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South West Exeter Environmental Statement Non-Technical Summary

Prepared on behalf of Bovis Homes Limited

February 2015

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BARTON WILLMORE
PLANNING / DESIGN / DELIVERY

South West Exeter

Environmental Statement
Non-Technical Summary

Prepared on behalf of Bovis Homes Limited

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1.0 INTRODUCTION

1.1 Bovis Homes Limited (the Applicant) is seeking outline planning permission for the development of land at South West Exeter. The site location is shown at Figure 1 (the Site).

1.2 This document provides a non-technical summary of the Environmental Statement (ES) prepared in support of the planning application. The ES is the report of an Environmental Impact Assessment (EIA) carried out for the development proposals in accordance with national legislation (The Town & Country Planning (EIA) Regulations 2011 (the EIA Regulations)).

1.3 Additional paper copies of the ES can be purchased for the following:

- Non-Technical Summary (NTS) - £15
- Volume 1: ES Main Text & Figures - £250
- Volume 2: ES Appendices - £350
- Volume 3: Transport Assessment - £50
- Full copy (Volumes 1-3 with NTS) of the ES on CD - £15

1.4 All documents are available from:

Environmental Planning
Barton Willmore LLP
7 Soho Square
London, W1D 3QB

1.5 The ES is available for public viewing during normal office hours at the following address:

Planning Department
Teignbridge District Council
Forde House
Brunel Road
Newton Abbot
Devon, TQ12 4XX

2.0 THE SITE & DEVELOPMENT

The Site

2.1 The Site (Figure 1) extends to approximately 96 hectares and lies within the administrative area of TDC.

2.2 The Site is divided into several adjacent portions by the existing road network, including Chudleigh Road, A379, Trood Lane and Dawlish Road.

2.3 Exeter City Centre lies approximately 3.2 km to the north and the Site lies adjacent to the south of Alphington and to the west of Matford. The M5 motorway lies adjacent to the south east of the Site, with the settlement of Exminster beyond. The A30 lies to the southwest of the Site, with agricultural fields and several smaller settlements including Shillingford Abbot and Shillingford Saint George beyond.

2.4 The Exeter Canal and River Exe lie approximately 1.2 km to the east of the Site. In this location, the River Exe is designated as a Site of Special Scientific Interest (SSSI), a Special Protection Area (SPA) and Ramsar Site.

2.5 The Site lies adjacent to the Grade II Listed building of Matford Barton, which is located to the south of Dawlish Road. A Grade II Listed milestone is also present on Dawlish Road. A further Grade II Listed milestone and building (The Gables) are present on Chudleigh Road to the west.

The Development

2.6 The description of the development proposals (the Development) is as follows:

- Up to 1,350 homes;
- A two form entry primary school;
- 600 place secondary school and additional form entry to the primary school, or up to an additional 150 homes, should this not come forward;
- Local Centre;
- Community Building;
- Areas of open space, landscaping and Suitable Alternative Natural Greenspace; and
- All necessary infrastructure.

2.7 Outline permission is sought for the Development, which is defined by a set of key principles, known as parameter plans (Figures 2, 3, and 4). These plans define the limits of the outline planning application. The parameter plans define:

- Land use (Figure 2);
- Building Heights (Figure 3);
- Access (Figure 4); and
- Landscaping and Green Infrastructure (Figure 2).

2.8 Permission for the detailed design of the Development would be sought at a later stage. Further details on the land uses proposed as part of the Development are shown on Figure 2 and detailed in Table 1.

Table 1: Land Uses

Description	Max units	Maxm^2
Residential	1,500	-
Local Centre (Uses A1, A2, A3, A4, A5, D1)		2,000
Community Building (Use classes D1/D2)		1,000
Health (Use class D1)		500
Small scale B1 as part of Local Centre (Use Class B1 (a))		2,000

2.9 Figure 2 shows areas where either residential or other mixed uses (identified in Table 1) could be provided. To allow flexibility for detailed plans to be prepared at a later stage, the assessments presented within the ES have assumed a worst case in terms of which land use would come forward.

Education

2.10 In addition to the uses above, the Development includes an area within which education uses will be provided. This lies to the south east of the junction between the A30 and A379 as shown on Figure 2. A two form entry primary school will be delivered as part of the Development. In addition, an area has been identified which could deliver an additional form entry to the primary school and a 600 place secondary school. Should this not occur, it is expected that overall residential units would increase by up to an additional 150.

2.11 At present, the delivery of the secondary school and expansion to the primary school is dependent on several factors and thus an either/or scenario is considered within the ES which allows for either a secondary school and primary school expansion or residential development to come forward in the area identified.

Suitable Accessible Natural Greenspace (SANGS)

2.12 SANGS is the name given to green space that is of a quality and type suitable to be used as mitigation, in this case, to divert visitors from visiting the land defined by the River Exe SPA, which is exposed to significant levels of recreational disturbance.

2.13 The Development will include SANGS, as identified within the southern area of the Site on Figure 2. The proposed SANGS features in excess of 4km of footpaths with a range of native habitats including woodlands, wildflower meadows and wetlands over varied topography. Facilities would include car parking, benches, picnic tables and toilets along with way-markers and interpretation boards.

2.14 An illustrative SANGS Plan, which shows how the SANGS could come forward, is provided at Figure 5.

3.0 EIA METHODOLOGY

Stakeholder Engagement and Public Consultation

3.0 The planning application is the culmination of an extensive design process which has involved thorough and continuous consultation with TDC, statutory consultees, the local community and other stakeholders.

3.1 The Applicant has held 4 public exhibitions, which are discussed below.

December 2013

3.2 On December 9, 2013 an exhibition was staged at the Devon hotel. Invites were delivered to local residents within the area and meetings were held on the day with representatives of the Parish Council. The local press covered the event which was attended by around 100 people on the day.

January and February 2014

3.3 At the request of groups from Exminster and Alphington, the exhibition was restaged in both villages in January and February 2014. Representatives of Exminster Parish Council and the Exminster Neighbourhood Plan group also attended the Exminster exhibition.

November 2014

3.4 In November 2014 the Applicant undertook a further public exhibition. The public exhibition was held on 18 November 2014 and was again the subject of publicity with invitations posted directly to local residents within the area and further invitations extended to the local community and other stakeholders via a website dedicated to the Development and notices in the local press.

3.5 The exhibition was attended by around 70 people with many with comments submitted on the day and subsequently through the website.

3.6 Feedback from the above events has informed the evolution of the design of the Development. Full details of the consultation strategy and its outcomes are included within the Statement of Community Engagement, submitted in support of the application.

EIA Scope

3.7 The ES consider the effects on the environment in respect of the following disciplines:

- Socio Economics;
- Cultural Heritage;
- Landscape & Visual Assessment (including night time light spillage)
- Ecology & Nature Conservation;
- Water Resources & Flood Risk;
- Ground Conditions & Contamination;
- Traffic & Transportation;
- Air Quality;
- Noise; and
- Agricultural Circumstances.

3.8 An ES should identify, describe and assess the likely significant effects of a development on the environment during the construction and operational phases

3.9 Each ES chapter establishes the baseline conditions that would be affected by the Development.

3.10 The significance of an effect is determined by the sensitivity of the receiving environment (receptor) and the magnitude (size/scale/severity) of the effect that the Development would lead to. The majority of EIA disciplines uses the terms negligible, or minor, moderate or major adverse or beneficial to describe the significance of an effect. Some disciplines use bespoke criteria in accordance with published guidance and industry best practice. The ES clarifies this where appropriate.

Cumulative Effects

3.11 Cumulative effects are generally considered to arise from the combination of effects from the proposed Development and other schemes with planning permission in the vicinity, acting together to generate elevated levels of effects. The committed schemes considered are set out in Table 2.

Table 2 Developments considered in the assessment of cumulative effects

Location/Reference	Scheme Description
Land At Matford Home Park, South Of A379, Exeter, Devon	Outline - mixed use development comprising circa 230 residential dwellings (C3), one single form entry primary school (D1), retail floorspace (A1)

Location/Reference	Scheme Description
(TDC Planning Application Number: 13/02729/MAJ)	together with associated public open space and highway infrastructure (approval sought for access).
Land Off Chudleigh Road, Alphington (TDC Planning Application Number: 13/02858/SO)	25% affordable housing (48 units) plus 141 new open market dwellings, the retention of the 5 cottages and the conversion of the tithe barn into 4 apartments. Overall, the site will provide 198 dwellings, with 193 of these being new dwellings. During the pre-application process, it has become evident that Gypsy and Traveller pitches will be provided and that an appropriate number for a development of this size and nature would be two pitches.

4.0 ALTERNATIVES CONSIDERED

4.1 The ES has described the alternatives considered by the Applicant.

The 'do nothing' Alternative

4.2 The 'do nothing' alternative means leaving the Site in its current use as predominantly agricultural land. In the absence of the Development, it is likely that the wider area would become increasingly developed, with the development of other projects schemes identified in section 2. The Site would remain in agricultural use and required housing would not be delivered.

Consideration of Alternative Locations

4.1 Locations for strategic development were considered as part of a wider assessment of the TDC plan for development across the District. This allocates development on the Site and the Development has been bought forward in line with the requirements of TDC and the TDC document 'South West Exeter Development Framework'.

Consideration of Alternative Designs

4.2 The Development submitted for approval is the result of a thorough analysis of environmental constraints and opportunities, planning policy, access issues and market demand. Consultation with TDC, statutory consultees and the general public has been a key influence in design evolution.

4.3 Whilst the Development is defined by the parameter plans (Figures 2 - 4), these have been informed by the evolution of an illustrative masterplan which has taken into account the comprehensive findings of the environmental impact assessment undertaken.

5.0 CONSTRUCTION

5.1 The indicative construction programme for the Development is anticipated to span approximately 10 years. Table 3 shows the indicative construction phasing and a phasing plan is included as Figure 6.

Table 3: Indicative Construction Phasing

			Residential Construction		
Phase	**Year**	**Assumed Year**	**Under Construction**	**Cumulative Operational**	**Total for Phase**
Phase 1	1	2016	20	0	271
	2	2017	70	20	
	3	2018	140	90	
	4	2019	41	230	
Phase 2	4	2019	99	271	238
	5	2020	139	370	
Phase 3	6	2021	200	509	338
	7	2022	138	709	
Phase 4*	7	2022	62	847	653
	8	2023	200	909	
	9	2024	200	1109	
	10	2025	191	1309	
Full Operation	11	2026	0	1500	

Note to Table: *this phase allows for up to 150 dwellings to come forward should the secondary school not come forward. See chapter 3 for additional explanation of this scenario.

5.2 As agreed with Natural England, the creation of the SANGS area will be appropriately phased to ensure that as each phase of the Development is completed, sufficient amounts of sufficient quality are completed in advance of occupation. This is shown on Figure 7. Further discussion of the SANGS is provided in section 9 Ecology and Nature Conservation.

5.3 The mitigation measures proposed within the ES to minimise adverse effects during the construction phase would be implemented through a Construction Environmental Management Plan (CEMP) which would be agreed with TDC prior to commencement of work on Site.

5.4 The structure of the CEMP would include the following:

- A table showing the objectives, activities (mitigation/optimisation measures), and

responsibilities for the implementation of those activities;

- The broad plan of the work programme;
- Details of prohibited or restricted operations (location, hours etc.);
- Institutional arrangements for its implementation and for environmental monitoring: responsibilities, role of the environmental authorities, participation of stakeholders;
- Contact during normal working hours and emergency details outside working hours;
- Provision for reporting, public liaison, and prior notification of particular construction related activities;
- The mechanism for the public to register complaints and the procedures for responding to such complaints;
- The details of proposed routes for HGVs travelling to and from the Site;
- Details of site hoarding; and
- Details of tree and hedgerow protection measures.

6.0 SOCIO-ECONOMIC EFFECTS

6.1 The ES has considered the likely effects on population, housing, healthcare, education, the local economy and employment. This has included consultation with the DCC and local NHS services. Further information has also been gathered from Office for National Statistics data, including the Census, and other publically available resources.

6.2 Baseline research has demonstrated that TDC (and neighbouring ECC) is anticipated to experience a growth in population of 6.3% (and 5.8% in ECC) with a corresponding growth in the number of households. The population in TDC and ECC demonstrates a similar age profile than England as a whole, with a predominance (65%) of working age population.

6.3 When considering the indicative construction cost of the Development, the assessment has identified that the Development is expected to generate approximately 1,327 jobs between 2016 and 2026, or an average of 133 jobs per year over the ten year construction programme. This could help to provide employment for the residents of the area who are currently claiming out of work benefits whilst seeking suitable employment in the construction industry. This is considered to be a minor-moderate beneficial effect.

6.4 Based on a quantitative and qualitative assessment, utilizing a mix of industry norm methodologies and consultation with relevant parties, this chapter has identified that the Development will have negligible effects on healthcare and secondary education provision following appropriate financial contributions. Minor beneficial effects are anticipated as a result of the provision of a two form entry primary school, which will generate spare capacity. Minor to moderate beneficial effects have been identified as a result of employment generated during construction and once completed. Furthermore minor to moderate beneficial effects are anticipated as a result of increased housing provision, increased spending in the local community and in terms of additional employment opportunities.

6.5 The Development includes the provision of up to 1,500 dwellings which could provide homes for up to 3,285 residents (or up to 2,957 should the secondary school/primary school expansion occur). The provision of up to 1,500 dwellings will assist TDC in meeting identified housing needs in the area. Furthermore the Development offers spare capacity for primary school places, and the potential for further education provision should the primary school expansion and secondary school be provided.

6.6 In addition, an element of commercial and community space is proposed as part of the Development which could generate between 77 and 342 jobs.

7.0 CULTURAL HERITAGE

7.1 This has considered the effects on heritage assets including Scheduled Ancient Monuments, archaeological remains, historic buildings and Conservation Areas. It has been based on best practice guidance, including from English Heritage and Institute for Archaeologists, and has included the production of an Archaeological Desk-Based Assessment, Geophysical Survey Report, Archaeological Evaluation via Trial Trenching, a Historic Built Environment Appraisal and viewpoints and illustrative photomontages as requested by English Heritage.

7.2 The assessments have confirmed the extent and character of the non-designated buried archaeological heritage assets within the Site, as well as their significance. This includes evidence of a Prehistoric barrow and settlement remains. With the implementation of an appropriate mitigation strategy the residual effects of the Development to these assets would be no more than minor adverse, and no significant effects would result from the Development.

7.3 The Development would take a precautionary approach to the management and conservation of the scheduled barrow situated within the Site. Careful design, which has been informed by close liaison with English Heritage and the DCC Archaeological Officer, together with the implementation of the draft heritage management plan would ensure that benefits would result from the Development. In particular the barrow would cease to be location in an area which is actively ploughed as part of an operational farm. Furthermore, appreciation and understanding would be enhanced through the creation of public open space and information boards.

7.4 The assessment also considered the effect of the Development to the significance of relevant built heritage assets in the surrounding area. The Development would not result in any significant effects to designated heritage assets, such as listed buildings, with only a minor adverse significance of effect identified to the Grade II Listed Matford Barton and The Gables, and no other effects above negligible.

7.5 The assessment concludes that the Development would not contravene national or local policies designed to protect heritage assets, as the effects identified would not result in significant adverse effects.

8.0 LANDSCAPE AND VISUAL

8.1 The ES has included an assessment of the likely effects of the Development on landscape character and features and the visual amenity of the area from surrounding public and private viewpoints for the construction and operational phases of the Development.

8.2 The assessment has included a review of relevant landscape planning policies, published landscape character studies and field work to establish the existing landscape features, character and visual amenity. The Landscape and Visual Impact Assessment has also included for public consultation and discussions with TDC in relation to the location of viewpoints and illustrative photomontages.

8.3 The visibility of the Site from the surrounding landscape has been established as part of the assessment. The nature of the landform is such that the Site has limited visibility in the wider area. Viewpoints in Exeter exist that look south from the high ground in the city towards the Site but these viewpoints are usually at least 3km away, or are in an urban environment with views frequently limited by buildings and obstructions.

8.4 During the construction phases of the Development there will be adverse effects as ground and construction works are undertaken. This will include views into the construction site and best practice measures will be applied to reduce these effects wherever possible. This will include measures such as site hoarding, where appropriate, and ensuring tidy working practices and storage of materials.

8.5 The operational Development has been modelled using wireline photomontage images, which superimpose the maximum development footprint and heights onto existing views as a shaded area. Whilst these images show the Development as a continual block, not as individual buildings with space between them, they establish the worst case visibility of the Development.

8.6 The assessment found that the Development would not give rise to any significant effects on landscape character or on views from the wider area. The Development would change the character of the Matford Brook within the Site and result in some adverse effects in areas within the immediate surrounds of the Site due to the introduction of new buildings. The proposals for the SANGS, visible at considerable distance from viewpoints in Exeter, would result in some beneficial effect on the landscape due to improved landscaping within these areas and the restoration of the landfill. In addition, some adverse effects would occur to the night time views due to the presence of new development, however these would occur in an area where there is already considerable artificial light in the night sky.

8.7 The assessment concludes that there are no significant landscape and visual effects that will arise from the operational phase of the Development.

9.0 ECOLOGY AND NATURE CONSERVATION

9.1 An assessment has been undertaken of the likely significant effects of the Development on the environment with respect to ecology and nature conservation. The ecological baseline was determined through desk studies and site surveys. Site surveys included an Extended Phase 1 Habitat survey as well as specific Phase 2 surveys for hedgerows, great crested newt, reptiles, birds (including cirl buntings), bats, hazel dormouse, badger and otter.

9.2 The Site comprises a mixture of arable and pastoral fields separated by hedgerows and treelines. Small areas of woodland are present, as are a number of watercourses and a pond; mature trees are associated with field boundaries as well as within fields. Surveys indicated that the Site supports reptiles (where suitable habitat is present), a bird assemblage typical of the habitats present (including some notable species), a breeding pair of cirl bunting, hazel dormouse, badger, otter and a moderate diversity and abundance of bats.

9.3 During the construction of the Development, adverse effects on habitats and species will be largely avoided through the use of protective fencing for retained habitats, sensitive location of construction compounds and control of lighting.

9.4 The survey results have informed the design of the Development, ensuring that key habitats and features would be retained, protected and enhanced; new habitats of ecological value would also be created. Where mitigation within the Site is not possible, i.e. for cirl buntings, off-site mitigation would be funded in line with TDC's current approach. An Ecological Management Plan would be prepared to guide the establishment, management and monitoring of retained and new habitats during the course of the Development. Mitigation has been outlined so that other impacts on species are minimised; no residual impacts on ecology would be significant in the long-term.

9.5 Numerous designated sites of nature conservation value are present within the 2km study area considered by the assessment, and one non-statutory designated site was present within the boundary of the Site. The Exe Estuary SPA and Ramsar lies approximately 1 km from the Site; potential recreational effects on this European Site would be mitigated through the provision of SANGS, and also the payment of a habitat financial contribution to TDC. The implementation of pollution prevention guidance and incorporation of an appropriate drainage design would ensure that there are no water

quality impacts on any designated site as a result of the Site's construction or operation.

9.6 It is concluded that the Development would deliver a net gain in diversity and value of habitats when considered against the baseline conditions.

10.0 WATER RESOURCES AND FLOOD RISK

10.1 An assessment has been undertaken of the likely significant effects of the Development in terms of water resources and flood risk. The assessment considered effects in relation to flooding, water pollution, water supply and waste water treatment capacity and has been based on publically available information and consultation with the Environment Agency and South West Water. A Flood Risk Assessment has been undertaken, along with the Drainage Strategy.

10.2 The assessment found that the Site is crossed by two watercourses that are identified as the Matford Brook and the Church Path Brook (named for the purpose of the assessment). The Church Path Brook watercourse flows west to east through the Site. The Matford Brook flows predominantly within the base of a localised valley. However, once the watercourse flows under the Chudleigh Road it has been artificially lifted by around 2m from the base of the natural valley floor. The watercourse is therefore referred to as 'perched' and is believed to have been diverted to provide water to a now redundant downstream mill.

10.3 An area of flood risk is present within the Site, although this is limited to land adjacent to Matford Brook and is constrained by the valley in which the watercourse flows. South West Water have identified that there is suitable capacity within the water supply network, however there is a known issue with waste water sewer capacity.

10.4 During construction of the Development, early implantation of the drainage strategy will help control any increases in surface water flows and water pollution, such that any effects are negligible.

10.5 The operational Development will be entirely located within areas which are not at risk of flooding. Furthermore, the Matford Brook will be diverted to its natural path at the bottom of the valley. These diversion works will include measures to control surface water flow that will mean flood risk within the Site, and away from it, will not be increased. The drainage measures provided as part of the Development will also control pollution and will mean that water quality effects are negligible.

10.6 Capacity issues, which have been identified within the local waste water sewer network, will be addressed through the improvement of off-site systems by South West Water and effects from the Development will be negligible.

11.0 GROUND CONDITIONS AND CONTAMINATION

11.1 An assessment has been undertaken of the likely significant effects of the Development in terms of potential contamination.

11.2 The Site comprises a number of agricultural fields underlain by various geological formations, consisting of mainly clays, silts, sands and gravels with some cobbles. All the deposits underlying the Site are classed as a Secondary A aquifer (which are permeable layers in the ground underlying the Site, capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.).

11.3 There is a large area of Made Ground (previously disturbed by man) associated with an active inert landfill site in the southeastern corner of the Site. Whilst this has not been investigated, it will be restored as part of the closing down by the operator prior to completion of the Development. There are a further two small quarries and a small pond that have been backfilled with unknown material.

11.4 The assessment identifies that the only potential significant effect prior to mitigation is the risk to demolition workers from asbestos that could be present in farm buildings that are to be removed. However, this effect can be mitigated by the use of industry standard, regulated procedures.

11.5 More detailed ground investigation and risk assessment will be carried out at the Site prior to construction, to confirm the degree of any contamination present at the Site, in particular with respect to small areas of Made Ground to maintain negligible effects.

12.0 TRANSPORT AND ACCESS

12.1 An assessment of the likely effects of the Development associated with road traffic generated during the construction and operational phases has been undertaken. The following impacts have been assessed in detail in the ES, as recommended by accepted guidelines:

- Severance (the physical barrier to movement presented by increased traffic);
- Driver delay;
- Pedestrian delay;
- Pedestrian amenity;
- Fear and intimidation (caused by greater traffic flows and more heavy good vehicles); and
- Accidents and safety.

12.2 The baseline characteristics of the surrounding highway network are that it carries significant volumes of traffic, which are typically focussed on the main roads (A30, A379). This contributes to delay and congestion at these locations, albeit this does not extend to the majority of the network immediately surrounding the Site, which is more lightly trafficked. There are no identifiable safety issues in the area surrounding the Site.

12.3 The baseline for pedestrians, cyclists and public transport users is one of a good standard of infrastructure and service provision in the vicinity of the Site, indicating that it is in a sustainable location.

12.4 Implementation of best practice methods in the construction phase will ensure negligible effects. This will include measures such as the appropriate routing and timing of deliveries. Following the implementation of the proposed mitigation measures, the residual traffic effect associated with the Development is considered to be temporary and of negligible significance during the construction phase.

12.5 The implementation of proposed mitigation measures, once the Development is compelte, will seek to ensure that the on-site impacts are managed and the off-site impacts are addressed. In addition, the creation and introduction of a Travel Plan for the Site will seek to manage any longer term impacts that may arise and encourage increased levels of non-motorised travel.

12.6 The residual effects for the operational Development will not be significant, with minor adverse effects on driver delay and minor or moderate beneficial effects for cyclists and pedestrians.

12.7 In conclusion, the substantial analysis which has been undertaken to date demonstrates that this is an accessible and sustainable site which is suitable to accommodate a residential development of the scale proposed, without undue effect upon the safe and efficient operation of either the local or strategic highway networks.

13.0 AIR QUALITY

13.1 An assessment has been undertaken of the likely significant effects of the Development with respect to air quality. The assessment has been informed by consultation with TDC and ECC air quality officers, a review of publically available air quality records for the area and through computer modelling of predicted traffic flows.

13.2 The Site does not currently experience issues from air quality pollution. The nearest area designated due to air quality issues is an Air Quality Management Area, located approximately 0.4km to the north of the Site. This is designated due to pollution from road traffic.

13.3 An assessment of the potential effects during the demolition and construction phase has been carried out. This has shown that during this phase of the Development releases of dust and particulate matter are likely to occur during site activities. Through good site practice and the implementation of suitable mitigation measures, the effect of dust and PM_{10} releases may be effectively mitigated and the resultant effects are considered to be negligible.

6.1 The modelling assessment has predicted a negligible effect on both nitrogen dioxide and particulate matter concentrations at existing human receptors as a result of traffic generated by the operational Development. Concentrations of both pollutants are also predicted to be well below the relevant objective limits (levels set out by the Government) across the Site, therefore the effect of the Development with regards new exposure to this pollutant is considered to be negligible.

6.2 The assessment has also considered the likely effects of the Development on nitrogen oxide and nitrogen deposition within the Exe Estuary (which is designated for its ecological value). The modelling undertaken for this part of the assessment has found that only very small changes would occur, which would result in negligible effects.

14.0 NOISE

14.1 An assessment has been undertaken of the likely significant effects of the Development on the environment with respect to noise and vibration. This has included baseline noise surveys undertaken on 13th and 14th January 2014, spanning both the day and night time. Noise modelling, to predict future noise levels, has also been undertaken using computer modelling software in line with accepted guidance.

14.2 The existing conditions at the Site were found to be entirely dominated by road traffic noise, particularly from the A30, A379 and the distant M5. Noise levels adjacent to the road network are relatively higher than those at towards the center of the Site.

14.3 The effects of noise and vibration during construction of the Development have been predicted and assessed. The assessment has identified that when best practice measures, (including using quieter plant, fitting acoustic enclosures and regular maintenance of machinery) the effect of noise and vibration during the construction of the Development is adequately controlled and effects would be broadly negligible with temporary minor to moderate effects occurring in limited areas.

14.4 The assessment has considered whether the noise conditions at the Site are suitable future residential dwellings. This has identified the need for mitigation measures in the form of appropriate glazing and ventilation design or building layout along the A379 and the additional option for a noise barrier adjacent to the A30. This will ensure that suitable noise levels can be achieved.

14.5 The effect of traffic associated with the Development has also been assessed. It is predicted that moderate adverse increase in road traffic noise will be experienced at some limited receptors adjacent to the surrounding roads.

15.0 AGRICULTURAL CIRCUMSTANCES

15.1 An assessment of the likely significant effects of the Development on the environment has been undertaken in relation to agricultural land. This has been informed by an Agricultural Land Classification (ALC) Survey and interviews with current farming businesses which operate within the Site.

15.2 The Development will affect approximately 76.2 ha of agricultural land (which excludes the landfill area and small parcels of woodland, farm buildings and tracks). The detailed ALC survey has determined that approximately 45.8 ha are of “best and most versatile” quality (which are Grades 1, 2 and 3a). The Site is occupied by three agricultural businesses, all of which are of a part-time nature. The Development will result in the loss of this land for farming.

15.3 Mitigation measures undertaken during the construction process will help preserve the soil resource for future use, either within the Site or elsewhere, including careful storage of soils and the timings of landwork. The Development design will mitigate potential trespass encroachment onto neighbouring agricultural land.

15.4 The loss of 45.8 ha of best and most versatile agricultural land, a receptor of high sensitivity, will lead to an impact of major – moderate adverse significance. The loss of land to the three farm businesses will lead to a minor – negligible effect in each instance.

The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

Site Boundary

Other land under control of applicant

FIGURE 1

Project
South West Exeter

Drawing Title
Site Boundary Plan

Date	Scale	Drawn by	Check by
03.03.15	1:5000@A2	PT	JdH

Project No	Drawing No	Revision
20835	9004	C

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Revision	Date	Drn	Ckd
-	-	-	-

- Red Line Boundary
- Residential
  (inc. incidental green space, access, drainage and infrastructure)
- Site for initial Primary Education
  (inc. infrastructure)
- Site for secondary education and expansion of primary school or Residential
  (inc. infrastructure, community facilities & formal play to include 3G Pitch)
- Area of Mixed Use and Residential
  (inc. retail, residential, community and infrastructure)
  (A1, A2, A3, A4, A5, B1a, D1 & D2))
- Area for SANGS
  (Suitable alternative natural green space)
- Area of Green Infrastructure
  (inc. public open space, Incidental green space, drainage, redirection of Matford Brook, new planting, play areas, other associated open space, retained green infrastructure and infrastructure including access & habitat creation)

FIGURE 2

Project
South West Exeter

Drawing Title
Parameter Plan:
Land Use Plan

Date	Scale	Drawn by	Check by
04.03.15	1:5000@A2	PT	JdH

Project No	Drawing No	Revision
20835	9600	M

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The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

- Site Boundary
- Upto 2 Storeys (10m)
- Upto 2.5 Storeys (12m)
- Upto 3 Storeys (13.5m)
- Upto 4 Storeys (18m)
- Initial Primary School Upto 2 Storeys
- Secondary School Upto 3 Storeys / expansion of primary school upto 2 storeys or Residential 3 Storeys (13.5m) if no School

Note:

To be read in conjunction with the proposed cut and fill areas strategy ref dwg 12525-C104 Rev D

To include 5% buildings higher than max in each zone to be utilised as key buildings - further details presented on legibility strategy plan and framework plan prior to submission of reserved matters.

FIGURE 3

Project
South West Exeter

Drawing Title
Parameter Plan:
Building Heights

Date	Scale	Drawn by	Check by
04.03.15	1:5000@A2	PT	JdH

Project No	Drawing No	Revision
20835	9602	I

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The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
-	-	-	-

- Vehicular/pedestrian/cycle access
- Pedestrian/Cycle link to boundary
- 30m Corridor in which Boulevard and bus will be routed
- 30m Corridor in which Avenue will be routed
- At grade crossing point
- Bridge location and landing zone
- Strategic pedestrian / cycle corridors
- Access zone to other development
- Bus connection zone
- Pedestrian link to bridge
- Pedestrian/Cycle access to SANG path network
- SANG car park

FIGURE 4

Project
South West Exeter

Drawing Title
Parameter Plan:
Access & Movement

Date	Scale	Drawn by	Check by
04.03.15	1:5000@A2	PT	JdH

Project No	Drawing No	Revision
20835	9604	H

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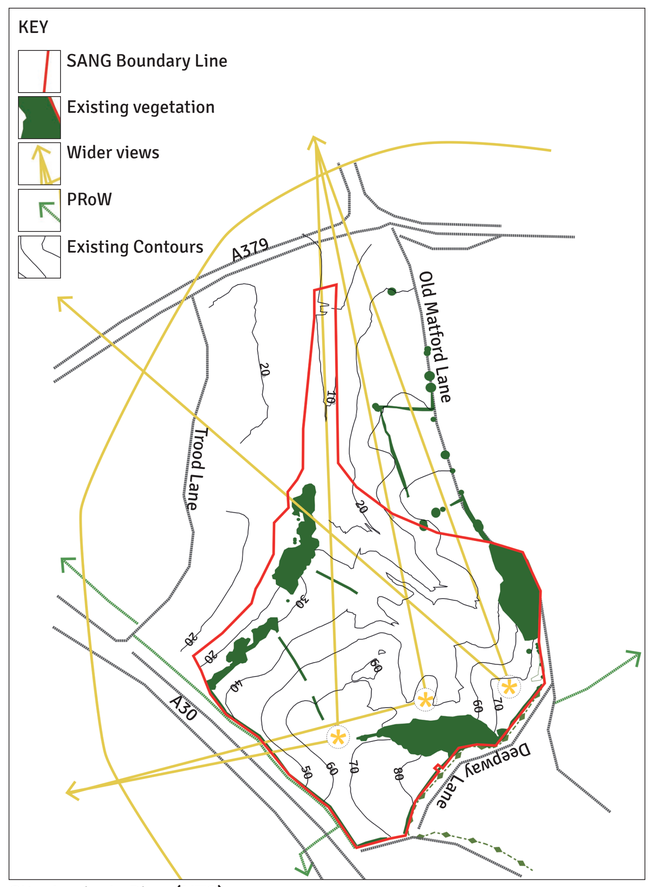
SANG Landscape Proposals:

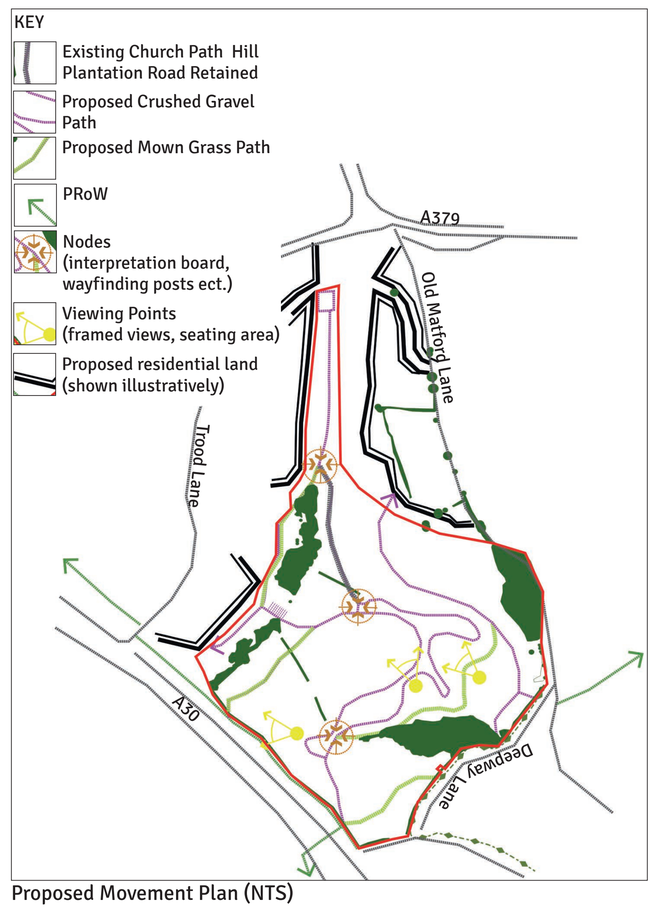
- Car Parking located at the main entrance including visitor facilities such as benches, picnic tables, bins, cycle parking and toilets
- 4km of footpaths with unrestricted, dog-friendly areas and dog bins
- Varied landscape and ecological features including existing tree cover, topography, water bodies and viewing areas
- Signage and interpretation boards throughout the SANG

FIGURE 5

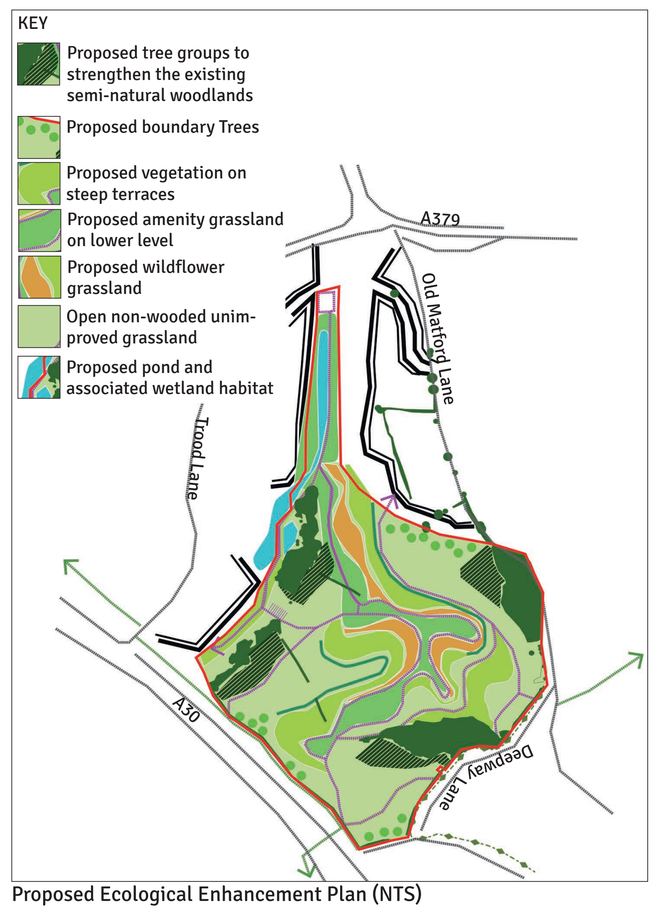
Illustrative Landscape Proposals SANG, Scale 1:1250@A0



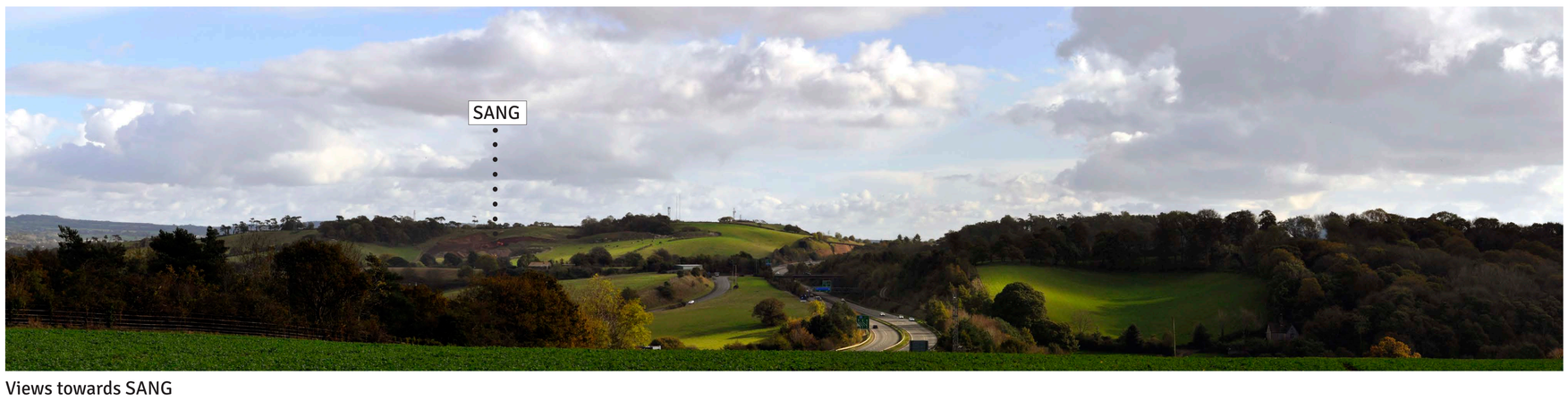
Site Analysis Plan (NTS)



Proposed Movement Plan (NTS)



Proposed Ecological Enhancement Plan (NTS)



Views towards SANG

PROJECT
South West Exeter

DRAWING TITLE
Suitable Alternative Natural Green Space (SANG)
DRAFT Landscape Proposals

DATE	SCALE	DRAWN BY	CHECK BY
07.11.2014	as shown	CF	RMcW

PROJECT NO	DRAWING NO	REVISION
20835	BR-L-SK002	-

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Revision	Date	Drn	Ckd
-	-	-	-

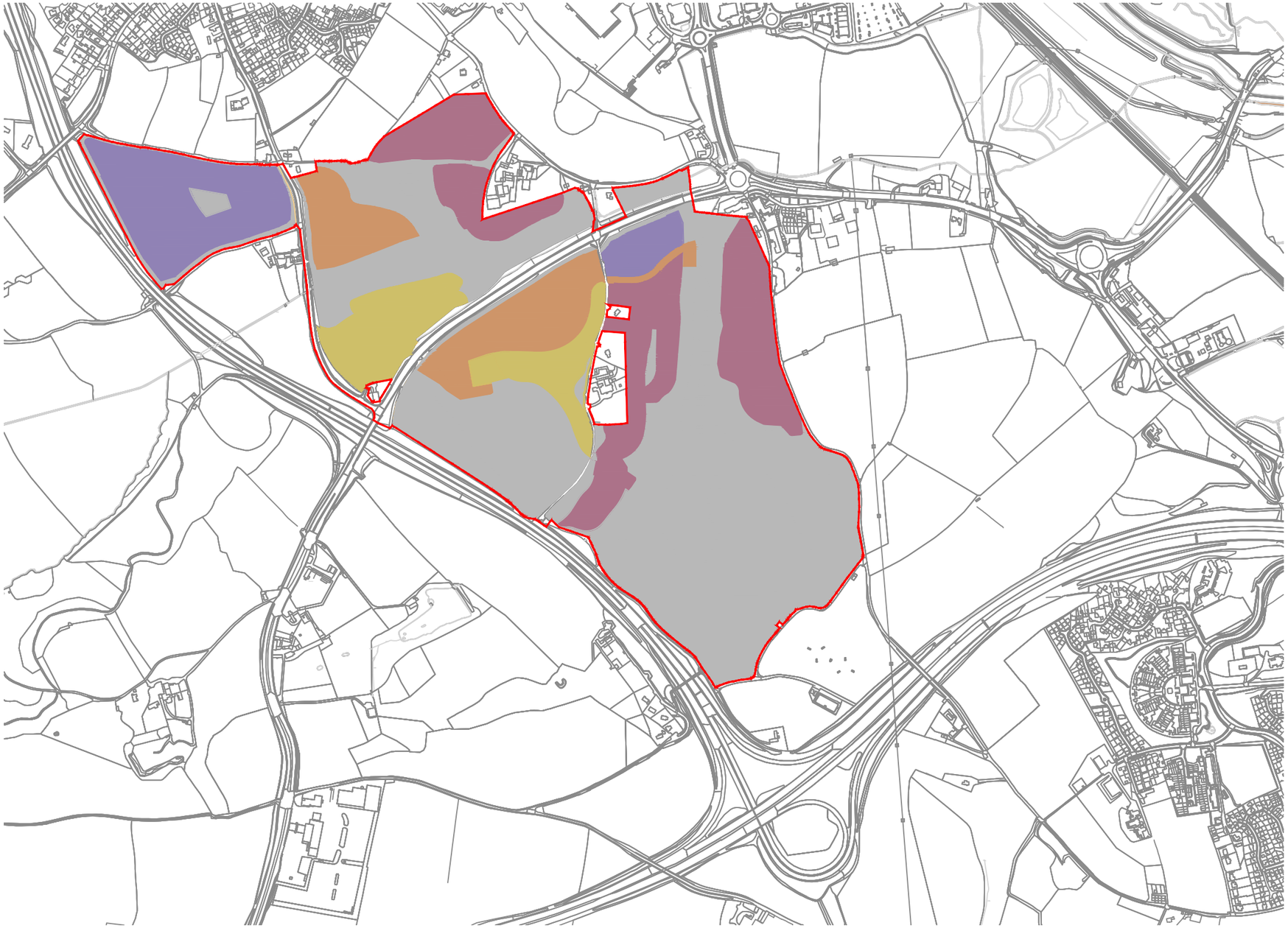

FIGURE 6

Project
South West Exeter

Drawing Title
Draft Housing Phasing Plan

Date	Scale	Drawn by	Check by
04.03.15	1:10,000@A3	PT	JdH

Project No	Drawing No	Revision
20835	9500	F

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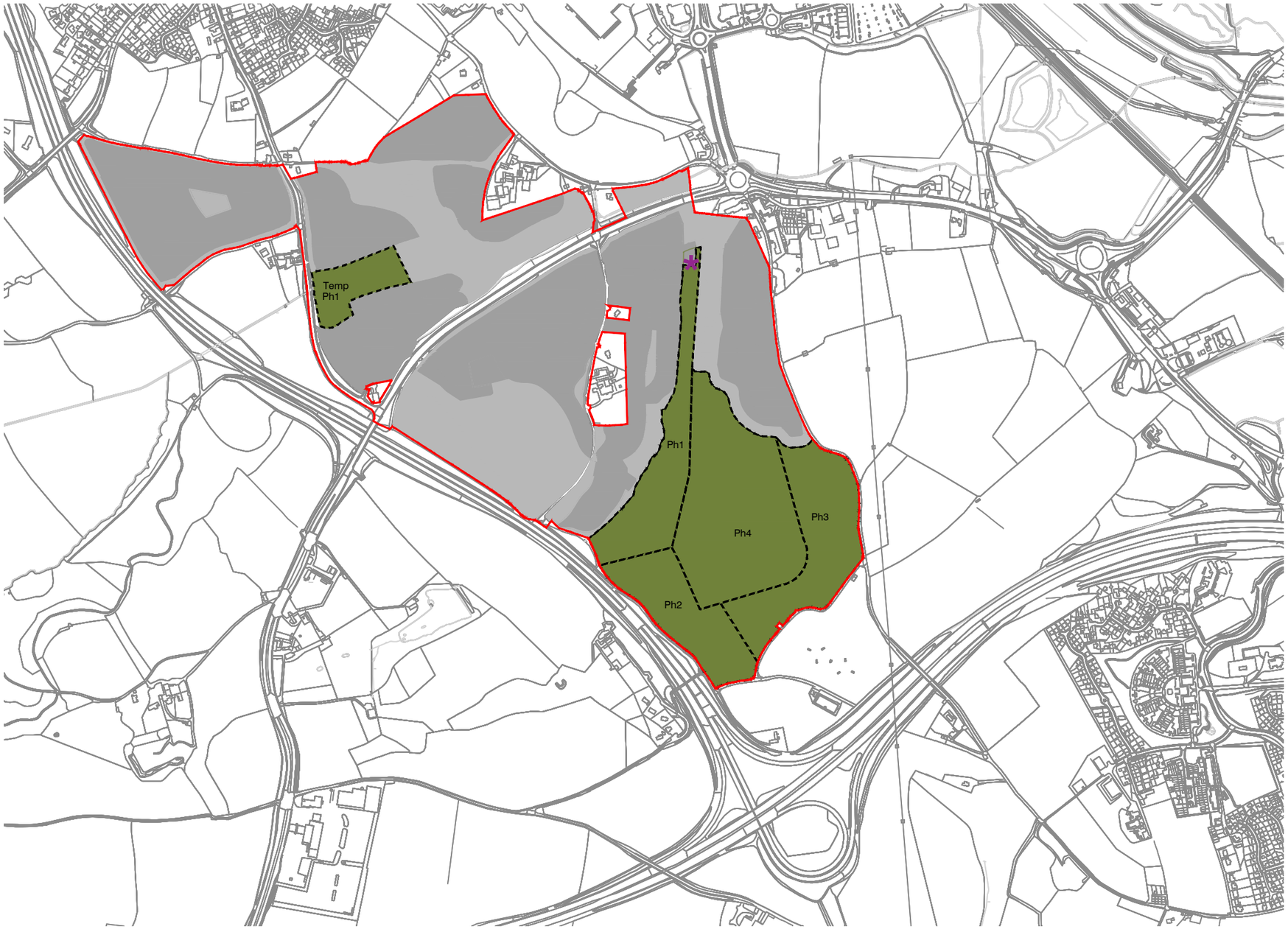
Revision	Date	Drn	Ckd
-	-	-	-



Temp Ph1	Temp Phase 1 (with tempoary SANG car park)	1.95Ha
Ph1	Phase 1	4.83Ha
Ph2	Phase 2	4.25Ha
Ph3	Phase 3	6.03Ha
Ph4	Phase 4	9.79Ha
*	SANG car park (to be delivered as part of phase 1)	

FIGURE 7

Project
South West Exeter

Drawing Title
Draft SANG Phasing Plan

Date	Scale	Drawn by	Check by
04.03.15	1:10,000@A3	PT	JdH

Project No	Drawing No	Revision
20835	9501	E

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