Thames Water

Development Consent Order

Application Reference Number: WWO10001

Documents for Certification September 2014

We, Lindsay Speed and Sarah Fairbrother hereby certify that this is a true copy of the environmental statement referred to in Article 61 (1) (f) of the Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014.

Lidsay Speed

Saran Firbnither

September 2014



Thames Tideway Tunnel

Thames Water Utilities Limited

Application for Development Consent

Application Reference Number: WWO10001

Environmental Statement

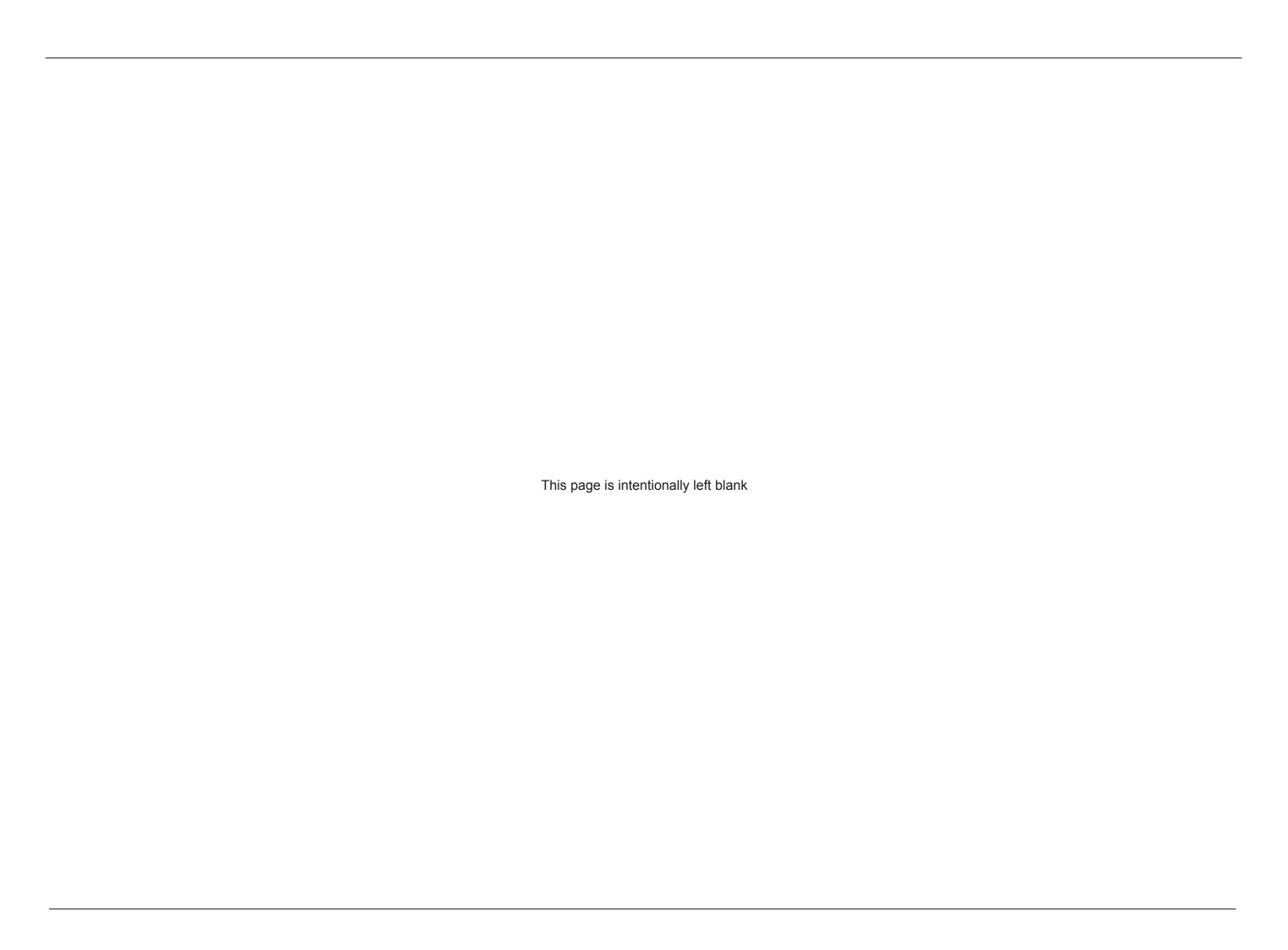
Doc Ref: **6.2.25**

Volume 25: Abbey Mills Pumping Station figures

APFP Regulations 2009: Regulation **5(2)(a)**







Thames Tideway Tunnel

Environmental Statement

List of contents

Environmenta	Statement glossary and abbreviations
Volume 1	Introduction to the Environmental Statement
Volume 2	Environmental assessment methodology
Volume 3	Project-wide effects assessment
Volume 4	Acton Storm Tanks site assessment
Volume 5	Hammersmith Pumping Station site assessment
Volume 6	Barn Elms site assessment
Volume 7	Putney Embankment Foreshore site assessment
Volume 8	Dormay Street site assessment
Volume 9	King George's Park site assessment
Volume 10	Carnwath Road Riverside site assessment
Volume 11	Falconbrook Pumping Station site assessment
Volume 12	Cremorne Wharf Depot site assessment
Volume 13	Chelsea Embankment Foreshore site assessment
Volume 14	Kirtling Street site assessment
Volume 15	Heathwall Pumping Station site assessment
Volume 16	Albert Embankment Foreshore site assessment
Volume 17	Victoria Embankment Foreshore site assessment
Volume 18	Blackfriars Bridge Foreshore site assessment
Volume 19	Shad Thames Pumping Station site assessment
Volume 20	Chambers Wharf site assessment
Volume 21	King Edward Memorial Park Foreshore site assessment
Volume 22	Earl Pumping Station site assessment
Volume 23	Deptford Church Street site assessment
Volume 24	Greenwich Pumping Station site assessment
Volume 25	Abbey Mills Pumping Station site assessment
Volume 26	Beckton Sewage Treatment Works site assessment
Volume 27	Minor works sites assessment

This page is intentionally blank

Section 1

Thames Tideway Tunnel

Environmental Statement

Volume 25 Abbey Mills Pumping Station site assessment

List of contents

Section 2	Site context
Section 3	Proposed development
Section 4	Air quality and odour
Section 5	Ecology – aquatic
Section 6	Ecology – terrestrial
Section 7	Historic environment
Section 8	Land quality
Section 9	Noise and vibration
Section 10	Socio-economics
Section 11	Townscape and visual
Section 12	Transport
Section 13	Water resources – groundwater
Section 14	Water resources – surface water
Section 15	Water resources – flood risk
Volumo 25 Abb	ov Mills Dumping Station figures

Introduction

Volume 25 Abbey Mills Pumping Station figures

Section 1	Plans	from '	the F	3nnk	of Plans
	I IUIIO	11 0111			oi i iaiio

Section 2 Environmental impact assessment figures

Volume 25 Abbey Mills Pumping Station appendices

ntroduction

Appendix B Air quality and odour
Appendix C Ecology - aquatic

Appendix D Ecology – terrestrial

Appendix E Historic environment

Appendix F Land quality

Appendix G Noise and vibration

Appendix H Socio-economics

Appendix I Townscape and visual

Appendix J Transport

Appendix K Water resources – groundwater

Appendix L Water resources – surface water

Appendix M Water resources – flood risk

Appendix N Development schedule

Thames Tideway Tunnel

Environmental Statement

Volume 25 Abbey Mills Pumping Station figures

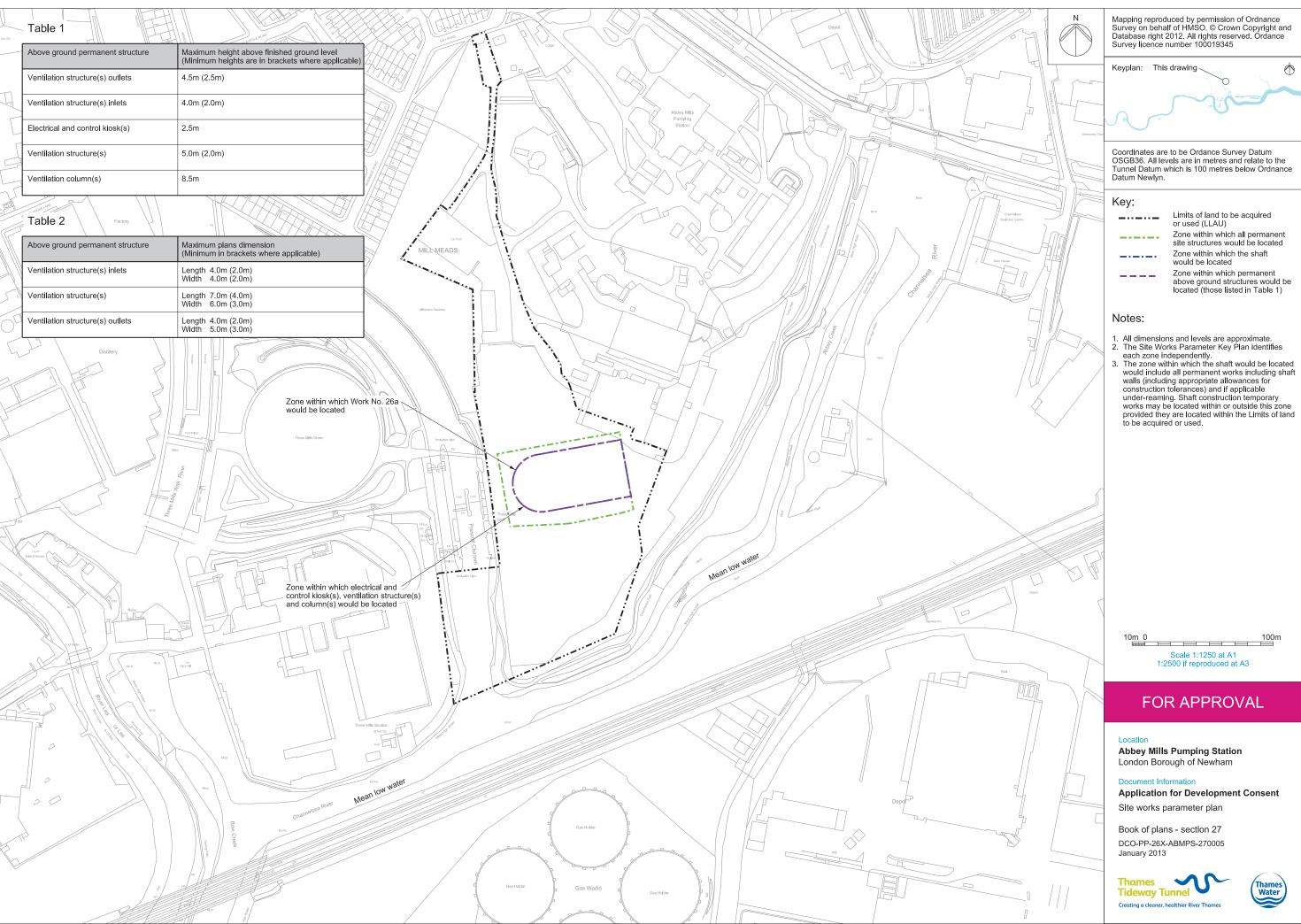
List of contents

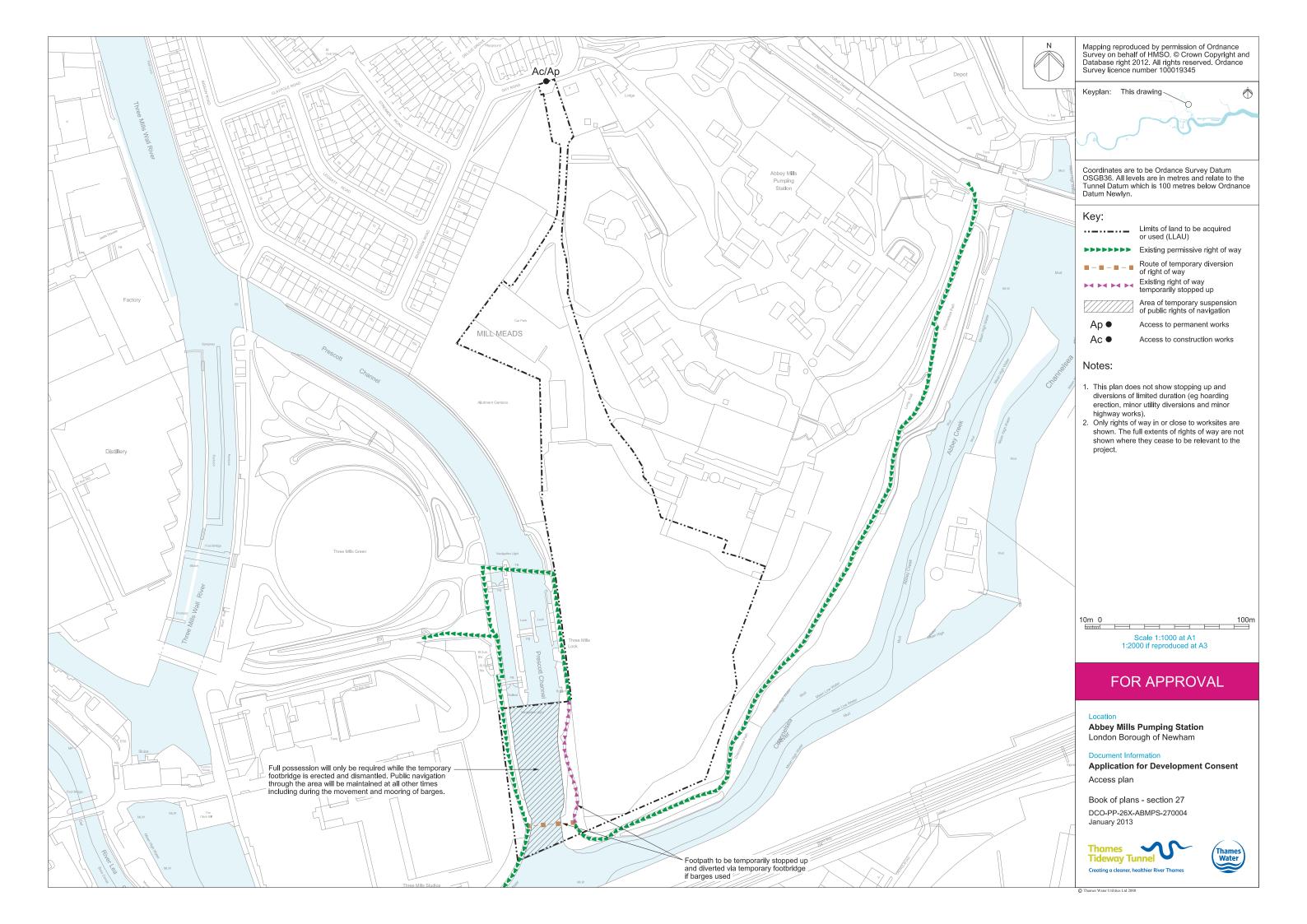
Section 1: Plans from the Book of Plans	
Site works parameter plan	
Access plan	
Proposed site features plan	
Construction phases - phase 1	
Construction phases - phase 2	
Transport - existing highway layout	
Transport - highway layout during construction area 1	
Transport - highway layout during construction area 2	
Transport - permanent highway layout area 1 work	
Transport - permanent highway layout area 2 work	
Section 2: Environmental impact assessment figures	
Site location plan	Vol 25 Figure 2.1.1
Land use	Vol 25 Figure 2.1.2
Environmental setting	Vol 25 Figure 2.1.3
Base case and cumulative development projects	Vol 25 Figure 3.5.1
Air quality and odour - air quality monitoring sites	Vol 25 Figure 4.4.1
Air quality and odour - H2S monitoring locations	Vol 25 Figure 4.4.2
Air quality and odour - modelled air quality receptors	Vol 25 Figure 4.4.3
Air quality and odour - annual mean NO2 for 2010 baseline	Vol 25 Figure 4.5.1
Air quality and odour - annual mean NO2 for peak construction year base case	Vol 25 Figure 4.5.2
Air quality and odour - annual mean NO2 for peak construction year	
development case	Vol 25 Figure 4.5.3
Air quality and odour - annual mean NO2 Impact for peak construction year	Vol 25 Figure 4.5.4
Air quality and odour - annual mean PM10 for 2010 baseline	Vol 25 Figure 4.5.5
Air quality and odour - annual mean PM10 for peak construction year base	
case	Vol 25 Figure 4.5.6
Air quality and odour - annual mean PM10 for peak construction year	
development case	Vol 25 Figure 4.5.7
Air quality and odour - annual mean PM10 Impact for peak construction year	Vol 25 Figure 4.5.8
Terrestrial ecology - designated sites	Vol 25 Figure 6.4.1
Terrestrial ecology - Phase 1 Habitat Survey	Vol 25 Figure 6.4.2
Terrestrial ecology - otter and water vole survey	Vol 25 Figure 6.4.3
Terrestrial ecology - bat triggering (remote recording) and bat activity survey	Vol 25 Figure 6.4.4
Terrestrial ecology - breeding bird survey	Vol 25 Figure 6.4.5
Terrestrial ecology - wintering birds survey	Vol 25 Figure 6.4.6

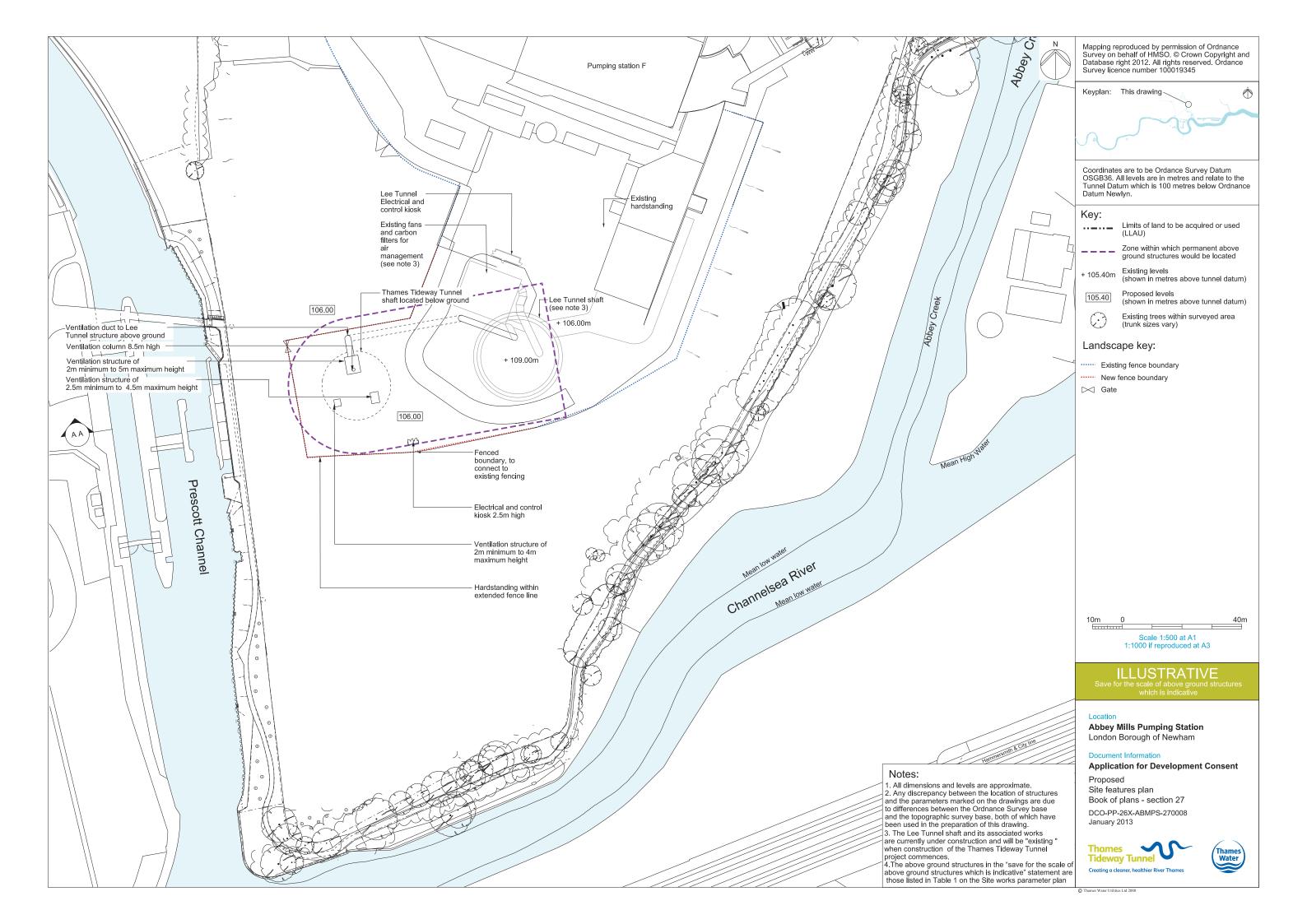
Terrestrial ecology - black redstart survey	Vol 25 Figure 6.4.7
Terrestrial ecology - reptile survey	Vol 25 Figure 6.4.8
Terrestrial ecology - invasive plant survey	Vol 25 Figure 6.4.9
Historic environment - historic environment features map	Vol 25 Figure 7.4.1
Historic environment - historic character and setting of heritage assets	Vol 25 Figure 7.4.2
Noise and vibration - receptor locations	Vol 25 Figure 9.4.1
Socio-economics - context plan	Vol 25 Figure 10.4.1
Townscape and visual - Development pattern and scale	Vol 25 Figure 11.4.1
Townscape and visual - Aerial photo showing pattern of vegetation	Vol 25 Figure 11.4.2
Townscape and visual - Open spaces	Vol 25 Figure 11.4.3
Townscape and visual - Transport routes	Vol 25 Figure 11.4.4
Townscape and visual - Townscape character areas	Vol 25 Figure 11.4.5
Townscape and visual – Viewpoints	Vol 25 Figure 11.4.6
Construction Traffic Routes	Vol 25 Figure 12.2.1
Site Location Plan	Vol 25 Figure 12.4.1
Pedestrian and Cycle Network	Vol 25 Figure 12.4.2
Public Transport	Vol 25 Figure 12.4.3
Parking	Vol 25 Figure 12.4.4
Survey Locations	Vol 25 Figure 12.4.5
Baseline, Construction and Development case traffic flow (AM peak hour)	Vol 25 Figure 12.4.6
Baseline, Construction and Development case traffic flow (PM peak hour)	Vol 25 Figure 12.4.7
Water resources - groundwater - superficial geology	Vol 25 Figure 13.4.1
Water resources - groundwater - solid geology	Vol 25 Figure 13.4.2
Water resources - groundwater - monitoring locations	Vol 25 Figure 13.4.3
Water resources - groundwater - regional groundwater hydrograph	Vol 25 Figure 13.4.4
Water resources - surface water - water quality monitoring points	Vol 25 Figure 14.4.1
Flood risk – EA flood zones	Vol 25 Figure 15.3.1
Flood risk – Rive Lee flood extents	Vol 25 Figure 15.3.2
Land quality - potentially contaminating land-uses	Vol 25 Figure F.1.1
Land quality - borehole locations	Vol 25 Figure F.1.2
Land quality - hazard and waste sites	Vol 25 Figure F.1.3
Noise and vibration - noise survey locations	Vol 25 Figure G.1.

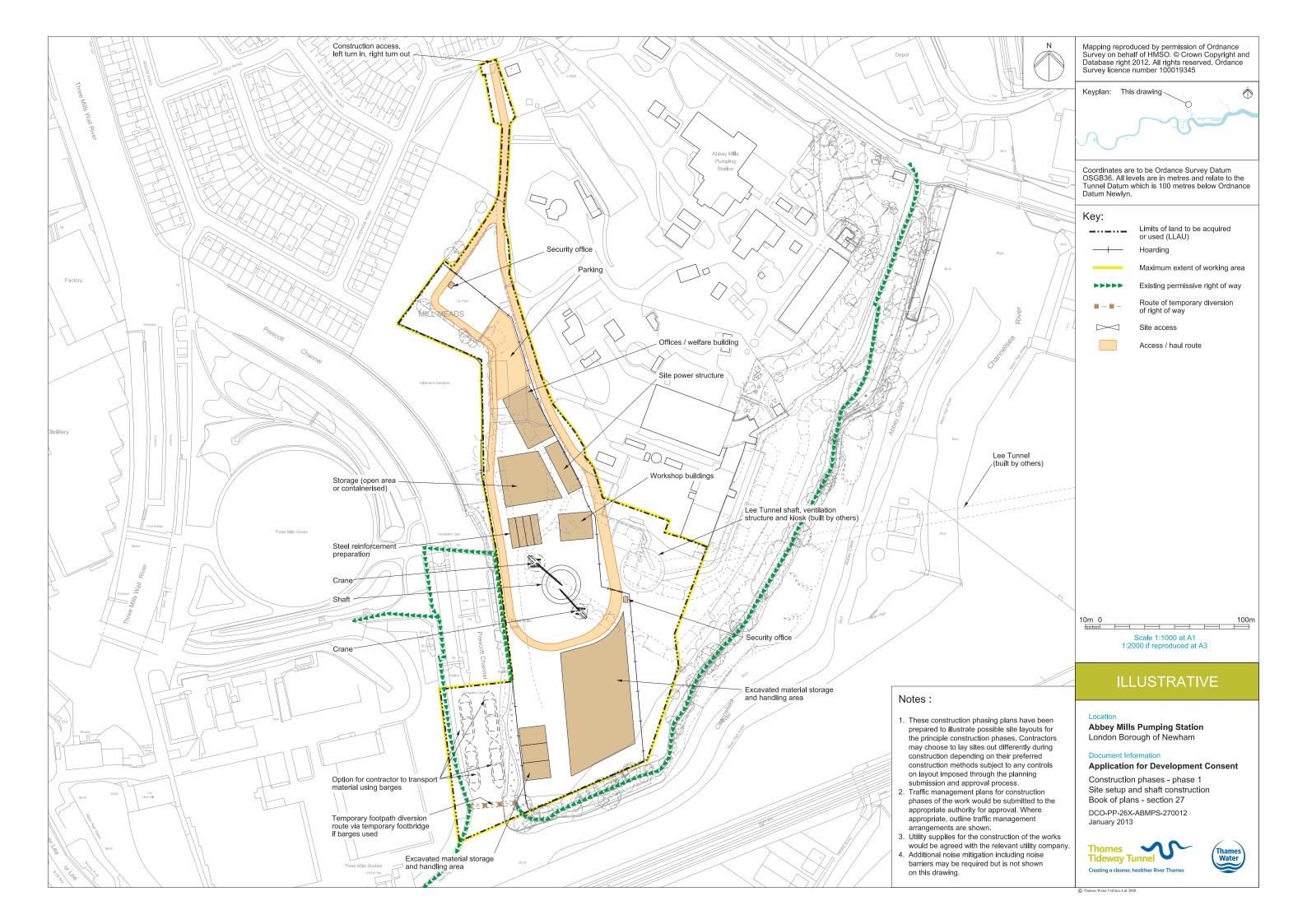
1 Plans from the Book of Plans

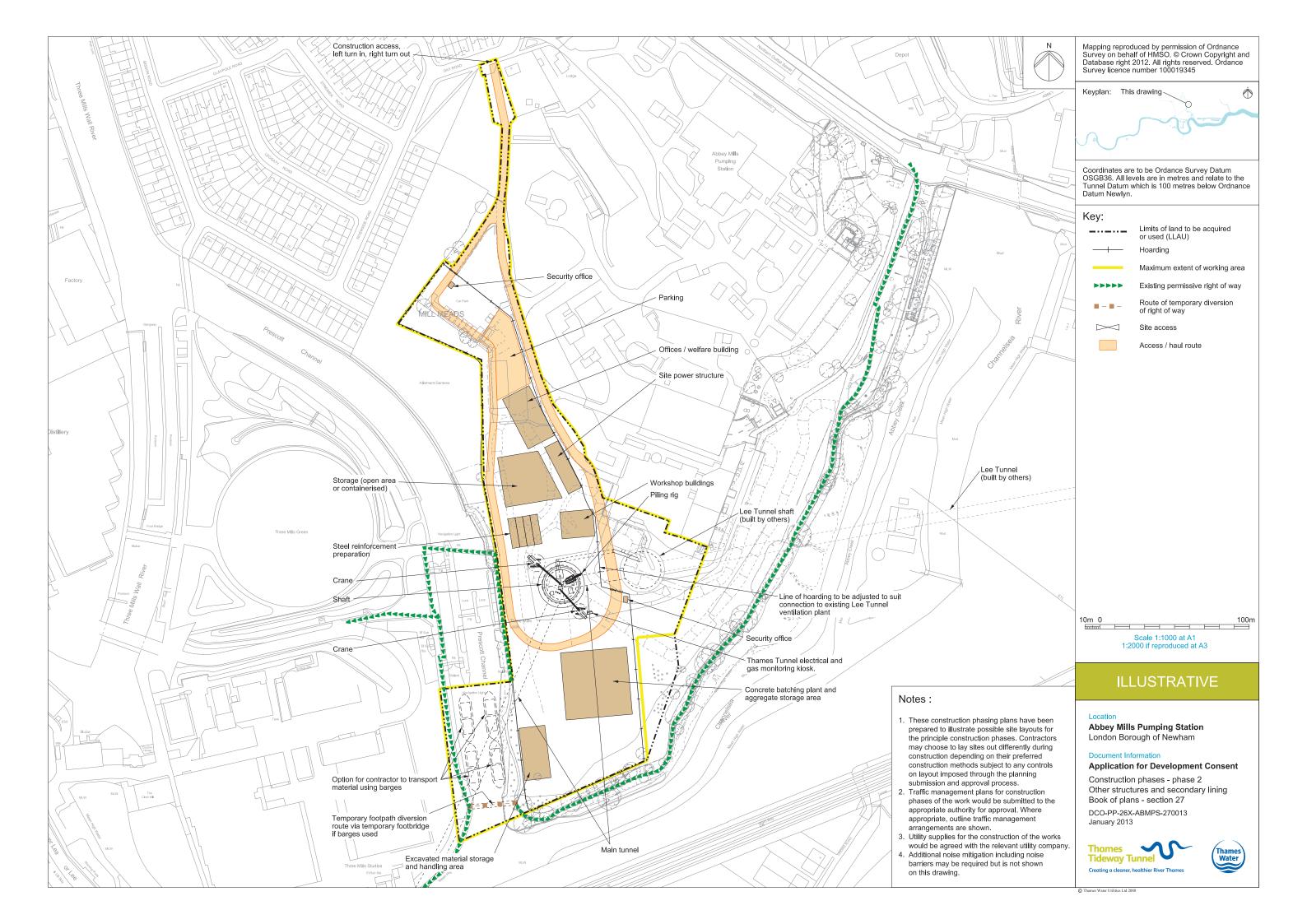
Environmental Statement	
	This page is intentionally blank

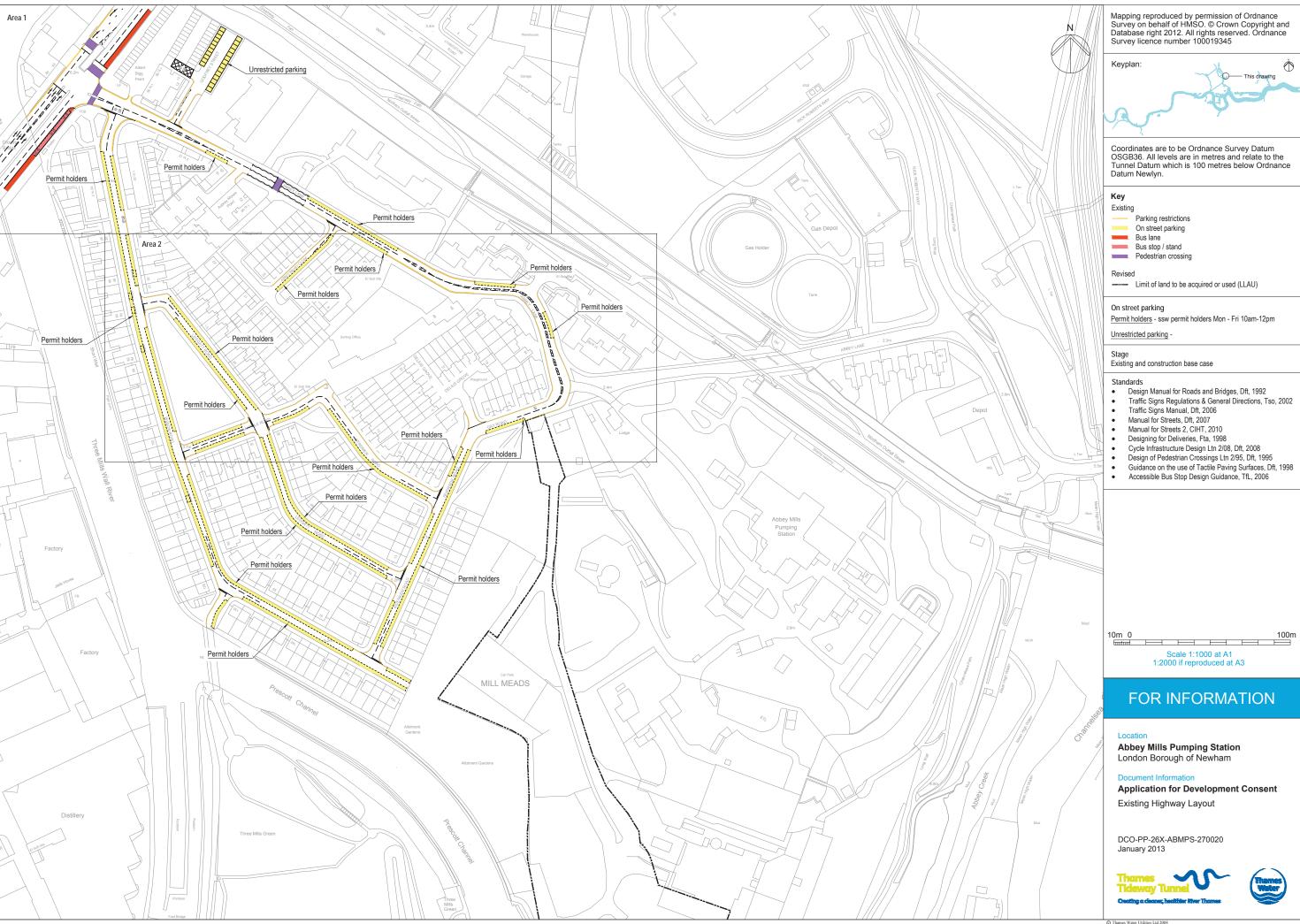


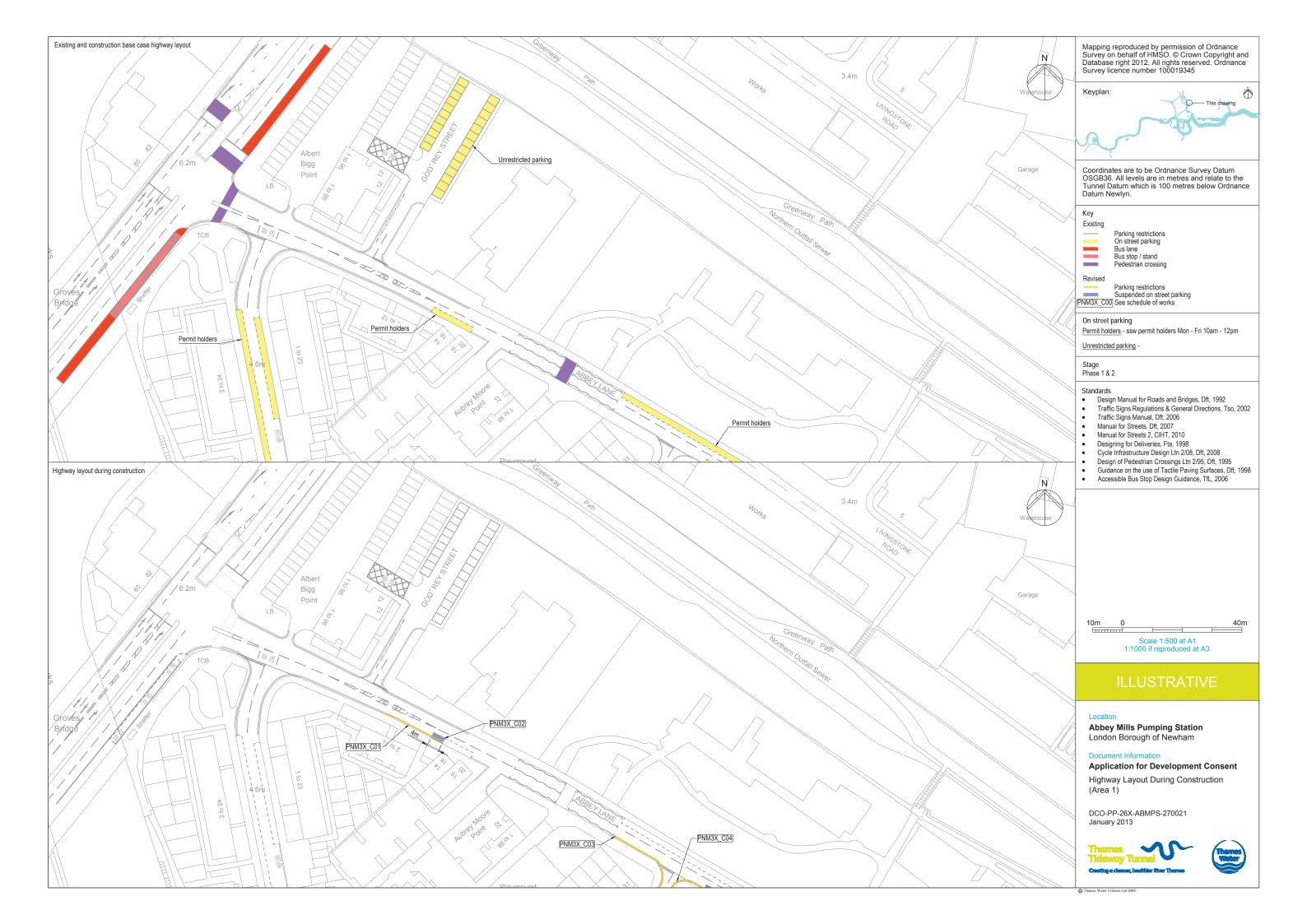


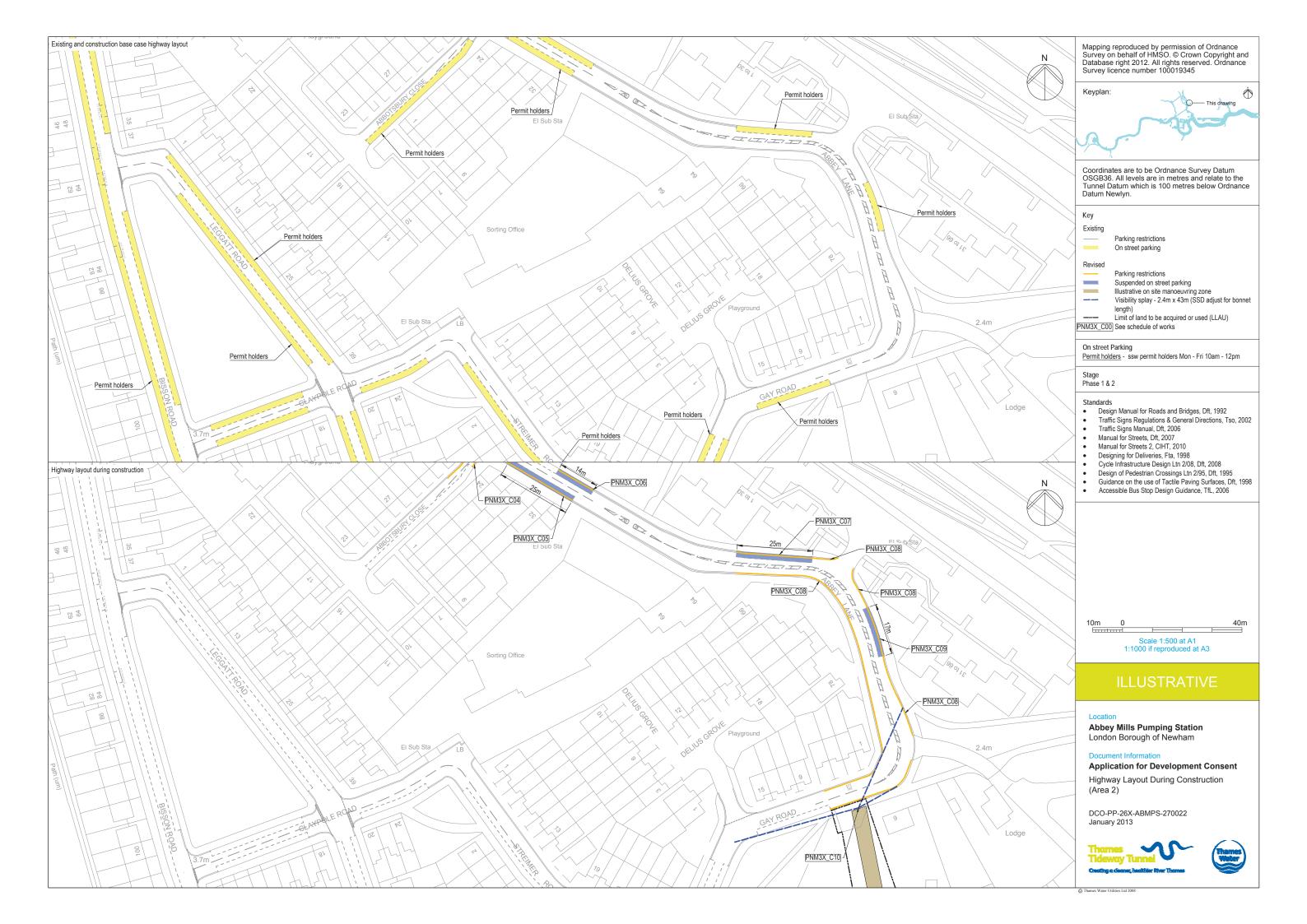


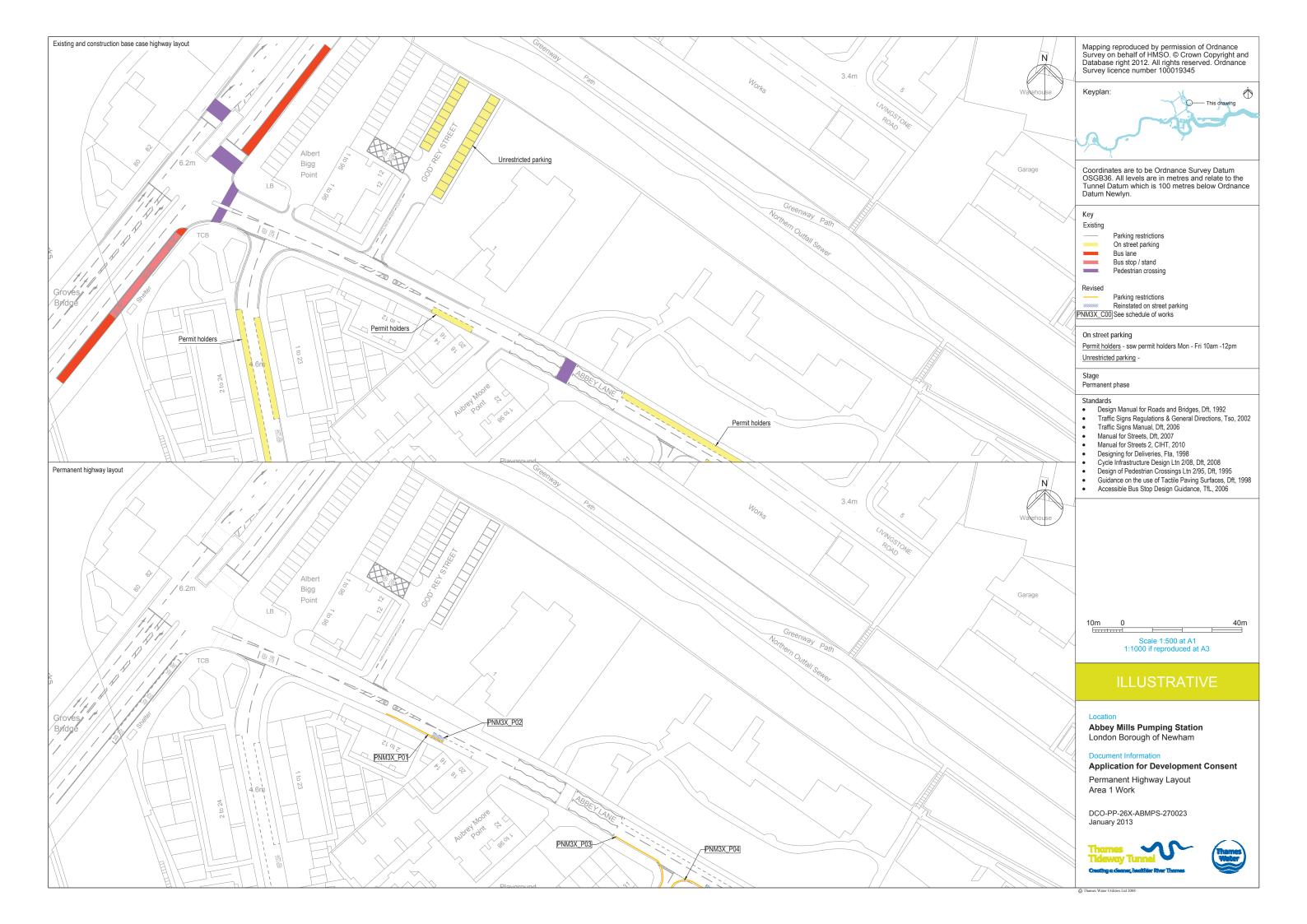


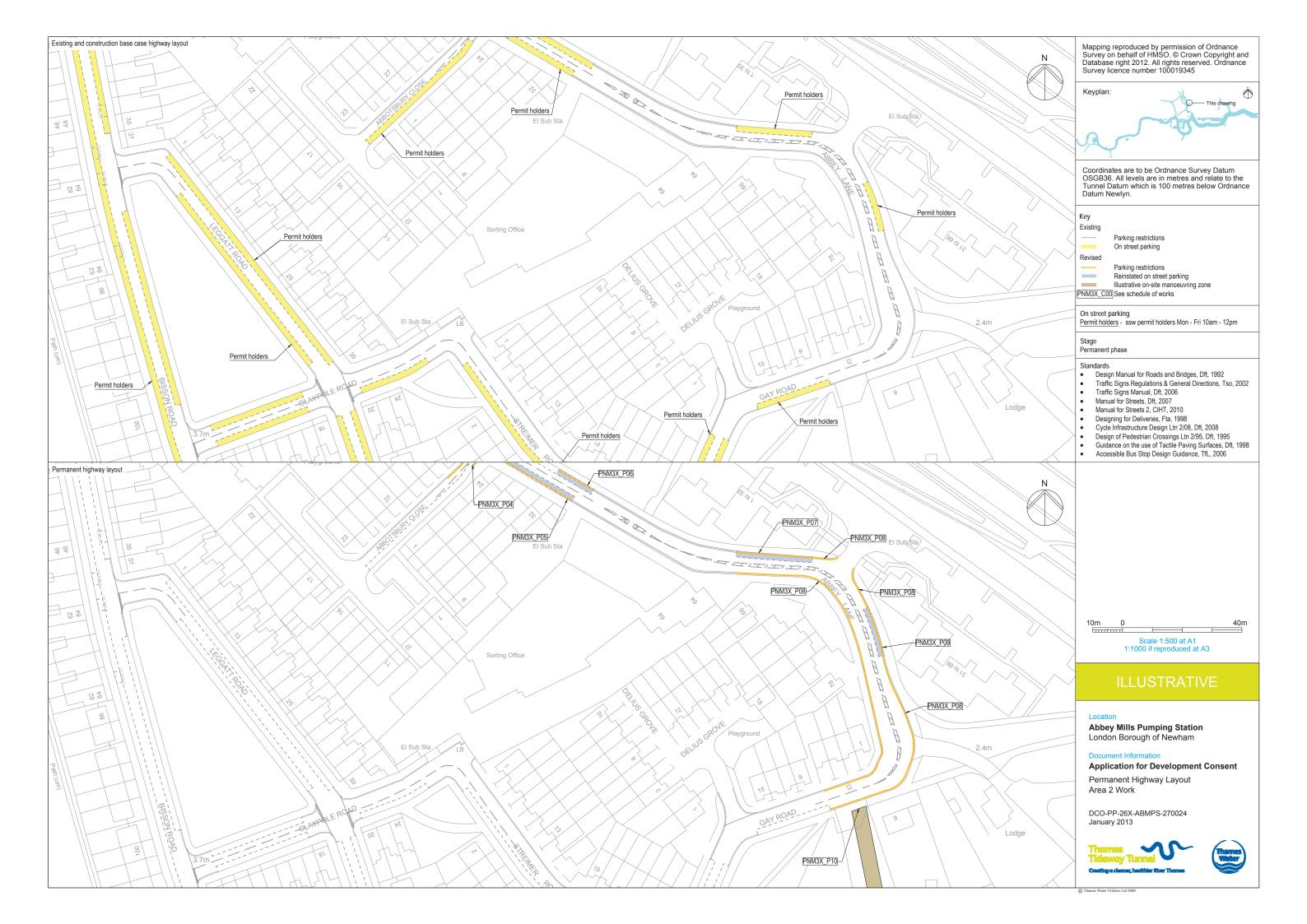






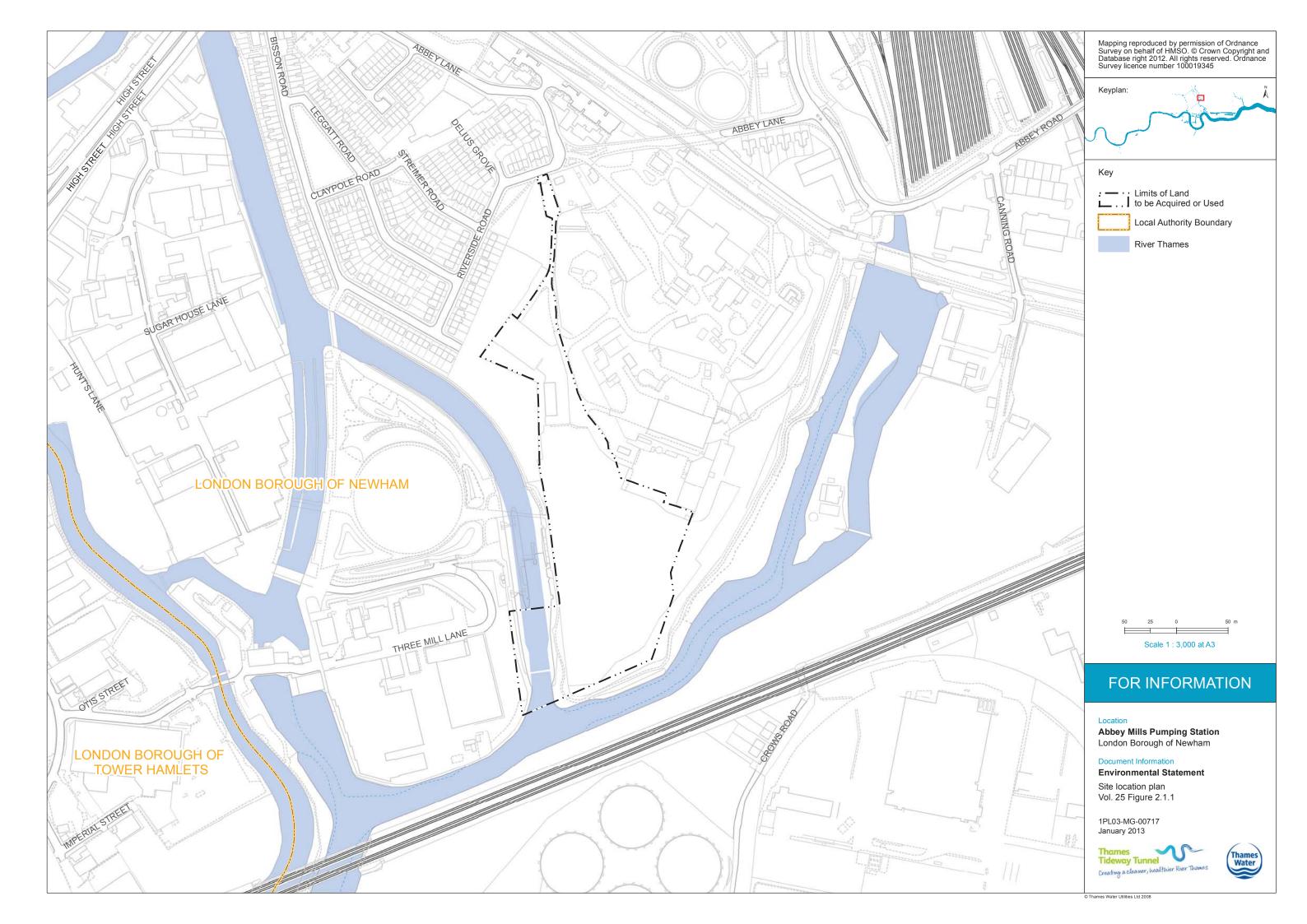


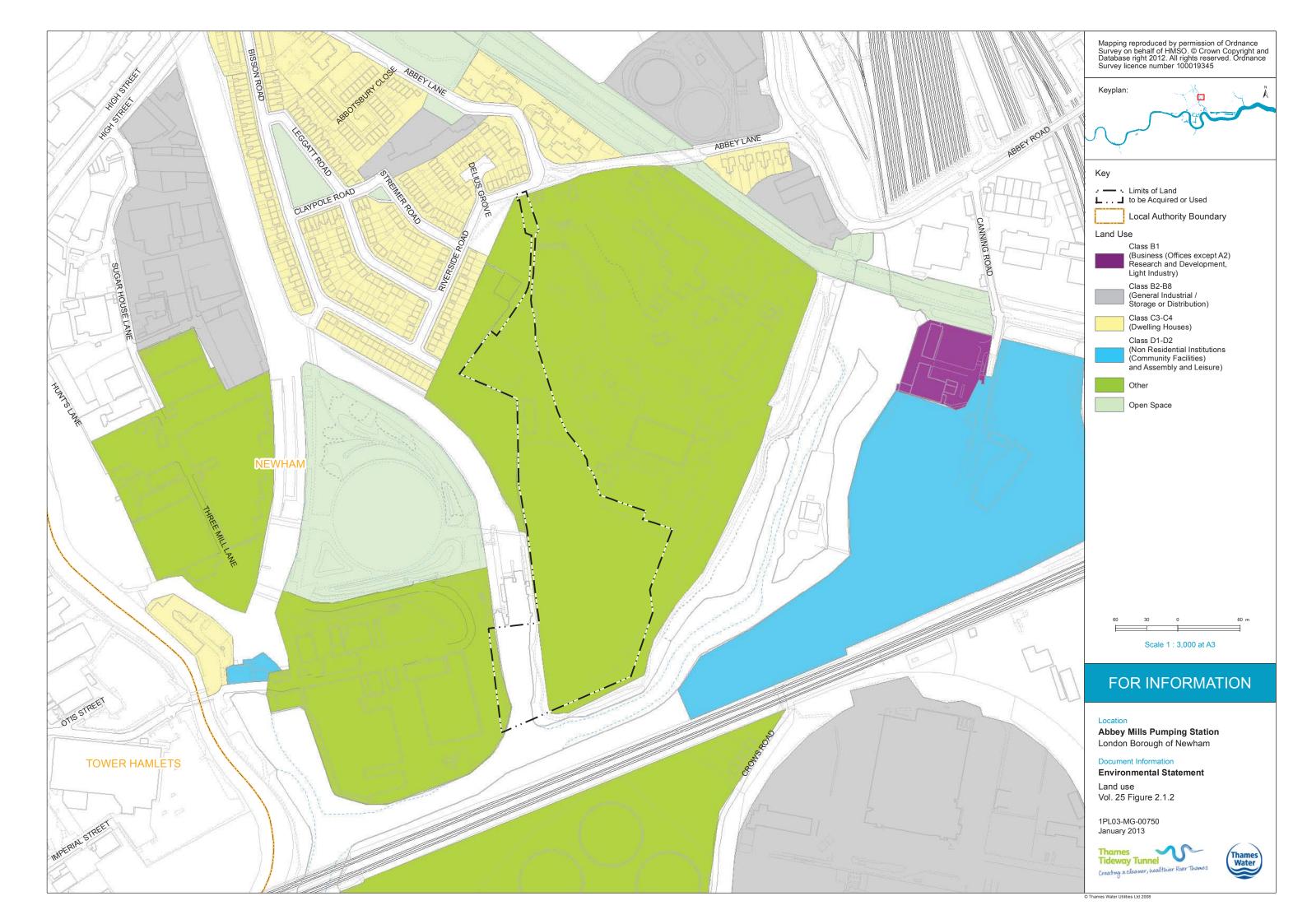


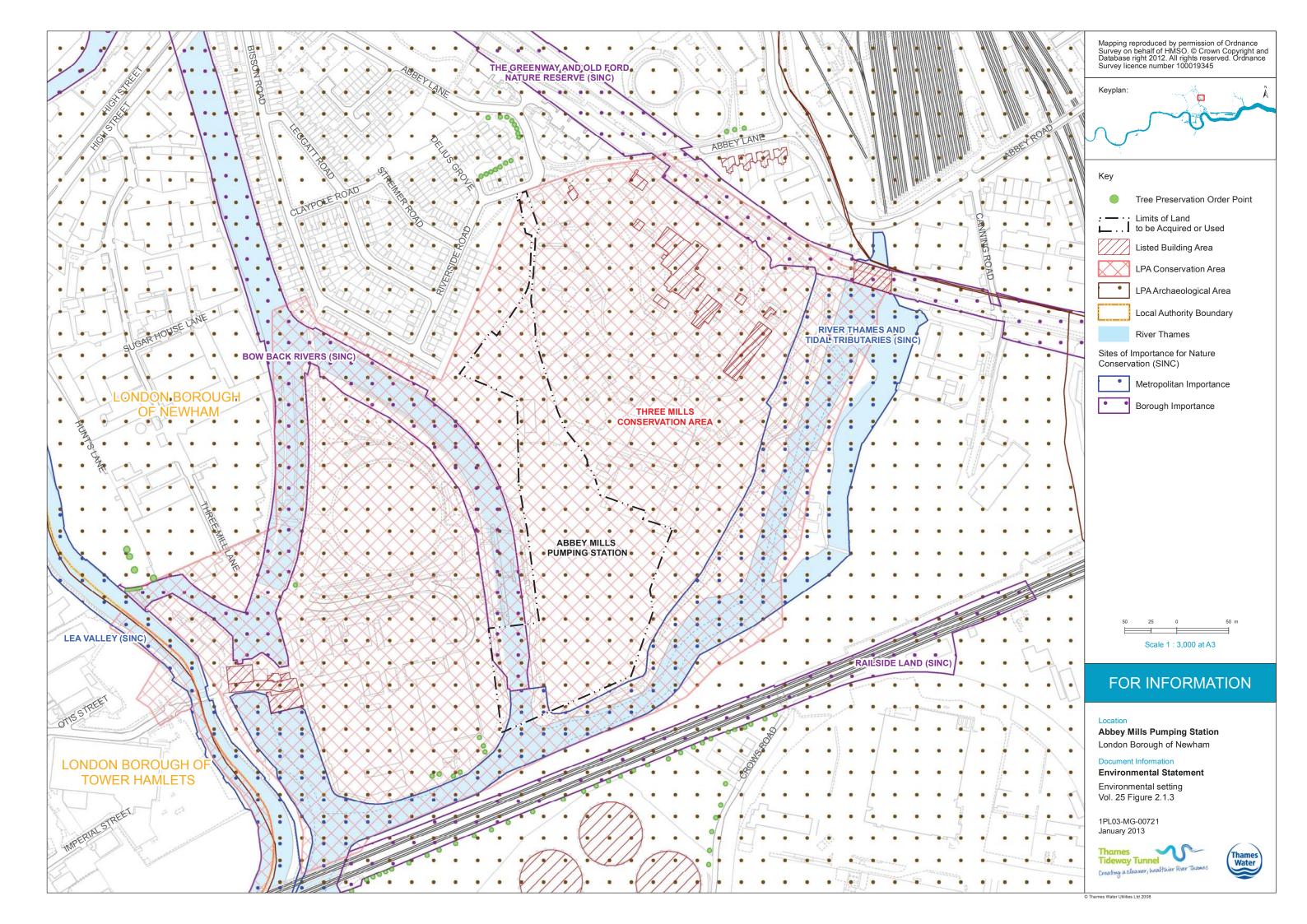


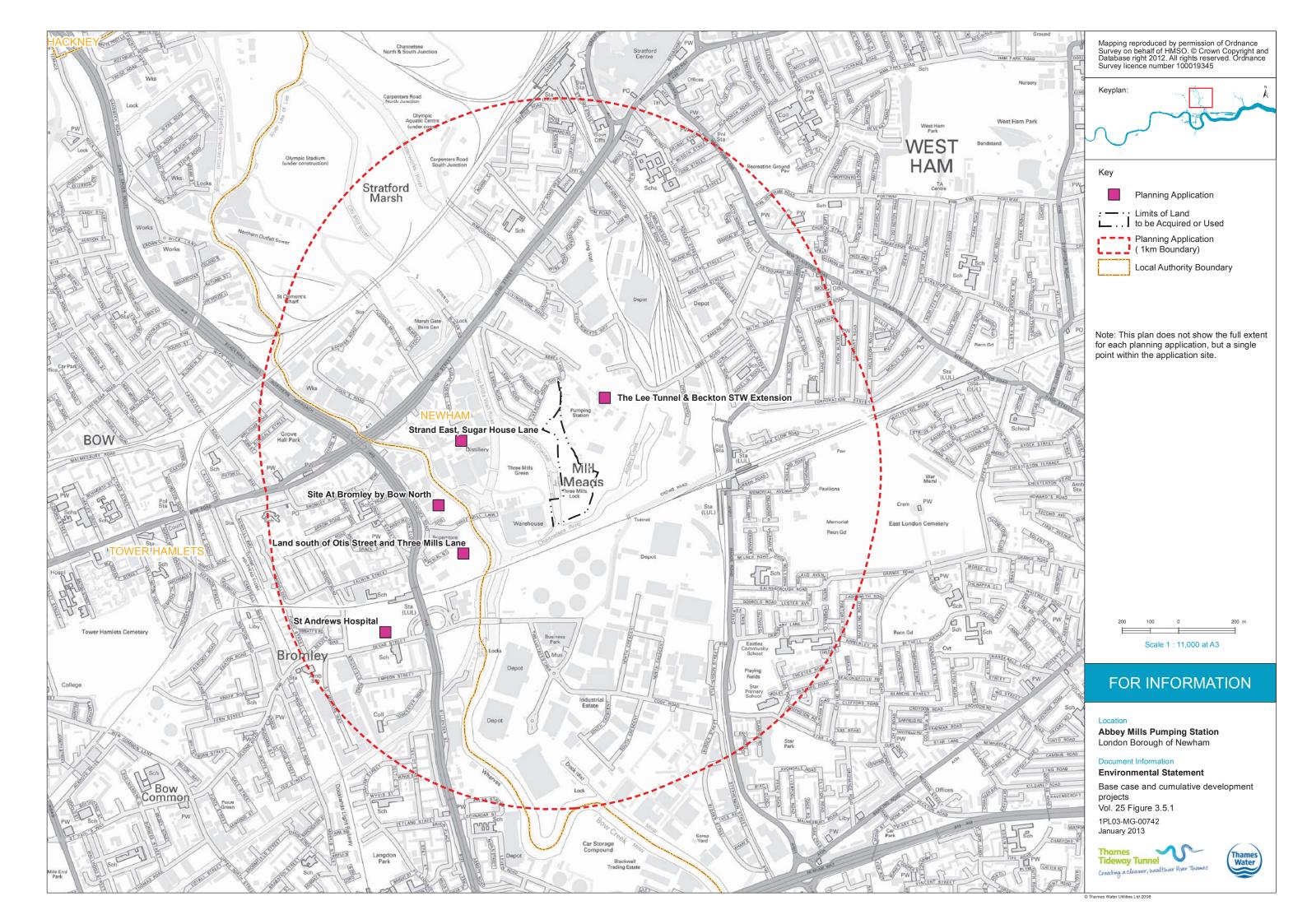
2 Environmental impact assessment figures

Environmental Statement		
	This page is intentionally blank	

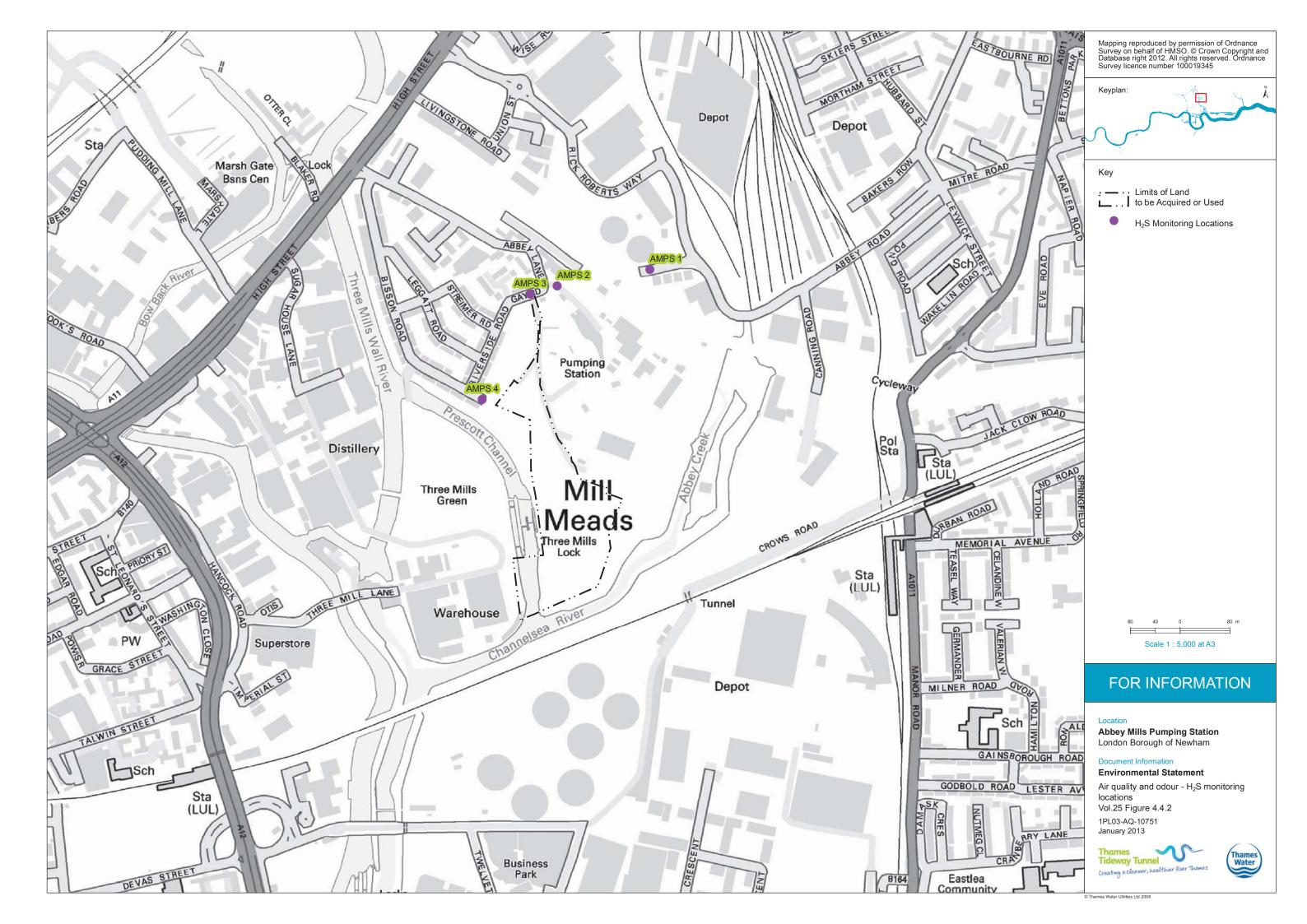


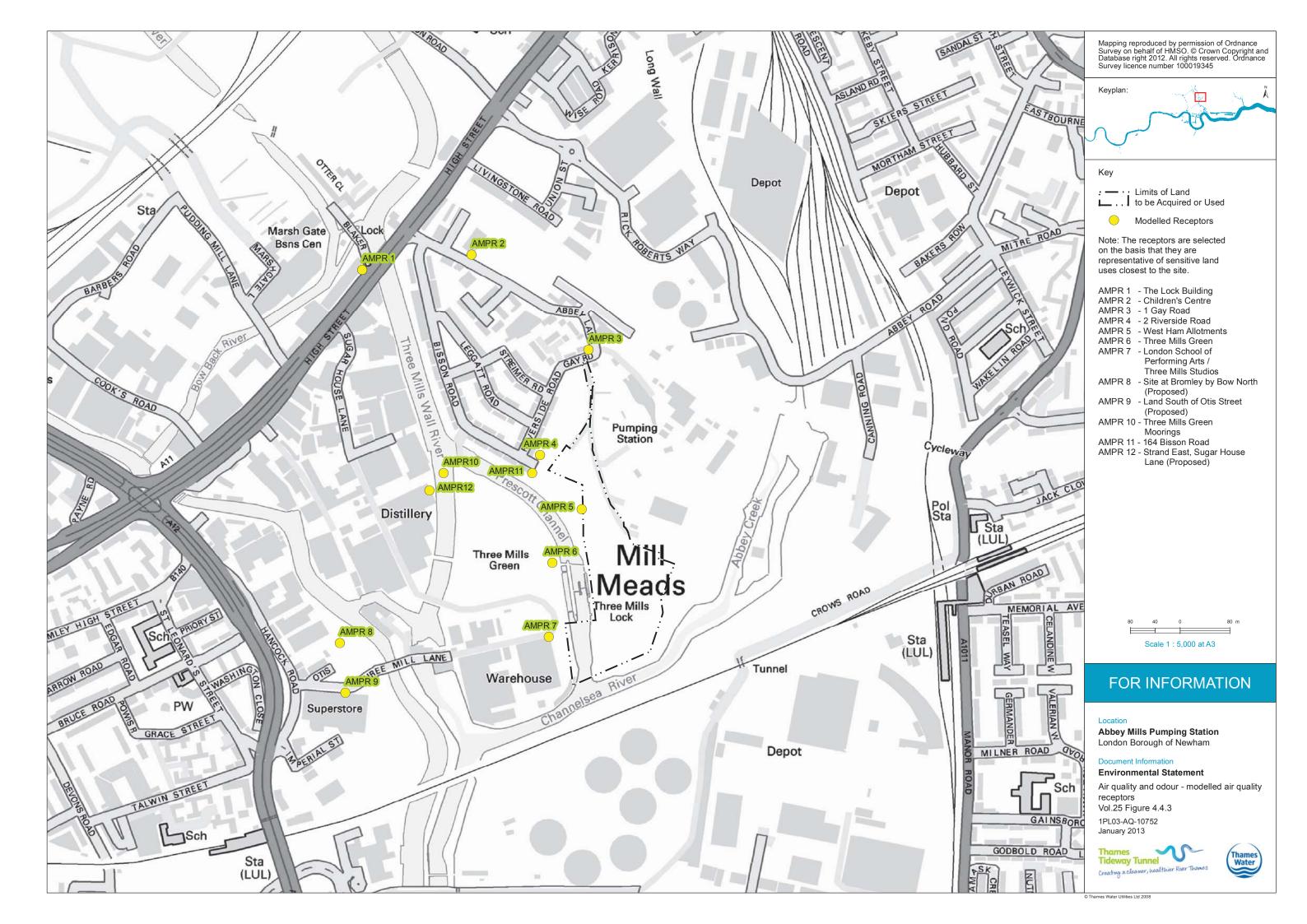


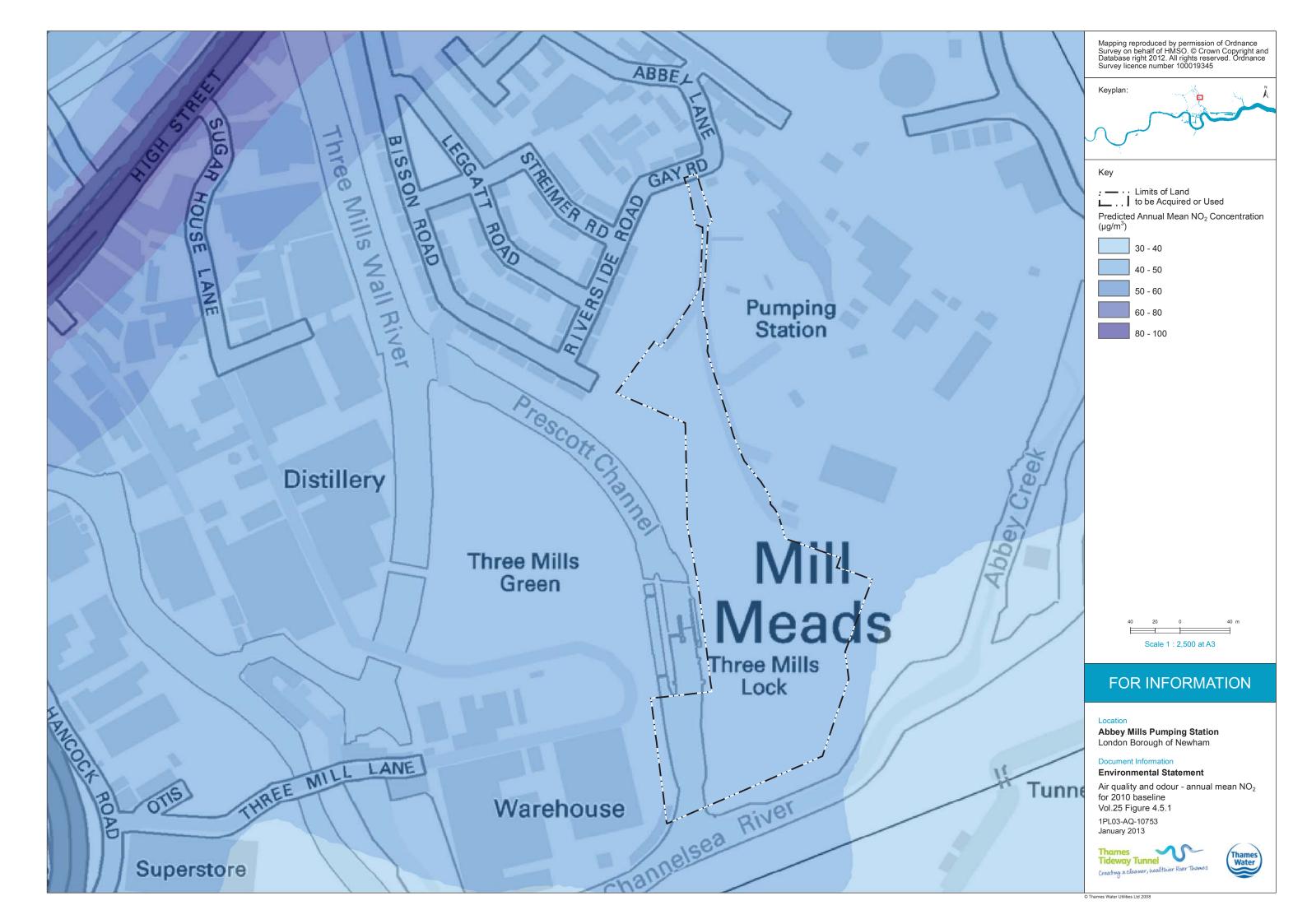


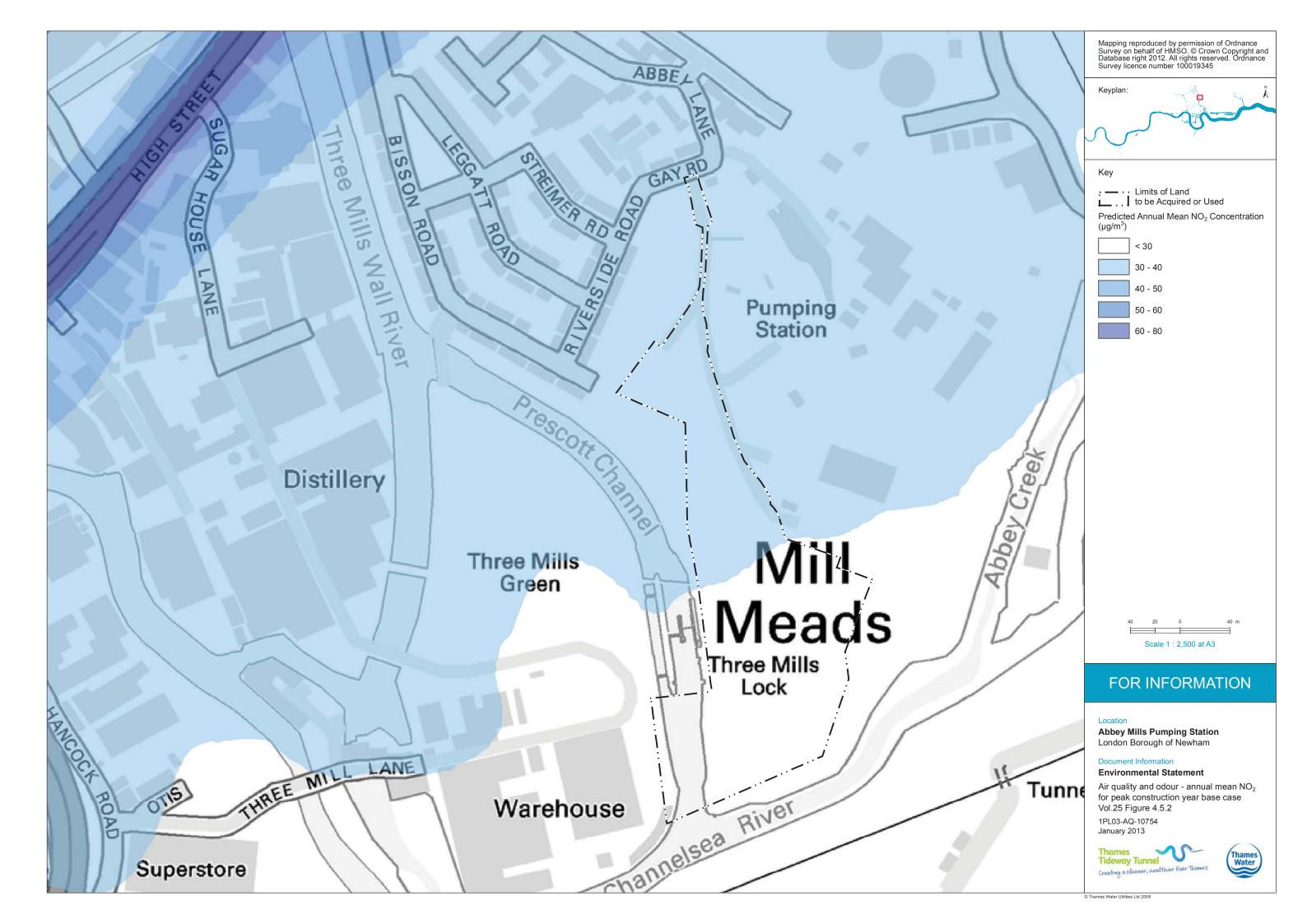


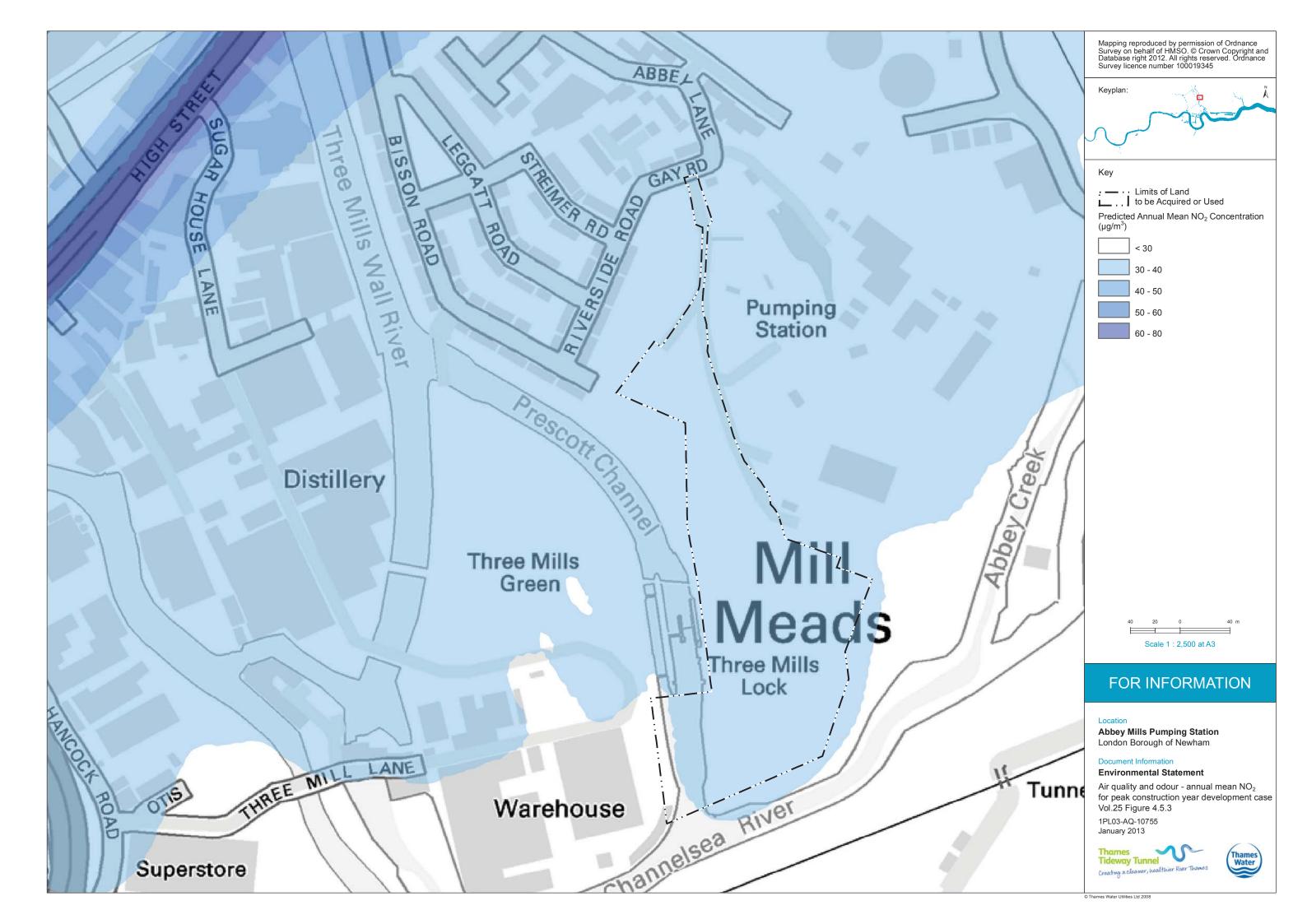


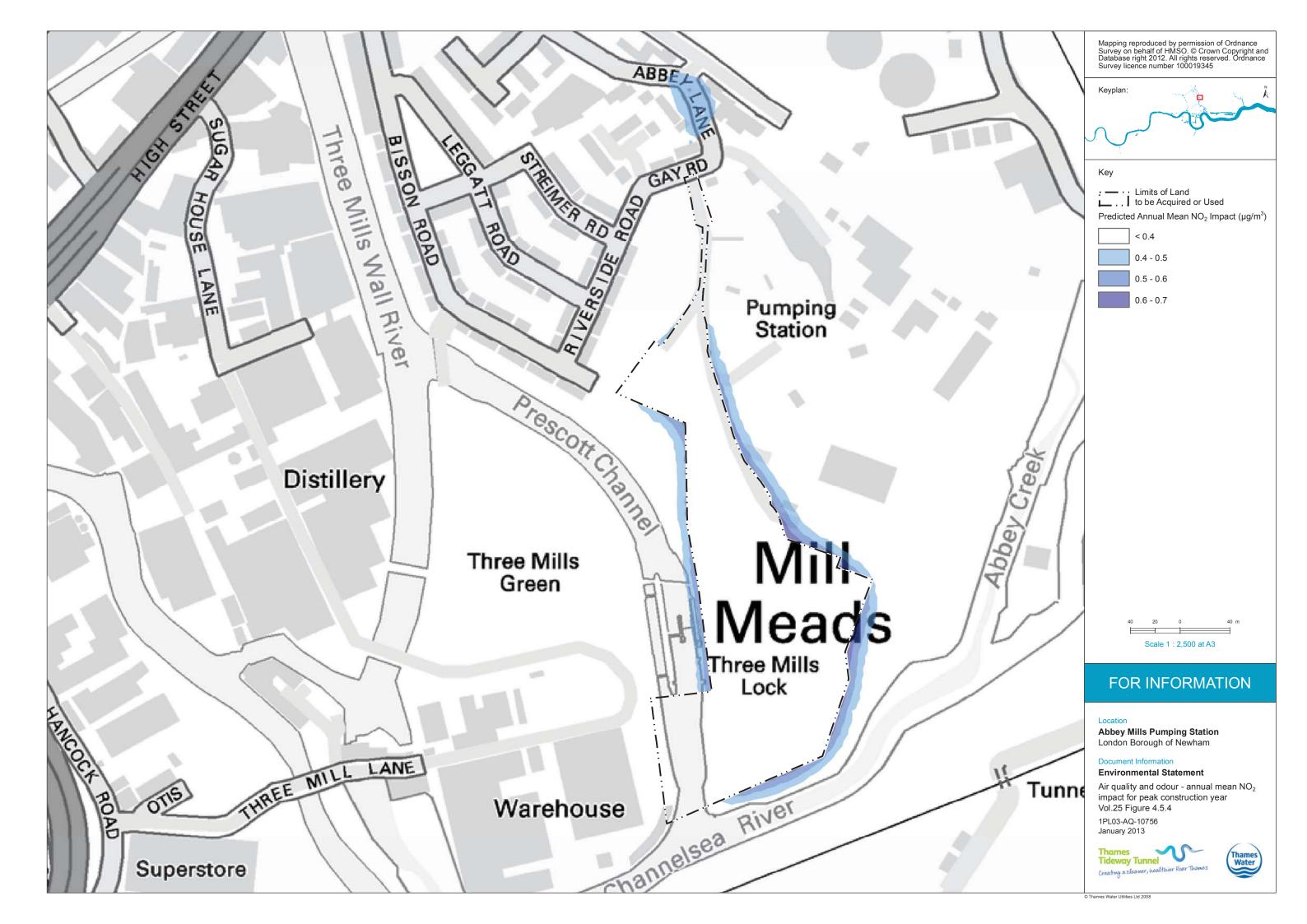


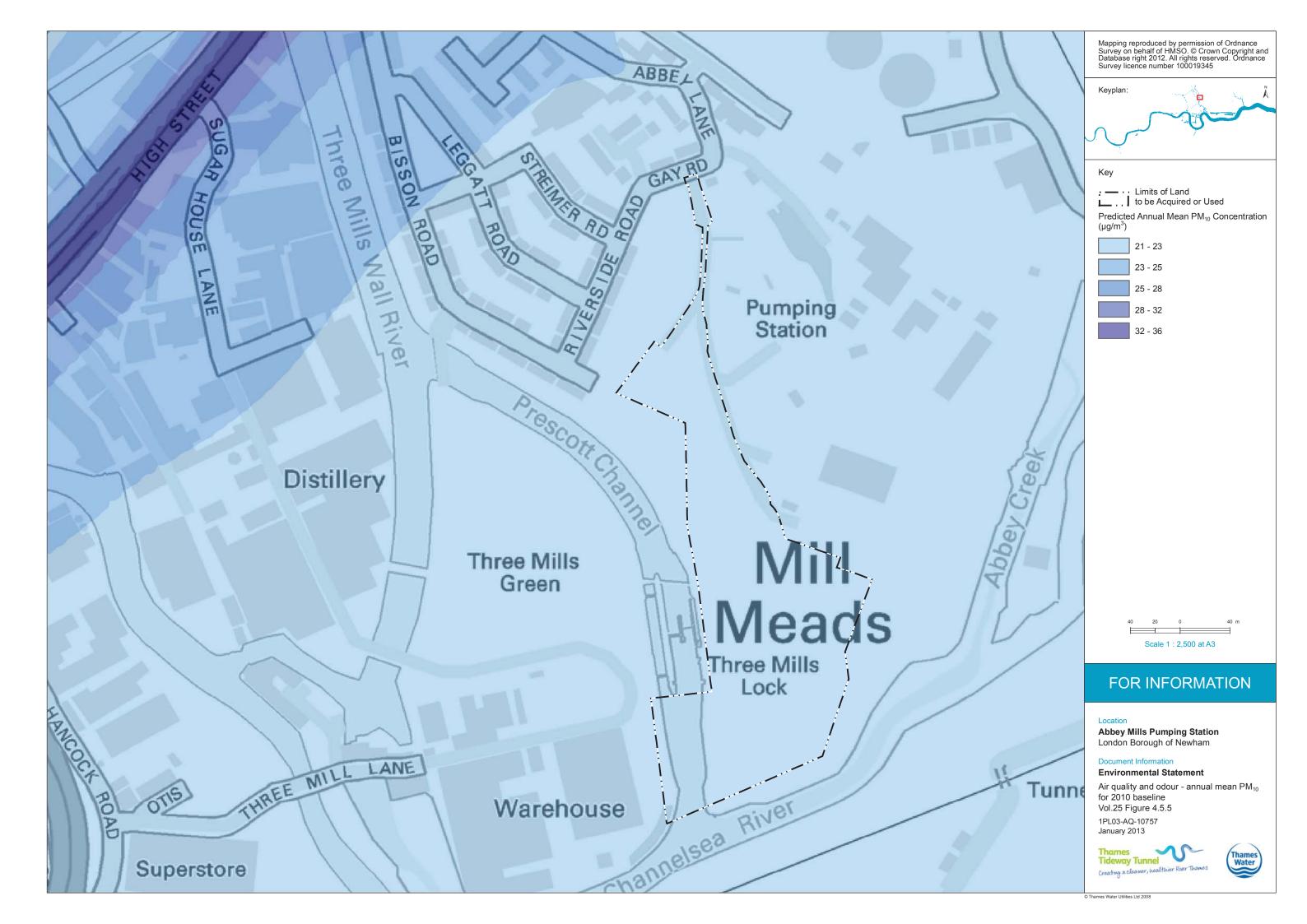


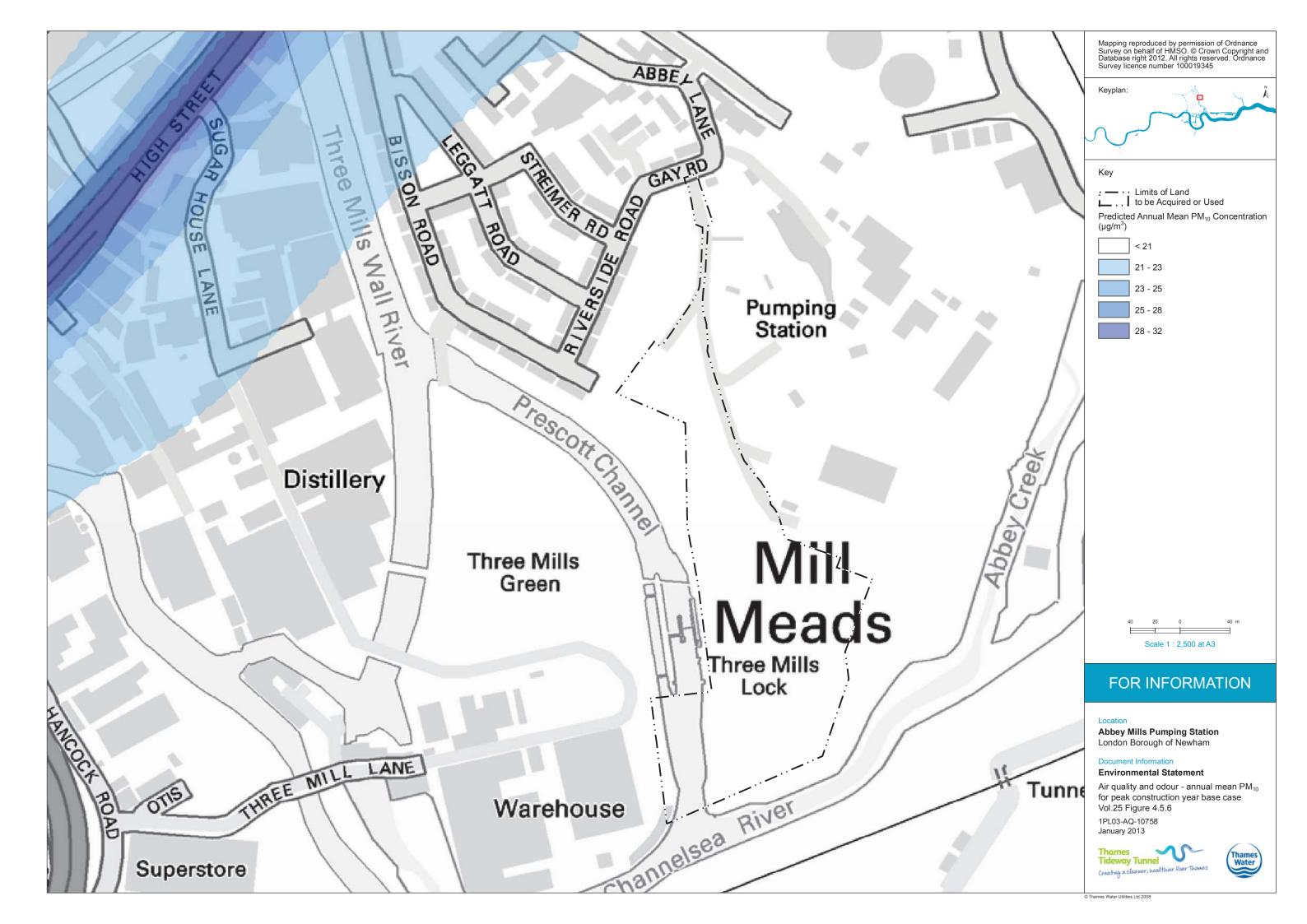


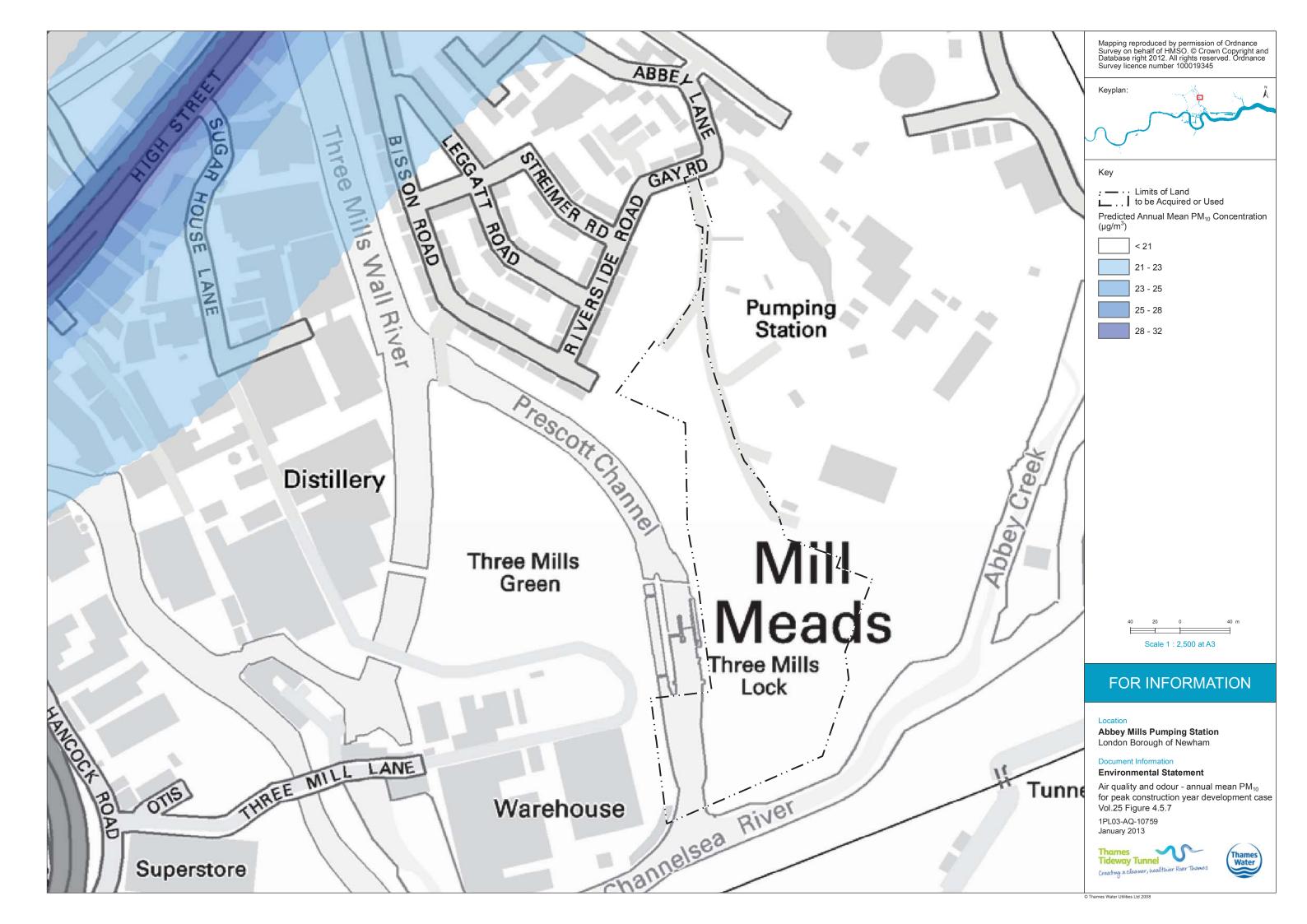


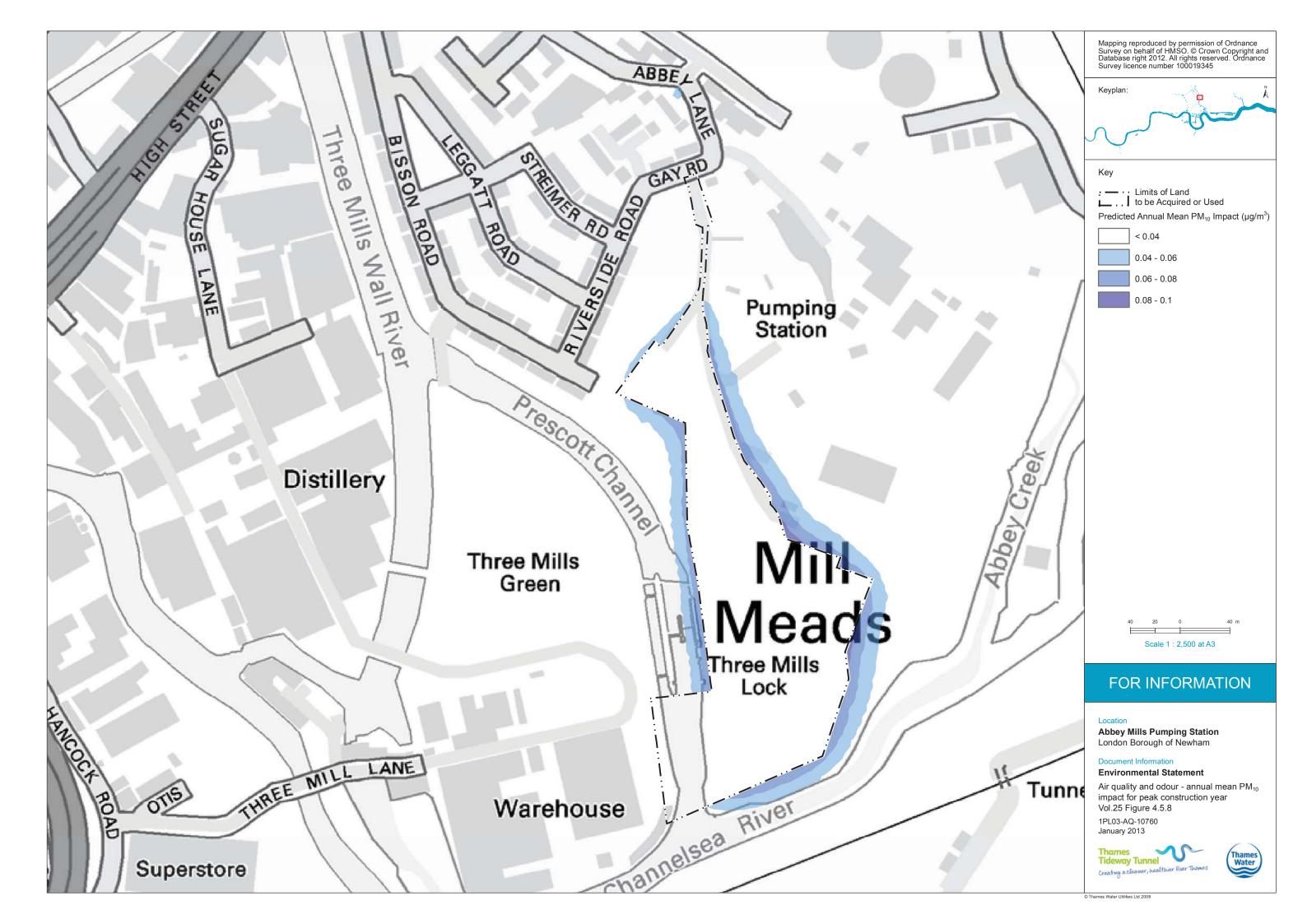














Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2012. All rights reserved. Ordnance Survey licence number 100019345

Keyplan:

- Limits of Land

 Local to be Acquired or Used
- 250m from Site
 - Local Authority Boundary

Sites of Importance for Nature Conservation (SINC)

- Metropolitan Importance
 - Borough Importance
- Local Importance

Aerial Imagery taken in 2010, before assessment.

Scale 1: 4,000 at A3

FOR INFORMATION

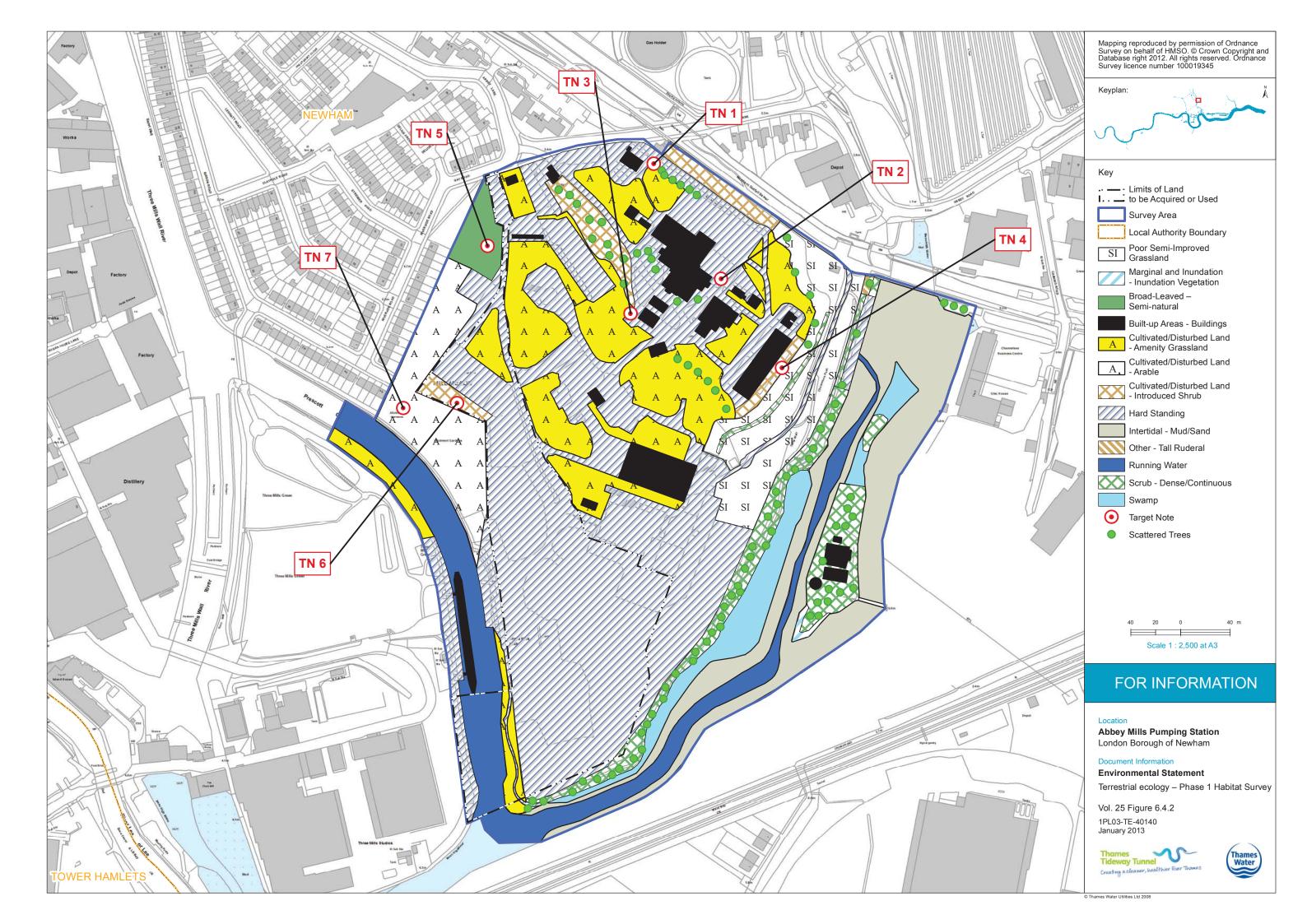
Abbey Mills Pumping Station London Borough of Newham

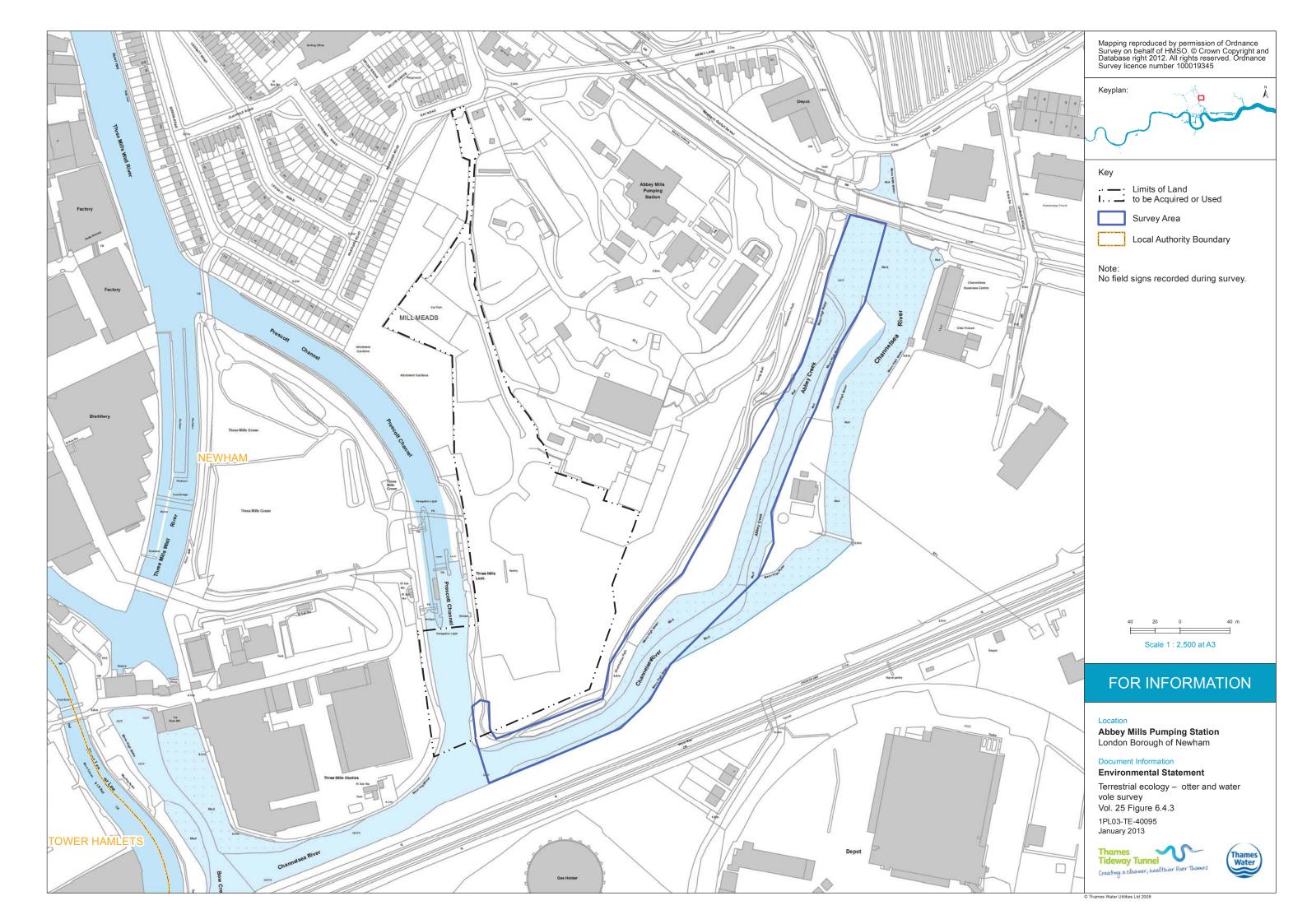
Environmental Statement

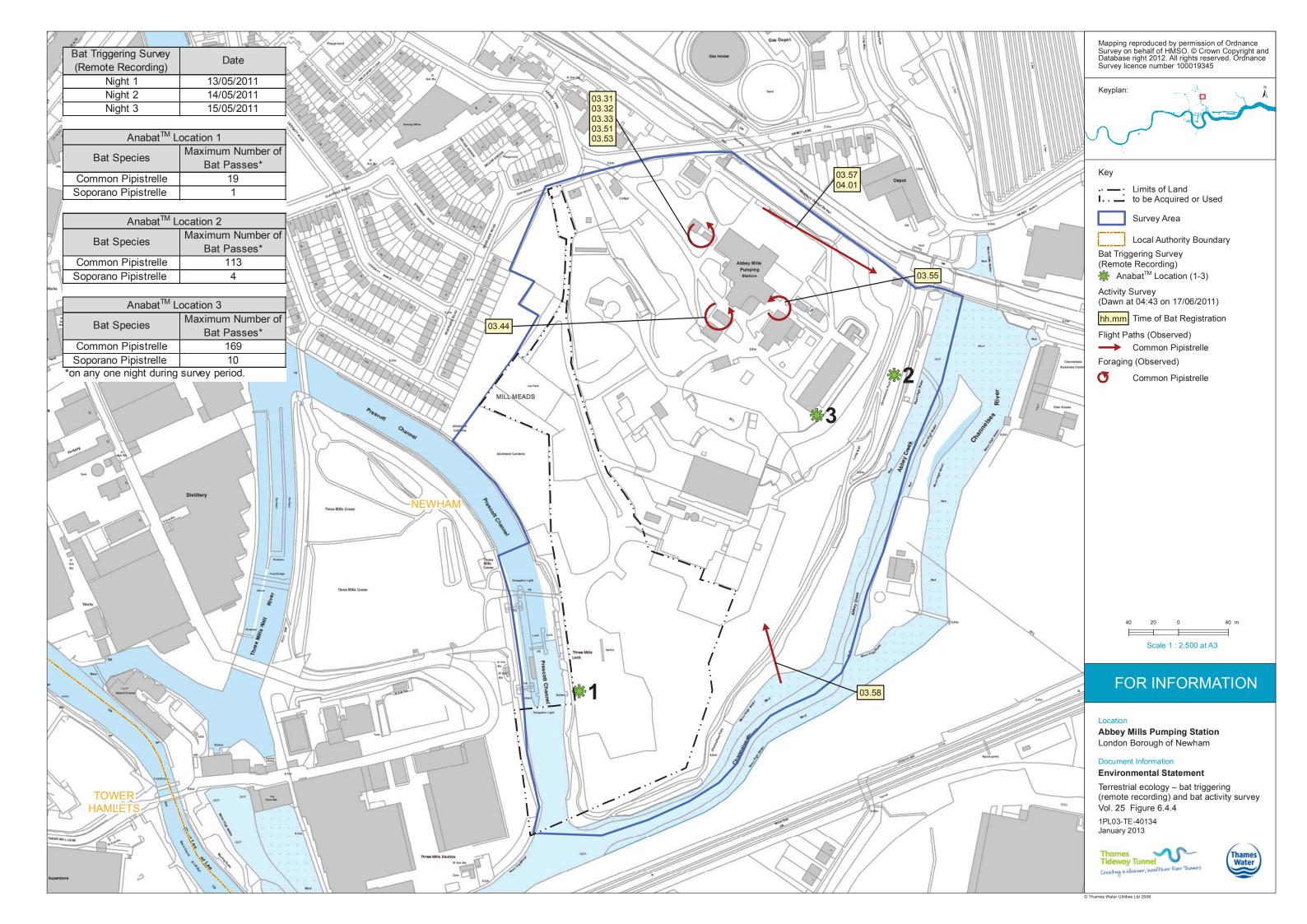
Terrestrial ecology - designated sites

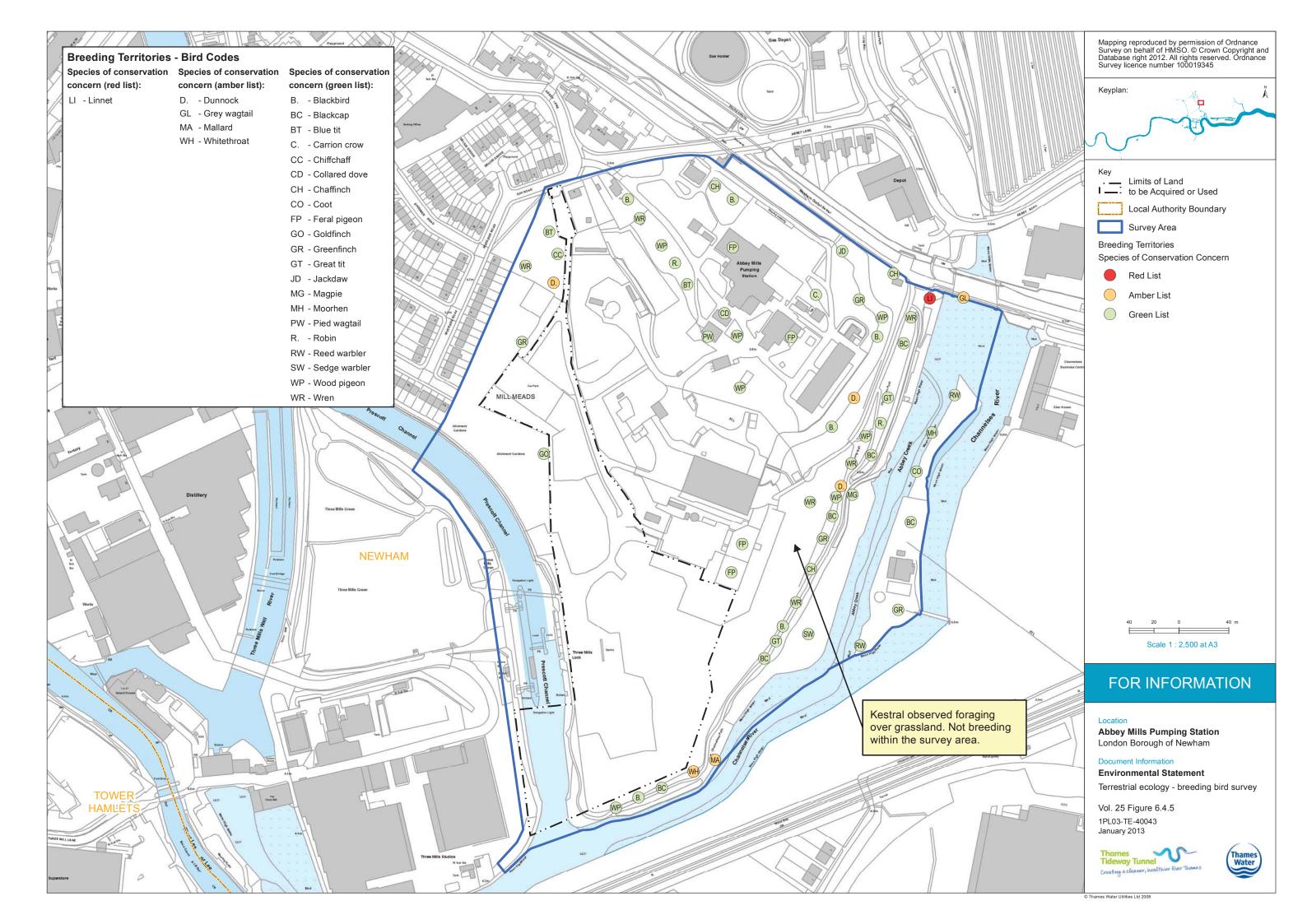
Vol. 25 Figure 6.4.1 1PL03-TE-40136 January 2013

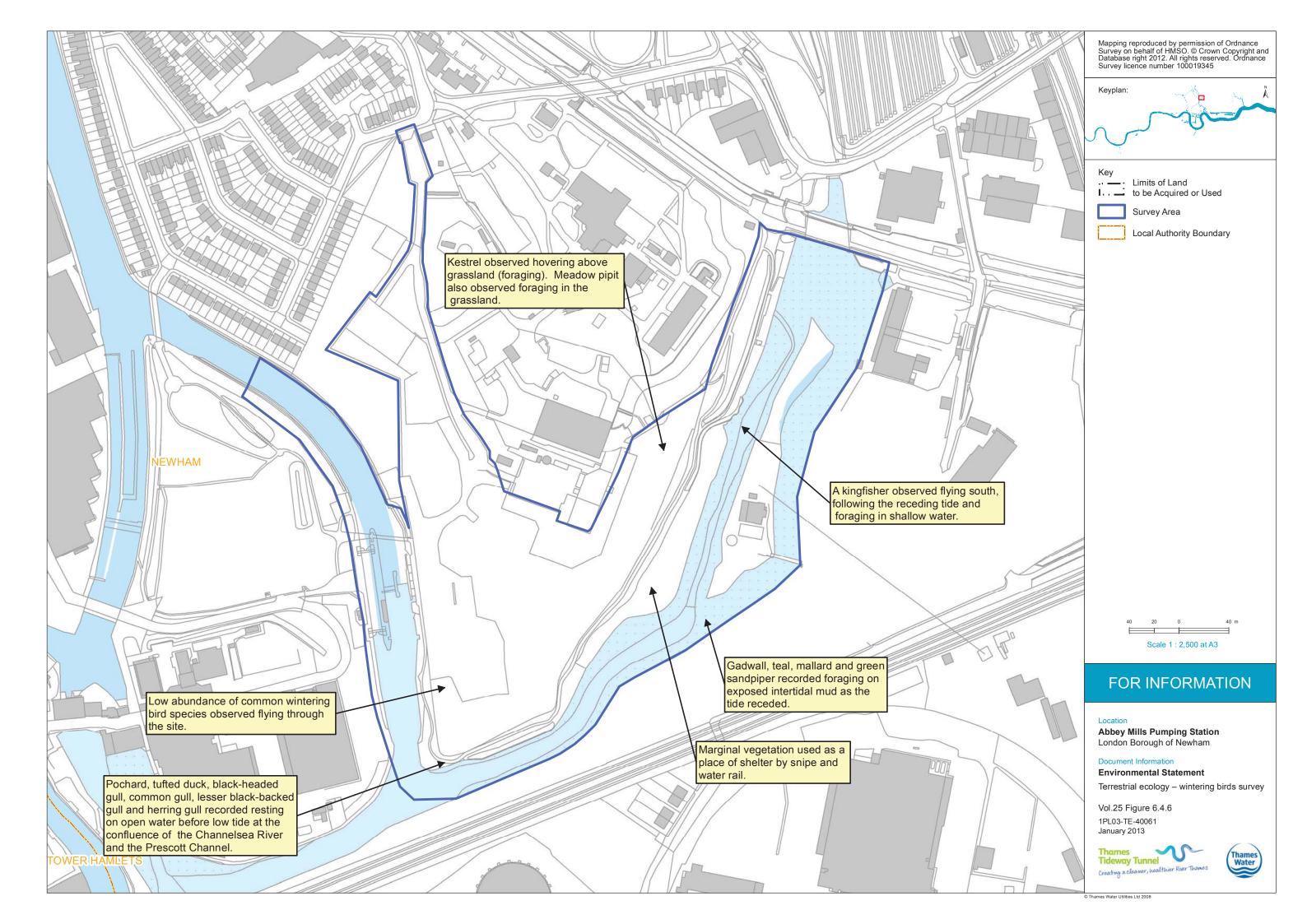


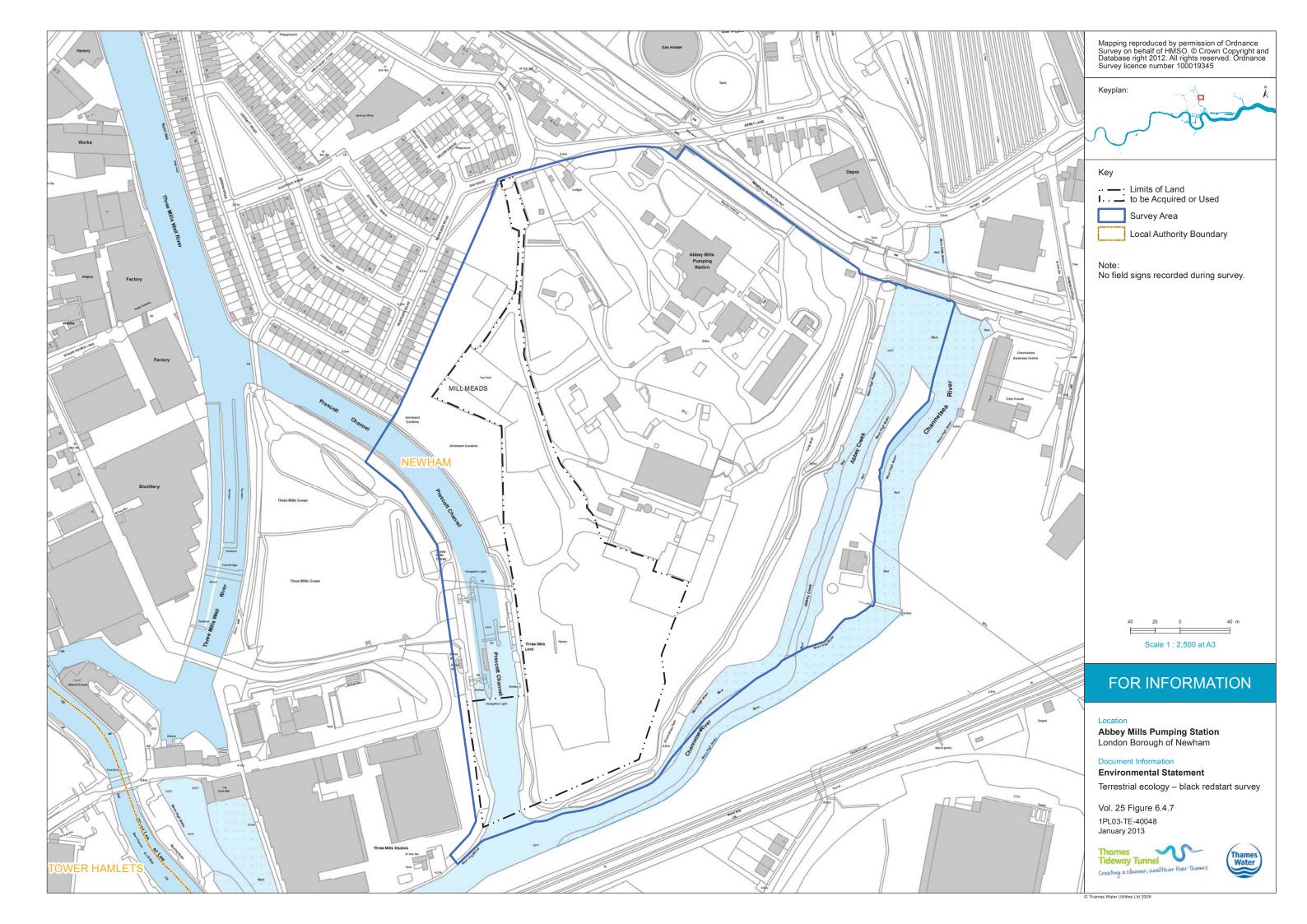


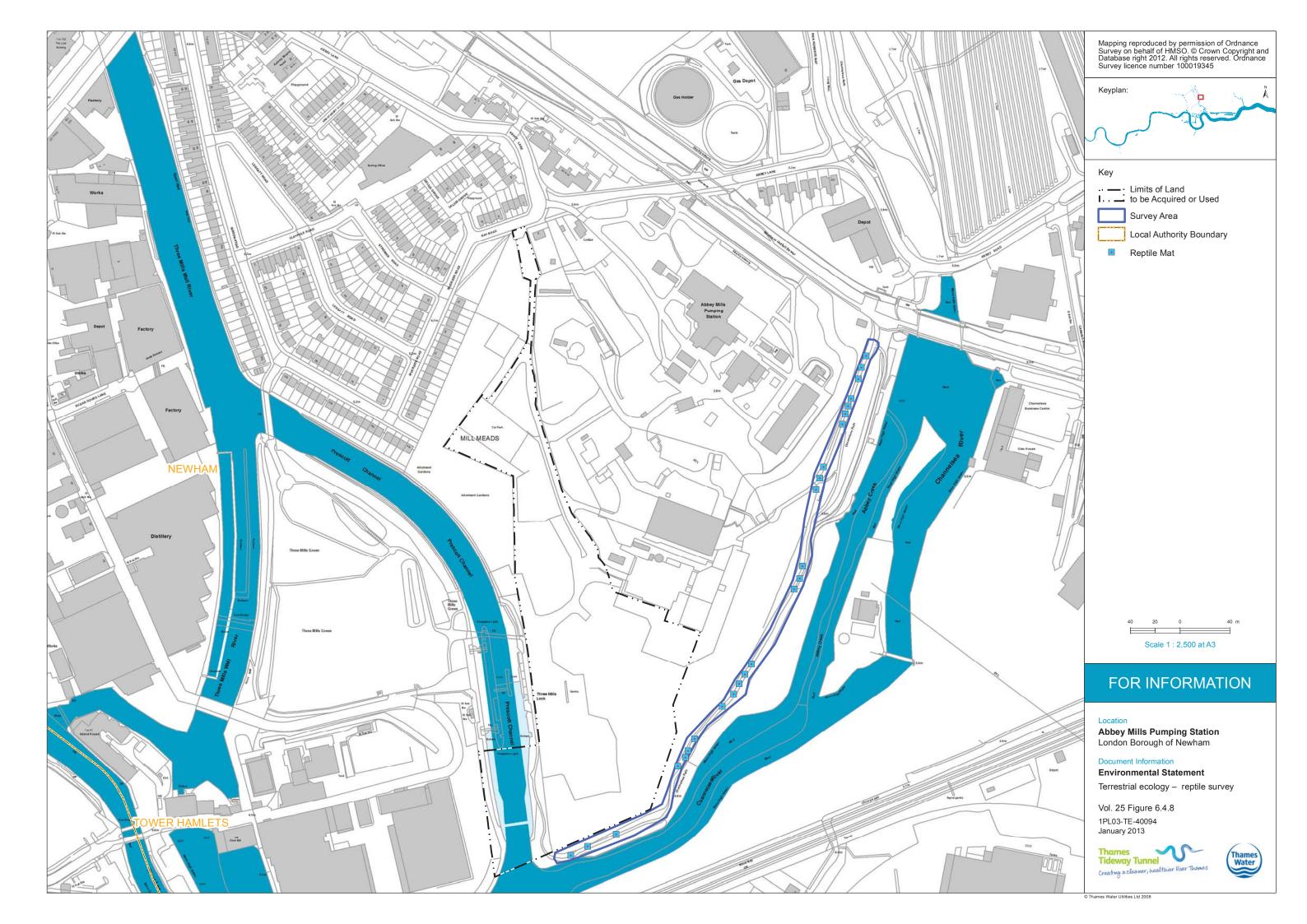


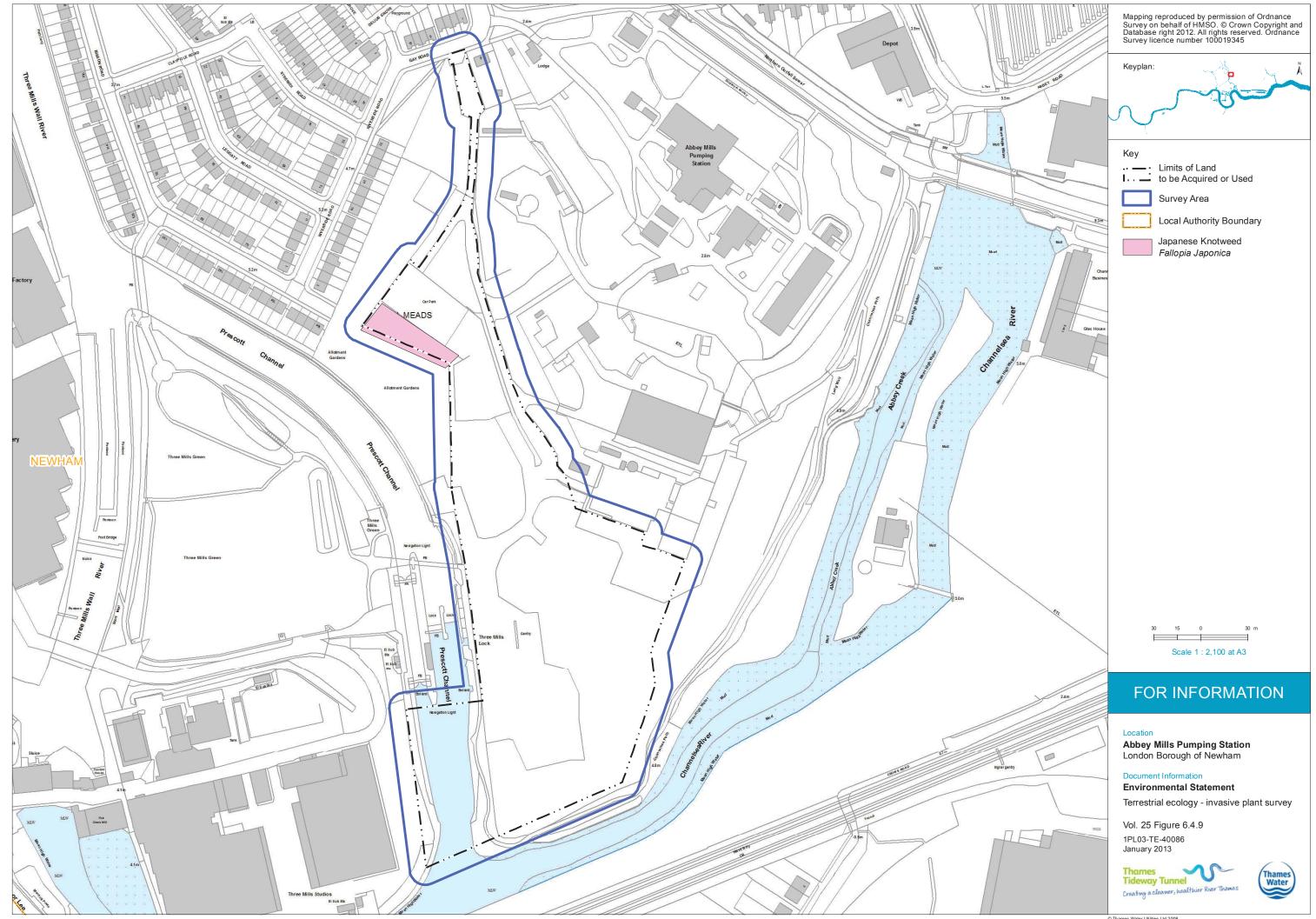


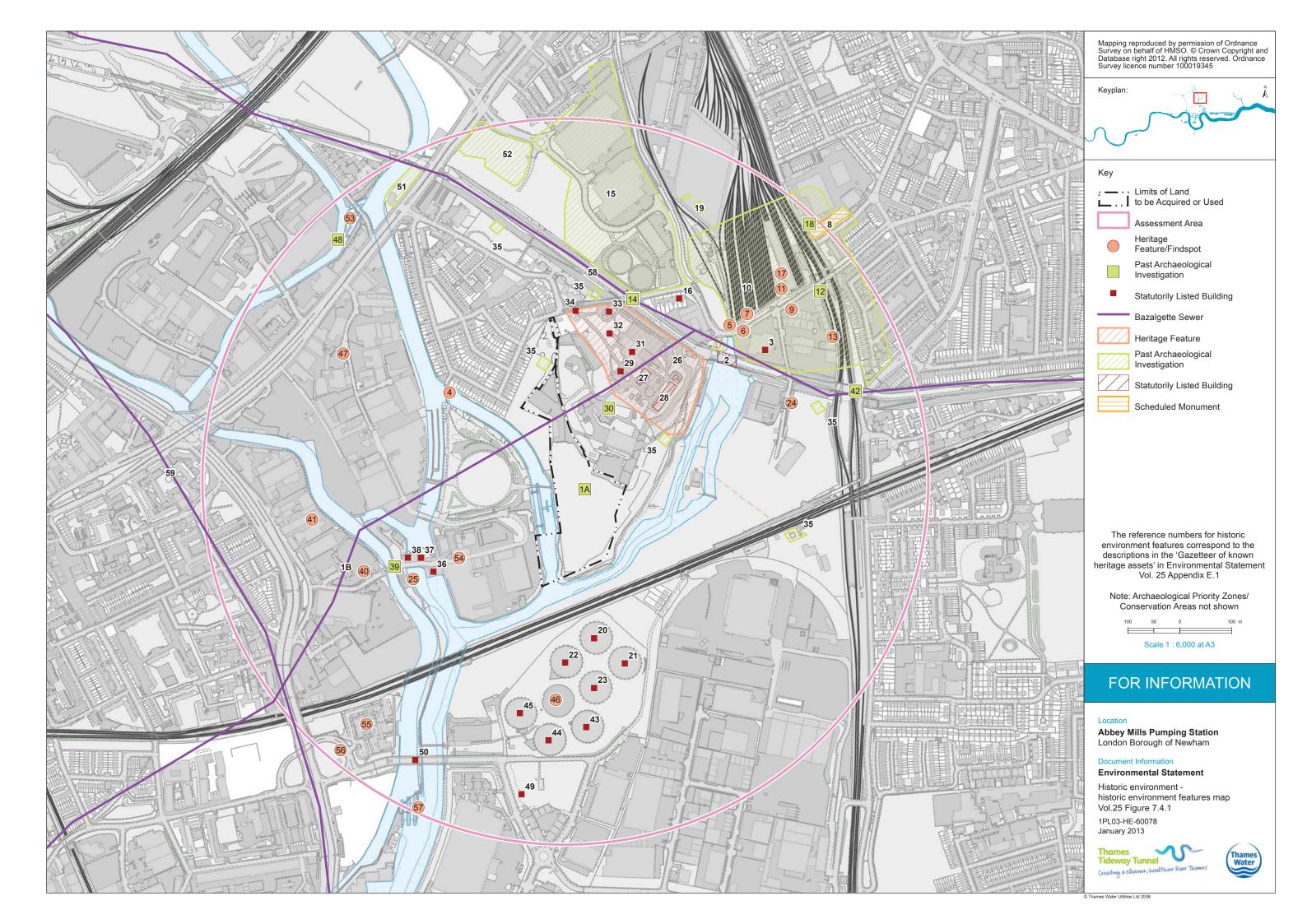


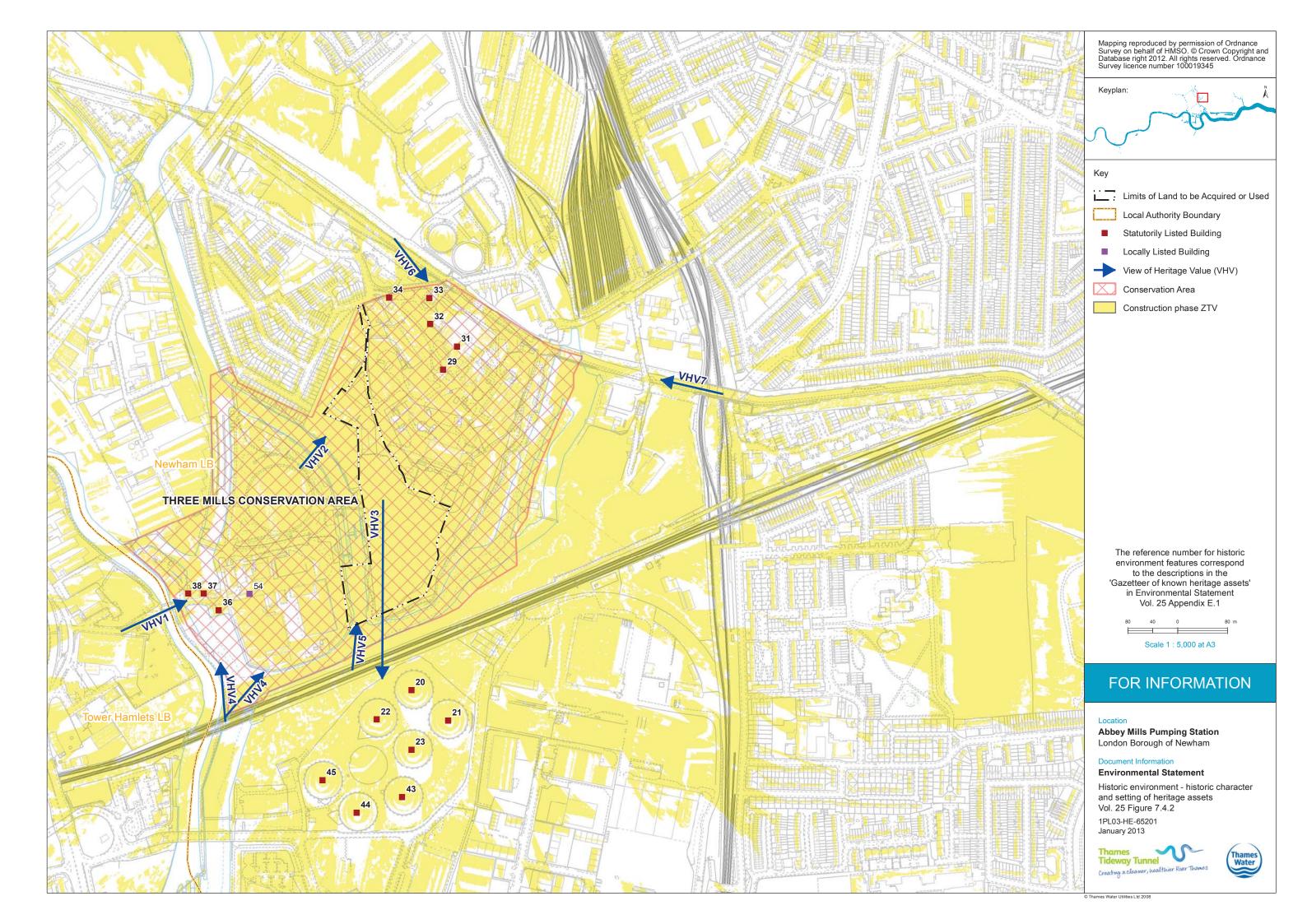


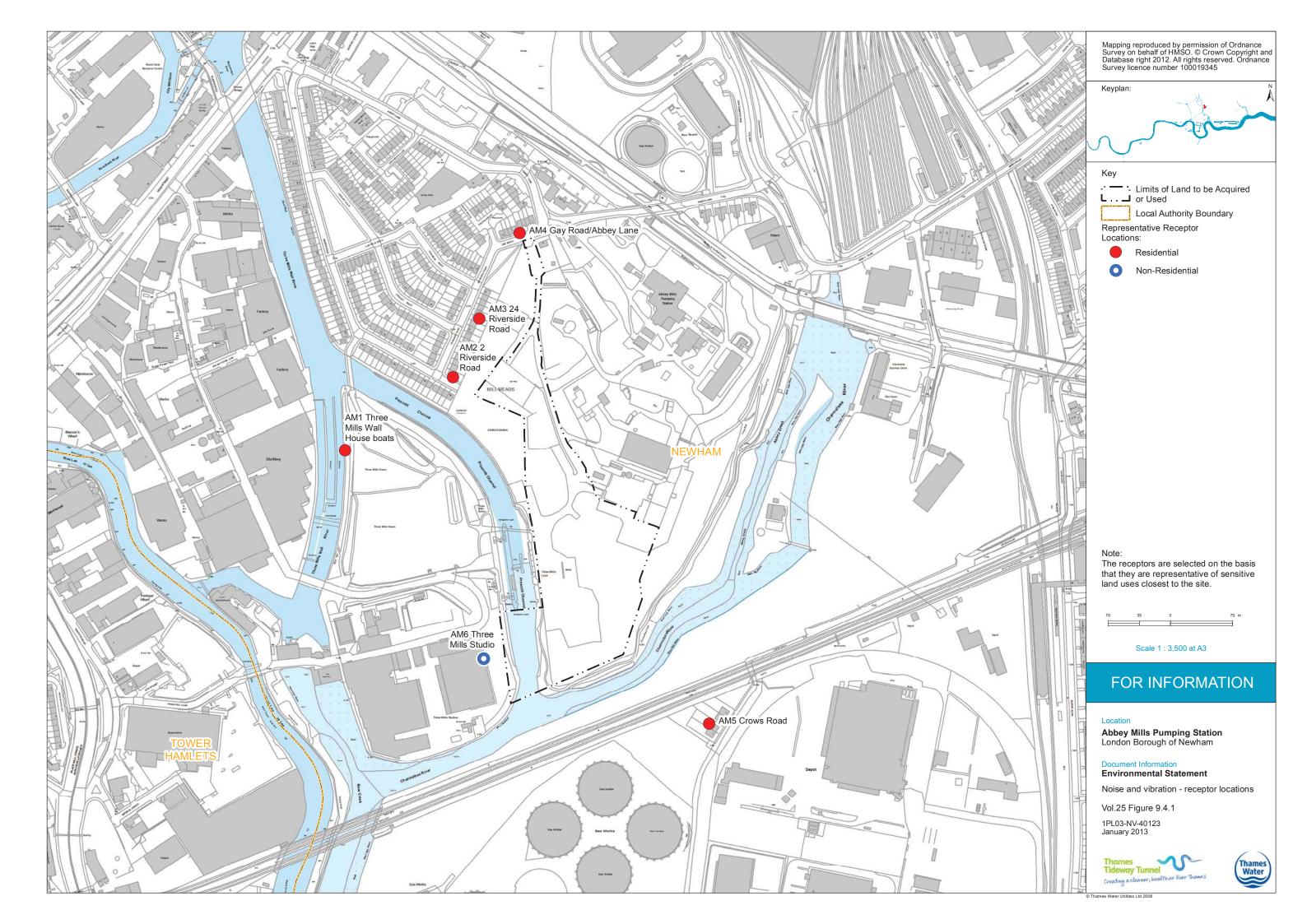


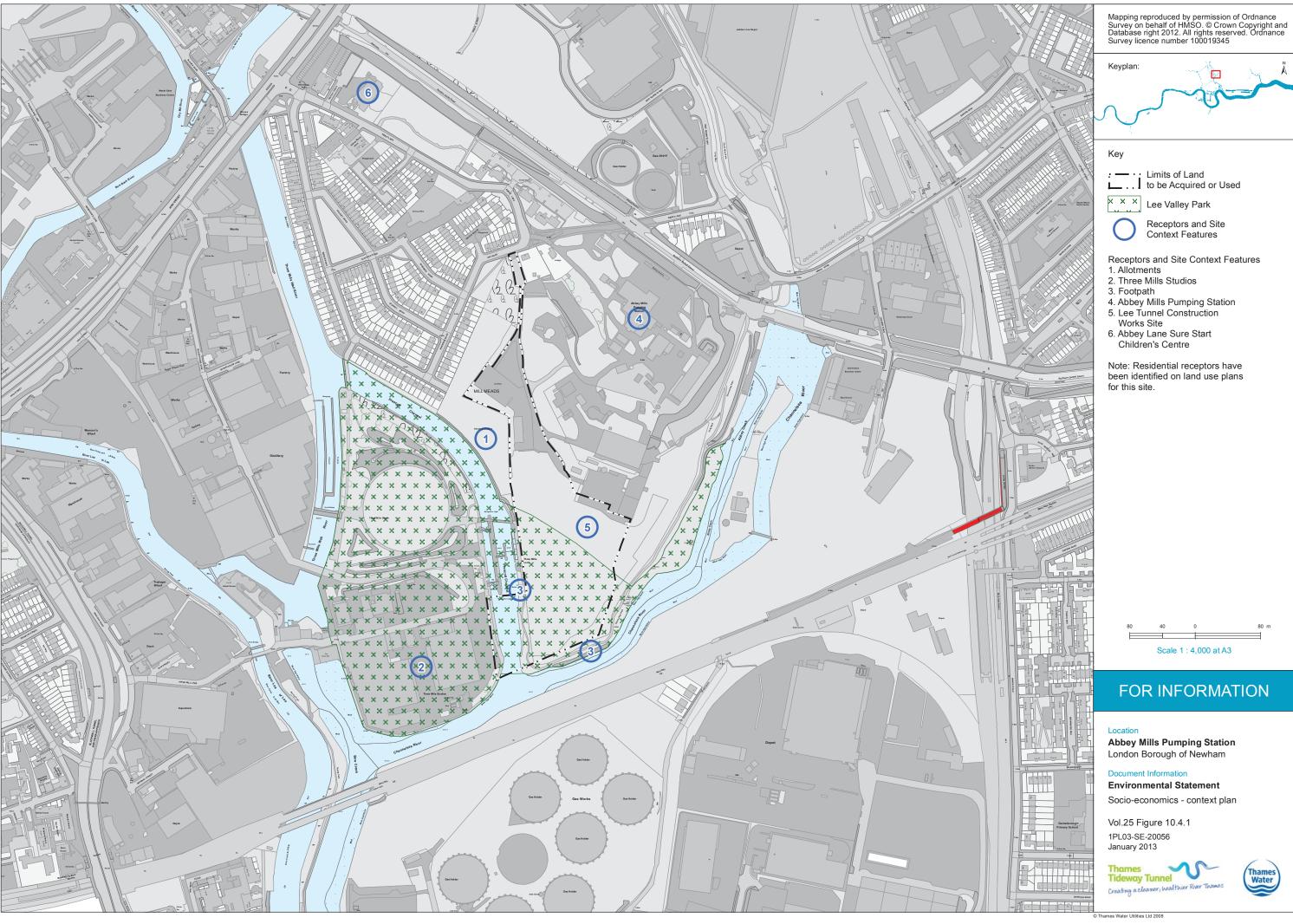


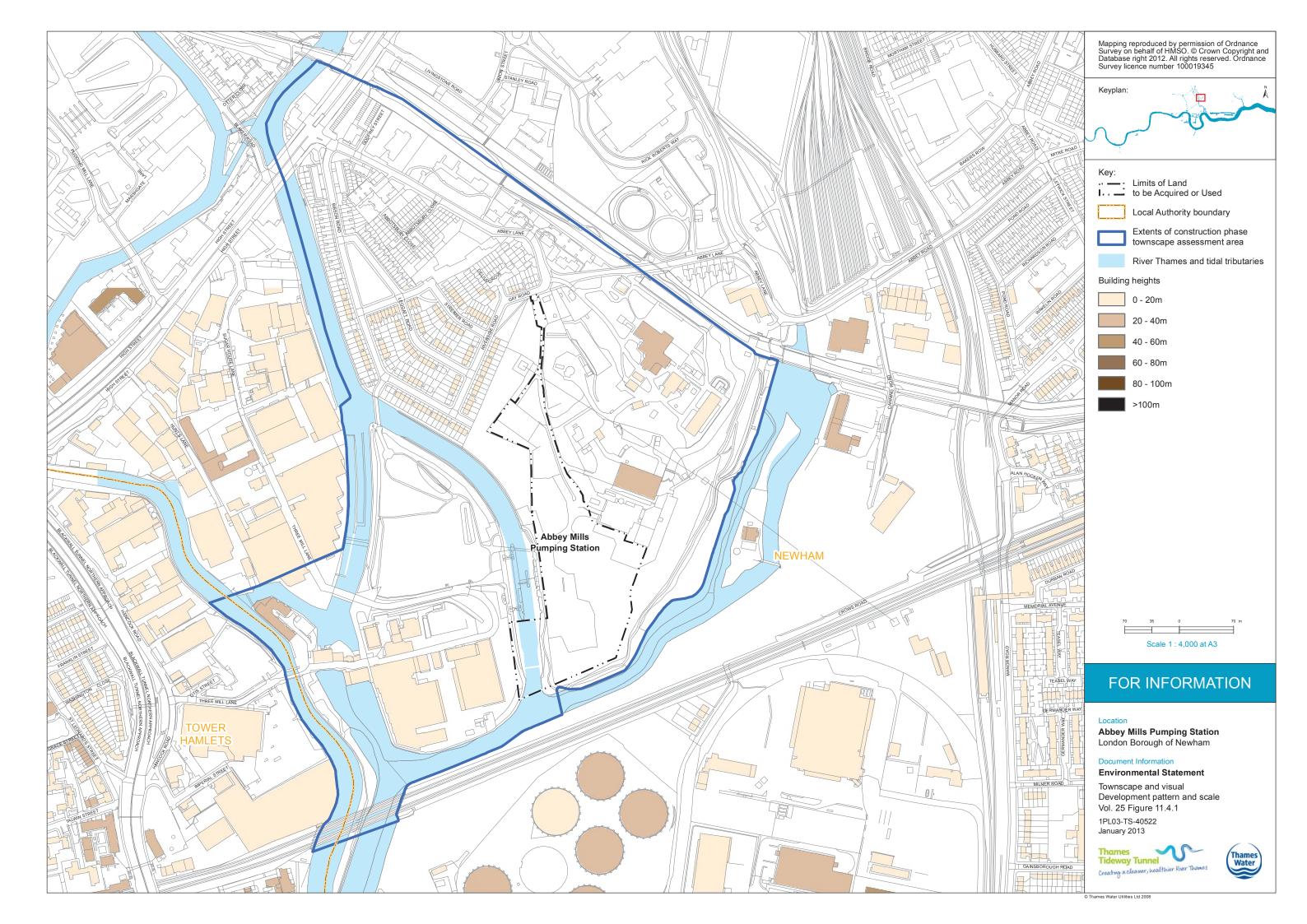














Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2012. All rights reserved. Ordnance Survey licence number 100019345

Keyplan:



Limits of Land

Local to be Acquired or Used



Local Authority boundary



Extents of construction phase townscape assessment area

FOR INFORMATION

Scale 1: 4,000 at A3

Abbey Mills Pumping Station London Borough of Newham

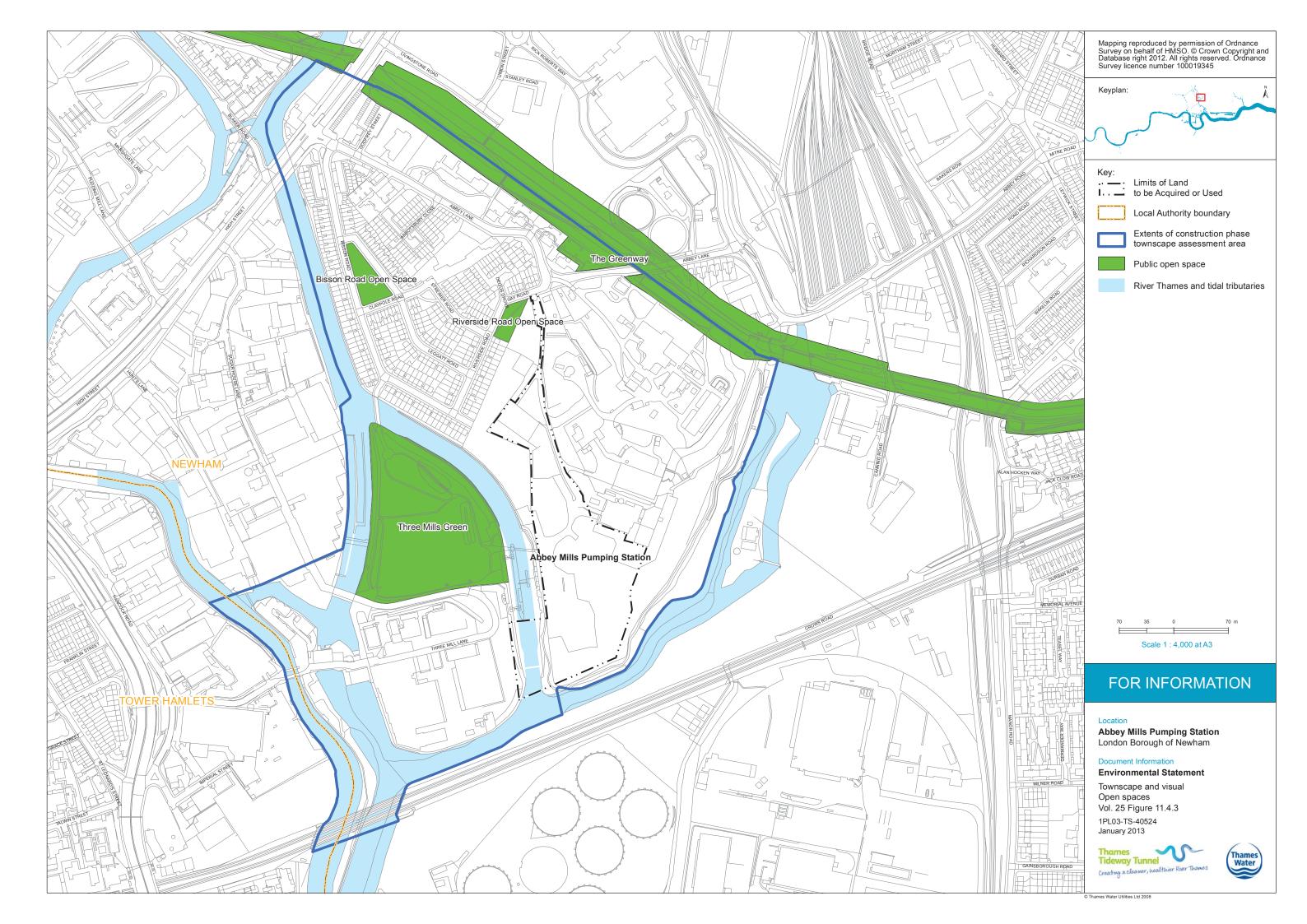
Environmental Statement

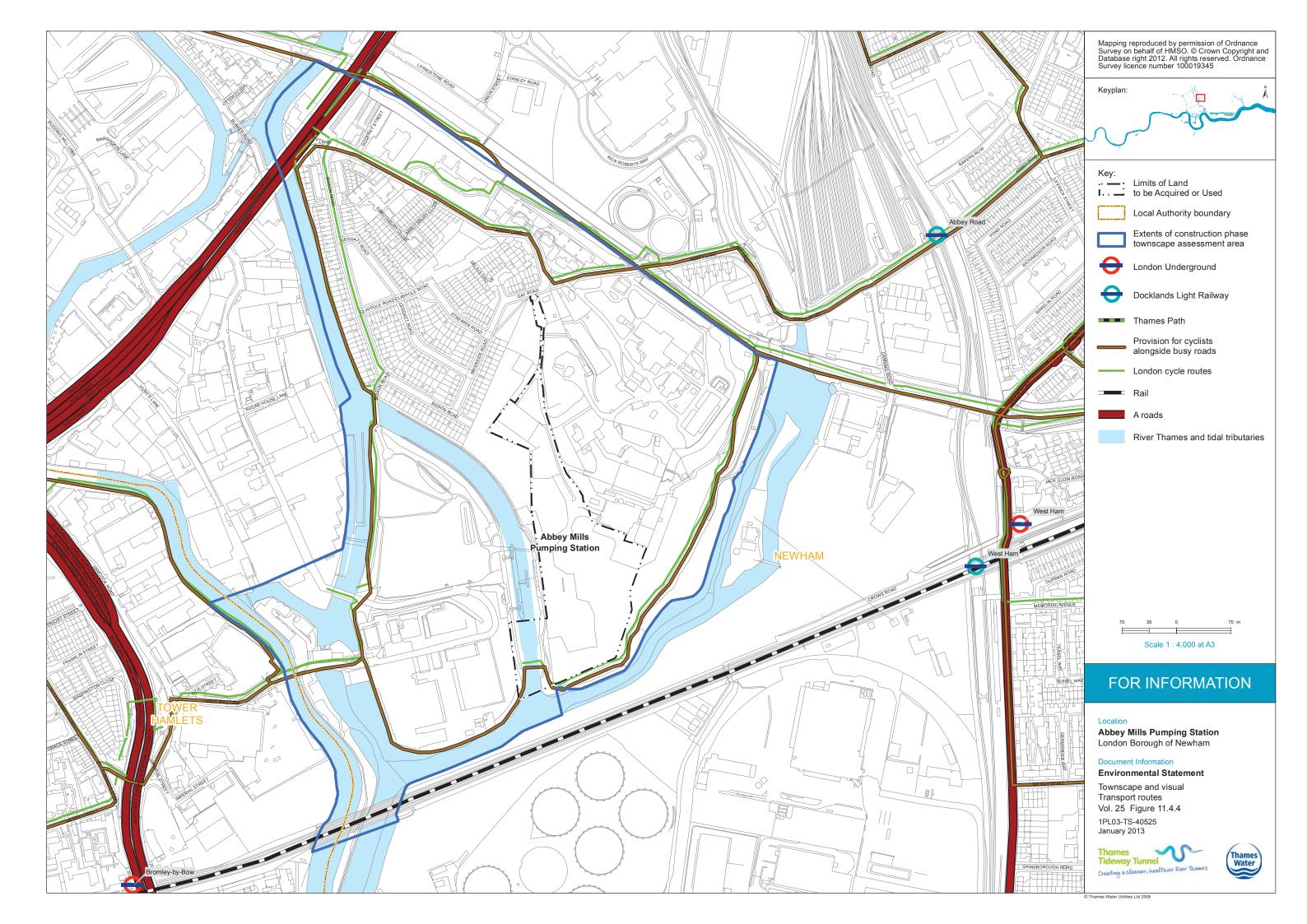
Townscape and visual Aerial photo showing pattern of vegetation Vol. 25 Figure 11.4.2

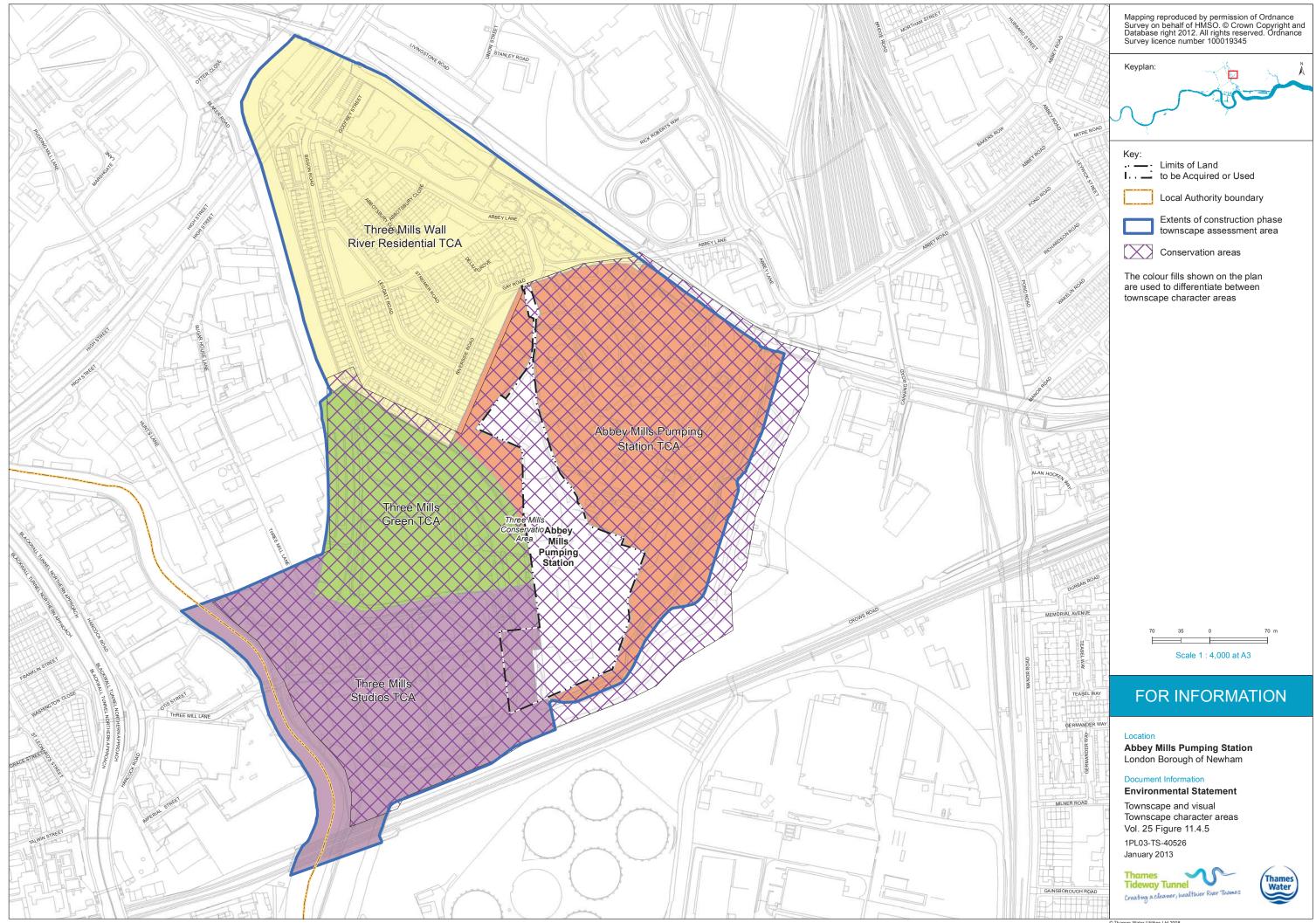
1PL03-TS-40523 January 2013

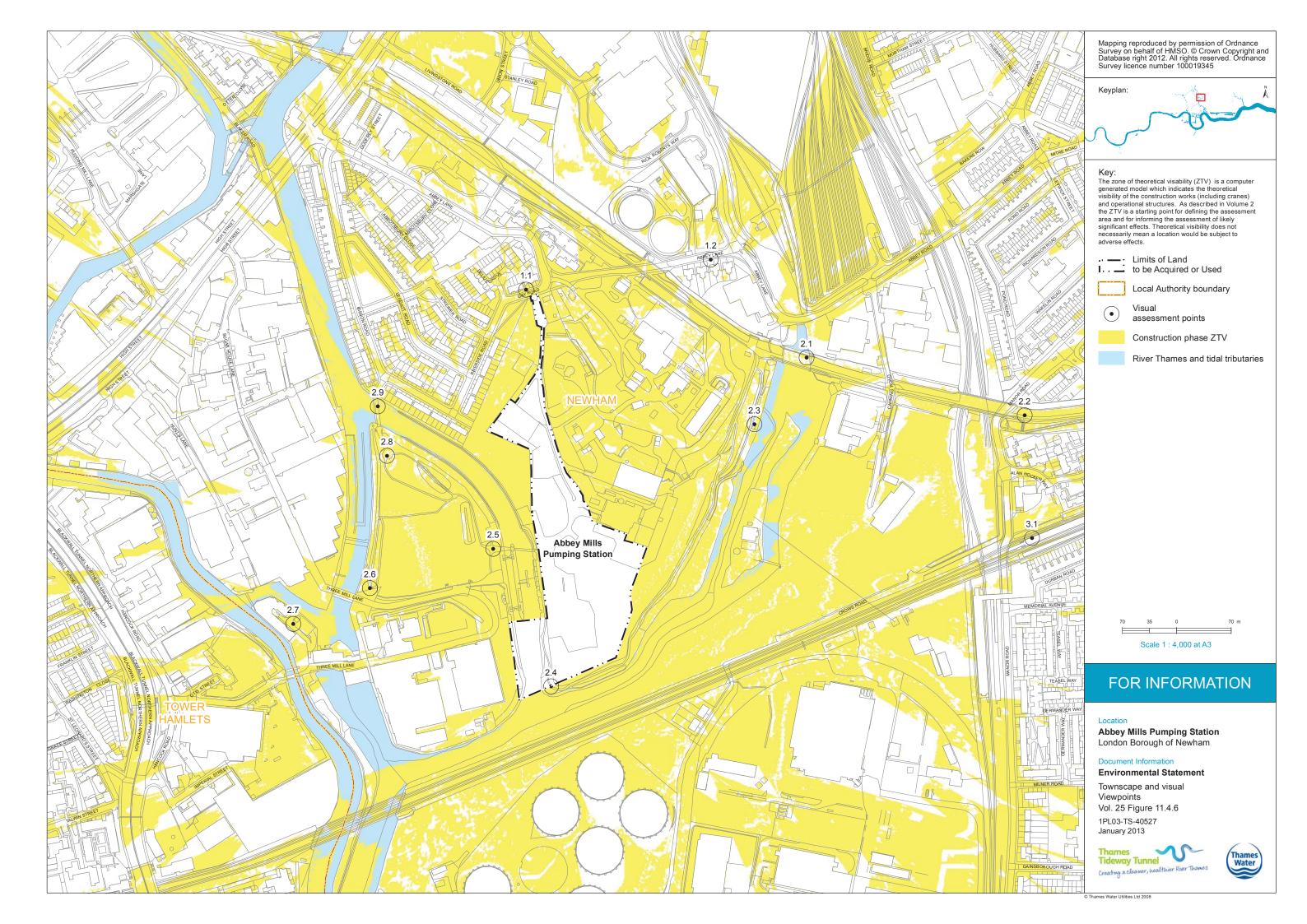


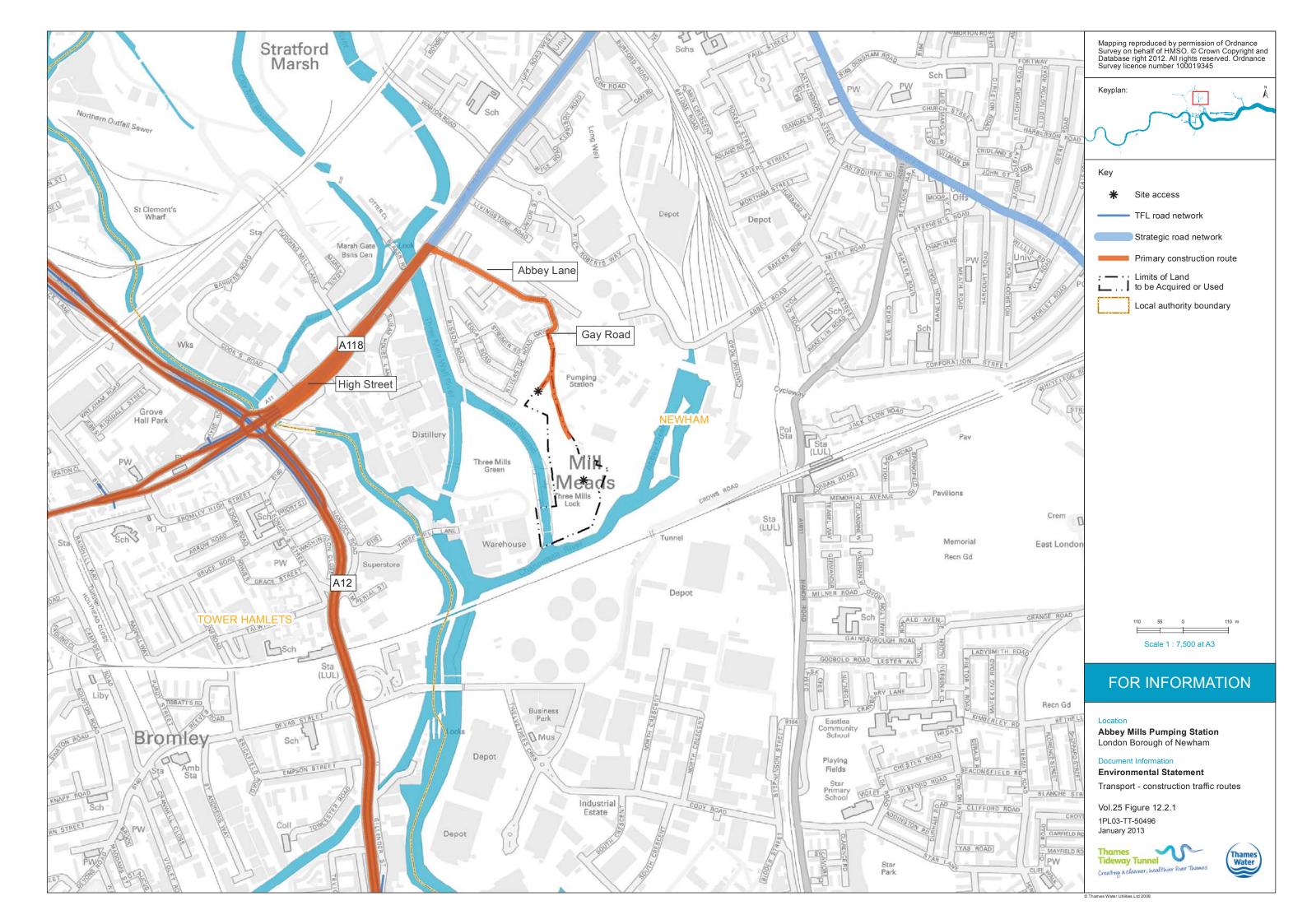


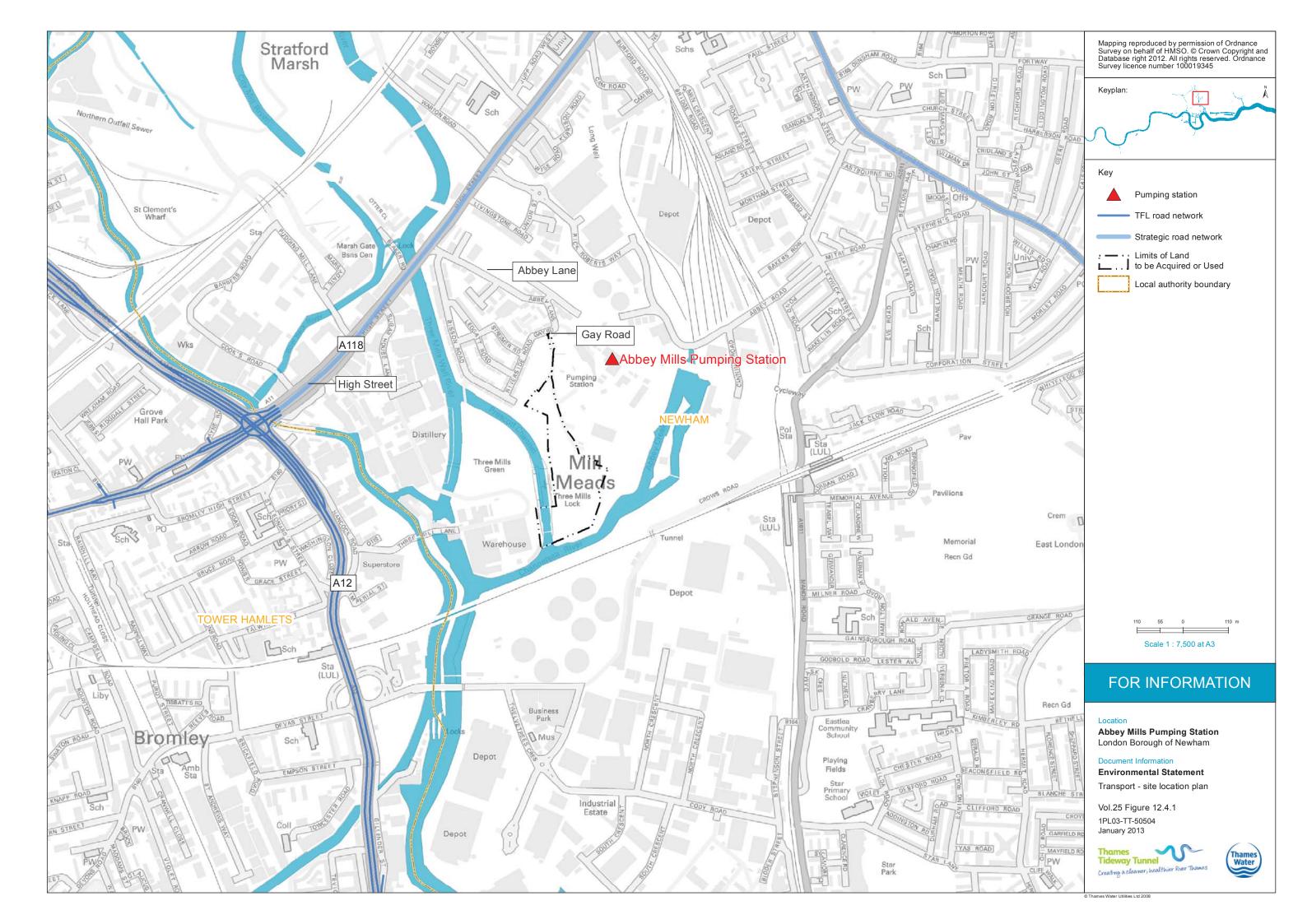


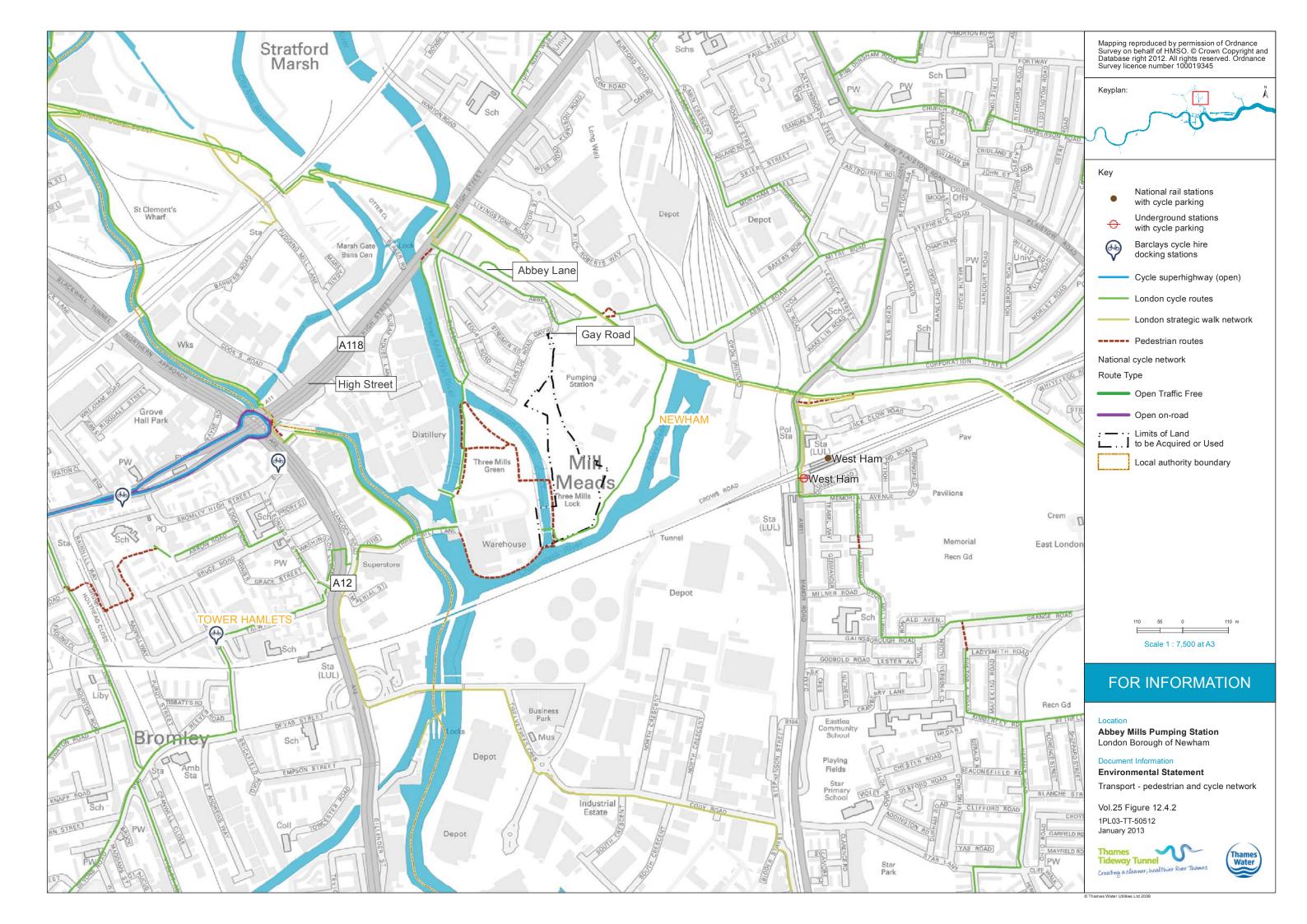


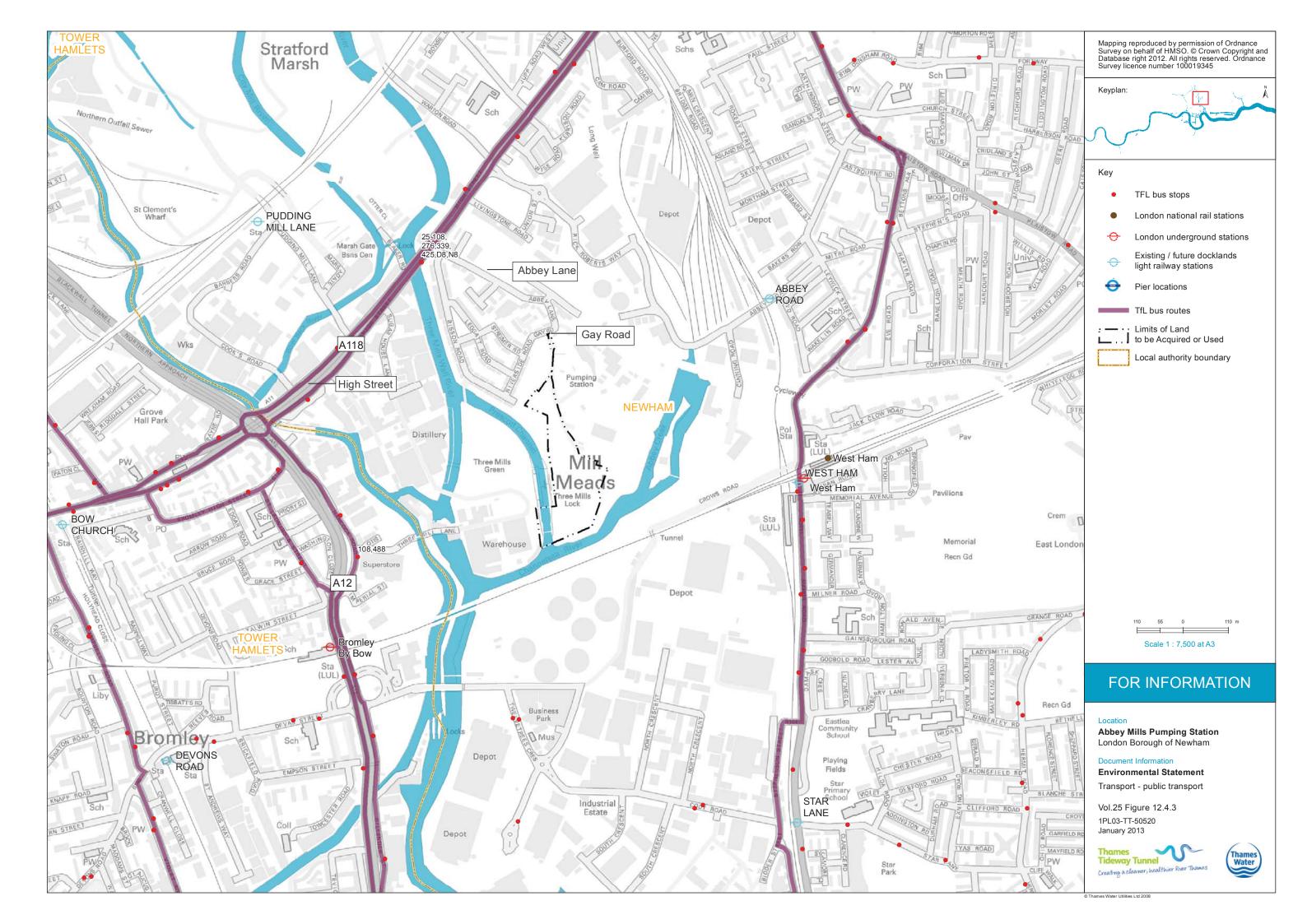


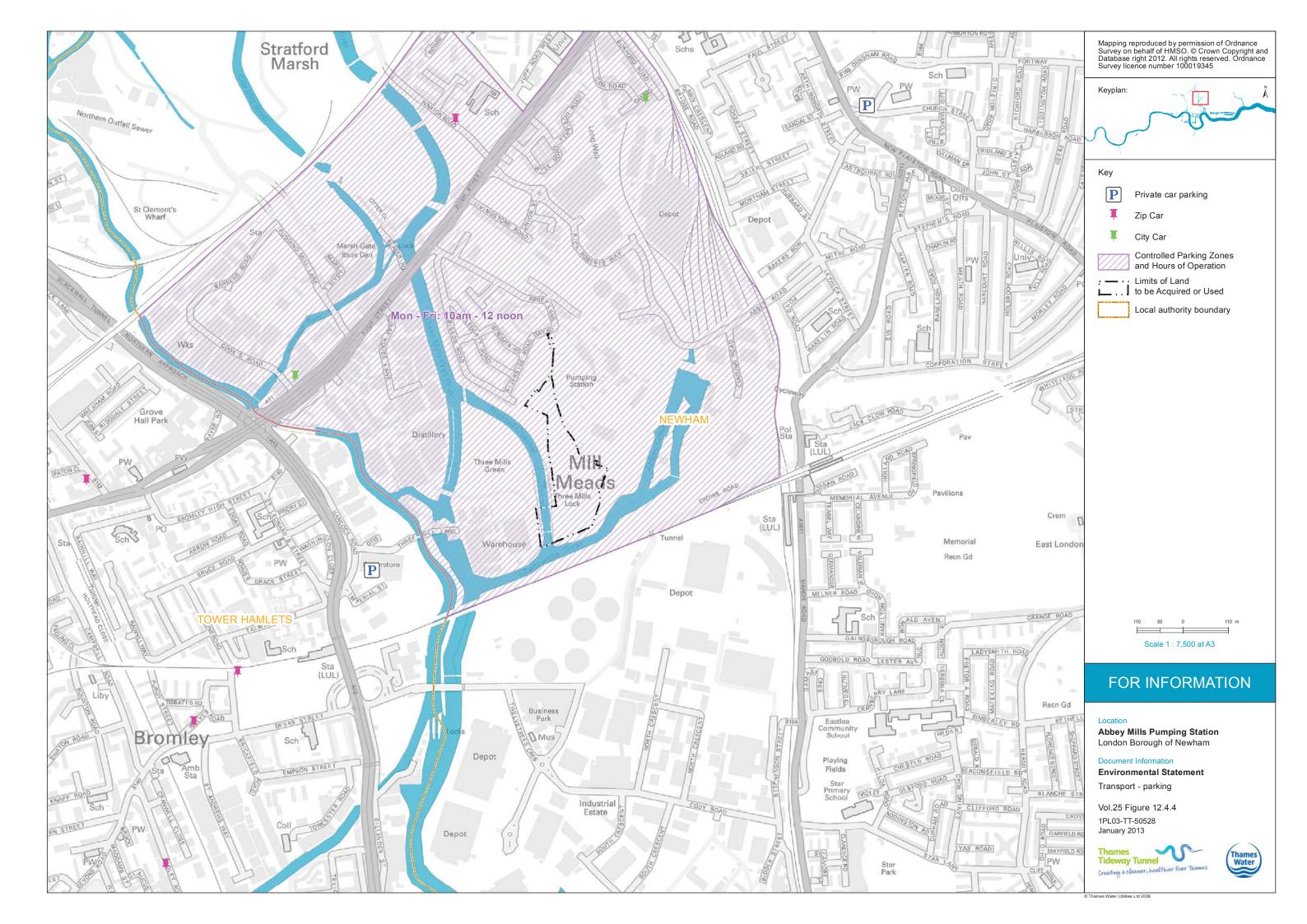


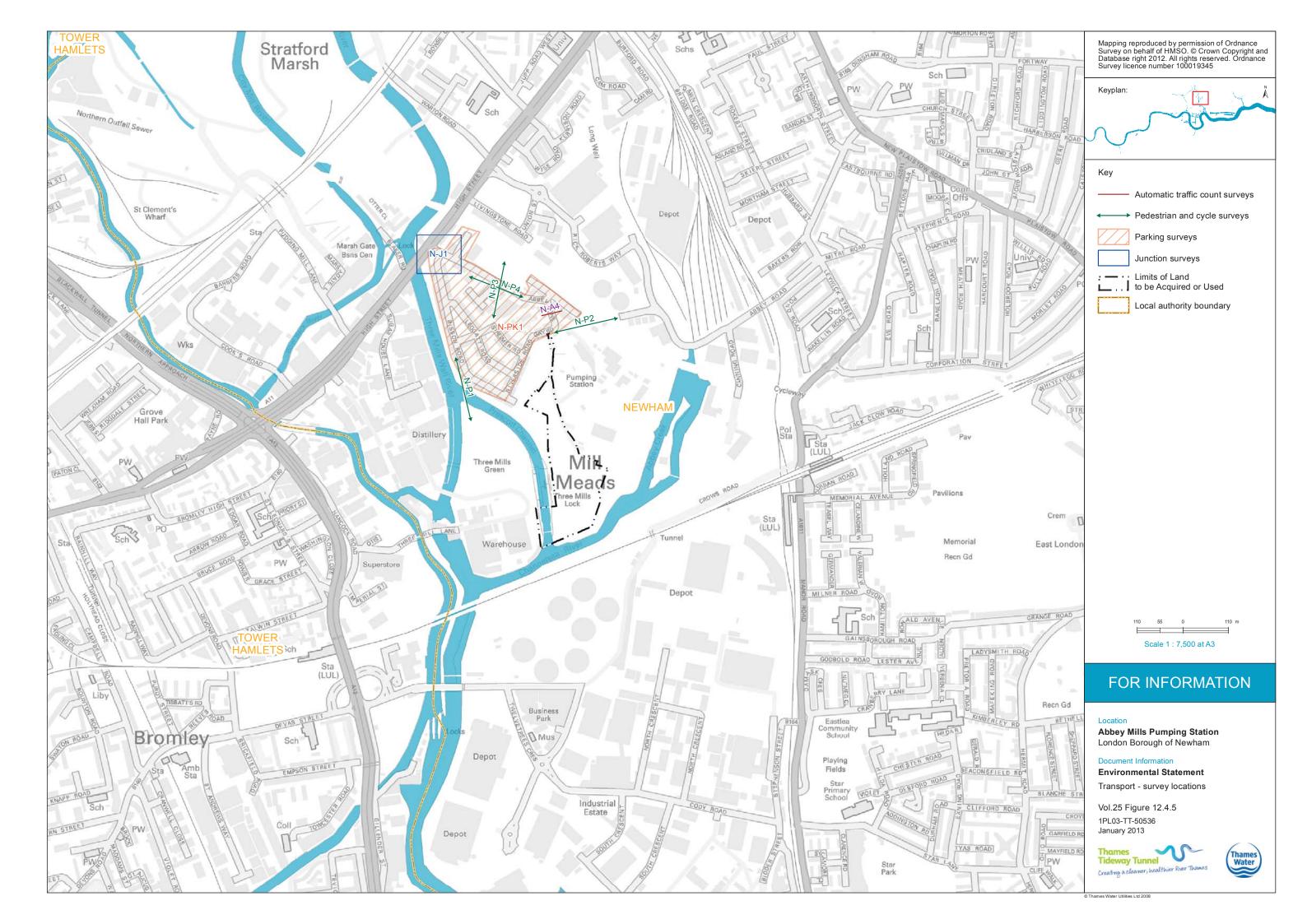


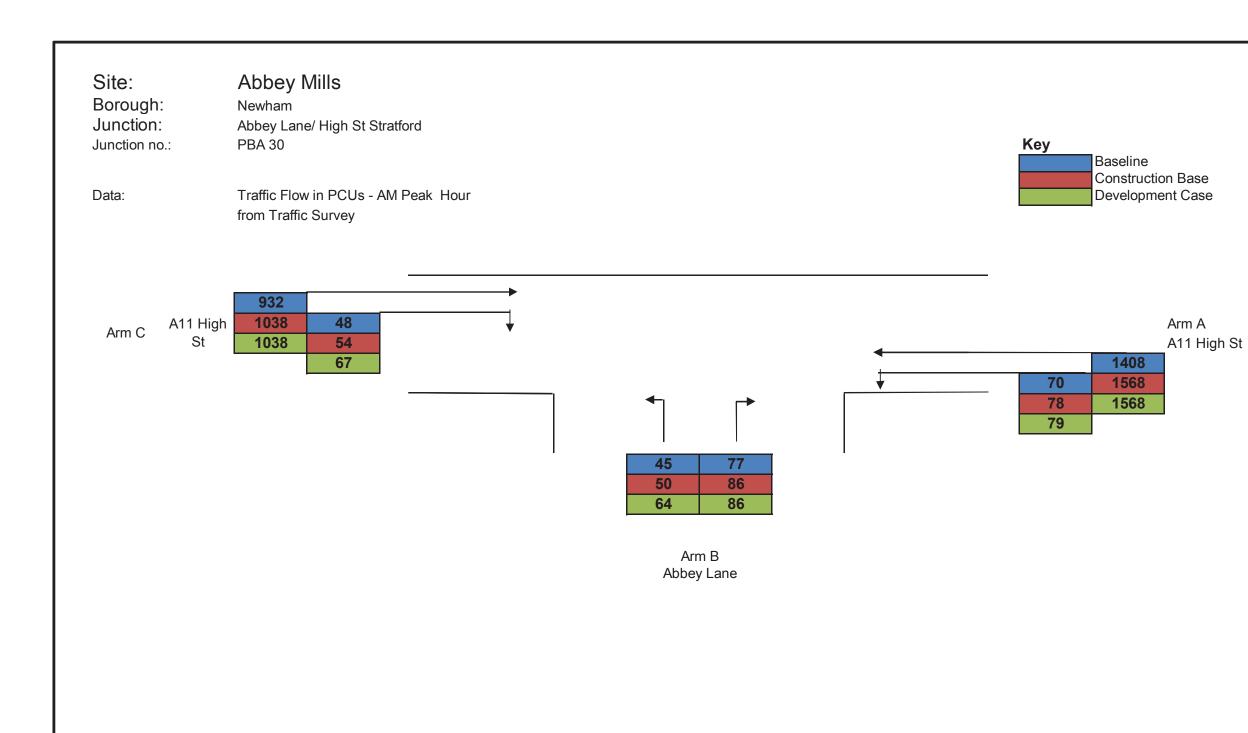












FOR INFORMATION

Location
Abbey Mills London Borough of Newham

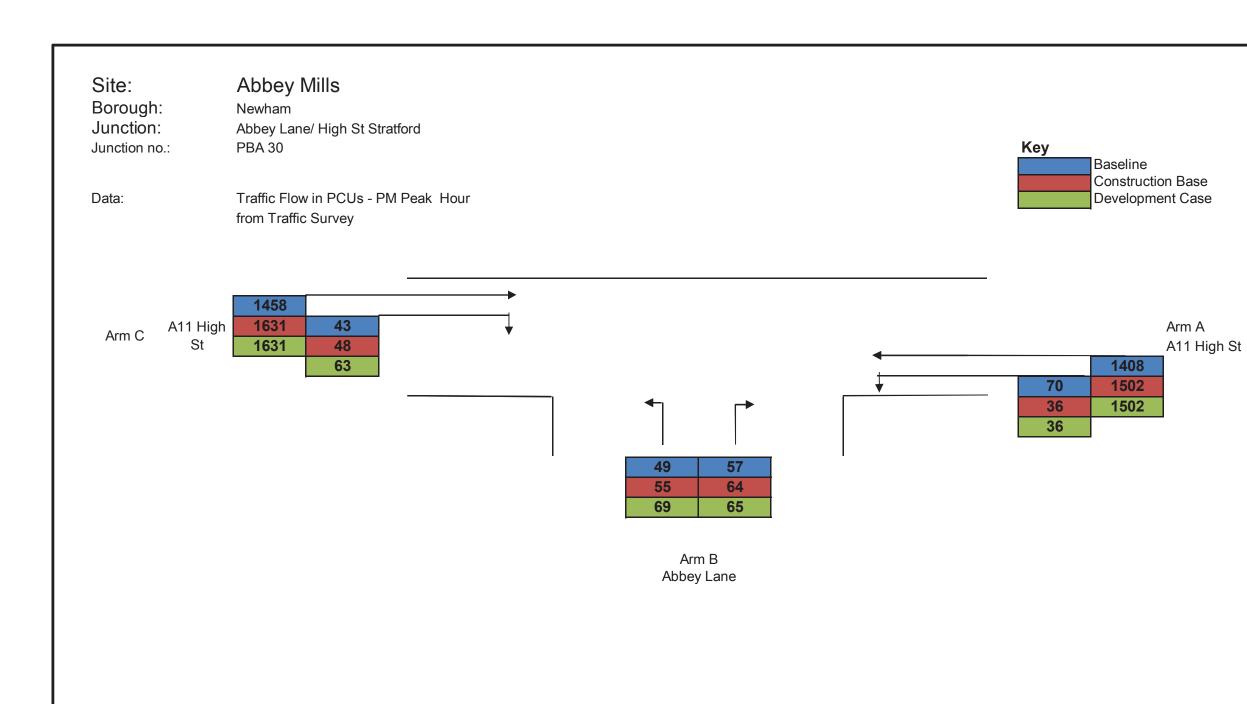
Document Information Environmental Statement

Baseline, Construction and Development case traffic flow (AM peak hour)

Vol. 25 Figure 12.4.6 1PL03-TT-50867 January 2013







FOR INFORMATION

Location
Abbey Mills

London Borough of Newham

Document Information

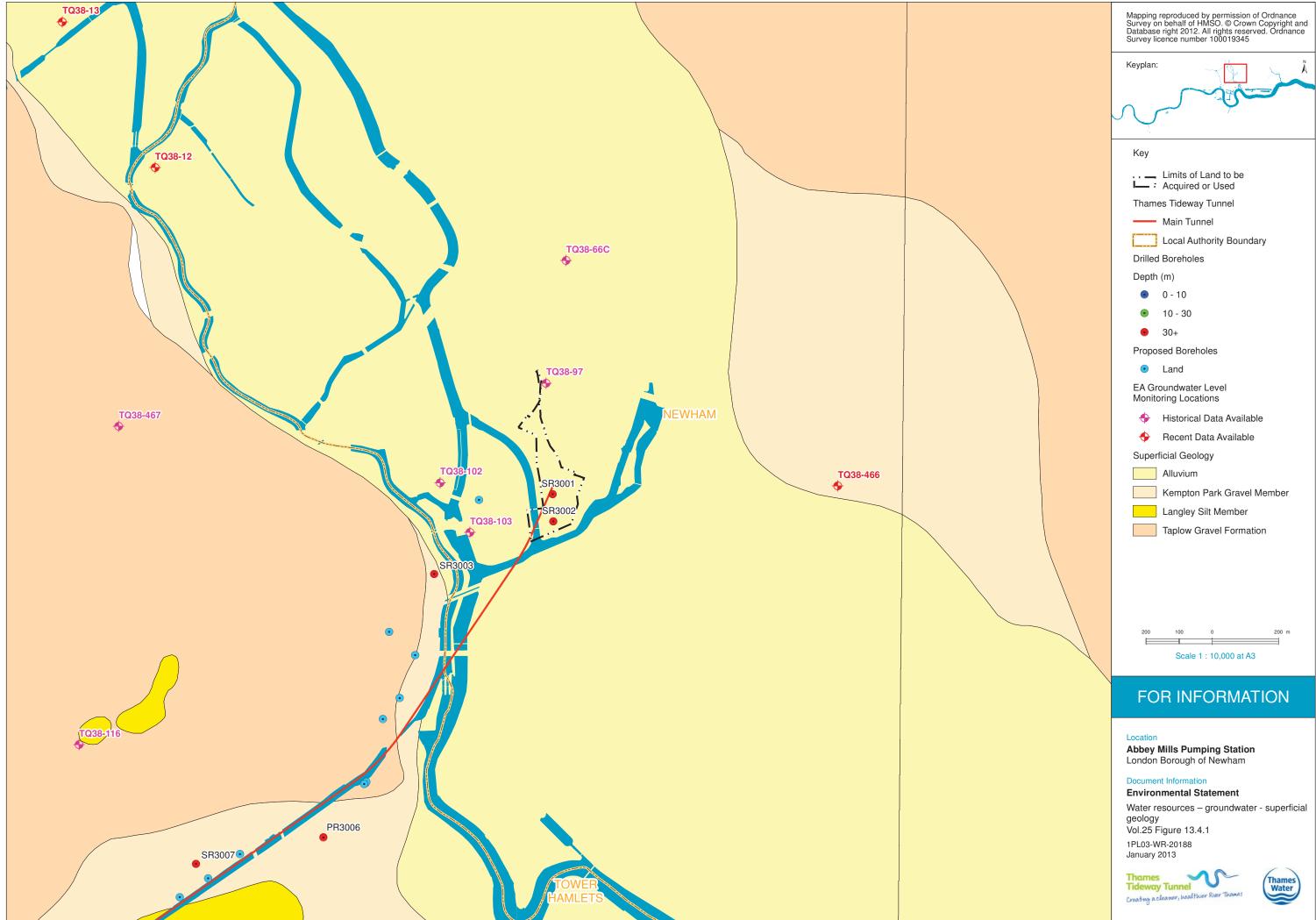
Environmental Statement

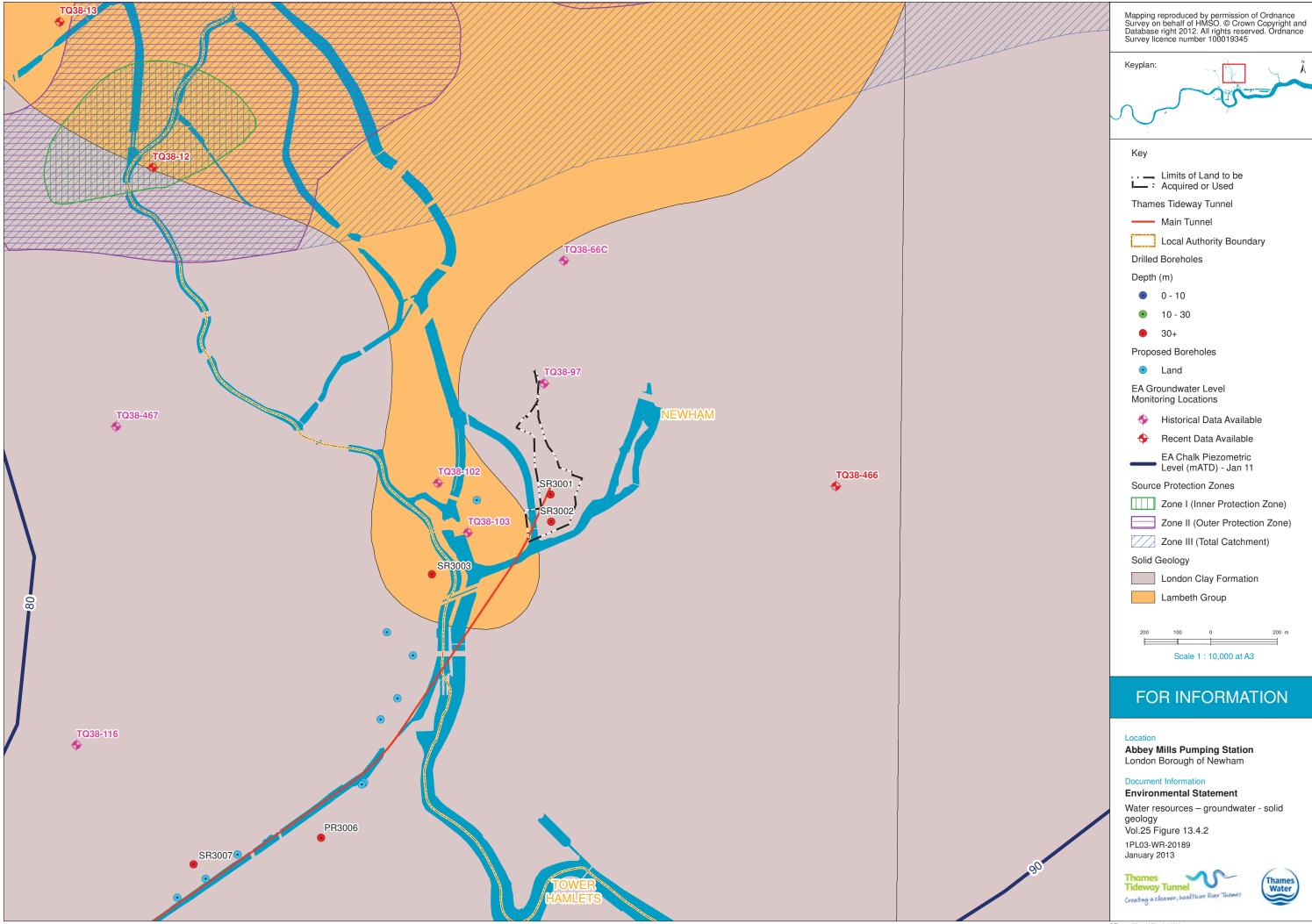
Baseline, Construction and Development case traffic flow (PM peak hour)

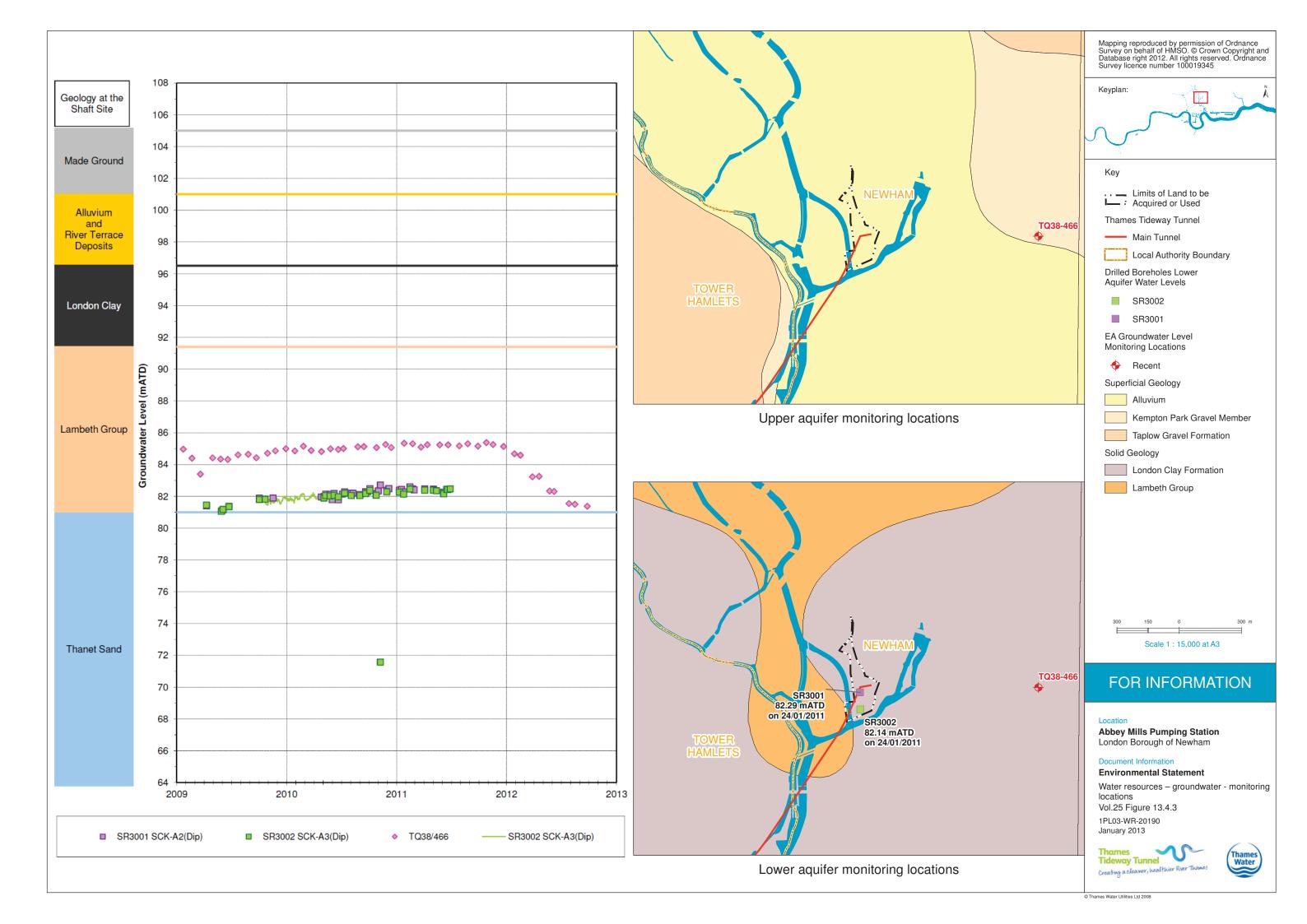
Vol. 25 Figure 12.4.7 1PL03-TT-50891 January 2013

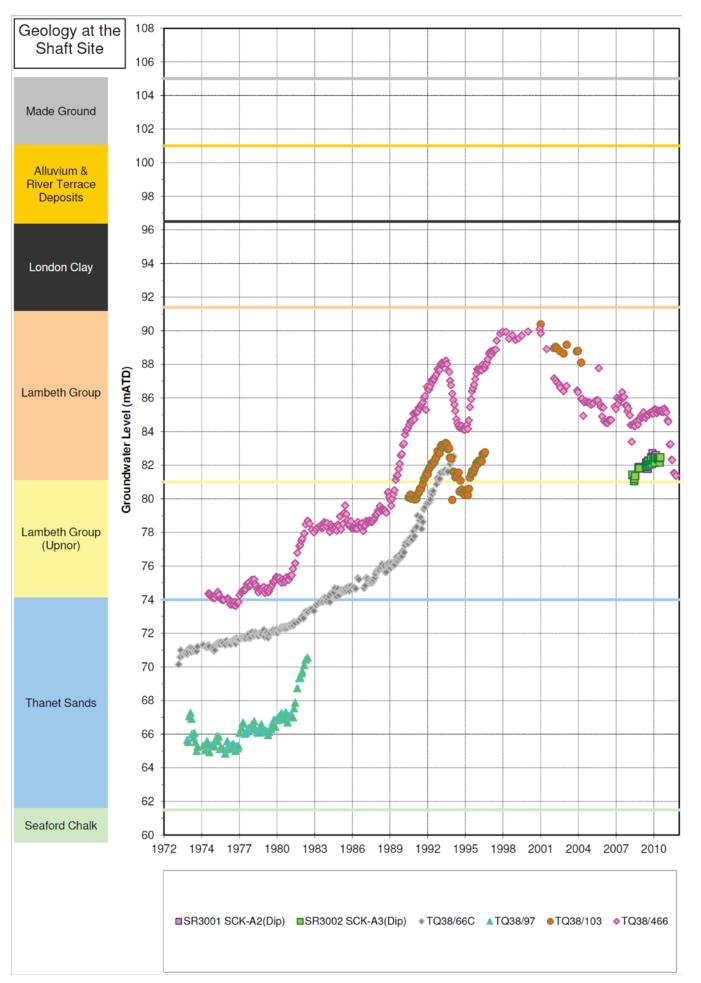


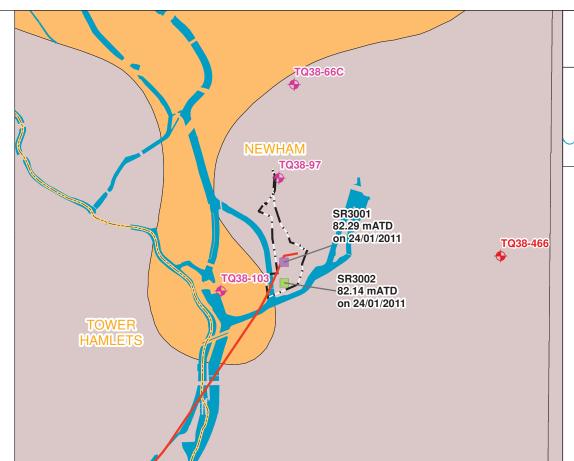












Long term groundwater level monitoring

Mapping reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and Database right 2012. All rights reserved. Ordnance Survey licence number 100019345



Key

Limits of Land to be Acquired or Used

Thames Tideway Tunnel

— Main Tunnel

Local Authority Boundary

Drilled Boreholes Lower Aquifer Water Levels

SR3002

SR3001

EA Groundwater Level Monitoring Locations

Historical Data Available

Recent Data Available

Solid Geology

London Clay Formation

Lambeth Group

FOR INFORMATION

Scale 1: 15,000 at A3

Location

Abbey Mills Pumping Station London Borough of Newham

Document Information

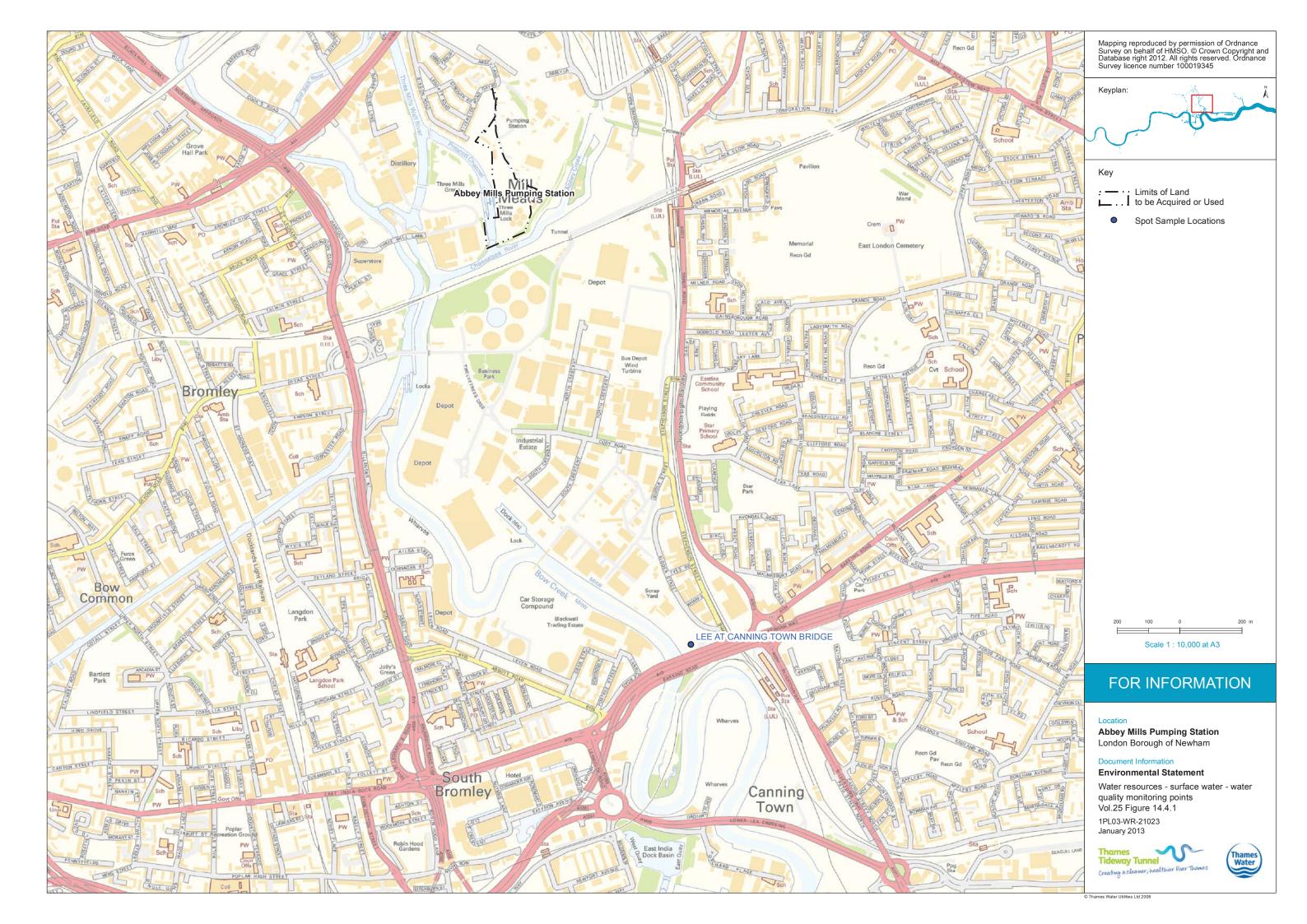
Environmental Statement

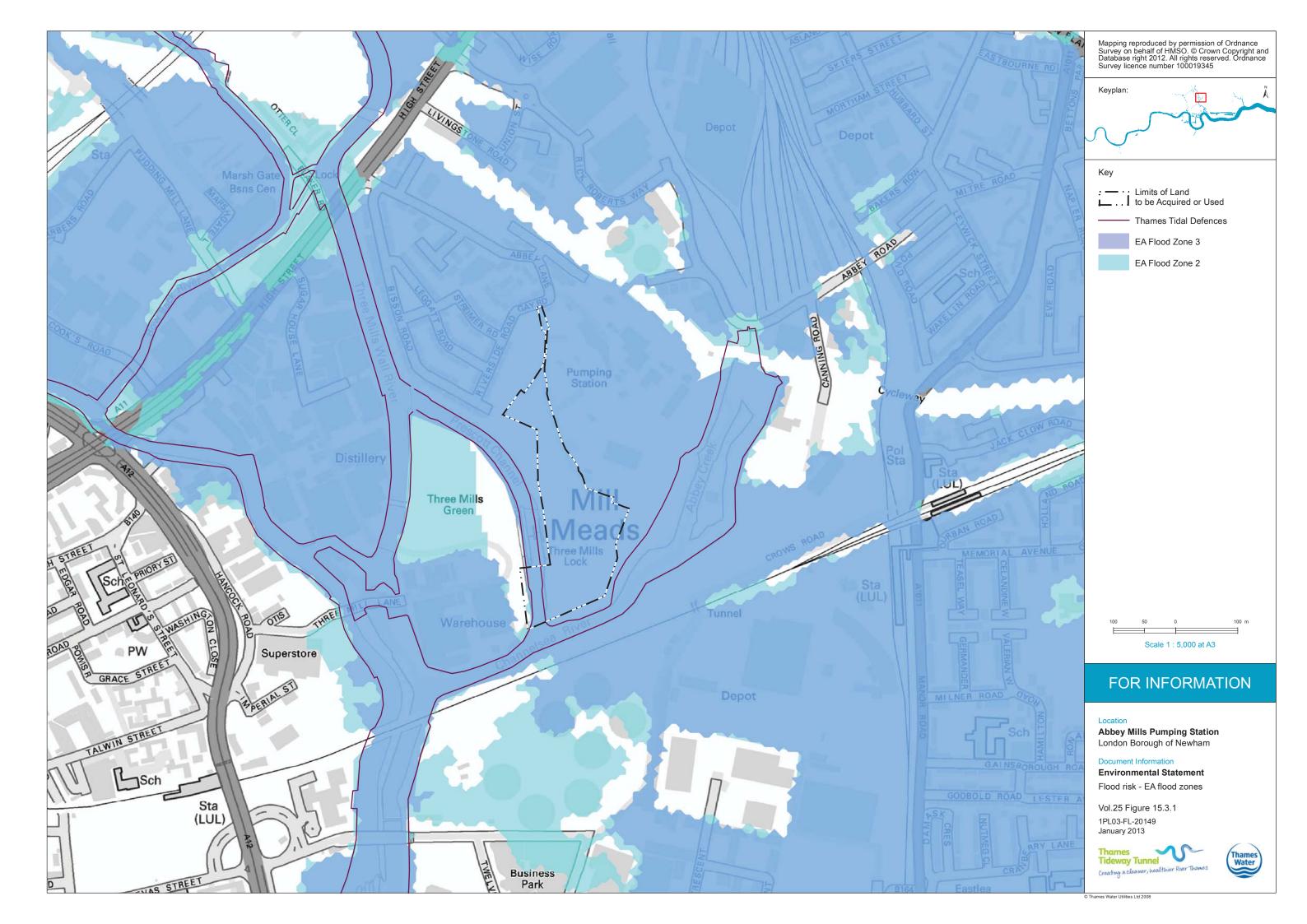
Water resources – groundwater - regional groundwater hydrograph Vol.25 Figure 13.4.4 1PL03-WR-20191

1PL03-WR-2019 January 2013

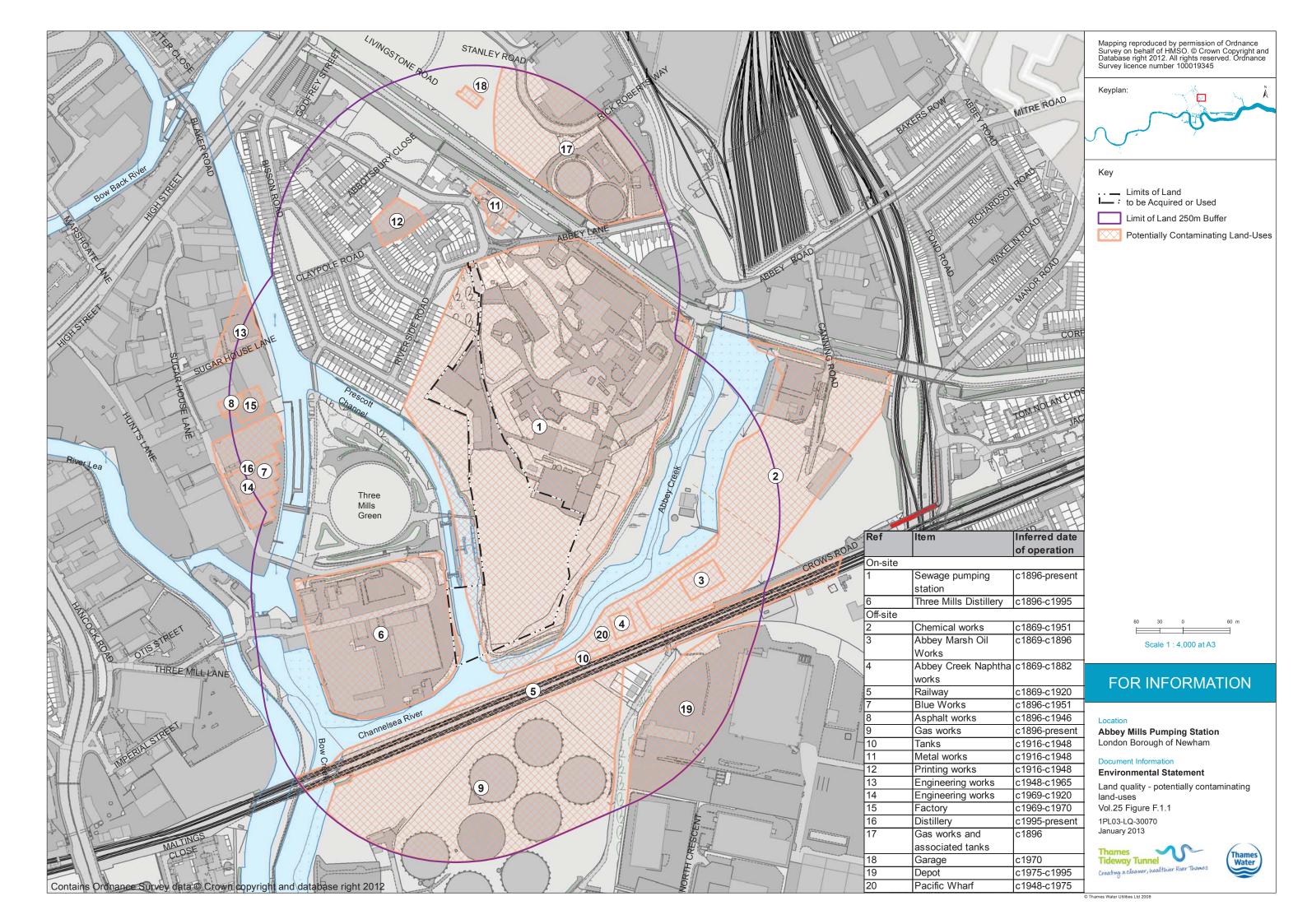


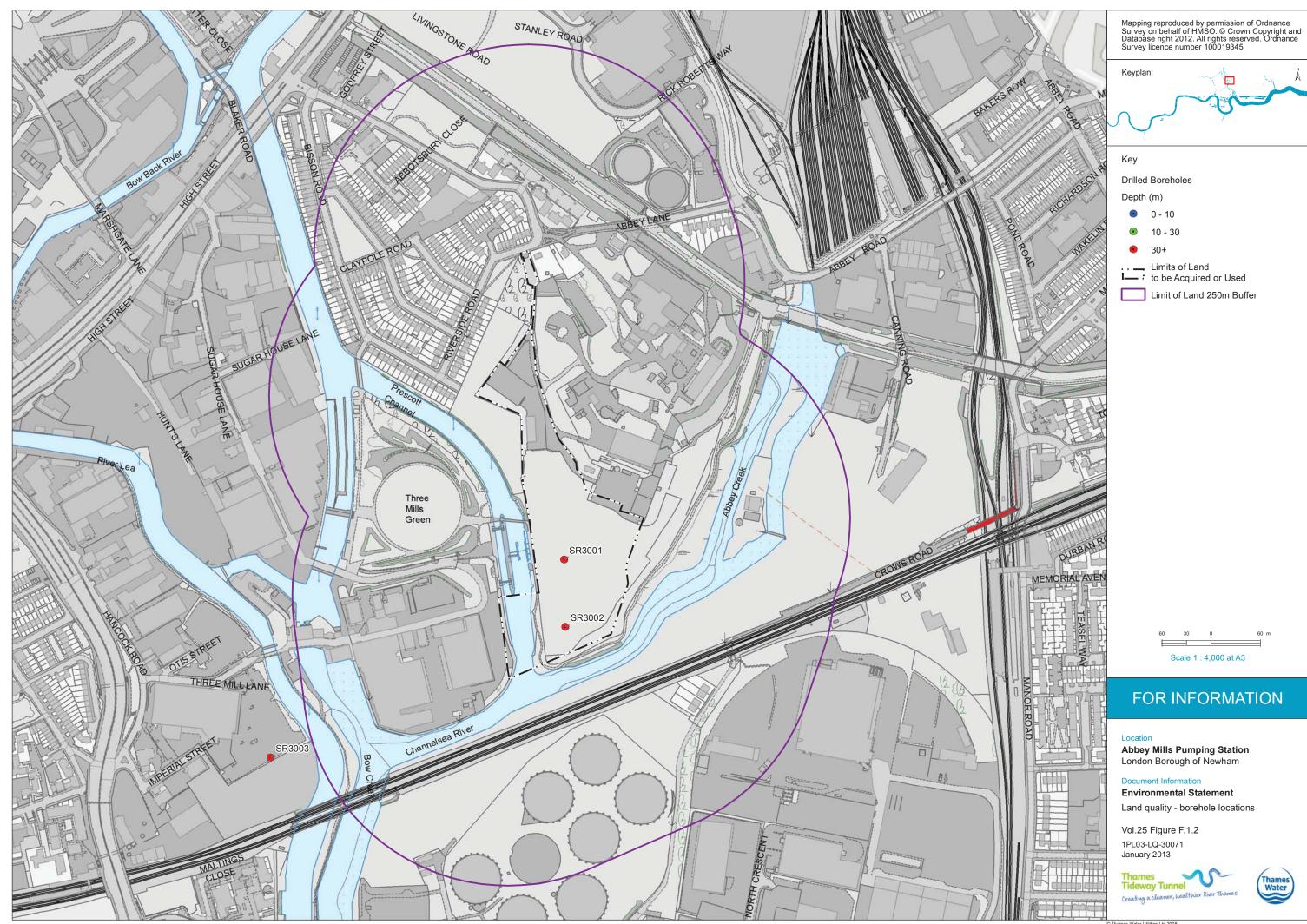


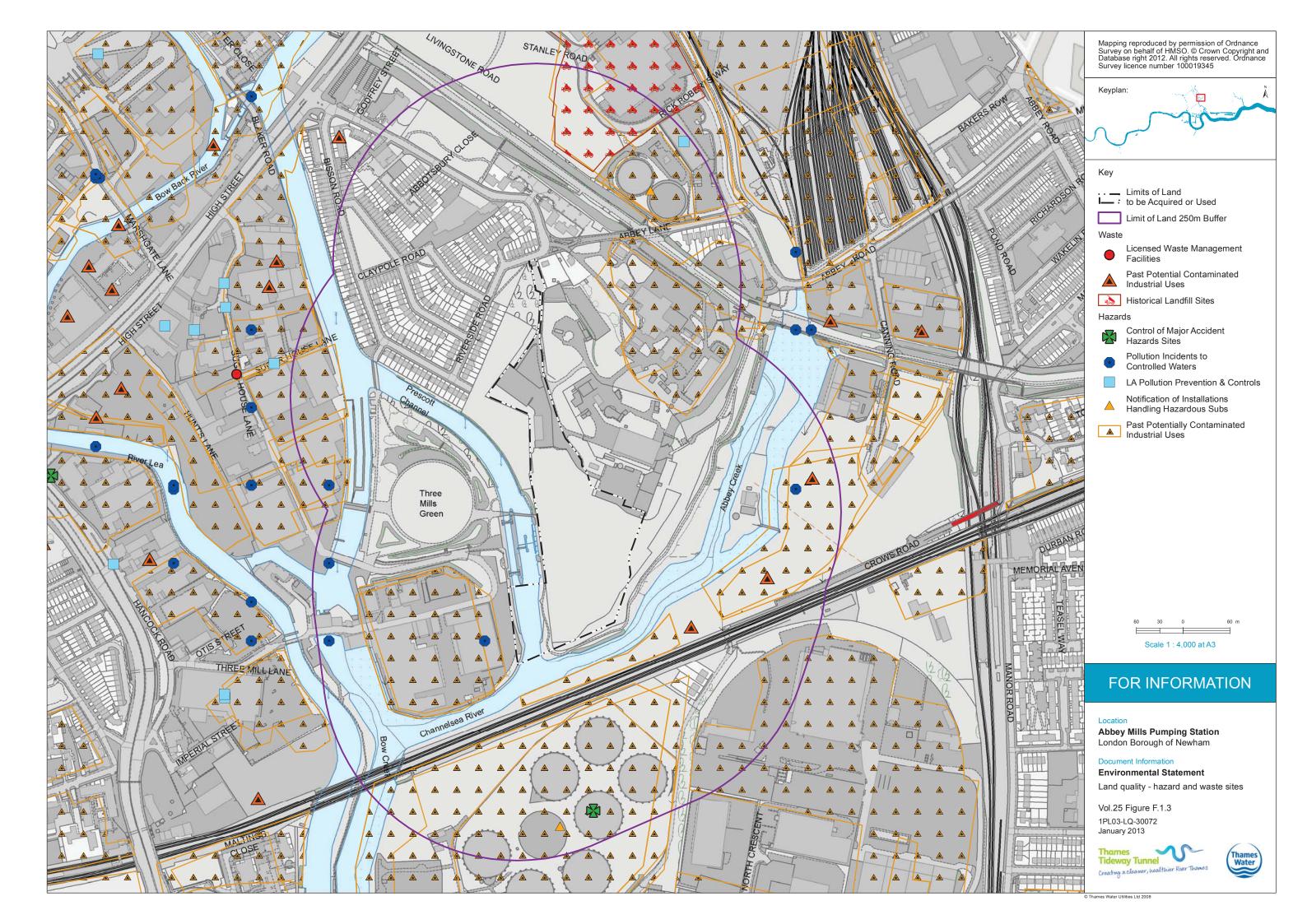


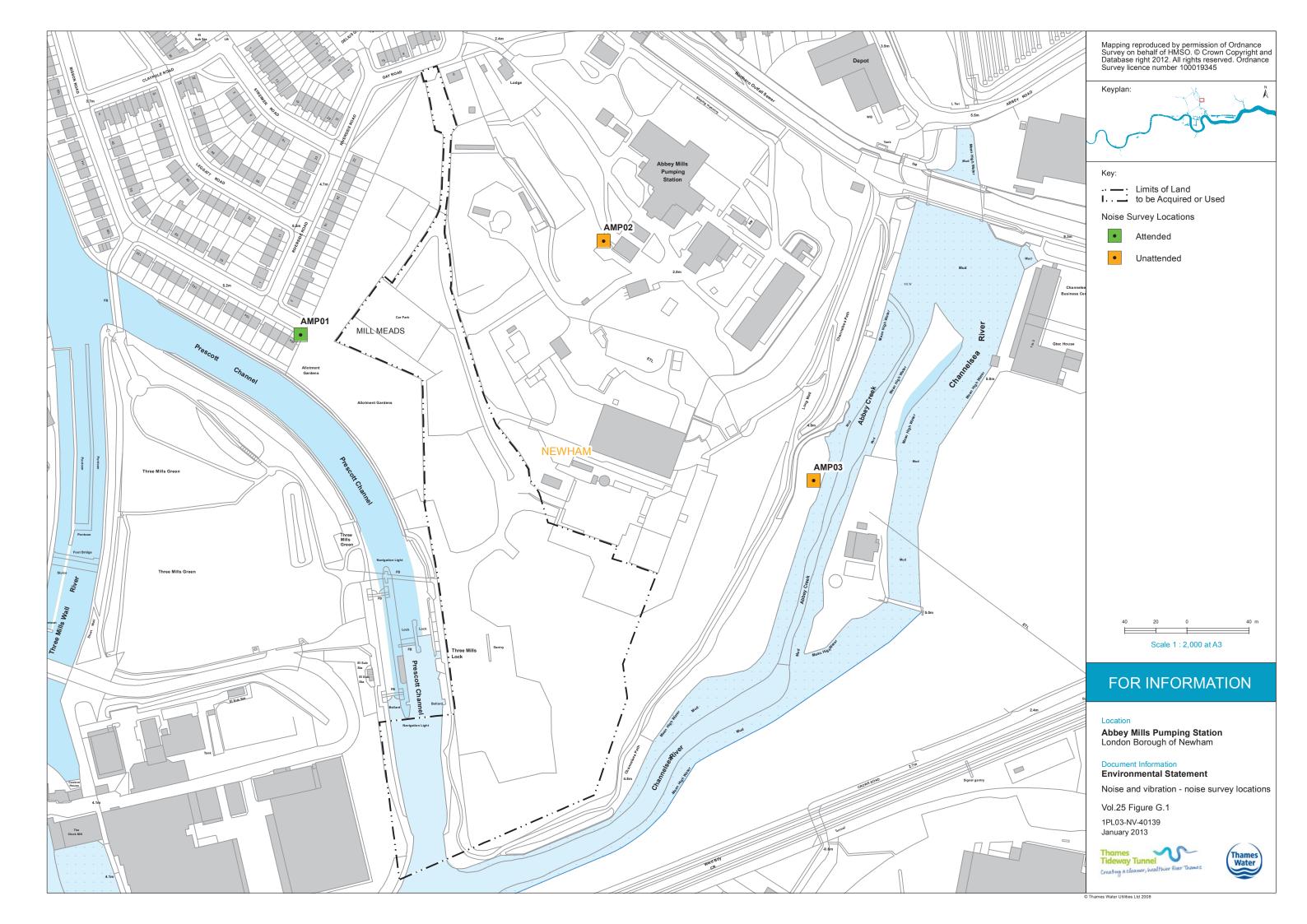












Copyright notice

Copyright © Thames Water Utilities Limited January 2013. All rights reserved.

Any plans, drawings, designs and materials (materials) submitted by Thames Water Utilities Limited (Thames Water) as part of this application for Development Consent to the Planning Inspectorate are protected by copyright. You may only use this material (including making copies of it) in order to (a) inspect those plans, drawings, designs and materials at a more convenient time or place; or (b) to facilitate the exercise of a right to participate in the pre-examination or examination stages of the application which is available under the Planning Act 2008 and related regulations. Use for any other purpose is prohibited and further copies must not be made without the prior written consent of Thames Water.

Thames Water Utilities Limited

Clearwater Court, Vastern Road, Reading RG1 8DB

The Thames Water logo and Thames Tideway Tunnel logo are © Thames Water Utilities Limited. All rights reserved.

