Title						
HAVANT THICKET RESERVOIR						
Drawing Title						
FIGURE 15.11 RESERVOIR GEOLOGY						
Portsmouth Water Drawing Number					Rev	
					C03	

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains British Geological Survey materials © UKRI [2020]
Contains public sector information licensed under the Open Government Licence v3.0.



Reservoir Footprint

Pipeline Red Line Boundary

Reservoir Red Line Boundary

Bedhampton Springs

Study Section Start

Study Section 1

Study Section 2

Study Section 3

Study Section 4

Study Section 5

Study Section 6

Study Section 7

Study Section 8

Park Lane Stream - Culverted

WFD Groundwater Body

Chichester-Worthing-Portsdown Chalk

East Hants Chalk

East Hants Lambeth Group

South Hants Lambeth Group

C03	MMN	NW	AR	JF	PUBLISHED	03/04/2024
C02	NW	LL	AR	JF	PUBLISHED	03/04/2024
C01	FD	LH	EE	LB	PUBLISHED	10/07/2020
Rev	Dn By	Old By	Rev By	Auth By	Description	Date

AtkinsRéalis

Aztec West

500 Park Avenue

Almondsbury

Bristol

BS32 4RZ

Tel: +44 (0) 1454 662000

Fax: +44 (0) 1454 663333

www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 0055
Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

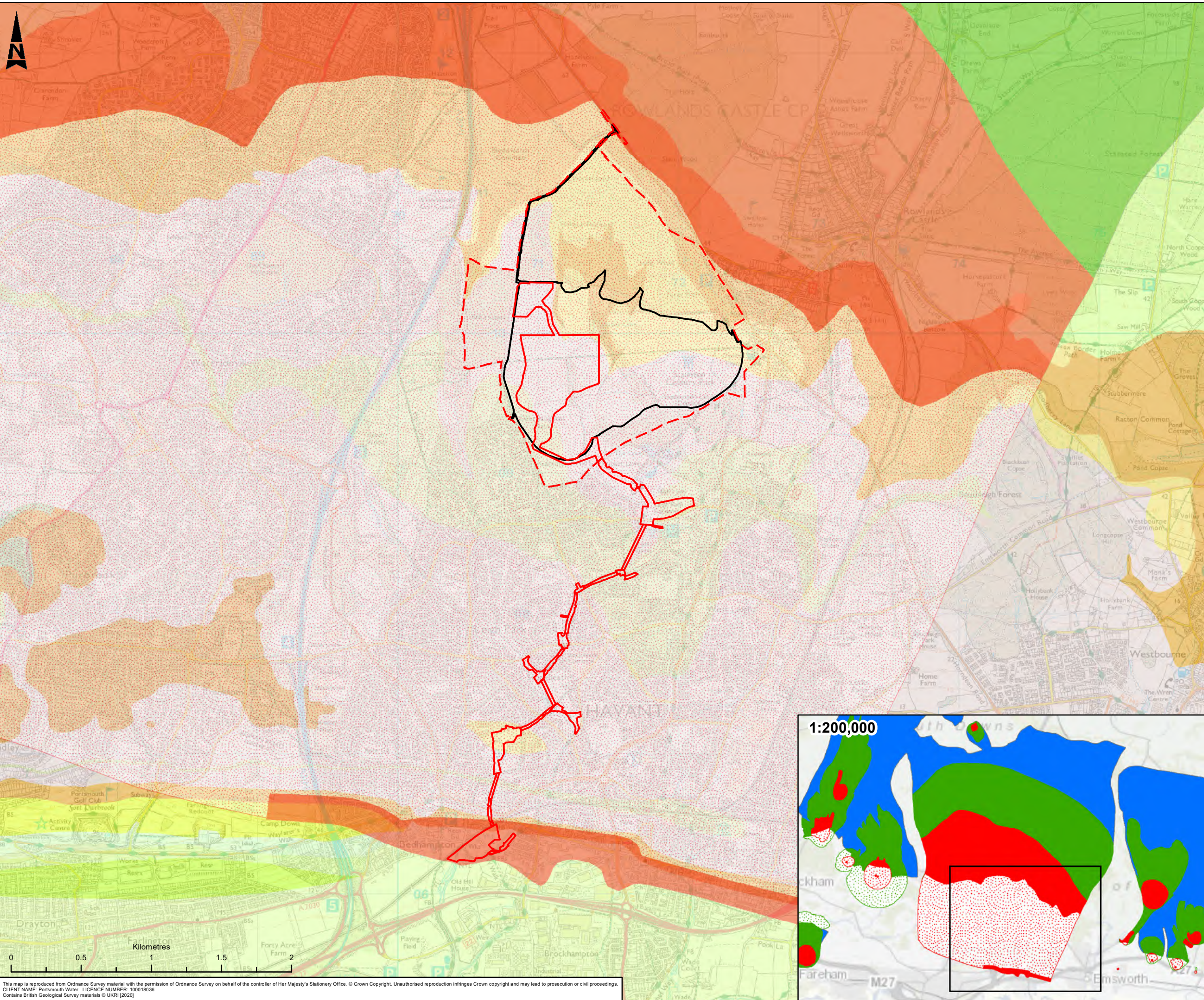
Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 1	1:25,000	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.12
WFD GROUNDWATER BODIES

Portsmouth Water Drawing Number
Rev
C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains public sector information licensed under the Open Government Licence v3.0.



Reservoir Footprint

Pipeline Red Line Boundary

Reservoir Red Line Boundary

PWS Groundwater Abstractions

Source Protection Zone

Zone I - Inner Protection Zone

Zone I - Subsurface Activity

Zone II - Outer Protection

Zone II - Subsurface Activity

Zone III - Total Catchment

Zone III - Subsurface Activity

Zone of Special Interest

Bedrock Geology

London Clay Formation - Sand

London Clay Formation - Clay, silt and sand

Wittering Formation - Sand

Wittering Formation - Sand, silt and clay

Bognor Sand Member - Sand

Lambeth Group - Clay, silt and sand

Whitecliff Sand Member - Sand

Portsdown Chalk Formation - Chalk

Spetisbury Chalk Member - Chalk

Tarrant Chalk Member - Chalk

Newhaven Chalk Formation - Chalk

Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation, Culver Chalk Formation And Portsdown Chalk Formation (Undifferentiated) - Chalk

C03	MMN	NW	AR	JF	PUBLISHED	03/04/2024
C02	NW	LL	AR	JF	PUBLISHED	03/04/2024
C01	FD	LH	EE	LB	PUBLISHED	10/07/2020
Rev.	Dm By	Old By	Rev By	Auth By	Description	Date

AtkinsRéalis

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsrealis.com

Copyright © AtkinsRéalis Limited (2023)

Drawing Suitability

PUBLISHED

Status

A1

Contractors Drawing Number:

HTR - ATK - ZZ - ZZ - GS - Z - 0056

Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Portsmouth Water

Project Ref. No

5169117

Sheet

1 of 1

Scale

1:25,000

Sheet Size

A3

Project Title

HAVANT THICKET RESERVOIR

Drawing Title

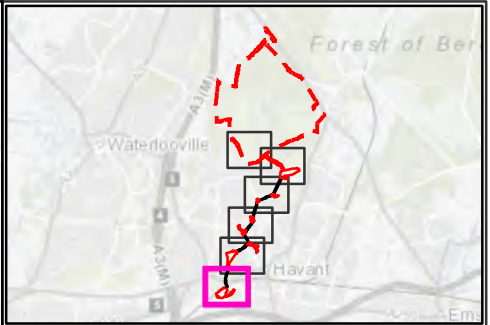
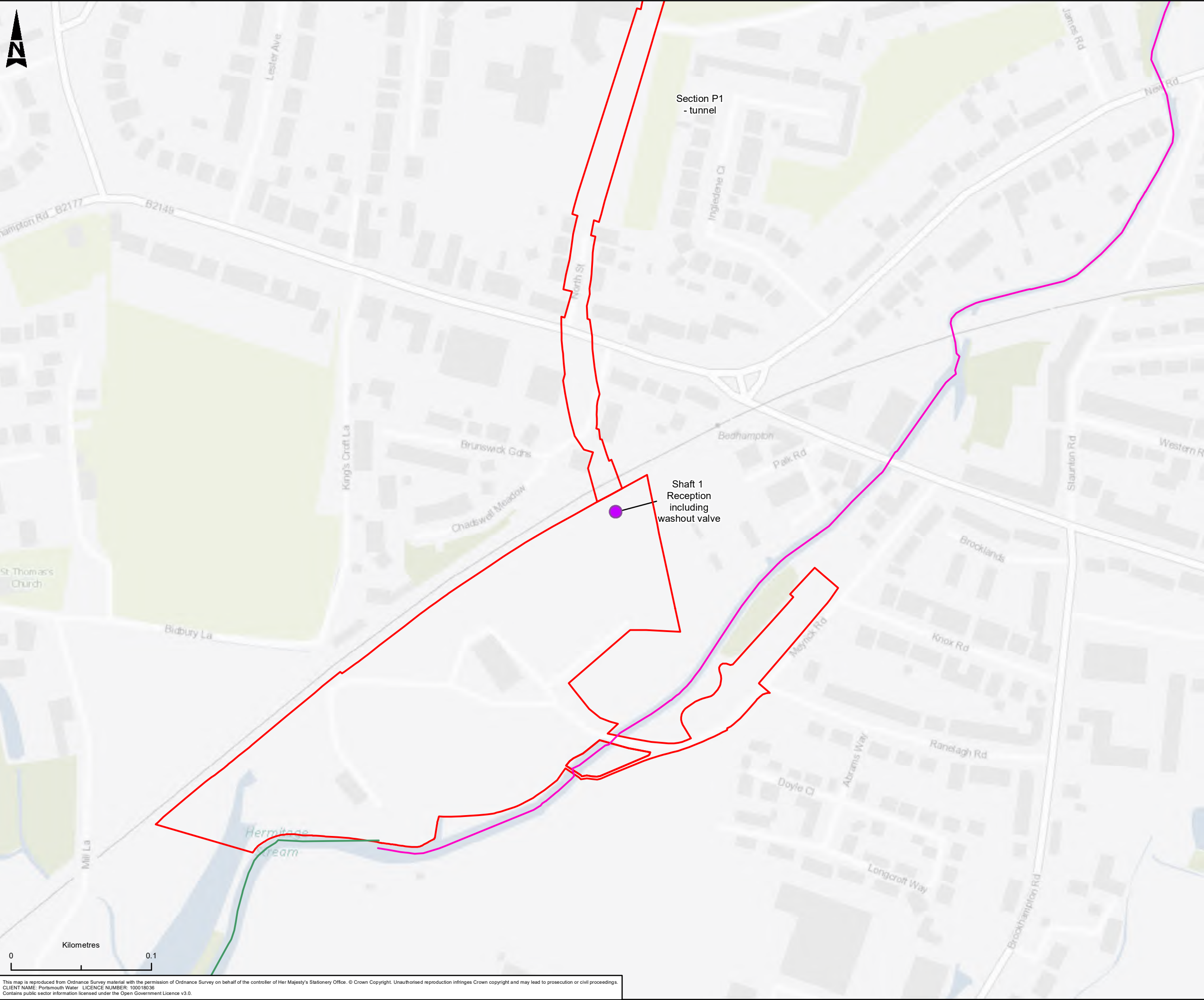
FIGURE 15.13
GROUNDWATER DESIGNATIONS

Portsmouth Water Drawing Number

Rev

C03

This map is reproduced from 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.
CLIENT NAME: Portsmouth Water LICENCE NUMBER: 100018036
Contains British Geological Survey materials © UKRI [2020]



- Pipeline Scheme Red Line Boundary
- Pipeline Work Locations (Launch and Reception)
- Study Section 5
- Study Section 6

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	Date

Member of the SNC-Lavalin Group

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:

HTR - ATK - ZZ - ZZ - GS - Z - 182

Project | Originator | Volume | Location | Type | Role | Number

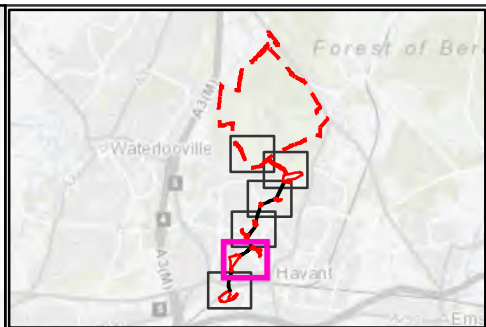
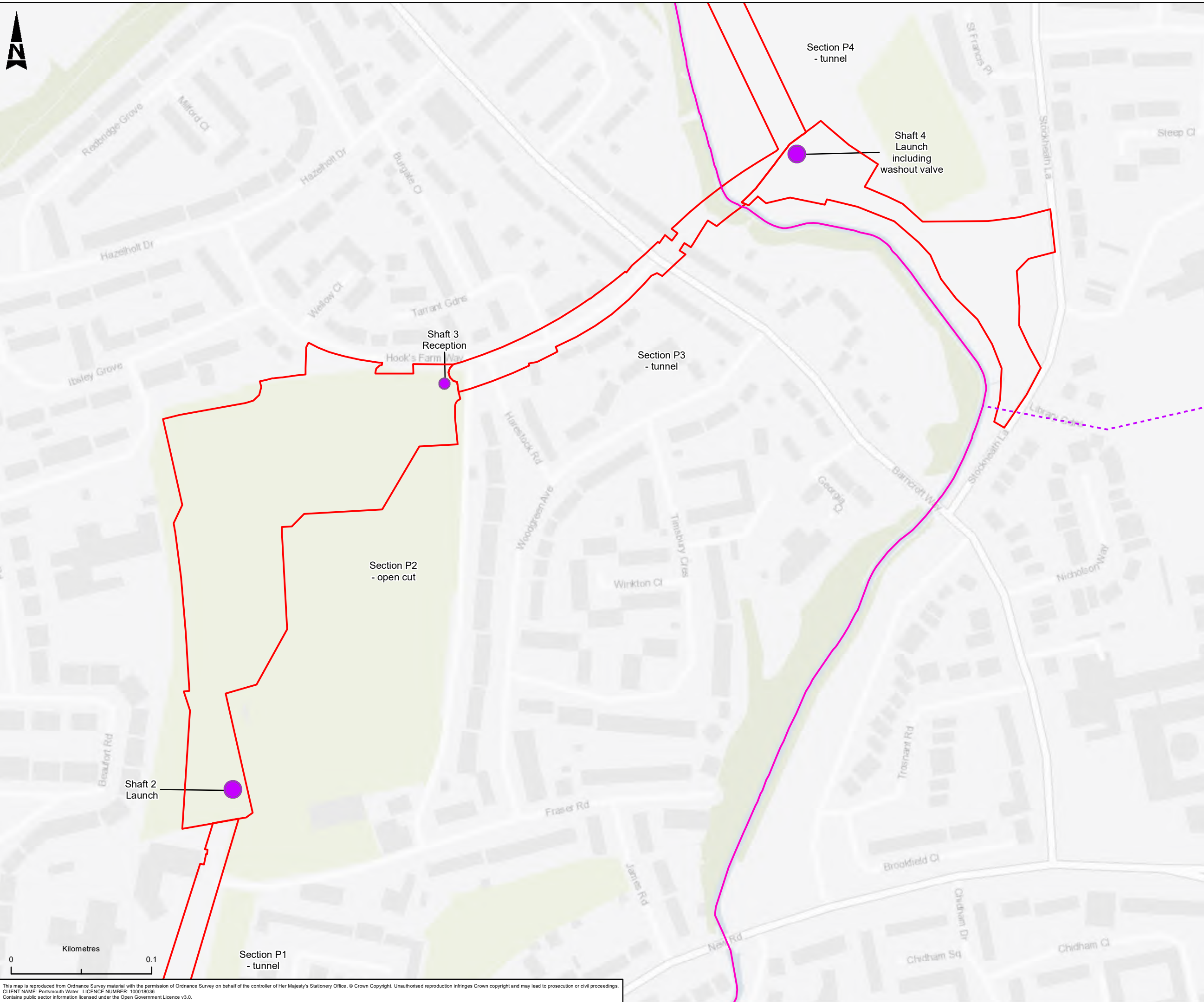
Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Project Ref. No	Sheet	Scale	Sheet Size
5169117	1 of 6	1:2,500	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.14 PIPELINE INFRASTRUCTURE RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



- ▬ Pipeline Scheme Red Line Boundary
- Pipeline Work Locations (Launch and Reception)
- Study Section 5
- - - River Lavant to Hermitage Stream Pipeline Connection

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Cld By	Rev By	Auth By	Description	Date



Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:

HTR - ATK - ZZ - ZZ - GS - Z - 182

Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455



Project Ref. No	Sheet	Scale	Sheet Size
5169117	2 of 6	1:2,500	A3

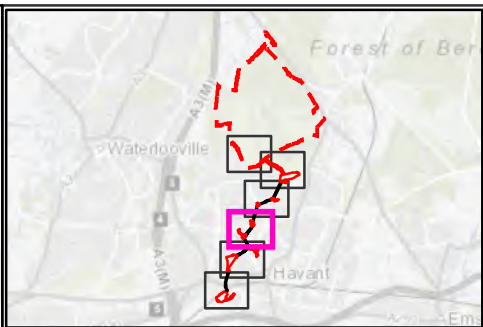
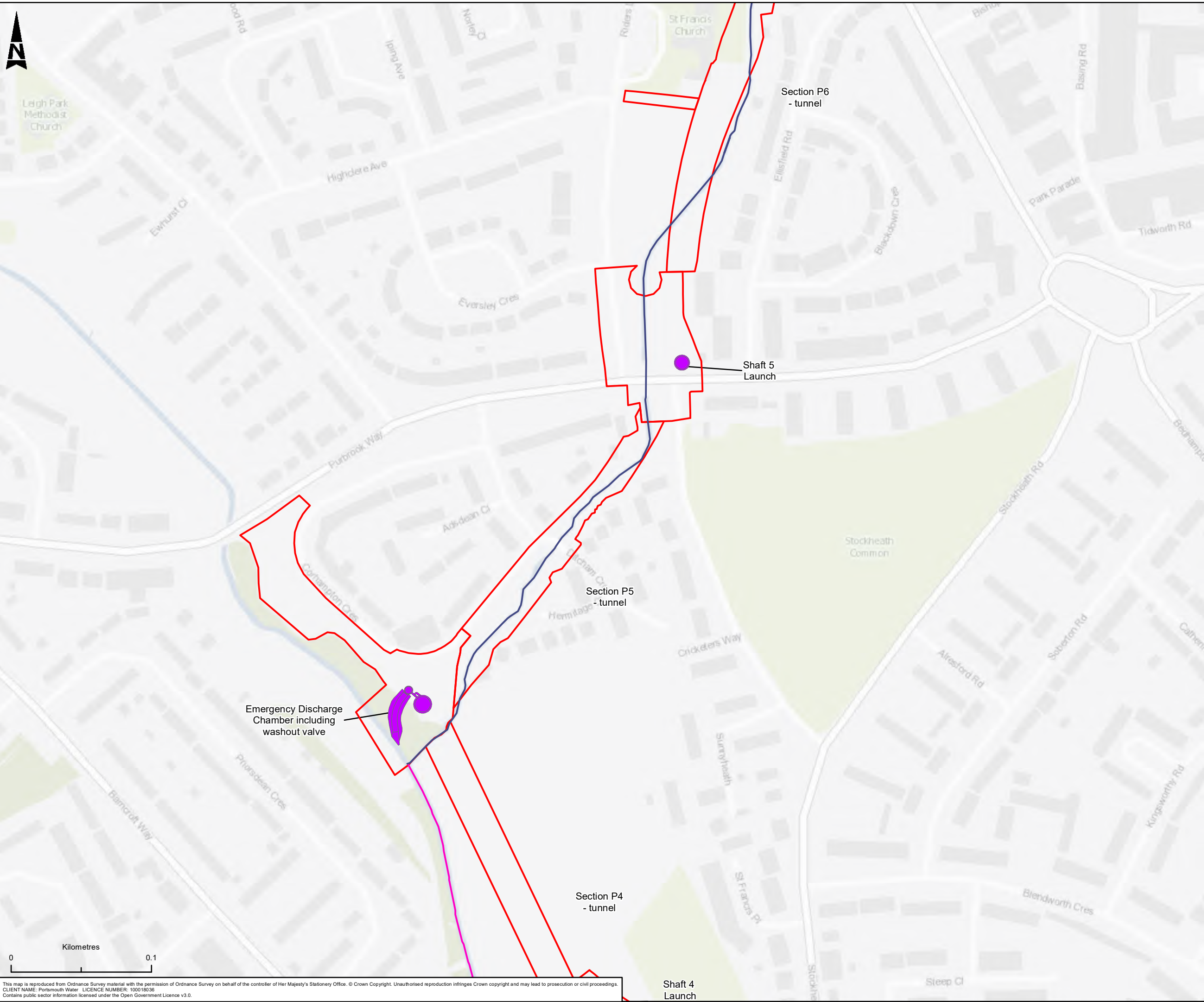
Project Title

HAVANT THICKET RESERVOIR

Drawing Title

FIGURE 15.14 PIPELINE INFRASTRUCTURE RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



- ▬ Pipeline Scheme Red Line Boundary
- ▬ Pipeline Work Locations (Launch and Reception)
- ▬ Study Section 3a
- ▬ Study Section 5

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Old By	Rev By	Auth By	Description	Date

ATKINS
Member of the SNC-Lavalin Group

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 182
Project | Originator | Volume | Location | Type | Role | Number

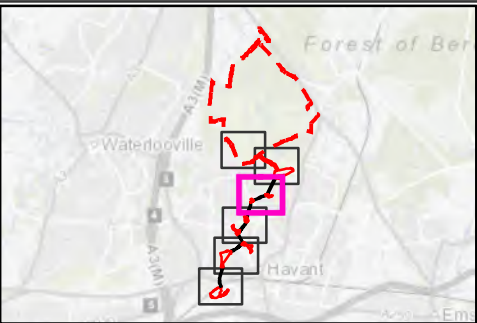
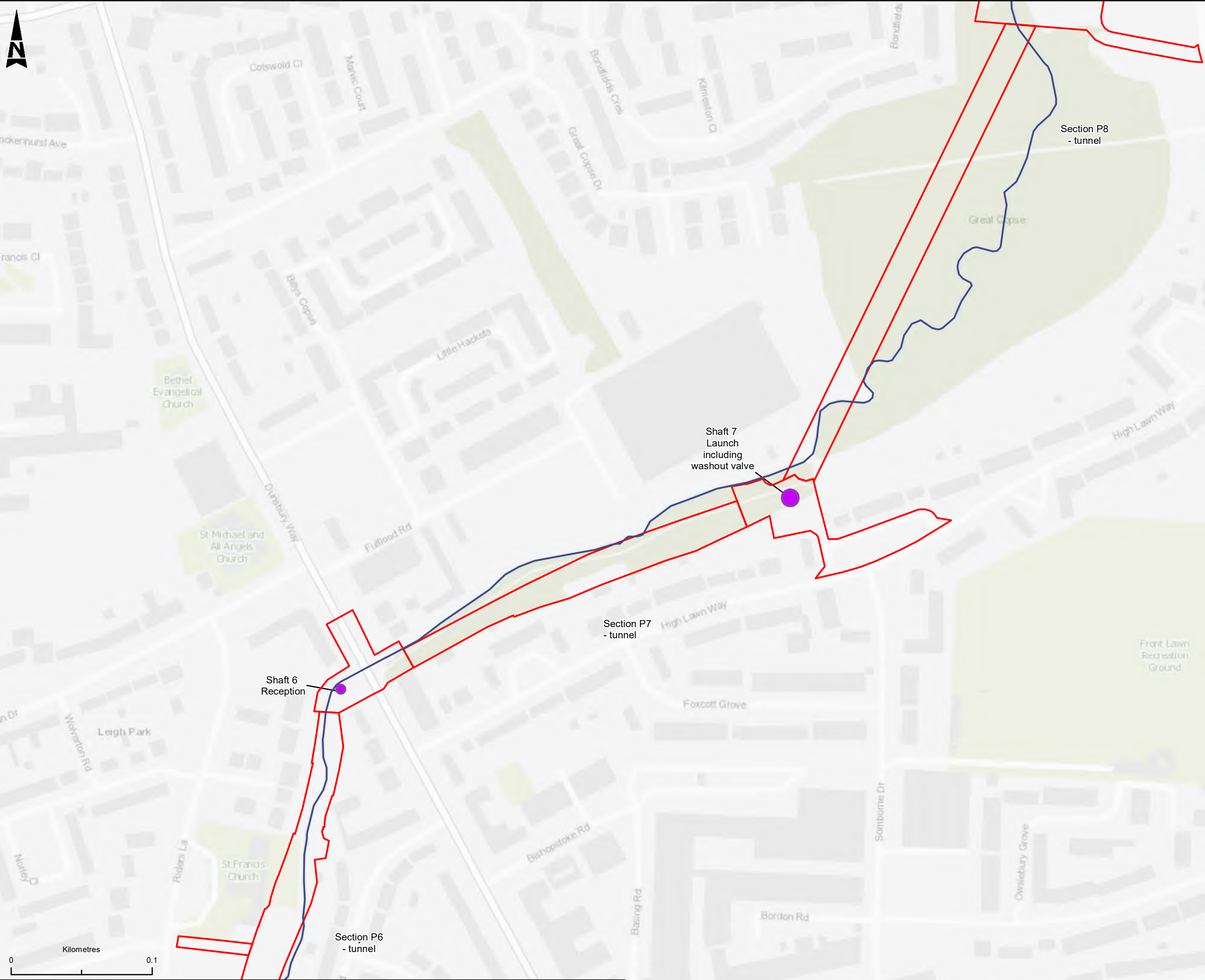
Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Project Ref. No	Sheet	Scale	Sheet Size
5169117	3 of 6	1:2,500	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.14 PIPELINE INFRASTRUCTURE RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



- ▬ Pipeline Scheme Red Line Boundary
- ▬ Pipeline Work Locations (Launch and Reception)
- ▬ Study Section 3a

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	Date

ATKINS
Member of the SNC-Lavalin Group

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 662000
Fax: +44 (0) 1454 663333
www.atkinsglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:
HTR - ATK - ZZ - ZZ - GS - Z - 182
Project | Originator | Volume | Location | Type | Role | Number

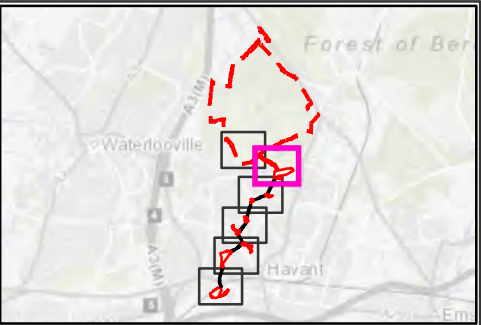
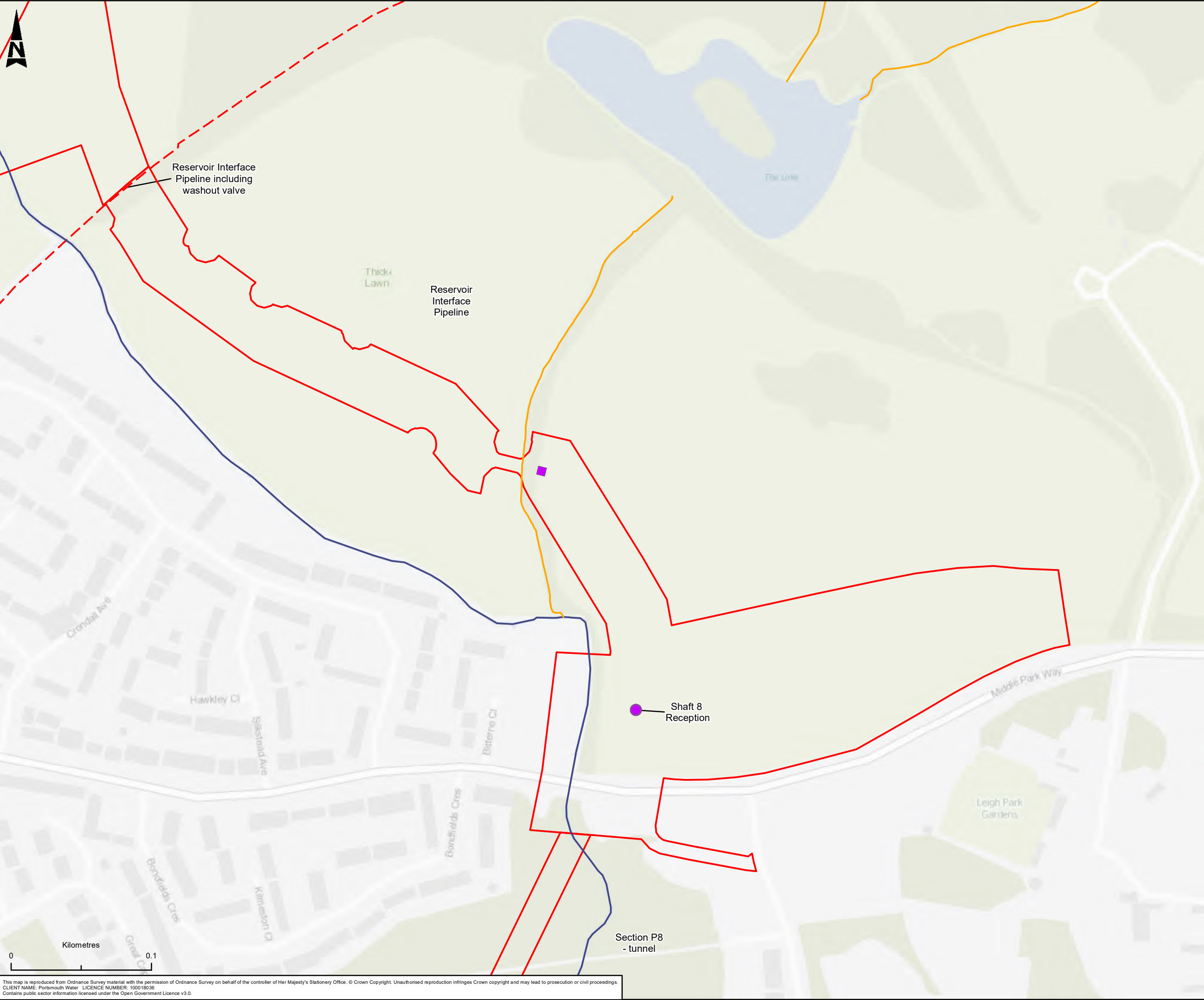
Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Project Ref. No	Sheet	Scale	Sheet Size
5169117	4 of 6	1:2,500	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.14 PIPELINE INFRASTRUCTURE RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



- Pipeline Scheme Red Line Boundary
- Reservoir Red Line Boundary
- Pipeline Work Locations (Launch and Reception)
- Study Section 3a
- Study Section 3b

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Ckd By	Rev By	Auth By	Description	Date



Member of the SNC-Lavalin Group

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number: HTR - ATK - ZZ - ZZ - GS - Z - 182						
Project	Originator	Volume	Location	Type	Role	Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

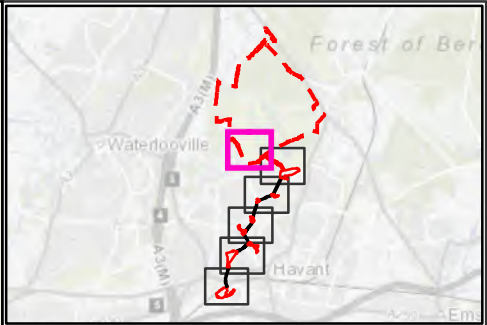
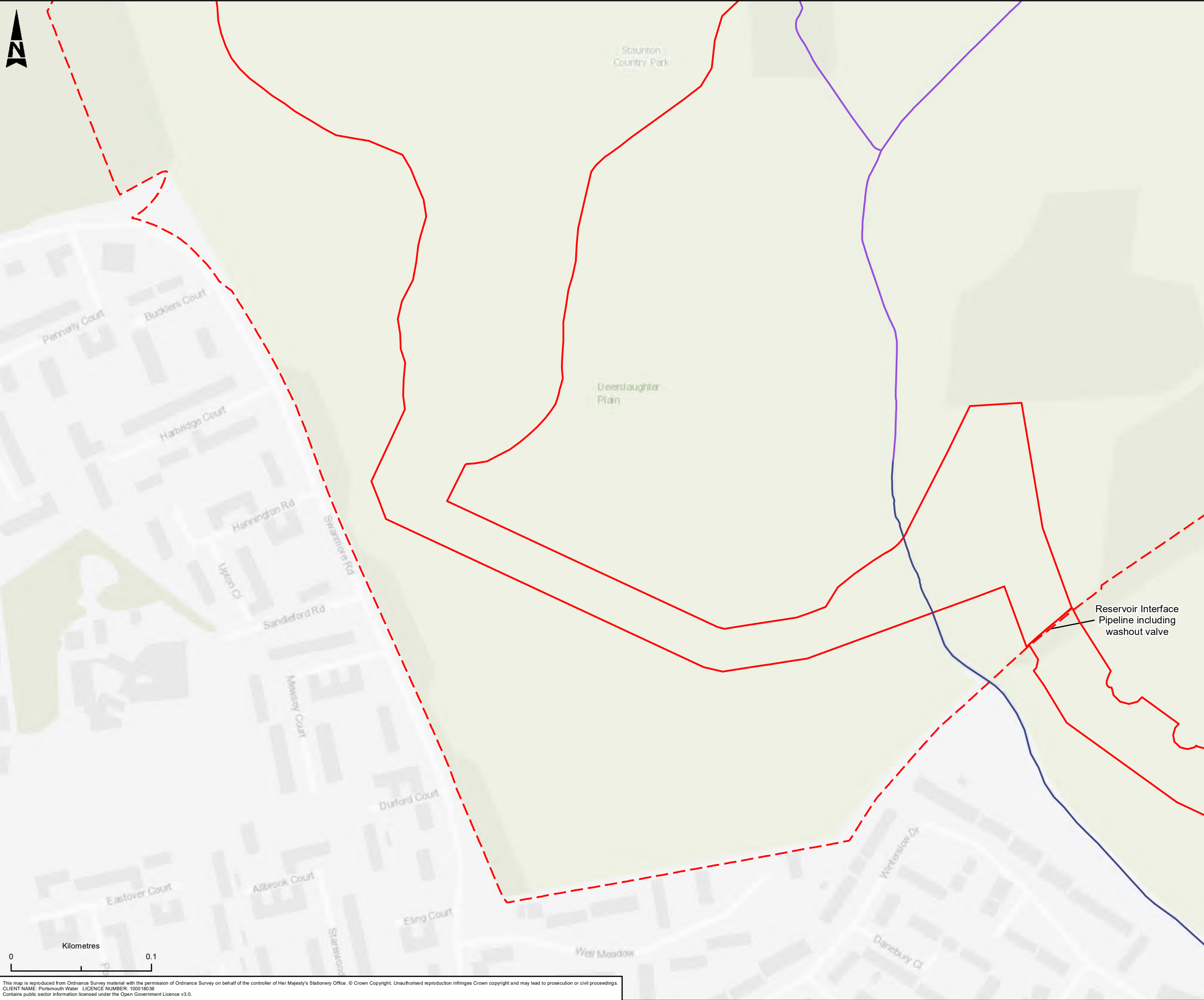


Project Ref. No	Sheet	Scale	Sheet Size
5169117	5 of 6	1:2,500	A3

Project Title
HAVANT THICKET RESERVOIR

Drawing Title
FIGURE 15.14 PIPELINE INFRASTRUCTURE RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



- Pipeline Scheme Red Line Boundary
- Reservoir Red Line Boundary
- Study Section 2
- Study Section 3a

P00	NW	JS	AR	JF	PUBLISHED	09/05/2024
Rev.	Dm By	Cld By	Rev By	Auth By	Description	Date

Member of the SNC-Lavalin Group

Aztec West
500 Park Avenue
Almondsbury
Bristol
BS32 4RZ

Tel: +44 (0) 1454 6620000
Fax: +44 (0) 1454 663333
www.atkinsglobal.com

Copyright © Atkins Limited (2023)

Drawing Suitability	Status
PUBLISHED	A1

Contractors Drawing Number:

HTR - ATK - ZZ - ZZ - GS - Z - 182

Project | Originator | Volume | Location | Type | Role | Number

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Project Ref. No	Sheet	Scale	Sheet Size
5169117	6 of 6	1:2,500	A3

Project Title

HAVANT THICKET RESERVOIR

Drawing Title

FIGURE 15.14 PIPELINE
INFRASTRUCTURE
RELEVANT TO STUDY SECTIONS

Portsmouth Water Drawing Number	Rev
	C01



Atkins Limited
The Hub
500 Park Avenue
Aztec West
Bristol
BS32 4RZ