2018 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the
Environment Act 1995
Local Air Quality Management

June 2018

Local Authority Officer	Rachel Elford
Department	Public Health and Housing
Address	Westport House, Worgret Road, Wareham, Dorset, BH20 4PP
Telephone	01929 557238
E-mail	rachelelford@purbeck-dc.gov.uk
Report Reference number	ASR 2018
Date	June 2018

Executive Summary: Air Quality in Our Area

Air Quality in Purbeck

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas[1,2].

The annual health cost to society of the impacts of particulate matter alone in the UK is estimated to be around £16 billion[3].

In Purbeck air quality monitoring has established that air quality is generally very good and no Air Quality Management Areas have been declared. Due to concerns from the local town council in Upton about potential increases in traffic on the local roads due to proposed developments in the neighbouring borough of Poole two additional diffusion tubes were added to the nitrogen dioxide diffusion tube survey in August 2017. Whilst too early to make conclusions on these two locations for this report, the 12 months monitoring data for 2017 confirms no AQMA's are required and that levels of pollution are well within the air quality levels.

Local engagement and how to get involved

Members of the public can help improve air quality in Purbeck by changing their normal travel patterns to be more sustainable. They can minimise unnecessary car journeys by choosing to walk, cycle, car-share or use public transport instead. A number of schemes are available in this area to facilitate this, including

- Lift Share which has a Dorset local group which Purbeck residents can sign up to. Details of which can be found here https://liftshare.com/uk/community/dorset

[1] Environmental equity, air quality, socioeconomic status and respiratory health, 2010
[2] Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006
[3] Defra. Abatement cost guidance for valuing changes in air quality, May 2013

- Through Dorset County Council, Purbeck's schools benefit from the Eco-Schools movement which seeks to transform the school-run and facilitating healthier ways of getting to school. Further information can be found here

  https://www.dorsetforyou.gov.uk/green-dorset/eco-schools

- Dorset for You website provides information for Dorset residents (which includes Purbeck) on walking, cycling and public transport https://mapping.dorsetforyou.gov.uk/TravelDorset

Information on air pollution

- DEFRA provide a daily pollution forecast via this link https://uk-air.defra.gov.uk/?type=Current along with a 5-day prediction of air pollution levels across the UK. Links on the DEFRA page also provide health advice for days when pollution levels are expected to be moderate, high or very high. In addition the latest results from the national monitoring network can be viewed here

Further information

- For more information on LAQM and the work being done by DEFRA to tackle air pollution, please visit https://uk-air.defra.gov.uk
- Further information in relation to air quality in the Purbeck area, including previous reports to DEFRA can be found on the Dorset for you website at https://www.dorsetforyou.gov.uk/air quality

Table of Contents

List of Tables

List of Figures

List of Maps

1 Local Air Quality Management

This report provides an overview of air quality in Purbeck during 2017. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Purbeck to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England can be found in Table E.1 in Appendix E.

1.1. Description of the area

The district of Purbeck (156 sq miles in area) is coastal with a predominantly rural environment situated west of the major conurbations of Poole and Bournemouth. It is characterised by a number of picturesque villages and towns with significant areas of scientifically important habitats such as lowland acid heathlands and the World Heritage ‘Jurassic’ coastline.

The population is approximately 45,200 with approximately 22,000 units of accommodation. The population rises in the summer months as tourism plays a major role in the local economy. It is estimated that half a million people visit the district annually.

There are two significant dual carriageways present in the district both on the A35 bypassing Upton and Bere Regis. The A roads A351 and A352 link Swanage, Upton and Wool to Wareham respectively.

The main Weymouth to Bournemouth rail link runs through the district passing through Upton, Wareham and Wool. There is also a heritage steam railway between Corfe Castle and Swanage which in the summer of 2017 linked to the main line at Wareham for a period of 60 days using diesel trains. It is anticipated that a second trial will commence in September 2018 and continue into 2019.

Purbeck district is bordered by other rural districts – West Dorset District Council, East Dorset District Council and North Dorset District Council. Upton in the east of the district borders the Poole/Bournemouth conurbation and the Borough of Poole. Parts of the area and road network are subject to periods of localised congestion particularly in the summer months due to tourist visits. The number of HGV's on the road network in Purbeck is relatively low compared to nearby urban areas and is concentrated on the A35 east-west route. List of larger developments approved by the Councils planning committee in 2016 are shown in Appendix F. A screening assessment has established that none of the developments pose any risk of significantly impacting on air quality or risk air quality objectives being breached.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare an Air Quality Action Plan (AQAP) within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the objectives.

Purbeck District Council currently does not have any AQMAs. Published air quality reports including the Updating and Screening Assessment 2015, Annual Status Report 2016 and Annual Status Report 2017 are available on Dorset For You website.

For reference, maps of Purbeck District Council's monitoring locations are available in Appendix D.

2.2 Progress and Impact of Measures to address Air Quality in Purbeck

Defra's appraisal of last year's ASR concluded that based on the evidence provided by the local authority the conclusions reached were acceptable for all sources and pollutants. As there are no AQMA's the local authority does not have an Air Quality Action Plan and no hot spots have been identified to target.

2.3 $PM_{2.5}$ – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of $PM_{2.5}$ (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that $PM_{2.5}$ has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

2.3.1 Pan Dorset PM2.5 Monitoring Project

Public Health England included a specific Health Protection Indicator within the Public Health Outcome Framework (PHOF) looking to improve the fraction of mortality attributable to particulate air pollution. The indicator is intended to enable Directors of Public Health to prioritise action on reducing the mortality burden associated with PM2.5 exposure. To properly review the situation within Dorset all the local authorities have collaborated with Public Health Dorset in order to carry out monitoring of PM2.5 across the county.

The project aims to create an air quality evidence base for Dorset local authorities (including Bournemouth and Poole) and establish the local linkages with health outcomes. This will verify DEFRA modelling and the PHOF. In addition the work will be used to validate research on satellite derived particulate measurements undertaken by Southampton University.

At the end of 2017 and at the beginning of 2018, 6 monitoring locations were chosen across Dorset by way of a formal review of pollution health and demographic data within a model created by Public Health Dorset. The monitoring methods will be way of a number of AQ Mesh Pods which will be collocated and referenced to an existing Real-Time analyser within Weymouth and Portland Borough Council. In addition Omni Samplers will be used to collect physical samples of particulates and then analysed to establish the speciation of particles throughout Dorset.

In Purbeck Sandford St Martins Primary School (Sandford, Wareham) was chosen as a location with the monitors installed in January 2018 and already sending data to the projects web interface (which participating authorities can access). Due to the fact that

all the monitoring locations are within school grounds it is also hoped that the schools will be able to utilise the data within the National Curriculum. The duration of the project is anticipated to be approximately two years and it is expected that a further update with the available data will be able to be included in next year's Annual Status Report.

In Dorset the district councils such as Purbeck District Council have their transport planning carried out by Dorset County Council (DCC) who in conjunction with the unitary authorities Bournemouth and Poole produce the Local Transport Plan. The LTP3 Implementation Plan Three 2017-2020 is the most relevant to this year's Annual Status Report. A full copy can be found at

https://www.dorsetforyou.gov.uk/media/222595/IP3-2017-2020-_Issued-Final-160517_May/pdf/IP3_2017-2020__Issued_Final_160517_May.pdf

The following measures identified in the Local Transport Plan are also identified in the DEFRA LAQM Action Toolbox as contributing to the reduction of PM2.5 emissions.

Figure 1.0 Additional Measures to Improve Air Quality in Purbeck

Measure Category	Measure Classification	Evidence of success
Promoting Travel Alternatives	School Travel Plans	**Routes to school** Through Eco schools children are encouraged to get to school by non-car means safely
	Promotion of cycling	**Cycling/Walking** A programme of initiatives to encourage more people to walk and cycle more often: • Rural cycling/walking rights of way improvement to promote sustainable tourism and health related leisure.
	Promotion of walking	
Alternatives to private vehicle use	Car and Lift sharing schemes	**Lift Sharing** There is a local Dorset group of the national initiative Lift Share
	Rail based Park and Ride	**Rail travel**

		In Summer 2017 a train service was re-established between Wareham and Swanage to help reduce vehicular trips on A351 in combination with other measures
Promoting Travel Alternatives	Personalised Travel Planning	**Visitor travel planning** Implementation of effective travel planning for people visiting the Purbeck area, sustainable tourism

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Purbeck District Council does not undertake automatic (continuous) monitoring at any location. The nearest automatic monitoring stations are at Bournemouth and Christchurch. National monitoring results are available at DEFRA website.

3.1.2 Non-Automatic Monitoring Sites

Purbeck District Council undertook non- automatic (passive) monitoring of NO_2 at 12 sites during 2017. Table A.1 in Appendix A shows the details of the sites. An additional two monitoring sites were added to the survey in August 2017. This was because of concerns from Upton Town Council about increased traffic on the local roads and the impact on air quality due to proposed development in the neighbouring local authority Poole Borough Council. Whilst they have been included in this year's report for completeness they have not been commented on because of the limited data set (see Table A.3 and A.4).

Maps showing the location of the monitoring sites are provided in Appendix D.

Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. "annualisation" and/or distance correction), are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, "annualisation". Further details on adjustments are provided in Appendix C. Only monitoring of NO2 is undertaken by Purbeck District Council.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.2 in Appendix A compares the ratified and adjusted monitored NO_2 annual mean concentrations for the past 5 years with the air quality objective of 40µg/m^3.

For diffusion tubes, the full 2017 dataset of monthly mean values is provided in Appendix B.

Levels of nitrogen dioxide (NO_2) have historically been monitored through a diffusion tube survey, running from January 2003 to the present time, with the exception of 2011 to 2013 when funding was not available. Previous monitoring and subsequent air quality reports have concluded that levels of NO_2 were significantly below long term air quality objectives at all sites monitored and that no detailed assessments were required. These reports also concluded that there were no other significant sources of other pollutants defined within the air quality regulations within the District area, and as a result concluded that no other air quality objectives were likely to be breached in the district. Table A.2 in Appendix A compares the ratified and adjusted monitored NO_2 annual mean concentrations for the past 3 years with the air quality objective of 40µg/m^3. The full 2017 dataset of monthly mean values is provided in Appendix B.

Appendix A: Monitoring Results

Table A.1 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA ?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube collocated with a Continuous Analyser?
PUR1	Wareham, Worgret Road	Kerbside	391790	87190	NO2	NO	13	1	NO
PUR2	Corfe Castle, East Street	Roadside	396276	81699	NO2	NO	1	1	NO
PUR3	Swanage, Kings Road	Roadside	402860	78830	NO2	NO	14	1	NO
PUR4	Swanage, Queens Road	Urban Background	402970	78410	NO2	NO	17	1	NO
PUR5	Upton, Blandford Road North	Roadside	397910	93425	NO2	NO	19	2	NO
PUR6	Wool, Dorchester Road	Roadside	384430	86880	NO2	NO	30	2	NO
PUR7	Bere Regis, West Street	Roadside	383901	95100	NO2	NO	12	1	NO
PUR8	Upton, Blandford Road	Roadside	398421	92644	NO2	NO	16	1	NO
PUR9	Swanage, Gilbert Road	Urban Background	402790	78950	NO2	NO	7	1	NO
PUR10	Sandford Road, Sandford	Roadside	393223	89947	NO2	NO	20	1	NO

Notes:(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).(2) N/A if not applicable.

Table A.2 – Annual Mean NO_2 Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2016 (%) (2)	NO_2 Annual Mean Concentration ($\mu g/m^3$) (3)			
					2014	2015	2016	2017
PUR1	Roadside	Diffusion Tube	100%	67%	12.8	12.48	15.2	15.5
PUR2	Roadside	Diffusion Tube	100%	75%	21	16.85	21.7	19.9
PUR3	Roadside	Diffusion Tube	100%	92%	17.9	17.24	18	17.4
PUR4	Urban Background	Diffusion Tube	100%	100%	9.25	8.3	12.5	10.2
PUR5	Roadside	Diffusion Tube	100%	83%	27.7	24.12	25.5	28.7
PUR6	Roadside	Diffusion Tube	100%	100%	23.1	19.97	21.9	24.1
PUR7	Roadside	Diffusion Tube	100%	83%	11.6	10.03	13	14.3
PUR8	Roadside	Diffusion Tube	100%	100%	22.9	18.32	22.5	25.9
PUR9	Roadside	Diffusion Tube	100%	100%	15.9	14.52	15.1	16.2
PUR10	Roadside	Diffusion Tube	100%	100%	27.4	22.18	21.9	20.9

☒ **Diffusion tube data has been bias corrected (confirm by selecting in box)**

☒ **Annualisation has been conducted where data capture is <75% (confirm by selecting in box)**

☐ **If applicable, all data has been distance corrected for relevant exposure (confirm by selecting in box)**

Notes:

Exceedances of the NO_2 annual mean objective of 40$\mu g/m^3$ are shown in **bold**.

NO_2 annual means exceeding 60$\mu g/m^3$, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined.**

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

(3) Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

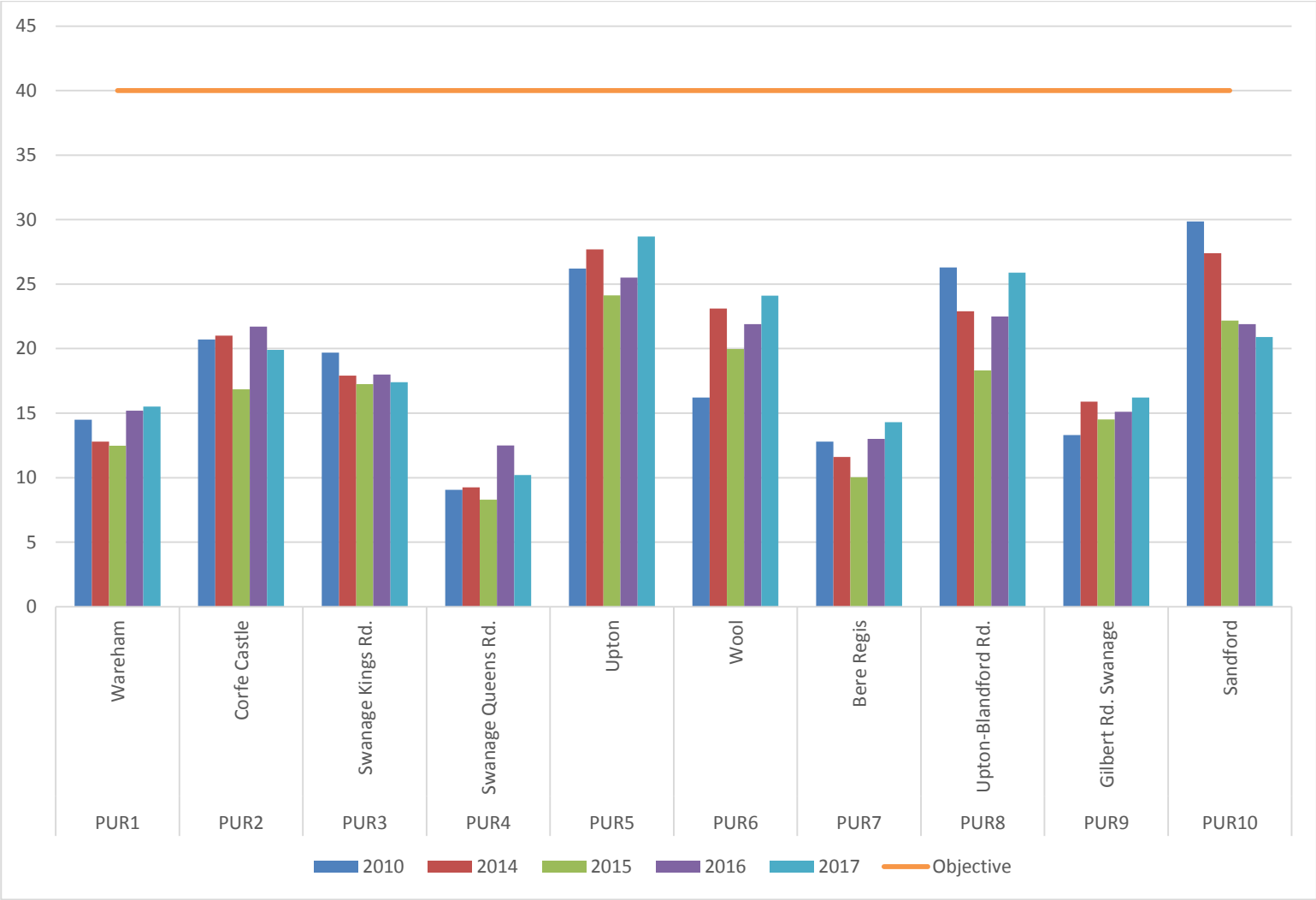
Table A.3 Details of additional non-automatic monitoring sites in 2017

PUR11	Upton, Poole Road (opp Dacombe Road)	Roadside	398330	93137	NO2	NO	10	2	NO
PUR12	Upton, Poole (adj Palmerston Road)	Roadside	398572	93137	NO2	NO	5	2	NO

Table A.4 Additional monitoring results for the period August – December 2017

15.8	17.9	21.4	NR	24.6	19.9	20.7
21.3	21.6	26.5	31.6	33	26.8	27.9

Figure A.1 – Trends in Annual Mean NO_2 Concentrations – 2014, 2015, 2016 and 2017



Appendix B: Full Monthly Diffusion Tube Results for 2017

Table B.1 – NO_2 Monthly Diffusion Tube Results - 2017

Site ID	NO_2 Mean Concentrations (µg/m^3)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean	
													Raw Data	Bias Adjusted (1.04) and Annualised (1)
PUR1	23.9	21.7	13.8	NR	NR	7.9	11.3	NR	10.4	NG	15.9	14.6	14.9	15.5
PUR2	33.4	23.5	NR	NR	NR	9.5	14.3	12.9	18.0	19.6	23.3	18.3	19.2	19.9
PUR3	29.1	19.3	14.1	18.3	15.6	12.7	12.9	12.1	NR	12.6	20.4	16.7	16.7	17.4
PUR4	20.6	11.9	10.2	10.4	10.4	6.3	6.7	4.9	7.1	7.3	12.7	9.2	9.8	10.2
PUR5	NR	31.3	24.7	28.9	NR	22.7	20.9	19.7	29.4	31.7	33.4	33.4	27.6	28.7
PUR6	28.9	24.6	22.7	26.6	20.2	18.8	23.3	19.8	20.8	21	27.6	24.6	23.2	24.1
PUR7	22.7	15.9	14.4	NR	NR	8.4	9.9	10	9.3	21.9	17.7	12.3	14.3	14.8
PUR8	35.1	28.6	21.4	24	19.3	18.2	18.2	18.7	23.8	30.6	35.9	25.1	24.9	25.9
PUR9	25.2	18	17.3	14.9	NR	12.4	15.3	12.7	11.4	13.5	15.8	15.5	15.6	16.2
PUR10	32.8	30	27.1	10.9	24.5	21.7	13.5	13.3	17.8	21.3	15.6	13.4	20.1	20.9

☒ **National bias adjustment factor used**

☒ **Annualisation has been conducted where data capture is <75%**

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

(1) See Appendix C for details on bias adjustment and annualisation.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

Significant Changes to Sources in Purbeck

There have been no known significant changes to sources of pollution in Purbeck since the Updating and Screening Assessment was submitted in 2015. There have been no planning applications of significance in 2017 (see Table F.1). However in 2016 a planning application for a new crematorium was granted at Harbour View, Upton. This was being built in 2017 and started to operate in September 2017.

Diffusion Tube Bias Adjustment Factors

Purbeck District Council purchases all of its diffusion tubes from South Yorkshire Air Quality Samplers. The preparation method is 50% TEA in acetone. All of the data presented in this report has been bias adjusted using the national adjustment databased available on the LAQM Support website. The data has been adjusted using version 03/18 of the spreadsheet giving a factor of 1.04 for all tubes. The data presented in this report has been fully bias adjusted.

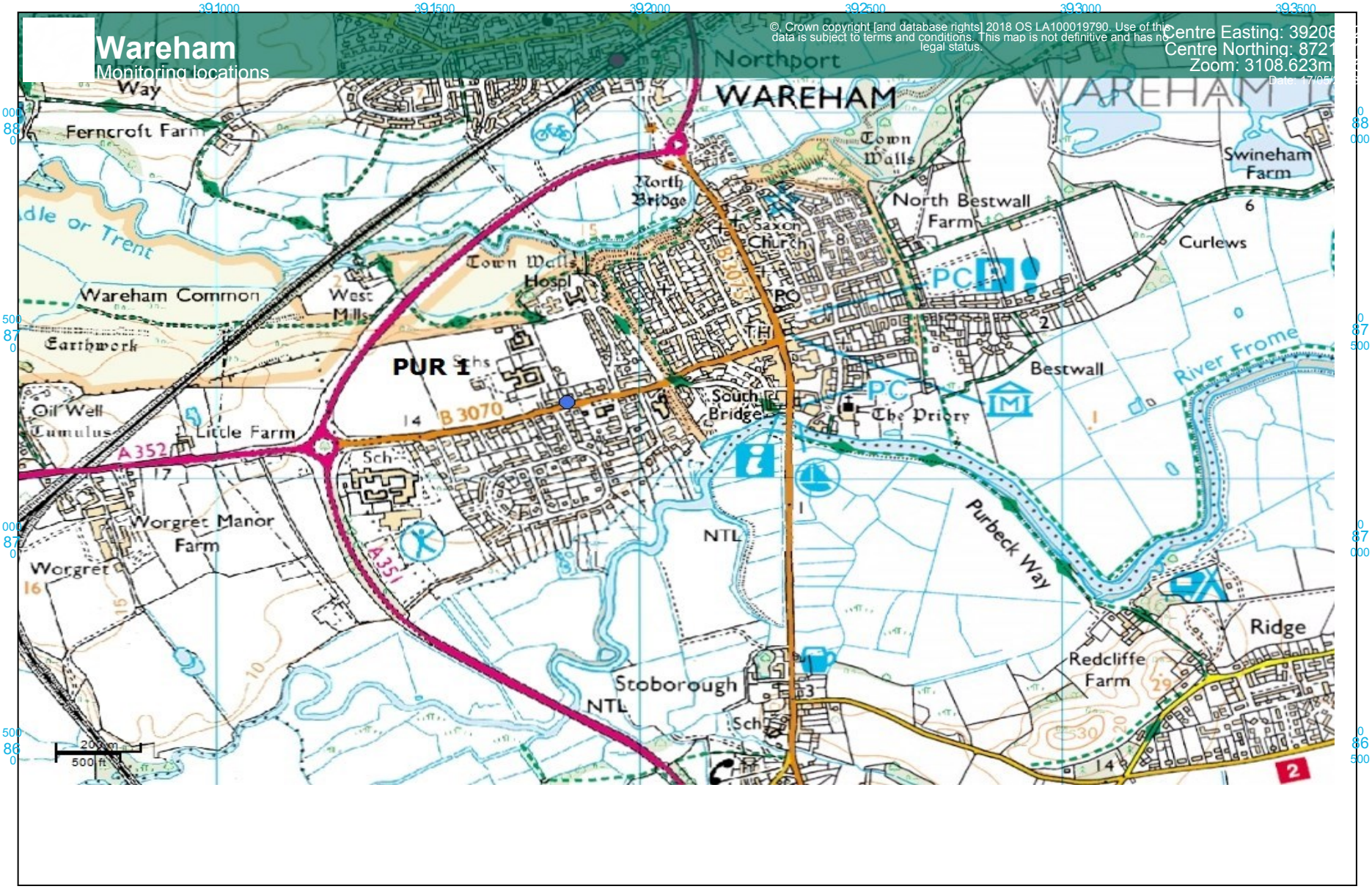
QA/QC of Monitoring Data

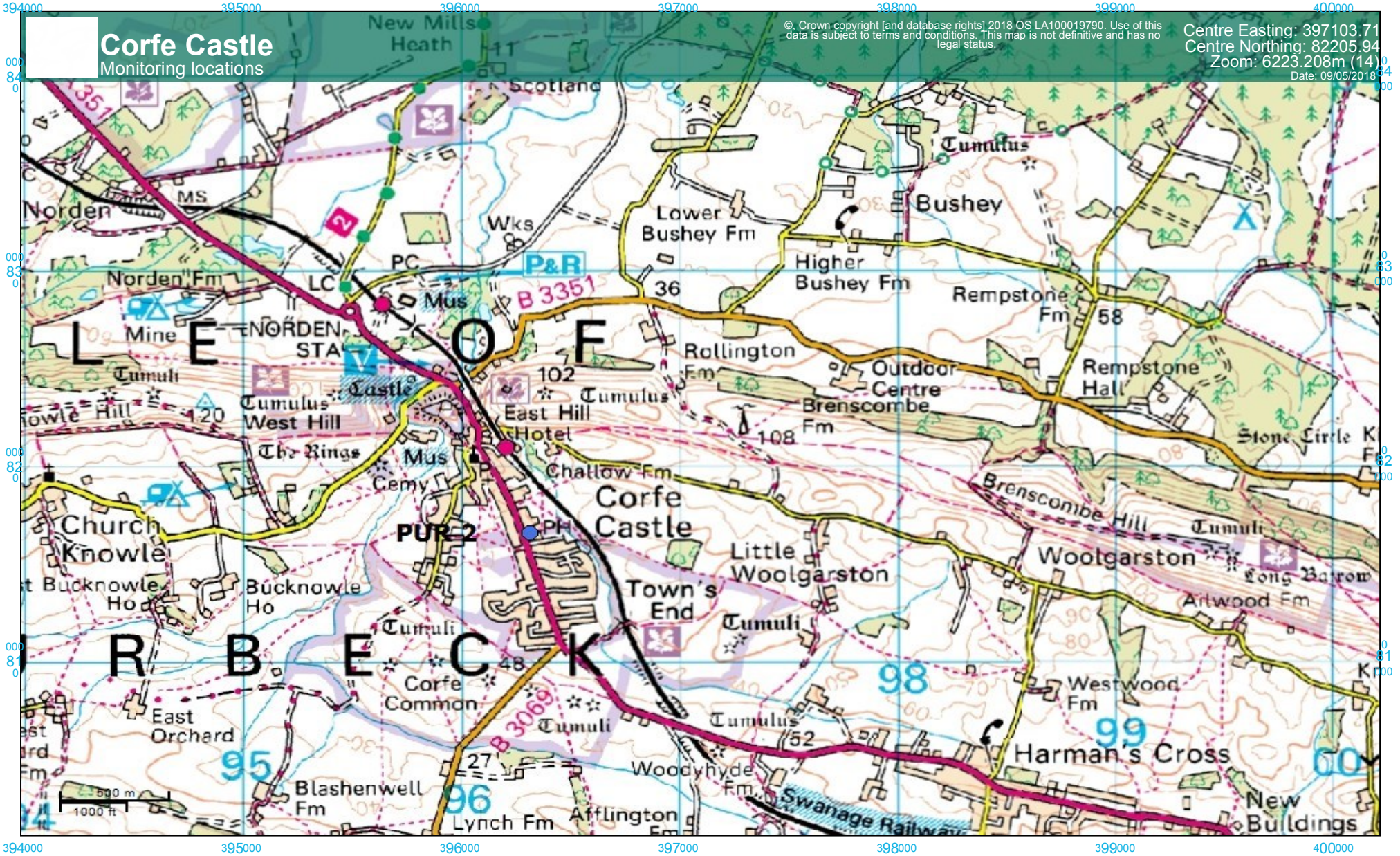
AIR PT is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). AIR PT is a new scheme, started in April 2014, and offers a number of test samples designed to test the proficiency of laboratories undertaking analysis of chemical pollutants in ambient indoor, stack and workplace air. One such sample is the AIR NO2 test sample type that is distributed to participants in a quarterly basis. AIR NO2 PT forms an integral part of the UK NO2 Networks QA/QC, and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to local authorities for use in the context of Local Air Quality Management (LAQM). Purbeck District Council purchases diffusion tubes from South Yorkshire Air Quality Samplers who take part in the AIR PT scheme. The results of the AIR PT scheme for 2017 are provided in Table C.1 below.

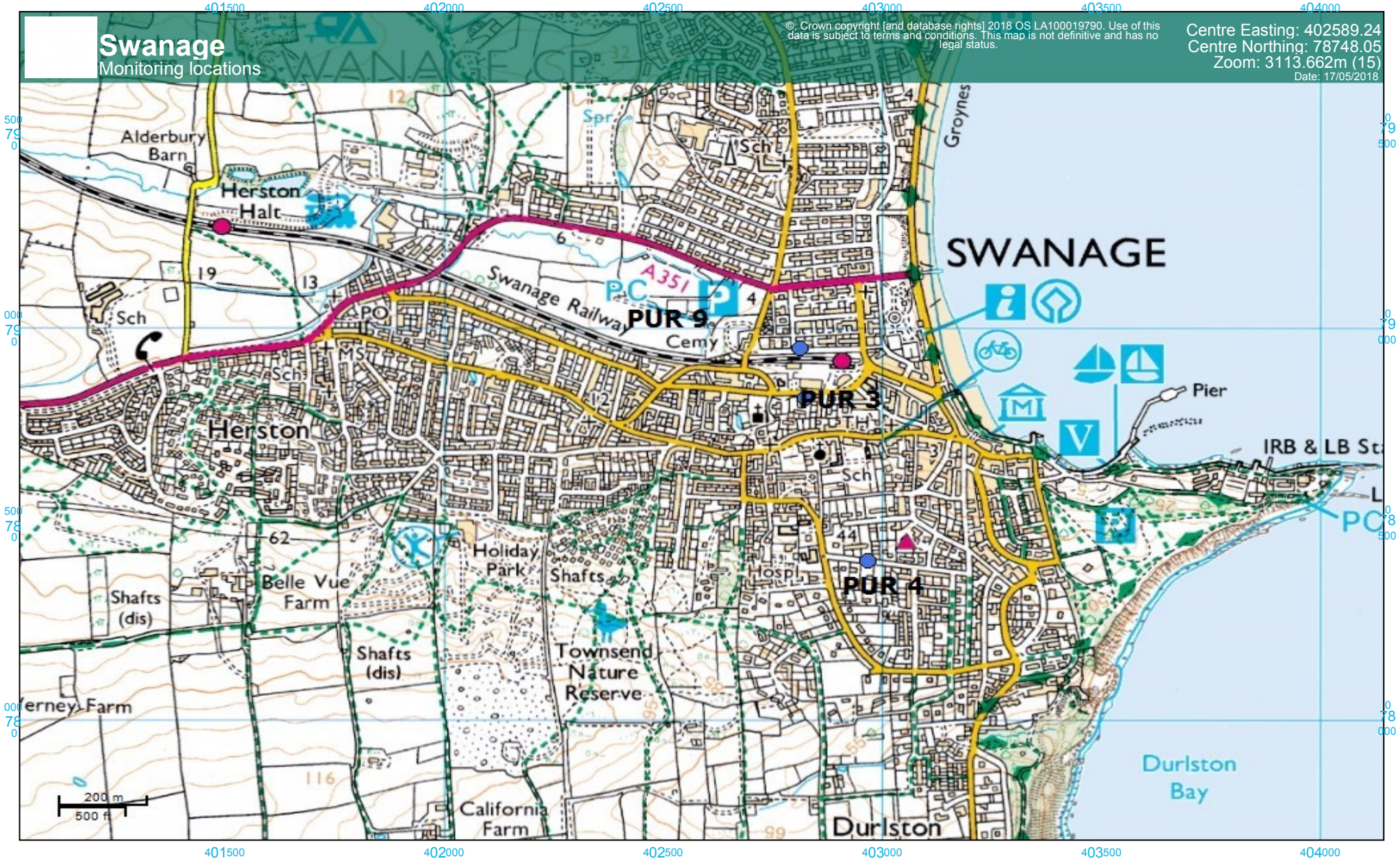
Table C.1 Results of Air PT Rounds South Yorkshire Air Quality Samplers

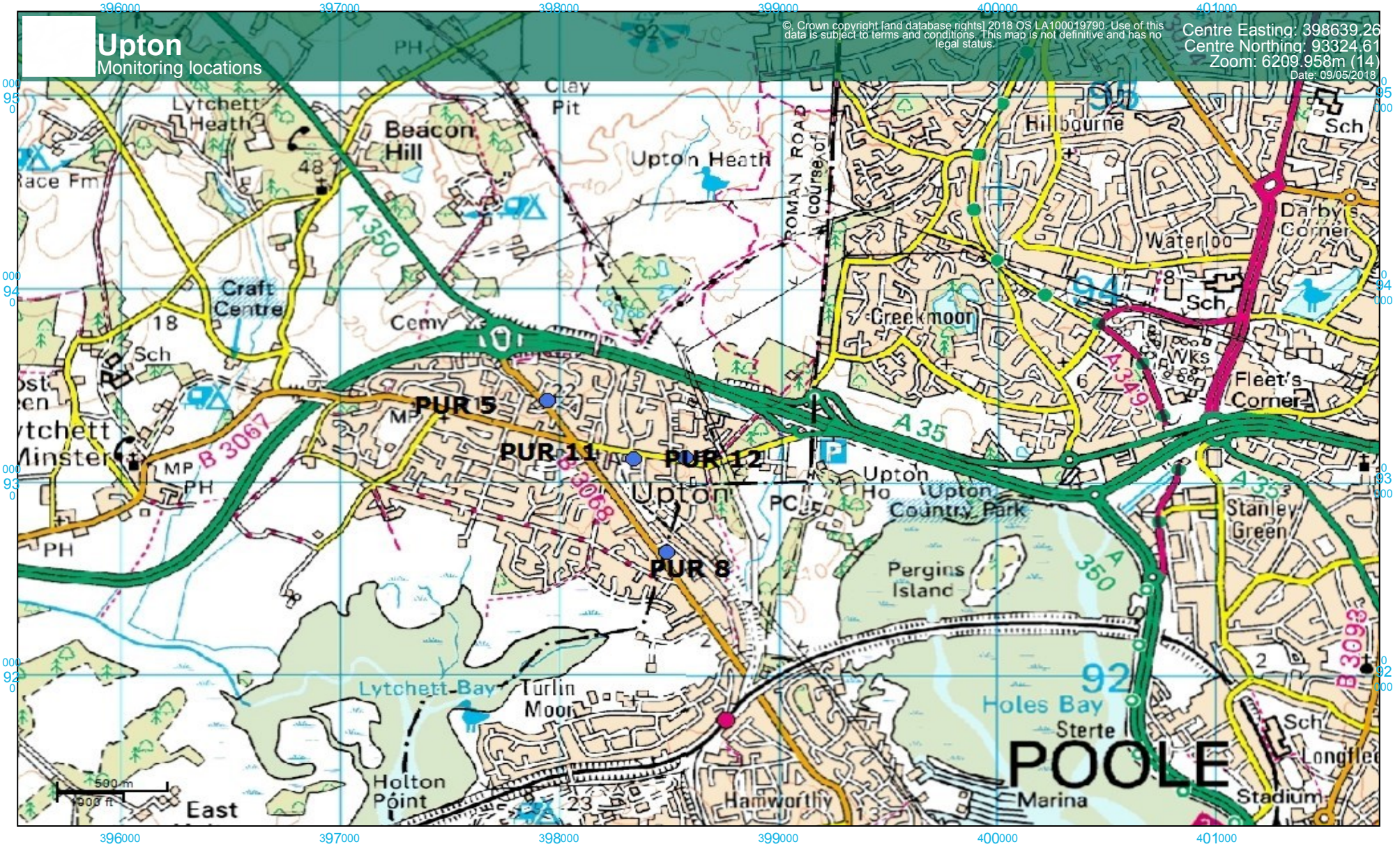
AIR PT round	AIR PT AR018	AIR PT AR019	AIR PT AR021	AIR PT AR022	AIR PT AR024
Period	January – February 2017	April – May 2017	July – August 2017	September – October 2017	January – February 2018
South Yorkshire Air Quality Samplers	100%	100%	100%	100%	100%

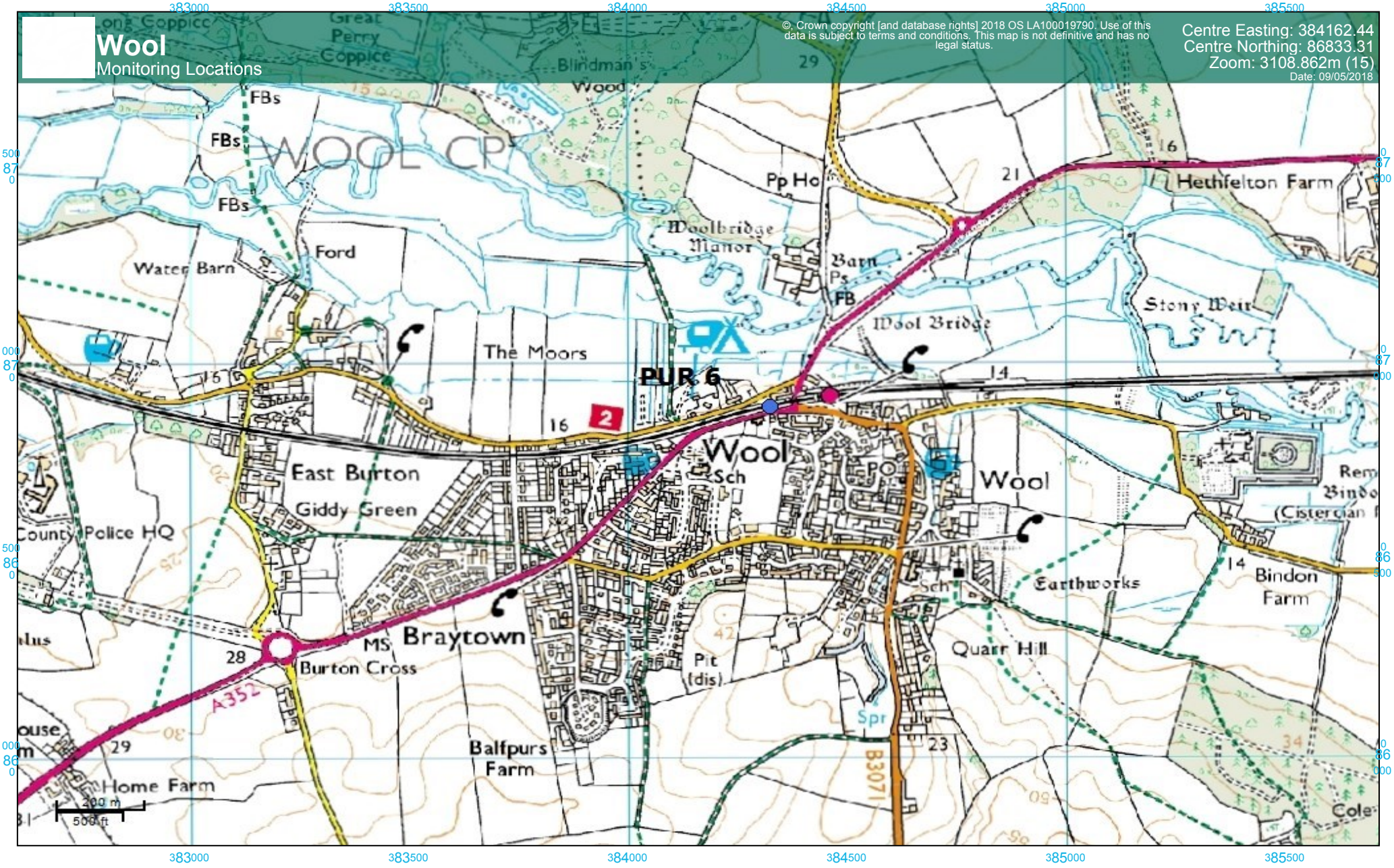
Appendix D: Maps of Monitoring Locations

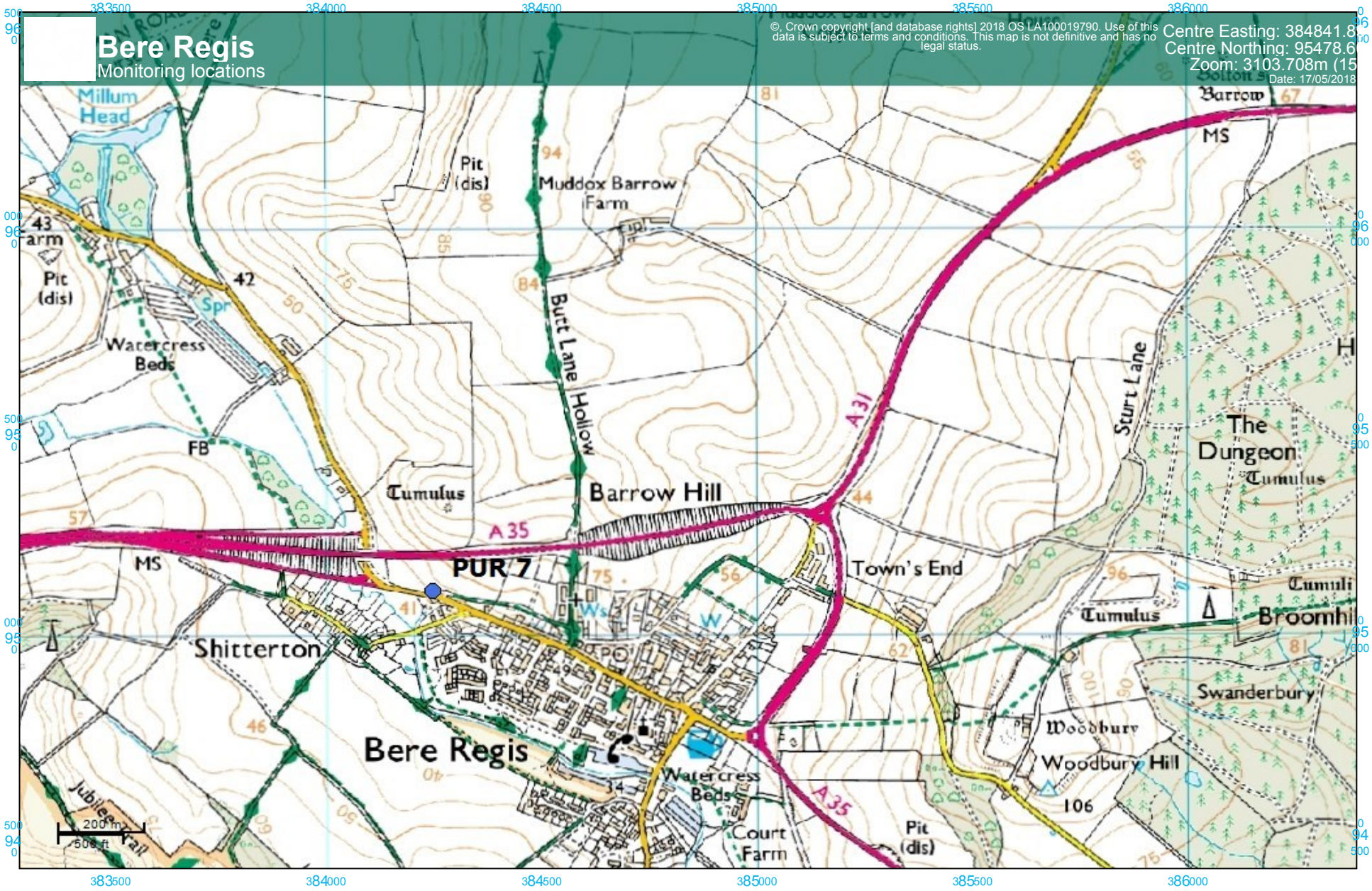

Wareham
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 39208
Centre Northing: 8721
Zoom: 3108.623m
391000
391500
392000
392500
393000
393500
WAREHAM
Northport
Way
Ferncroft Farm
Town Walls
Swineham Farm
North Bridge
North Bestwall Farm
Saxon Church
Curlews
Town Walls
Hospl
Wareham Common
West Mills
Earthwork
PUR 1
Bestwall
River Frome
Oil Well
Tumulus
Little Farm
B 3070
South Bridge
The Priory
A352
Sch
Worgret Manor Farm
Worgret
A351
NTL
Purbeck Way
Ridge
Redcliffe Farm
Stoborough
NTL
Sch
200m
500 ft

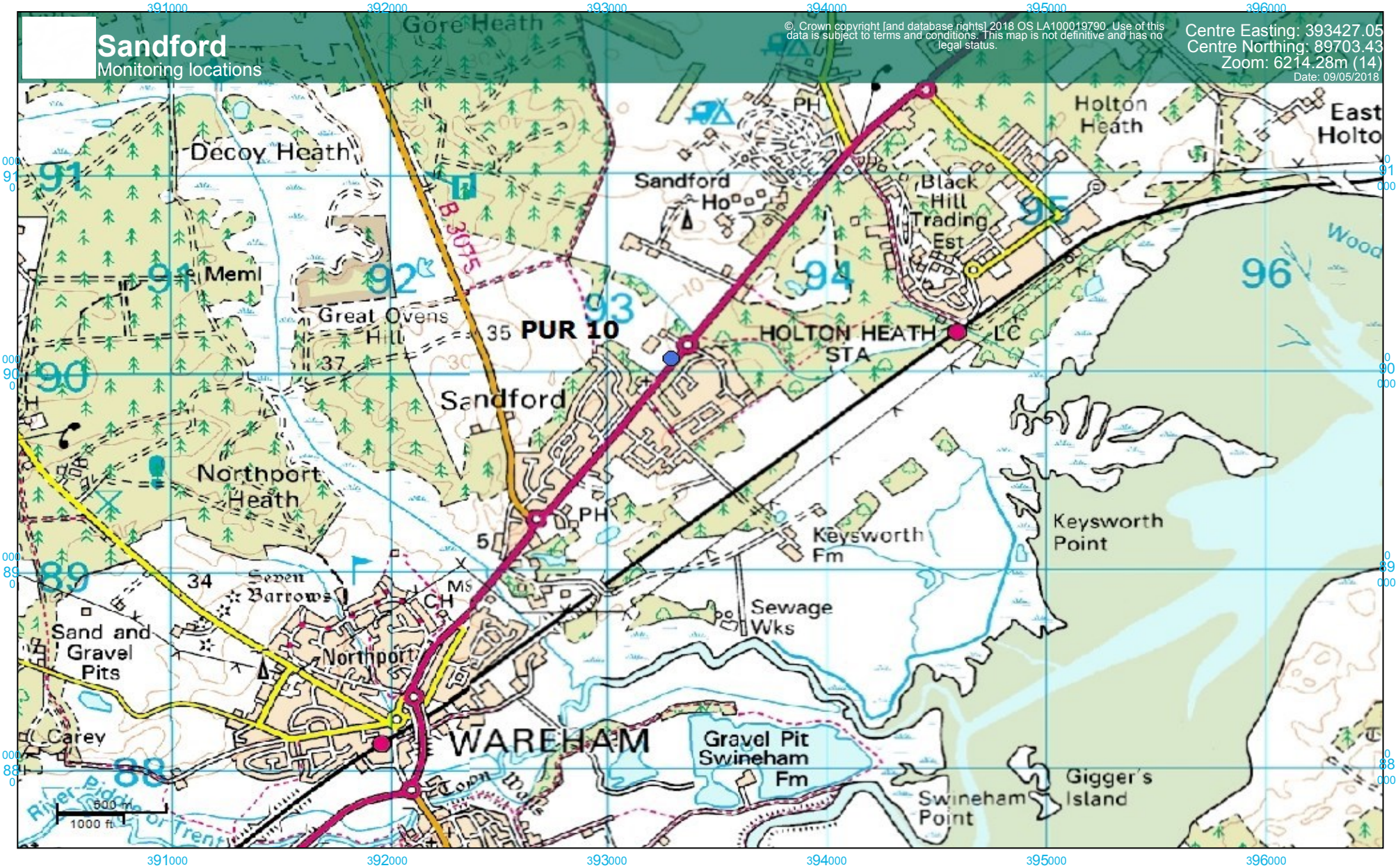

Corfe Castle
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 397103.71
Centre Northing: 82205.94
Zoom: 6223.208m (14)
Date: 09/05/2018
New Mills Heath
Scotland
Norden
Norden Fm
Mine
Tumuli
Tumulus
Castle
Hill
West Hill
The Rings
Mus
Cemy
Church Knowle
Bucknowle
Bucknowle Ho
East Orchard
Blashenwell Fm
Lynch Fm
Afflington Fm
Corfe Common
Wks
PC
P&R
LC
B 3351
B 3069
Lower Bushey Fm
Higher Bushey Fm
Bushey
Rempstone Fm
Rempstone Hall
Rollington Fm
Outdoor Centre
Brenscombe Fm
East Hill
Hotel
Challow Fm
Corfe Castle
PUR 2
PH
Town's End
Little Woolgarston
Woolgarston
Long Barrow
Ailwood Fm
Westwood Fm
Harman's Cross
Woodyhyde Fm
Swanage Railway
New Buildings
Brenscombe Hill
Stone Circle
500 m
1000 ft
394000
395000
396000
397000
398000
399000
400000


Swanage
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 402589.24
Centre Northing: 78748.05
Zoom: 3113.662m (15)
Date: 17/05/2018
401500
402000
402500
403000
403500
404000
SWANAGE
Alderbury Barn
Herston Halt
Swanage Railway
A351
PUR 9
PUR 3
PUR 4
Cemy
Sch
PO
MS
Herston
Groynes
Pier
IRB & LB St
Holiday Park
Belle Vue Farm
Shafts (dis)
Townsend Nature Reserve
Hospl
California Farm
Durlston
Durlston Bay
200 m
500 ft


Upton
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 398639.26
Centre Northing: 93324.61
Zoom: 6209.958m (14)
Date: 09/05/2018
PUR 5
PUR 11
PUR 12
PUR 8
Upton
Upton Heath
Beacon Hill
Lytchett Heath
Clay Pit
Craft Centre
Cemy
Creekmoor
Waterloo
Hillbourne
Darby's Corner
Fleet's Corner
Upton Country Park
Stanley Green
Pergins Island
Lytchett Bay
Turlin Moor
Holton Point
Hamworthy
Holes Bay
Sterte
POOLE
Marina
Stadium
A 35
A 350
A 349
B 3067
B 3068
B 3093
ROMAN ROAD
500 m
1908 ft
396000
397000
398000
399000
400000
401000


Wool
Monitoring Locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 384162.44
Centre Northing: 86833.31
Zoom: 3108.862m (15)
Date: 09/05/2018
PUR 6
WOOL CP
Wool
East Burton
Giddy Green
Braytown
Burton Cross
Balfpurs Farm
Home Farm
Hethfelton Farm
Woolbridge Manor
Water Barn
Ford
The Moors
Wool Bridge
Stony Weir
Earthworks
Bindon Farm
Quarr Hill
County Police HQ
A352
B3071
383000
383500
384000
384500
385000
385500


Bere Regis
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 384841.8
Centre Northing: 95478.6
Zoom: 3103.708m (15
Date: 17/05/2018
PUR 7
Bere Regis
Shitterton
Barrow Hill
Tumulus
Muddox Barrow Farm
Pit (dis)
Millum Head
Butt Lane Hollow
Sturt Lane
Town's End
The Dungeon
Swanderbury
Woodbury
Woodbury Hill
Watercress Beds
Court Farm
Jubilee Trail
A35
A31
200 m
500 ft


Sandford
Monitoring locations
© Crown copyright [and database rights] 2018 OS LA100019790. Use of this data is subject to terms and conditions. This map is not definitive and has no legal status.
Centre Easting: 393427.05
Centre Northing: 89703.43
Zoom: 6214.28m (14)
Date: 09/05/2018
391000
392000
393000
394000
395000
396000
Gore Heath
Decoy Heath
Sandford Ho
PH
Holton Heath
East Holto
Black Hill Trading Est
Wood
Meml
Great Ovens Hill
35 PUR 10
37
HOLTON HEATH STA
LC
Sandford
Northport Heath
PH
Keysworth Fm
Keysworth Point
Seven Barrows
Ms
CH
Sewage Wks
Sand and Gravel Pits
Northport
Carey
WAREHAM
Gravel Pit Swineham Fm
Swineham Point
Gigger's Island
500 m
1000 ft

Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England

Pollutant	Air Quality Objective[4]	
	Concentration	Measured as
Nitrogen Dioxide (NO_2)	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m^3	Annual mean
Particulate Matter (PM_{10})	50 µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m^3	Annual mean
Sulphur Dioxide (SO_2)	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean

[4] The units are in micrograms of pollutant per cubic metre of air (µg/m^3).

Appendix F: Development

Table F.1 Summary of Larger Developments in Purbeck 2017

Planning Ref No	Location	Proposal	Significance/likely impact on air quality
6/2017/0359	Land at Prospect Farm, Victoria Avenue, Swanage, BH19 1AS	Demolition of existing farm buildings; the erection of 20 dwellings	Low impact
6/2017/0281	Alans House, 51 Holton Road, Holton Heath Trading Park, Poole, BH16 6LS	Construction of a new fuel depot including installation of 5 double skinned 125,000 litre fuel tanks, parking for up to 5 LGV tankers, office building and associated parking	Low impact
6/2017/0258	Swanworth Quarry, Eastington Road, Worth Matravers, Swanage, BH19 3LE	Revised scheme of restoration including continued importation of inert fill material.	Low impact
6/2017/0260	3 Martin's Lane, Wareham, BH20 4HF	Demolish existing building and erect six 2 bed retirement apartments creating parking	Very low impact
6/2017/0306	Sandford Holiday Park, Holton Heath, Poole, Dorset BH16 6JZ	Stationing of 7 lodges and 14 static caravans including parking	Very low impact
6/2017/0237	Sandford Filling Station, Sandford Road, Sandford, BH20 7AG	Demolition of existing retail store/kiosk and jet wash facility; erection of replacement retail store, removal and replacement of existing petrol pumps, canopy and underground tanks.	Low Impact

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
ASR	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
EU	European Union
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide
…	…

References

DEFRA (2018) Local Air Quality Management Policy Guidance (LAQM: PG16)

DEFRA (2018) Local Air Quality Management Technical Guidance (LAQM:TG16)

Purbeck District Council (2016) Updating and Screening Assessment for Purbeck District Council

Purbeck District Council (June 2017) Air Quality Annual Status Report