ROWDEN PARK GARDEN VILLAGE

ENVIRONMENTAL STATEMENT

NON-TECHNICAL SUMMARY
CONTENTS

1. INTRODUCTION
2. SITE CONTEXT AND LOCATION
3. PROPOSED DEVELOPMENT
4. SOCIO ECONOMIC ISSUES
5. LANDSCAPE AND VISUAL
6. ECOLOGY
7. CULTURAL HERITAGE & ARCHAEOLOGY
8. TRAFFIC AND TRANSPORTATION
9. AGRICULTURAL CIRCUMSTANCES
10. NOISE AND VIBRATION
11. ODOUR
12. WATER, DRAINAGE, FLOOD RISK AND HYDROLOGY
13. GEOTECHNICAL
14. PUBLIC CONSULTATION AND COMMENTS

APPENDICES

1. Illustrative Masterplan
1. **INTRODUCTION**

1.1. This document summarises the findings of an Environmental Statement (ES) which accompanies an outline planning application submitted by D2 Planning Limited on behalf of Crest Nicholson Operations Projects Limited and Redcliffe Homes Limited (the Applicants).

1.2. The Planning application is for a mixed use community comprising residential development (up to 1,000 dwellings) providing a full range and mix of house types to meet future housing demands for open market and affordable housing, a local centre, primary school together with informal (Riverside Park) and formal open space as well as associated infrastructure, including roads, footways, cycleways, balancing ponds, drainage systems, street lighting, strategic landscaping and means of access.

2. **SITE CONTEXT AND LOCATION**

2.1. The planning application covers an area of circa 175 hectares on a site which lies on the south western edge of Chippenham. It is located some 2km south west of the town centre.

2.2. The site comprises land within well defined and defensible boundaries. It is bordered by the River Avon and its floodplain to the east, Patterdown Road to the west and south west and Chippenham urban area to the north.

2.3. The site comprises mostly open farmland with a small area of woodland. The wider context indicates open farmland as well as residential area to the west and north west.

2.4. The site contains two designated sites of Nature Conservation Interest. The River Avon is designated as non statutory Country Wildlife Site (CWS) Martins Wood Nature Park and CWS lies on the north west portion of the site.

3. **PROPOSED DEVELOPMENT**

3.1. The proposal is for a mixed use suitable urban extension on the south western edge of the Chippenham urban area where there are opportunities for the new development to be integrated into the existing settlement pattern and its public transport system whilst providing improved residential, employment, leisure amenity and educational services whilst being protective toward the environment and community.

3.2. The application site extends to a site area of circa 125 hectares and the development will comprise a mixed development of:
• 1,000 residential dwellings.

• 1.2ha of primary school site capable of accommodating a 2 form entry school and pre school (class D2).

• A local centre comprising a mix of land uses to include:
  a) Retail convenience store up to 400sqm gross within Class A1.
  b) Four shops up to 300 sqm (Class A1-A5).
  c) Community uses up to 700 sqm (Class D1 & D2) which could include a dentists, doctor’s surgery, vets and community building.

• Public open space, recreational facilities and allotments.

• Provision of four points of access onto Patterdown Road with additional off site highway works to be carried out within Section 106 Agreement, and

• Associated infrastructure including roads, haul road, footpaths, cycleways, balancing ponds, drainage systems, sewage, street lighting and strategic landscaping.

4. SOCIO ECONOMIC ISSUES

4.1. The proposed development would make an important contribution to meeting the existing and future housing needs in Chippenham. The development provides for appropriate supporting uses in the form of a local centre, primary school, community facilities and areas of open space to meet the day to day needs of the new community. Section 106 contributions will be subject of negotiation with the Local Planning Authority to secure the necessary socio economic benefits in terms of phasing of affordable housing, serving community facilities and financial contributions where relevant and necessary.

4.2. Overall the development would represent a significant step forward on meeting the strategic housing and social/economic needs of the town. The socio economic impact of the development would be of significant benefits to Chippenham.

5. LANDSCAPE AND VISUAL IMPACT

5.1. The site sits on the gently sloping western valley side of the river corridor south of the built-up area of Chippenham. This landscape consists of sloping small to medium
sized pastoral fields, with some grazing bounded by substantial hedgerows containing numerous substantial trees. There are fragmented blocks of deciduous woodland belts along some field boundaries, along Pudding Brook and other watercourses that run west to join the River Avon.

5.2. There are numerous hedgerows crossing the site that contain a variety of large mature trees. There is substantial riparian woodland along Pudding Brook along the site boundary, mixed scrub with some areas of wet grassland along the various smaller watercourses and ditches that run through the site. Scattered trees, mixed scrub and riparian vegetation lie along the river corridor. Two substantial woodland blocks are located in the south-west of the site along field boundaries.

5.3. The site contains Grade II listed buildings and a Scheduled Monument (a medieval fish pond) associated with Rowden Farm buildings. This landscape forms part of the Rowden Conservation Area, which is of historic significance due to events occurring in the area during the English Civil War in 1664, with some traces of entrenchment round the former Rowden Manor. The eastern area of the site is designated as Rowden Conservation Area, first designated in May 1996. No development is proposed within the Conservation Area.

5.4. The Conservation Area is protected, in part, for its national and regional historical importance, the local importance of the Manor, its ownership and land holdings to the evolution of Chippenham. The Conservation Area also provides topographical and visual enclosure of the Manor lands within the river valley and around former Manor House.

5.5. For the most part, the site is visually well contained. Views from the west are limited by the vegetated railway track, other than views from Patterdown Road. Views of the site from the east are gained from Pewsham Way on the eastern valley site, over the River Avon, but are filtered through substantial riparian vegetation and scattered woodland blocks. There are some glimpsed distant views from the higher land to the south.

Mitigation

5.6. The low visual impact of the scheme is reinforced by its location in the less visually prominent western area of the site, outside the Conservation Area and floodplain. The landscape-led masterplan retains and strengthens the surrounding woodland and
tree structure that filters views of the Rowden Park Garden Village from the Rowden Conservation Area and surrounding landscape.

5.7. The masterplan has been designed to provide a strong landscape structure that respects and responds to existing landscape features on site, such as woodland blocks, watercourses and bat corridors. All these help to provide substantial landscape mitigation.

5.8. The Conservation Area was designated to protect buildings and features, trees and foliage, open spaces, paths and water, and the proposals will help preserve and enhance these features. The proposals for the Riverside Park will enhance the various ecological habitats in the area and the interconnectivity between them via a stronger hedgerow network and widened riparian corridors throughout the site.

5.9. The Riverside Park will increase access to the countryside for the residents of the proposals, as well as the urban population that surrounds the site, by linking into wider cycle and footpath networks.

**Landscape Impacts**

5.10. The assessment has found an adverse impact on the land use and character of the site. This is the same for all residential development. It also finds benefit to the character of Pudding Brook, the River Avon Park, and the interpretation of the Rowden Conservation Area and Civil War battlefield.

**Visual Impacts**

5.11. There will be visual impacts in the short and long-term from Viewpoint 2, where it crosses the site. Viewpoints at Showell Nursery and Rowden Manor will incur short-term visual impacts as a result of construction, but these will not be significant in the long-term.

5.12. All other 11 viewpoints have no significant impacts during construction, on completion, or after 15 years.

6. **ECOLOGY**

6.1. Investigations during 2013 and 2014 have identified habitats and wildlife within the development site and Riverside Park that will be of potential sensitivity during the construction and operational stages of the proposals. The design process has been informed by detailed wildlife surveys and the final plans include green infrastructure and features designed specifically to avoid, mitigate for or offset effects of the
proposed development on wildlife and habitats and to provide significant benefits for wildlife.

6.2. Several European and nationally protected species use the habitats on site including Lesser and Greater Horseshoe bats, Great Crested Newts, Barn Owls and low numbers of Grass Snakes and Otters within the southern reaches of the River Avon. A moderately diverse assemblage of breeding and over-wintering birds use the site and there are three, minor, Common and Soprano Pipistrelle bat roosts being retained in the development site and the Riverside Park.

6.3. There are a number of diverse and legally protected hedgerows on the development site and the Riverside Park as well as mature and veteran trees, woodland, marshy areas and the River Avon corridor along the eastern boundary. Habitat diversity and wildlife activity is generally greater in the Riverside Park at present due to the less intensive management of the habitats. The development site and parts of the Riverside Park are managed for dairy cattle grazing.

6.4. The majority of the most valuable habitats on the development site, as well as all habitat on the Riverside Park, will be retained, enhanced and protected. Mature trees, woodland and hedgerows will be retained and protected on the development site with an overall increase in hedgerow and woodland planting in both the development site and the Riverside Park.

6.5. Good practice and precautionary measures to avoid impacts on wildlife will form part of the Construction Environmental Management Plan. Measures will include seasonal vegetation clearance, carefully sited low-spill lighting, dust and noise management and pollution prevention.

6.6. The application includes significant habitat creation and enhancement in the Riverside Park including creating new species-rich meadow, hedgerows, woodland, parkland and a mosaic of wetland habitats as well as strengthening existing hedgerows. New and enhanced habitats will provide significant benefits for birds, reptiles, mammals and invertebrates in the locality including rare and declining species. A variety of new bat roosting features will be created including converted pillboxes and bat boxes. A Landscape and Ecological Management Strategy has been produced to guide the protection, enhancement and future management of the ecology of the site.
7. **CULTURAL HERITAGE & ARCHAEOLOGY**

7.1. A detailed series of studies have been undertaken to identify and assess the significance of heritage assets within and surrounding the site. These studies have addressed the heritage significance of the assets, the potential impacts on them and their setting and the assessment has concluded that the important heritage assets would not be affected by the proposed development.

7.2. Appropriate mitigation measures however include enhancements of the historic bridge and the ability for public appreciation of the Civil War battlefield. These means would use a bronze 3-D model (subject to discussion) of the battlefield and discrete interpretation panels to explain the cultural heritage of Rowden Park and would compensate for the low level of indirect harm that would otherwise accrue to the designated heritage assets. When implemented these mitigation measures would result in a residential enhancement of current understanding and appreciation of the cultural heritage of the Rowden Park Conservation Area.

7.3. For direct harm to buried heritage assets within the area of proposed residential housing and the attenuation ponds, archaeological investigation and recording prior to construction would constitute an appropriate mitigation strategy which would result in additional knowledge and understanding of the archaeological resource which would benefit public appreciation of the cultural heritage of the area.

8. **TRAFFIC AND TRANSPORTATION**

8.1. No significant adverse effects have been identified for either the construction or operational phase of the proposed development.

8.2. The baseline traffic and transport conditions have been assessed. Mitigation measures that have already been incorporated into the proposals, or will be implemented in the future, have been discussed, and then the significance of the residual transport-related effects of the development during the construction and operational phase assessed.

**Construction Effects**

8.3. The assessment has found that environmental impacts occurring due to construction will be within acceptable limits. A Construction Environmental Management Plan will be produced in order to reduce the impact of construction traffic, and to encourage staff to travel by more sustainable means.
Operational Effects

8.4. The environmental impacts have been assessed for the year 2026. The trip generation arising from the development has been established in the TA. Further information can be found within section 5 of the TA.

8.5. The assessment includes traffic generated by committed and planned developments in the area. The cumulative assessment shows that the development in conjunction with other committed developments will have a minor beneficial effect on driver delay.

8.6. The potential impact (from traffic associated with the development) on the identified local receptors has been assessed considering their level of sensitivity. The significance of those impacts is considered negligible.

8.7. The construction environmental impact is deemed to be not significant in terms of traffic and transport.

8.8. It has been concluded that the long-term operational effects are negligible, and the overall impact of the development will be insignificant in terms of traffic and transport, therefore no additional mitigation is required.

9. AGRICULTURAL CIRCUMSTANCES

9.1. An Agricultural Assessment has been prepared which considers the impact of the development on the agricultural interests namely land quality, soil resources and land holding in accordance with national land local plan policy.

9.2. This chapter considers the impact of the proposed development on agricultural interests based on the consideration of agricultural and quality, social resources and land building interpreted in the light of guidance provided by national and local planning policy.

9.3. The site extends to come 175 hectares in agricultural use. The majority of land is undifferentiated Grade 3 but with some area of Grade 4. There is an area of Grade 1 and 2 land. The agricultural land within the site forms two farm holdings which is predominantly based on dairy farming, with the remaining land either grassland or woodland or cover areas.

9.4. There is no mitigation available for the direct loss of agricultural land although part of the site would be given over the Riverside Park, Openspace, allotments and
landscaping which would retain the existing soil resources interest so that it can meet future needs to support ecosystems, landscape, agricultural and cultural factors.

9.5. The primary measures to mitigate the loss of soil resources would be to reuse as much of the surplus resources on site in the cut and fill balance, the detailed design of gardens, amenity and open space and allotment to dispose of any surplus soil. Thereafter in a sustainable manner and to ensure that the quality of soil if required is maintained by filling best practice guidance in soil handling.

9.6. Other than financial compensation there is no mitigation available for the effects on the farm holdings.

9.7. The loss of agricultural land is an inevitable consequence of the amount of development that Chippenham is expected to accommodate if that need is to be met.

10. NOISE AND VIBRATION

10.1. A baseline environmental noise survey was undertaken to determine the correct noise climate of the site and to calibrate the noise model.

10.2. A noise model was prepared to compliment the baseline studies and to predict the likely noise impact arising from the operation of the proposed development.

10.3. The external noise levels on site meet the outdoor level of 55dBA mentioned in BS8233 for the majority of the site. This level would only be exceeded close to Patterdown Road. Various mitigation measures may be considered even through current Governance and guidance states that:

“…. It is also recognised that these guideline values are not achievable in the circumstances where development might be desirable. In higher noise areas such as city centres or urban areas adjoining the strategic transport network, a compromise between noise levels and other factors such as the convenience of living in these locations or making efficient use of land resources to ensure development needs can be met might be warranted. In such a situation development should be designed to achieve the lowest practicable levels in these external amenity spaces but should not be prohibited.”

10.4. It is suggested that private gardens should not face Patterdown Road and are indeed located behind dwellings. The dwellings would then provide shielding which should allow 55dBAeq 16 hours to be met.
10.5. A proposed mitigation strategy has been outlined in order to comply with the internal guidelines level in BS8233: 2014.

10.6. For the operational effects the change in noise levels on the roads has been assessed. The results of the assessment show that the increase in noise levels due to road traffic would not be significant. Therefore no mitigation measures are considered necessary.

10.7. Noise and vibration generated during the construction phase of the development has been assessed qualitatively using the best practicable means as stated in BS5228: 2009 Part 1 and 2 (A1:2004) in order to minimise the noise and vibration effect of construction on nearby receptors. The construction works will be minimised by implementing mitigation measures so that Construction Environmental management Plan (CEMP)

11. ODOUR

11.1. The air quality effects associated with the construction and operation of the proposed development have been assessed.

11.2. Construction phase impacts are judged to be not significant when appropriate mitigation measures are applied through a Construction Environmental Management Plan for the site.

11.3. Concentrations of nitrogen dioxide, PM10 and PM2.5 have been predicted for a number of worst-case locations representing existing and proposed properties adjacent to the road network.

11.4. The changes in concentrations, brought about by the development traffic, range from imperceptible to small at all existing receptors. The operational effects of the proposed development are judged to be not significant due to the conservative nature of the assessment.

11.5. Predicted concentrations are well below the relevant objectives at all of the proposed receptors in 2026. The effect of road and traffic on air quality for residents of the development is judged to be not significant.

11.6. A generic odour modelling study has been undertaken which has predicted odour concentrations on the development site. Receptors on site are predicted to have the same risk of odour as existing residential areas in Chippenham. It is intended to
update the odour assessment with a specific study to be undertaken in conjunction with Wessex Water,

12. WATER, DRAINAGE, FLOOD RISK AND HYDROLOGY

12.1. The ES chapter has provided a summary of the impact of the Proposed Development in relation to flood risk, drainage and water quality.

12.2. The Site lies mainly within Flood Zone 1 ‘Low Probability’, less than 1 in 1000 (0.1%) annual probability of fluvial or sea flooding. A small proportion of the site, along the Pudding Brook, lies in Flood Zone 3 ‘high probability’, land with a greater than 1 in 100 (>1%) annual probability of flooding from rivers or the sea.

12.3. A Flood Risk Assessment has been prepared in accordance with the NPPF which provides an assessment of flood risk to the Site and demonstrates that future occupants of the Site will be safe from flooding and the Proposed Development will not increase flood risk elsewhere.

12.4. The development includes a limited amount of ground rising within the floodplain of the Pudding Brook to facilitate an access road. A flood compensation scheme is proposed to ensure there is no detrimental impact on floodplain storage (the proposed mitigation ensures the development results in a net gain in storage).

12.5. The location of all residential units within Flood Zone 1, combined with appropriate freeboard above surrounding ground, will ensure these are not impacted by fluvial flooding.

12.6. The ground floor levels of new residential development will include a suitable freeboard above surrounding ground levels to prevent the egress of surface water during an extreme rainfall event. The redevelopment of the site will also include appropriate landscaping to redirect overland flow routes away from properties during an extreme rainfall event.

12.7. The Surface Water drainage strategy has been prepared in accordance with the principles set out in the W.C.C SUDs Guide and CIRCA C697. These provide facilities for the storage of surface water on Site and restricted discharge to the local water-courses. The systems have been designed up to a 1 in 100 year (1%) annual probability rainfall event, including a margin for potential increases in rainfall intensity and duration as a result of climate change and include measures for pollution control. This provides a substantial improvement compared to the existing
The proposed drainage regime and will serve to reduce the risk of flooding from surface water at the Site.

12.8. A Construction Environmental Management Plan (CEMP) will be prepared for the Site which will serve to mitigate against the potential minor adverse effects to surface water through construction activity at the Site.

13. GEOTECHNICAL

13.1. An assessment of the ground conditions on the site has been undertaken to identify the potential effects on any potentially viable mineral resources on the Site resulting from the proposed development.

13.2. The River Terrace Deposits present on the eastern part of the Site are located within the designated Bristol Avon MRZ. An initial appraisal carried out for the Wilshire and Swindon Aggregate Minerals Site Allocations Local Plan found the mineral resources in the area of the Site to be of poor quality with low anticipated yield.

13.3. Although there may be an opportunity to exploit any suitable sand and gravel resources on the Site to provide materials for use in the proposed development, any associated benefits are expected to be substantially outweighed by the associated detrimental effects on the nature and form of the development platform required for the proposed development.

13.4. The proposed development once completed may reduce the potential for future exploitation of any suitable sand and gravel resources. However, any potential adverse effects on the mineral resources are expected to be substantially outweighed by the beneficial contribution to wealth creation, infrastructure, housing and consumer needs afforded by the proposed development.

13.5. It is therefore concluded that any potential adverse effects on any potentially viable mineral resources on the Site do not pose an unacceptable constraint to the proposed development.
PUBLIC CONSULTATION AND COMMENTS

Any person wishing to make representations about the application should make them in writing to Wiltshire Council. A copy of the Environmental Statement together with the applicants and other supporting documentation can be inspected between normal office hours at the Planning Reception of:

Wiltshire Council
Monkerton Park
Chippenham SN15 1ER

13.6. Further copies of the Non Technical Summary and the Environmental Statement may be purchased (£50 + £5.00 CD) from:

D2 Planning Limited
Suites 3 & 4 Westbury Court
Church Road
Westbury on Trym
Bristol BS9 3EF
APPENDIX 1

Illustrative Masterplan