

WILTSHIRE COUNCIL

REPORT TO THE STRATEGIC PLANNING COMMITTEE

| | | | |
|----------------------------|--|---------------------|--|
| Date of Meeting | 13 February 2013 | | |
| Application Number | W/12/01818/WCM | | |
| Site Address | Wessex Water Sewage Treatment Station, Trowle, Trowbridge | | |
| Proposal | The construction of a new sludge digestion facility | | |
| Applicant | Wessex Water | | |
| Town/Parish Council | Trowbridge | | |
| Grid Ref | 384833 158710 | | |
| Type of application | County Matter | | |
| Case Officer | Mark Henderson | 01225 718598 | mark.henderson@wiltshire.gov.uk |

Reason for the application being considered by Committee

Councillor Helen Osborn has requested that this application be determined by the Committee for the following reasons:

- Scale of development
- Visual impact on surrounding area
- Design – bulk, height, general appearance
- Environmental/highway impact

1. Purpose of Report

To consider the above application and to recommend that planning permission be GRANTED, subject to conditions.

2. Report Summary

The main issues in the consideration of this application are as follows:

- Principle of the development
- Landscape/Visual impact
- Green Belt
- Lighting
- Odour
- Traffic movements

3. Site Description

The application site is located within the western part of the operational land at Trowbridge Sewage Treatment Works, near Trowle, north of Trowbridge. The site is accessed via a 400m private road leading from the A363 Bradford Road and which is also used to provide access to the adjoining agricultural land.

The site itself is screened by trees and hedgerows along the western and northern boundaries of the site. To the immediate north east of the application site are sewage treatment ponds and the main sewage treatment works are to the south and east. Beyond the northern and western boundaries of the Sewage Treatment Works the land is in agricultural use.

The nearest residential properties are approximately 325 metres to the south of the site at Langford Road. There are also properties along the Bradford Road at approximately 425 metres distance from the site.

The application site covers an area of 661 square metres, on land that has historically been used for sludge treatment. The land was, until very recently, the site of sludge digestion plant (built under permission ref 82/00840/FUL), which has recently been demolished.

The application site is situated at approximately 45 metres Above Ordnance Datum (AOD), 5 metres lower than the crest of a natural rise in the topography at Trowle between the River Biss at Trowbridge and the River Avon at Bradford on Avon (both at approximately 25 metres AOD).

4. Relevant Planning History

82/00840/FUL – Sludge digestion plant and sludge consolidation tanks.

W/08/09007/WCM – Construction of one motor kiosk to improve efficiency of current sludge treatment process

W/09/09001/WCM – Installation of new control kiosk to monitor and operate a combined heat and power plant.

5. Proposal

The proposal is for the construction of an anaerobic digestion facility incorporating:

- Two anaerobic digester tanks each at 23.6 metres in height and 15.6 metres in diameter. The tanks will be of Glass Reinforced Plastic (GRP), a non-reflective grey in colour with access stairs and hand railings of galvanised steel;
- A boiler house – 10.1 metres x 8.1 metres and 4.7 metres in height, with a stack at 14.5 metres in height. Steel frame and corrugated aluminium cladding construction, grey in colour;
- Combined Heat and Power (CHP) Plant – 12.2 metres x 3 metres and 5.4 metres in height with a stack at 10 metres in height. Steel container, grey in colour;
- A generator enclosure. Steel container, grey in colour; and
- 5 control kiosks – one kiosk measuring 9 metres x 4 metres at 5 metres in height and the other four kiosks each measuring 7 metres x 3 metres at 3.5 metres in height. Each of GRP, grey in colour.

The proposed development is to be located in an area in the western part of the Sewage Treatment Works.

Demolition of redundant plant and machinery and the construction of other elements of the development required for the operation of the sludge digestion facility will be carried out under permitted development rights set out in part 16 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended), and are therefore not a consideration for the purposes of this report. The applicant has however included reference to these elements of the proposal in their supporting documents for information.

6. Planning Policy

Wiltshire and Swindon Waste Core Strategy DPD 2006 – 2026

Policy WCS3: Preferred Locations of Waste Management Facility by Type and the Provision of Flexibility

Policy WCS5: The Wiltshire and Swindon Waste Hierarchy and Sustainable Waste Management

Wiltshire and Swindon Waste Development Control Policies DPD

Policy WDC1: Key Criteria for Ensuring Sustainable Waste Management Development

Policy WDC7: Conserving Landscape Character

Policy WDC12: Renewable Energy

7. Consultations

Local Member, Councillor Helen Osborne - The height and size of the new installation will seriously impact upon the local environment and will clearly be visible from houses on Bradford Road. It appears from the plans that it will be far higher and larger than existing plant and buildings. Is there no way that the visual impact can be mitigated?

Trowbridge Town Council - Whilst recognising the need to increase capacity at the sewage treatment works, considers the height of the proposed tanks will be so much greater than the current development on the site as to be potentially visually intrusive in the landscape. The Town Council would prefer to see an alternative proposal which is not as tall, even if it requires an extension to the area of development.

Highways - no objection to the application

Environmental Health - no objection to the application

Environment Agency - no objection to the application

Strategic Landscape Team – The photomontages are very helpful in giving an indication of the scale of the proposed tanks and their setting.

View A – Views from the west are varied mainly thanks to the large oak that masks the entrance of the site. View point A is the most difficult to mitigate as the tanks rise above the existing tree line and are visible through gaps or lower portions of planting (although this may diminish in the summer months). Planting a copse to the north west corner of the field south of the main entrance (from Trowle Road) would in time help to lessen the impact of this view, particularly if long term species such as oak are included. Hedgerow with standards along the entrance road linking up with the existing large oak tree is another consideration. Both options would provide the development with a net gain in biodiversity.

View B – this montage demonstrates how effectively the tanks fade against a grey winter sky. However, looking at the height of the existing trees in this view it is clear that the visual impact of the tanks could be mitigated by additional tree planting of large long term species within the hedge/boundary.

View C - I think this view from the rear of Francis Street has the least significant visual impact because

- the tanks are just breaking the skyline
- the vegetation buffer between the houses and the site is sufficiently wide and with a varied structure to provide an effective visual screen in the summer but allowing glimpsed views in the winter
- there is the potential for foreground distractions drawing the eye away from the tanks e.g. washing drying, children playing etc.

The other point that we discussed was the potential impact of Chalara fraxinea ash dieback disease. The applicant should be mindful that if a lot of the existing screen planting is made up of ash species there is the potential that the site could become visually exposed at some future point this requires consideration during the development of a landscape mitigation plan for the above proposals.

8. Publicity

The application was advertised by site notice, press advert and neighbour consultation.

7 responses have been received by members of the public, all objecting to the proposal. The objections are summarised as follows:

- The Anaerobic Digestion vessels will stand considerably higher than the tree line, higher than shown in the photomontages, and would be visually intrusive on the countryside. The vessels should be sunk at least 12 metres into the ground.
- The increase in traffic would be unacceptable on an already busy road.
- The transport of more sewage through the town and past schools would cause added danger to the environment.
- The proposal would result an increase in odour and flies experienced by local residents and an increase in airborne bacteria.

9. Planning Considerations

Principle of the development

Wessex Water has a statutory obligation to provide for an appropriate level of sewage treatment capacity to meet the needs of the population it serves. Trowbridge and the surrounding area has grown considerably in the past 30 years since the original sludge treatment plant was constructed. The Town of Trowbridge itself has been identified in the Submission draft Wiltshire Core Strategy as one of the principal settlements in Wiltshire for further growth. As such, Trowbridge is planned by Core Policy 29 to accommodate an additional 5680 new homes and 25 hectares of new employment development to 2026.

Sewage sludge is a bi-product of sewage waste water treatment and, if not properly managed, is well known to produce strong and offensive odours. It is estimated that the Trowbridge sewage treatment site will be required to treat up to 10,950 tonnes of digested sludge per year to 2025, an increase of 4,450 tonnes per annum (the equivalent of 12 extra tonnes per day) compared to current levels. The site is also currently used to treat sludge from other smaller scale local sewage treatment sites where it is not feasible to accommodate sludge digestion plant at the scale required for efficient sludge treatment.

The existing sludge treatment infrastructure at the Trowbridge Works would not have the capacity to deal with the anticipated future growth of the Town and surrounds. There is therefore an established need for a new replacement sludge digestion facility at Trowbridge with the capacity to accommodate this growth.

Policy WCS3 of the Wiltshire and Swindon Waste Core Strategy DPD identifies the preferred locations for waste management development by waste management type. The Policy steers waste water treatment (i.e. sewage treatment) development to existing waste water treatment facilities, with other brown field or green field land being used where “*the development cannot feasibly be carried out within the capacity of existing waste water treatment sites and cannot feasibly be carried out at other waste management sites.*” The proposal will allow for the continued treatment of sludge at the Trowbridge Sewage Treatment site. Locating such developments at existing sewage treatment sites is preferential option to the alternative of developing a new sewage treatment site.

The sludge treated at Trowbridge Works is currently dosed with lime and removed from the site to be disposed of at a landfill facility. National Policy and the development plan for the area encourage development that is considered sustainable, including sustainable waste management. Policy WCS5 of the Wiltshire and Swindon Waste Core Strategy seeks to drive waste up the waste hierarchy to reduce Wiltshire’s reliance on landfill by encouraging recovery, recycling and reuse. The proposed development will offer a more advanced system by using anaerobic digestion vessels to speed up the sludge decomposition process. The digested sludge will produce methane which will be harnessed to generate heat and electricity. The heat generated will be fed back into the anaerobic digestion process and the electricity produced will meet the energy needs of the works, with surplus energy being fed into the national grid. The end product from the digested sludge will be used as an agricultural fertiliser.

The proposal will result in driving waste up the waste hierarchy by reducing the volume of waste currently going to landfill. This clearly represents an environmental benefit and is supported by policy WCS5 of the Wiltshire and Swindon Waste Core Strategy.

In addition, Policy WDC12 of the Wiltshire and Swindon Waste Development Control Policies DPD requires all waste management proposals to demonstrate that they have regard to “*the need to maximise the opportunities for renewable energy production both for electricity and heat generation*”. The proposal would effectively maximise the renewable energy opportunities for sludge treatment and is therefore fully compliant with the development plan in this respect.

Landscape and visual impact

The application site is located approximately 30 metres within the northwestern boundary of the Works and in the context of the existing installations is of limited scale at 661m². The residential, industrial and retail units in Trowbridge provide a backdrop to the sewage treatment works when viewed from properties nearest to the proposal along Bradford Road and at Langford Road. The Works have been operational for several decades and as such has become part of the landscape of the local area and forms the baseline against which the proposal should be assessed.

The application site does fall within designated green belt land (discussed later in this report) but is situated within the footprint of an existing sewage treatment works, on the fringes of Trowbridge and is otherwise not considered to be within a particularly sensitive area in landscape terms. Nonetheless, there is still potential for adverse visual impact to be associated with development at the Works.

Policy WDC7 of the Wiltshire and Swindon Waste Development Control Policies DPD requires applicants to undertake assessments of the impact of their proposals on the landscape, appropriate to the scale and nature of the development proposed.

The applicant has undertaken a Landscape Appraisal of the proposal, supplemented with photomontages showing the how the development would appear from viewing points at Bradford Road and Langford Road. The appraisal concludes that there would not be an unacceptable adverse impact on the landscape. Based on the fact that the application site is located within an established sewage treatment works and is not in a sensitive landscape area, as outlined above, the proposal is considered to be acceptable in landscape terms.

Turning to the potential visual impact of the proposal, Policy WDC1 of the Wiltshire and Swindon Waste Development Control Policies DPD requires proposals to be assessed against the “*extent to which the impact of any structures and buildings is minimised in terms of the appropriate use of scale and form, informed by the Wiltshire Landscape Character Assessment*”.

A substantial proportion of the application site is screened by an established mix of mature conifer and deciduous trees. The trees are estimated to range from 10 metres to 15 metres in height and provide a reasonably effective screen for the existing built development within the Works. Breaks in the natural screening created by the existing site entrance and small lower level gaps in the vegetation allows obscured views into the site from the site access road at Trowle and views into a small area of the site from the rear of properties nearest to the site along the Bradford Road. Currently only a telecommunications mast located near to the entrance of the site can be seen above the tree line.

A large proportion of the proposal, the combined heat and power plant, boiler house, diesel generator, belt thickeners and associated kiosks, would sit below the tree line, and below the height of the tallest existing structure on the site. These elements of the proposed development will not be visible from the Bradford Road side of the works other than obscured views via the site entrance as per the existing development. In places along Langford Road there are already clear views into a large part of the works and so these elements of the proposal will be visible from that location, particularly during the winter months.

However, the most prominent features of the new development are the two anaerobic digestion (AD) vessels each at 15 metres in width and 23.6 metres in height. The AD vessels will be located approximately 40 metres in from the boundary of the Works, near to the site entrance at Trowle, off the A363 Bradford Road. A proportion of the AD vessels would stand proud of the tree line, although this must be considered within the context of a likely viewing distance of 300-400 metres from the site (e.g the residences at Bradford Road and Langford Road), where the effect would be reduced. Both Trowbridge Town Council and the local Councillor, Helen Osborne, have objected to the proposal based on concerns regarding the visual impact of the proposals. Local residents have also objected to the height of the AD vessels and the impact this would have on their visual amenity.

The photomontages provided by the applicant are considered to offer an accurate representation of how the proposed development would appear once constructed. These show that the proposal would be visible from properties at Langford Road and Bradford Road. However, when taking into account of the distance of the sensitive receptors from the proposed AD vessels, the non-reflective grey colouring to be used and when considered against the existing urban context of Langford Road and the part rural context with an urban backdrop of Bradford Road, the visual impact that the development would have is not considered to be significant. Due to the partially rural setting of properties along the eastern side of Bradford Road near to the site entrance at Trowle and the open views across the fields to the boundary of the Works from the rear of these properties, the visual impact is however likely to be marginally more noticeable.

In response to the concerns raised by the Town Council and Councillor Osborn, Officers have explored with the applicant options to reduce or mitigate the visual impact of the proposed AD vessels. The first option considered the possibility of relocating the AD vessels and associated plant to another area within the Trowbridge Sewage Treatment Works. Whilst the overall footprint of the sewage treatment works is significantly larger than application site, the entire site is either in use for sewage treatment, or has been historically used for landfill associated with sewage treatment, rendering the land unsuitable for further or additional built development. The application site therefore reflects the only realistic option for locating the sludge treatment facility within the existing sewage works.

As a consequence of the above constraints, the limitations of the available land for the sludge treatment facility also means that increasing the width of the vessels to compensate for a reduction in height is not possible. The site boundary is flanked by oil and gas pipelines which run around

the outside of the sewage treatment works, effectively precluding extending the application site area beyond the site boundary, into the adjacent agricultural land.

The applicant was also asked to consider excavating an area to allow a proportion of the vessels to be sunk into the ground. Had this option been feasible the applicant would have pursued it, as it could potentially have brought the proposal below the 15 metre height threshold for permitted development at sewage treatment facilities. However, the nature of sewage treatment is such that to do so would present a risk of a build up of noxious gases in the sunken areas, resulting in a health and safety hazard for staff at the site. This option has consequently been dismissed for that reason.

The only remaining option to mitigate for the visual impact of the proposal is to provide enhancements to the existing screening at the boundary of the Works. The applicant has subsequently proposed landscape planting plans for land along the boundary of the Works, near to the Trowle entrance to the site. The trees, once established will not reach the full height of the proposed AD vessels, but the additional planting will fill existing gaps in vegetation, softening the effect of the proposal below the top of the tree line. This, in addition to the use of a non-reflective grey colouring to allow the visible proportion of the development to blend into the sky, will minimise the visual impact of the proposal.

Whilst it is acknowledged that there will still remain an adverse visual impact resulting from the proposal, this must be weighed against the need to increase sludge treatment capacity sufficient to meet the future waste water treatment needs of Trowbridge and surrounds. It has been demonstrated that alternative options, in terms of location and scale, for the sludge digestion plant would not be feasible. The impact of the proposal will be minimised through use of an appropriate non-reflective colour and by providing additional planting to enhance existing screening of the development site. Additionally, the backdrop of urban development associated with Trowbridge, including large prominent industrial units clearly visible to the south of the site, means that the proposed development is not entirely out of keeping with what would be expected at the periphery of a large town.

It is considered that at a distance of more than 300 metres from the nearest sensitive receptors, the visual impact associated with the proposal is not sufficient to outweigh the need for the development or the sustainability benefits of the proposal.

Green belt

The application site is located within the Western Wiltshire Green Belt. Paragraph 3 of Planning Policy Statement 10 provides a list of the key objectives for planning for waste development, one of which is to *“protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission”*

Notwithstanding the above, the National Planning Policy Framework sets out a clear position on development in the green belt. Paragraph 89 of the National Planning Policy Framework states that, *“A local planning authority should regard the construction of new buildings as inappropriate in Green Belt.”*, subject to a list of exceptions. The exceptions includes *“limited infilling or the partial or complete redevelopment of previously developed sites (brownfield land), whether redundant or in continuing use (excluding temporary buildings), which would not have a greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development.”*

The proposed development is fully contained within the boundary of the Works and represents a continuation of the use of the land for sludge treatment on the site of redundant sludge treatment plant.

It is considered that the proposal would not adversely impact on the openness of the Green Belt and the purpose of including land within it than the existing development and therefore meets the exception criteria of paragraph 89.

Lighting

Low level bulk head lights will be above the entrances to the control kiosks at a height of approximately 4 metres. No other lighting for the development is being proposed. This would result in no change to the previously permitted lighting associated with the former sludge treatment facility. The Council's Environmental Health Officer has not raised any adverse comments in relation to this aspect of the proposal.

Odour

With regard to odour, a number of local residents have raised concerns about a possible increase in odour associated with an increase in sludge treatment and the delivery of sludge to the site and removal of digested sludge from the site. The proposal is on an existing sewage treatment works; a use that will produce a certain amount of odour regardless of whether this proposal is granted planning permission. The tankers used to transport sewage sludge are sealed units.

The proposal is for an upgrade of an existing sludge treatment facility which will result in either no change or an improvement to the existing odour situation. The Council's Environmental Health Officer has considered the odour implications of the proposal and has not raised any adverse comments.

Traffic Movements

Local residents have also raised concerns about the impact of traffic on the local highway. The applicant has estimated that the proposal, when operating at maximum capacity, would result in an maximum additional 10 loads per day using the site access/egress off of Bradford Road at Trowle. This estimate includes trips associated with sludge being brought to the site and the removal of additional digested sludge, compared to current levels of site traffic. The access track to the site is approximately 400 metres in length and includes two passing points. The additional traffic would arrive at the site from both the north and south of Trowbridge.

The Council's Highways Officer has raised no objection to the proposal. The existing access arrangements and small increase in traffic are judged to be acceptable.

10. Recommendation:

Planning Permission be granted for the following reason:

The new sludge digestion facility will provide increased sludge treatment capacity essential to meet the regulatory obligations of the sewage treatment statutory undertaker. The facility will provide additional sustainability benefits in terms of diverting waste from landfill and harnessing a source of renewable energy. The essential need for the development and the sustainability benefits are considered sufficient to outweigh any visual impact of the proposal.

Subject to the following conditions:

1. The development to which this permission relates must be begun not later than the expiration of three years from the date on which this permission is granted. Written notification of the date of commencement shall be sent to the Waste Planning Authority within 7 days of such commencement.

Reason: To comply with Section 51 of the Planning and Compulsory Purchase Act 2004.

2. The development hereby permitted shall be carried out in accordance with the following approved plans:

- D9542/7000 revision E dated 17/09/2012 – location plan
- D9542/7002 revision G dated 24/09/2012 – Proposed Block Site Plan scale 1:500
- D9542/7003 revision H dated 24/09/2012 – Proposed Block Site Plan scale 1:200
- D9542/7005 revision F dated 24/09/2012 – Proposed Digester Tanks Plan and Elevations
- D9542/7006 revision F dated 24/09/2012 – CHP Plant Plan & Elevations
- D9542/7008 revision E dated 24/09/2012 – MCC Kiosk (No. 1,2,3 &4) Plan and Elevations
- D9542/7013 revision G dated 24/09/2012 – Proposed site sections
- D9542/7014 revision F dated 19/09/2012 – Proposed Thickener Kiosk No.5 Plan and Elevations
- D9542/7015 revision G dated 24/09/2012 - Proposed Boiler House Plan & Elevations
- D9542/7016 revision A dated 13/09/2012 – Proposed Diesel Generator Plan & Elevations
- Trowbridge Sewage Treatment Works Environmental Supporting Statement prepared by Wessex Water, dated August 2012
- Trowbridge STW APD (D9542 – Proposed Landscape Planting)

Reason: For the avoidance of doubt and in the interests of proper planning

3. All soft landscaping comprised in the approved details of landscaping, as shown in drawing ref Trowbridge STW APD (D9542 – Proposed Landscape Planting), shall be carried out in the first planting and seeding season following the commencement of the development. All shrubs, trees and hedge planting shall be maintained free from weeds and shall be protected from damage by vermin and stock. Any trees or plants which, within a period of five years, die, are removed, or become seriously damaged or diseased shall be replaced in the next planting season with others of a similar size and species, unless otherwise agreed in writing by the local planning authority.

REASON: To ensure a satisfactory landscaped setting for the development and the protection of existing important landscape features.

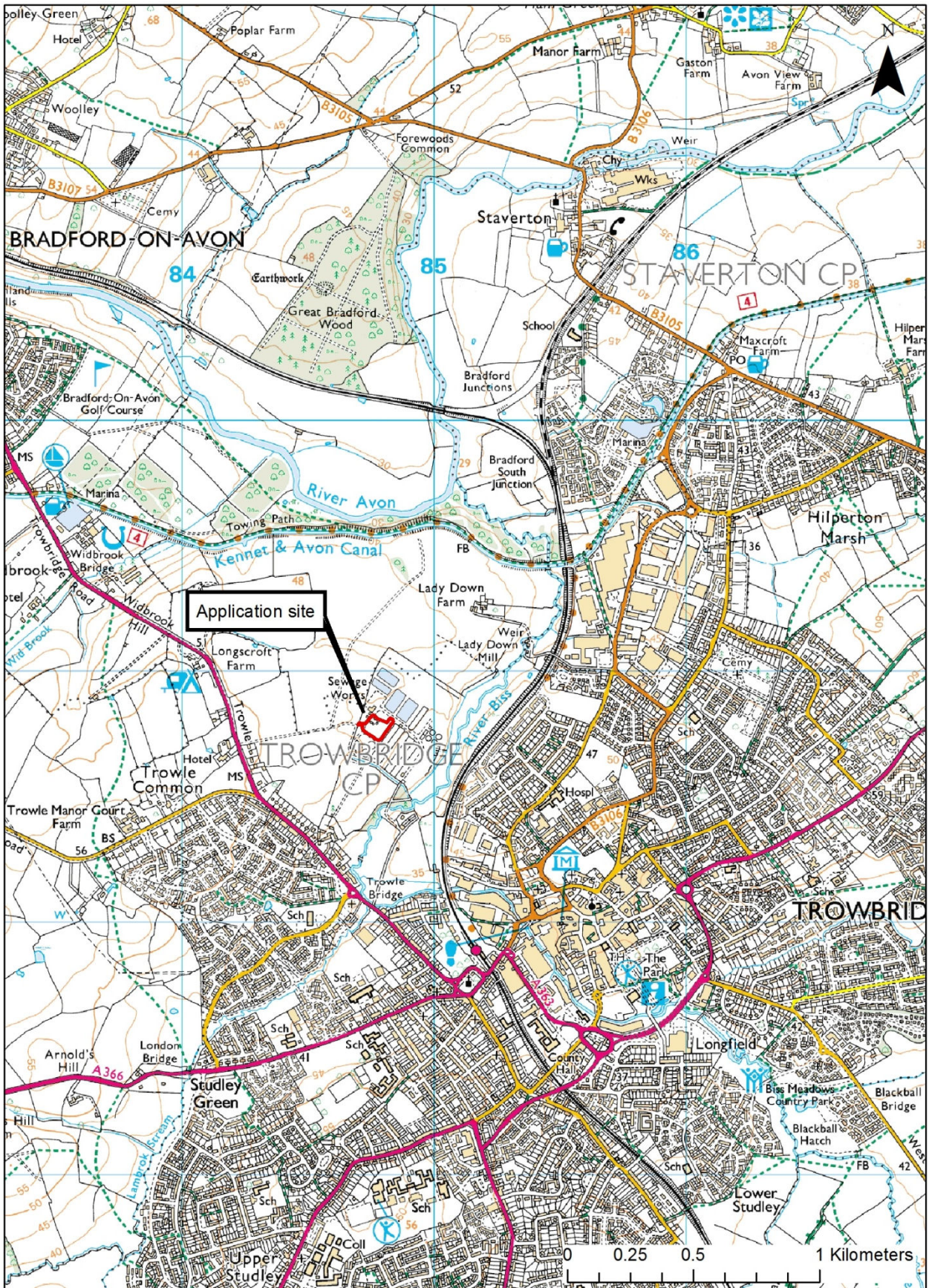
POLICY: WDC6 of the Wiltshire and Swindon Waste Development Control Policies DPD

4. The external surfaces of the development hereby permitted shall be finished in non-reflective BS 4800 00 A 05 – Goose grey and maintained as such thereafter.

Reason: In the interests of protecting visual amenity and the character and appearance of the area.

| | |
|--|--|
| <p>Appendices:</p> | <p>Appendix 1: Site Location Plan Appendix 2: Site layout plan</p> |
| <p>Background Documents Used in the Preparation of this Report:</p> | <p>Planning Policy Statement 10: Planning for Sustainable Waste Management National Planning Policy Framework</p> |

Appendix 1: Site Location Plan



Appendix 2: Site Layout Plan

