



# DESIGN & ACCESS STATEMENT

## Desborough Grange II





April 2011

### Vision



To produce a living environment of high quality forming a distinctive extension to The Grange I of up to 700 dwellings. The development will provide a balanced mix of high quality dwellings, open space, recreation and community facilities including a Local Centre and Primary School.

To create safe, attractive and secure neighbourhoods, promoting social interaction. Provide movement routes and networks which give priority to pedestrians, cyclists and public transport.

To create a development that will integrate into its countryside setting by virtue of its green infrastructure strategy.

To prioritise reduction of carbon and waste and to promote eco-friendly technology.

To enhance Desborough as a place to live, incorporating aspects of local character, landscape, visual amenity and biodiversity.

For the development to achieve the Building for Life Silver Standard.

### Introduction

- 1.1 This statement has been produced by RDC on behalf of CJC.
- 1.2 The statement has been produced in full accordance with the DCLG Circular 01/2006 requiring applications to be submitted with and accompanying design and access statement. We have also referred to CABE's guidance on the preparation of design and access statements 'Design and Access Statements how to write, read and use them'
- 1.3 The purpose of this statement is to explain 'The design principles and concepts that have been applied to the proposed development and how issues relating to the access to the development have been dealt with' (paragraph 80, DCLG Circular 01/2006)
- 1.4 It should be read with the outline planning application and the accompanying documents.

1.5 This document has the following sections:

Section 1 Introduction – outlines the purpose of the document

Section 2 Assessment – considers the site and its surroundings in terms of the physical, social, economic and planning context

Section 3 Involvement – outlines the stake holder participation and consultation undertaken as well as its key findings

Section 4 Evaluation – identifies the sites constraints and opportunities

Section 5 Design Concept and Principles – presents the design concept and principles which underpin the proposals

Section 6 Design Proposals – sets out the uses and amount proposed, character areas, access, layout, scale, landscaping, appearance and use

Section 7 Implementation – details the phasing of the development and the next steps to be taken.

Section 8 Summary





Page 3



- 2.1 The site covers an area of 35.8ha. It lies to the north of existing The Grange I development and is approx.1.6km north of Desborough town centre.
- 2.2 To the west of the site is the industrial estate of Magnetic Park. The western boundary is bordered by the Great Bear warehouse. To the north of the site lies open countryside, the northern boundary is bordered by Back Lane/Pipewell Road. To the east lies Desborough green space which will become a country park. To the south lies the existing Grange I development and beyond is Desborough town centre.
- 2.3 The site is presently used for light agriculture.





Magnetic Park



Great Bear Warehouse



Existing Grange I Development





#### The Site





- 2.4 To the west of the site lies Magnetic Park, an industrial estate that houses the large Great Bear warehouse. Magnetic Park is not yet complete with a number of opportunities for further development. Albany Sheds also lies to the west of the site on Stoke Road, this is a medium size industrial concern manufacturing timber sheds.
- 2.5 There is open countryside to the north and east of the site
- 2.6 To the south of the site lies existing residential development.

- 2.7 Despite much of the site having been quarried the site is actually relatively flat. The high point of the site is 143.38m AOD adjacent the existing bund, with the low point being 134.74m AOD at the eastern boundary.
- 2.8 From the western boundary adjacent to Stoke Road to the eastern boundary adjacent to the country park there is approx. 2m of fall. The level at the eastern boundary is approx. 140m AOD whilst the level at the eastern boundary is approx. 138m AOD.
- 2.9 The levels along the northern boundary range from 139m AOD to 141m AOD, whilst the levels along the southern boundary range from 139.6m AOD at the western end to 142m AOD in the middle to 138.48m AOD at the western end.
- 2.10 This indicates a fairly flat site.
- 2.11 Right: Site Survey



- 2.12 The site is clear of significant landscape features, it is currently used for light agriculture.
- 2.13 There is an existing planted noise bund on the site which lies along the western boundary adjacent to the Great Bear warehouse.
- 2.14 Any historic landscape features would have been removed during the quarrying carried out on the site throughout the 1930's 1950's.
- 2.15 The site does, however, benefit from significant hedging to the eastern, western and northern boundaries with a hedge also running from the existing bund to the northern boundary.

**Existing Landscape Features** 

- 2.16 The eastern boundary features further hedging and borders a small wood.
- 2.17 More detail on existing landscaping and Green Infrastructure can be found in the ES.
- 2.18 There is an existing water body to the north west area of the site, this appears to hold rainwater after rainfall.





- 2.19 The site was worked as a quarry from the 1930's to 1950's and therefore any archaeological evidence will have been destroyed in the process.
- 2.20 The 1900 map shows the site to be partly occupied by Desborough Grange along with small areas of woodland (Desborough Spinney and East Covert). There is evidence of a quarry to the east of the site boundary within what would now be the country park.
- 2.21 The 1926 map still shows Desborough Grange, however the quarry has extended very close to Desborough Grange. East Covert has now gone, taken over by the quarry.
- 2.22 The 1958 map shows evidence of additional quarrying along the northern boundary and to the south of the site. Desborough Grange has now gone and also East Covert.

2.23 The 1984 map shows the quarry now gone and reinstated, the site pretty much as it is today.











- 2.24 The AAP requires the development to incorporate SUDs to manage surface water drainage in order to not increase the risk of flooding to the Rivers Ise and Jordan and Slade Brook. To achieve this a network of swales are proposed.
- 2.25 There is a water body to the north western area of the site adjacent to the northern boundary. This will be retained and used to create a swale that will fill and channel surface water away from the site into the piped system.
- 2.26 The swales will form part of the Green Infrastructure and will be landscaped and constructed to provide visual amenity and wildlife habits

- 2.27 The swales will restrict the rainwater reaching the wider drainage system by containing rainwater and gradually allowing it flow through the network into the attenuation pond.
- 2.28 The swales will drain across the country park to the existing attenuation pond that was constructed for Grange I. The attenuation pond will need to be enlarged in order to be able to store the additional run off generated by Grange II.
- 2.29 In order to secure the long term management and maintenance of the swales, they will be offered for adoption to the Local Authority.





- 2.30 In terms of Ecology the aim of the AAP is to minimise harm to the natural environment and seek an overall net gain in the sites biodiversity.
- 2.31 To achieve this, biodiversity will be increased through the protection, restoration, creation and long term management of habitats characteristic to the area and focus on the priority habitats and species identified in the Northamptonshire Biodiversity Action Plan 2nd Edition (2008)
- 2.32 A net gain in green infrastructure will be delivered through the provision of plentiful, multi functional open spaces and a network of accessible links to new and existing green infrastructure resources such as Desborough Green Space. Wildlife corridors will be strengthened and will link existing habitats.
- 2.33 There are no sites with statutory or non-statutory designation for nature conservation within the site. One woodland provisional Wildlife Site (a non-statutory designation abuts immediately to the east, with The Plens, a Wildlife Trust Nature Reserve (non-statutory designation) lying approximately 0.5 km to the south.
- 2.34 The site is managed for agricultural purposes, largely comprising improved grassland, with arable and species poor semi-improved grass lands, of limited intrinsic ecological value. Hedgerows including mature trees form field and site boundaries, notably in the northern half of the site, where they provide some connections to the wider countryside, particularly along Back Lane.
- 2.35 All hedgerows are UK and Local BAP habitats, although none are species rich and none have Importance under the Wildlife and Landscape Criteria of the Hedgerow

Regulations 1997.

- 2.36 Standing water is limited to a single ephemeral pond in the north west of the site, also of limited intrinsic value. Existing hedgerows provide foraging habitat and corridors of movement for a range of local wildlife, in particular along the western and northern boundaries.
- 2.37 Protected species recorded using the site include foraging and commuting bats species and badgers. Potential habitats are present which could be used by roosting bats and also by great crested newts (recorded in nearby ponds off-site). Key habitats for breeding birds (including 17 notable species) included the scrub areas and improved grassland, with summer semi-improved grassland providing summer foraging for a number of UK BAP species
- 2.38 For over wintering birds (Including 17 notable species, key areas include the scrub in the north of the site and the winter stubble of the arable compartment. Hedgerows and the scrub/ruderal habitats in the central north of the site provide the areas of higher ecological value on site.
- 2.39 Design principles for the master plan have taken into account the ecological interests and nature conservation value of the site to maximize and enhance the existing biodiversity of the site, incorporating existing hedgerows and their associated trees wherever possible, as the basis for a green framework to the built environment. New habitats will be created adjacent to existing habitats to enhance their overall value. The design aims to create an area of higher biodiversity value, which integrates with the existing habitats of interest on and off site and create a green infrastructure of recreational, biodiversity and sustainability benefits.

Page 11 Desborough Grange II

- 2.40 Enhancements have been designed to take into account both UK and LBAP priorities, with new native mixed and broad leaved woodland tree and scrub planting and species rich lowland meadow grassland.
- 2.41 New and enhanced green ways will maintain linkages with off-site habitats and improve links with the adjacent woodland and will enhance connectivity creating a continuous green corridor around the whole site, with a strengthened corridor bisecting it, albeit with breaches for access roads and pedestrian/cycle ways.
- 2.42 The PWS woodland will be linked more effectively along these corridors with habitats in the wider area and there will be minor benefits reducing habitat fragmentation and isolation at a local level as a result.
- 2.43 New and enhanced green ways will maintain linkages with off-site habitats and improve links with the adjacent woodland and will enhance connectivity creating a continuous green corridor around the whole site, with a strengthened corridor bisecting it, albeit with breaches for access roads and pedestrian/cycle ways.
- 2.44 The pWS woodland will be linked more effectively along these corridors with habitats in the wider area and there will be minor benefits reducing habitat fragmentation and isolation at a local level as a result.

## Ecology

2.45 Below: Ecology Features Plan





- 2.46 The site is fairly well concealed from views into the site from outside its boundaries.
- 2.47 The site is well shielded from views by substantial existing hedging along the northern, north western and eastern boundaries.
- 2.48 The western boundary is well shielded by the existing noise bund and warehouse.
- 2.49 The site is most viewable from the southern boundary, the existing Grange I
- 2.50 In view of this it is appropriate that the site should remain well concealed along its rural boundaries and be continued to be opened up along the southern boundary from where the access points to the extension of Grange I are taken.
- 2.51 The hedging to the north, north western and western boundaries will be reinforced and will form an important part of the green infrastructure
- 2.52 A landscape opportunities plan has been produced which is shown to the right.



#### 2.53 Landscape Opportunities Plan



- 2.54 Sustainable Urban Extensions (SUE) can be less sustainable than existing urban areas as they usually lie beyond normal walking and cycling distances to key destinations. Therefore improvements need to be made in servicing an SUE via sustainable means.
- 2.55 This normally means the provision of public transport and in the case of Grange II the existing bus service to Grange I will be extended to ensure that all dwellings are within 300m of a bus stop (Policy 16 of CSS). The AAP highlights this issue and calls for the site to be served by public transport.
- 2.56 In terms of public transport, there is one bus service which serves Grange I. The site is thus well connected to the town centre and surrounding towns via public transport
- 2.57 The bus route will be extended in order to serve Grange II. The access points are taken from Wood Avens Way and Ironwood Avenue. These were designed as bus routes as part of Grange I.
- 2.58 The Proposed Bus Route Plan shows how the bus route will extend into and through the site. It is important that the bus route serves both the school and local centre as shown on the master plan.
- 2.59 The bus route will form a loop entering and leaving through Wood Avens Way and Ironwood Avenue. It may also be desirable for the bus to enter the north western parcel of the site and either leave the site at the Stoke Road access before heading back to Desborough or turn round and wend its way back to Wood Avens Way.

#### Movement & Circulation

- 2.60 Ultimately the final route of the bus will depend upon the economics of providing such a route and this will be decided by the bus company
- 2.61 To allow flexibility the bus route shown on the master plan will be designed as such with a 6m wide road and in addition we will also allow for the bus to carry on up to the Stoke Road entrance.
- 2.62 Public Rights of Way exist across the site, adjacent to the perimeter. These are shown on the Existing Public Right of Way Plan below.
- 2.63 There is an existing right of way across the site. This currently runs through open grassland. Rather than enclose the footpath with development, keeping it on its existing route we have decided to divert the footpath around the perimeter of the site and through the countryside so that it runs through greenery as it does now. This is shown on the Diverted Footpath Plan below.
- 2.64 The Right of Way that runs across the north west of the site adjacent to the swale will need to be slightly diverted in order to avoid the development edge. The diverted footpath will run with the open space that surrounds the allotments.
- 2.65 The County Council Have endorsed the approach of taking the diversions through open space rather than building them into the development.







- 2.66 The only access at present to the site is via a field access from Stoke Road
- 2.67 The northern site boundary is very rural and provides a greenway which will become part of the Desborough Green Space.
- 2.68 As the northern boundary is so rural, access has been kept to the southern boundary of the site from where the Grange I will be extended north. Keeping the access to the southern end of the site will see Grange II becoming an extension of Grange I and it will not feel as though it is a stand alone site
- 2.69 In order to provide an alternative entrance/egress to the site the existing field access to Stoke Road will be upgraded to become a third access point and will relieve the two access points at Wood Avens Way and Ironwood Avenue
- 2.70 This will provide an alternative should any of the other accesses on Grange I become blocked.
- 2.71 Highways also require an additional access point as the maximum length for a cul de sac will have been reached.
- 2.72 During the Design Forums and Public Exhibitions there was a desire expressed by the attendees for an access from Grange II to Back Lane/Pipewell Road. We have considered including an access here but have decided not to include it for the following reasons:
  - An access onto Back Lane is not promoted in the Area Action Plan (AAP)

- Providing an access onto Back Lane would result in a large amount of existing hedge being removed in order to accommodate the road, footpaths and the required visibility splays. A key aim of the AAP is to provide a network of green infrastructure by safe guarding and enhancing the existing provision. This is incompatible with providing an access to Back Lane.
- Grange II is to be seen as an extension to Grange I, adding a further access would make Grange II seem less of an extension and more of a separate site with its own accesses.
- The proposed accesses at Ironwood Avenue and Wood Avens Way are the only two access points that CJC wish to promote. The access from Rowan Close cannot be used for vehicular access for legal reasons.



#### 2.73 **REASONS FOR ACCESS CHOICES**

The designers of Grange I have ensured that both Wood Avens Way and Ironwood Avenue have had a spur left in order that the highway can be extended into Grange II. The S106 Agreement for Grange I stated that Wood Avens Way was to be designed as a bus access for any subsequent extension site. The road is 6m wide, so can accommodate a bus.

- 2.74 It would not be practical to expect all traffic to access the site via Wood Avens Way as this would be too concentrated.
- 2.75 A second access is proposed from Ironwood Avenue. Ironwood Avenue is already used as a bus access, the bus route would be diverted from its existing route to carry on up Ironwood Avenue into Grange II.
- 2.76 These two accesses would then provide an 'in' and 'out' for the bus in order that Grange II can be served via a new bus loop.

#### 2.77 CONSTRUCTION ACCESS

As stated previously a third access point is to be provided to Grange II from Stoke Road, during the construction phase this would be used primarily as the construction access. The reasoning being that it would be impractical and very undesirable for both residents and developers to bring construction vehicles through the existing Grange I.

#### 2.78 **PEDESTRIAN AND CYCLE ACCESS**

The AAP and CSS both encourage a 20% modal shift away from car journeys. Short trips could easily be carried out by cycling. To encourage this the site will feature a network of cycle ways and footpaths.

- 2.79 By default Pedestrian and cycle accesses will be provided at the new Ironwood Avenue and Wood Avens Way accesses. In addition a new cycle access will be provided from Rowan Close which will link into the perimeter road of Grange II.
- 2.80 A further pedestrian and cycle access will be provided in the south western corner from the existing pedestrian/ cycle path that runs from Eagle Way and then turns north along the Great Bear boundary. This new link will also connect into the site perimeter road.
- 2.81 There are also additional pedestrian and cycle connections into the site from Back Lane. These are positioned so that they can be accessed from the existing public footpath that runs parallel to Back Lane



- 2.82 There are noise sources around the site. These are Albany Sheds on Stoke Road and the Great Bear warehouse. There is an empty plot adjacent to the warehouse which may also be a potential future noise source.
- 2.83 Albany Sheds has a 7m high extraction unit which has a noise influence over the site. The noise consultant who is advising the team has advised that dwellings are set back 100m from the site boundary in mitigation.
- 2.84 As can be seen from the master plan, dwellings fronting onto Stoke Road are set back approx. 120m from the site boundary.
- 2.85 The existing noise bund will be extended to the east in order to envelop the adjacent plot, therefore mitigating against future noise problems.
- 2.86 Stoke Road and Back Lane/Pipewell Road are not considered to have undue noise influence on the site.

Great Bare Warehouse Noise Source Albany Sheds Noise Source



2.87 20th Century Development - Grange I







2.88 19th Century Development - Desborough Town Centre





- 2.89 This has been produced in conjunction with document entitled 'Capitalising on the Inherited Landscape' by the HCA and English Heritage. This document encourages a development rather than conservation lead approach in understanding the context of the site and its surroundings.
- 2.90 The immediate surrounding area is made up of new housing. Grange I was constructed over approx. the last 5 years and is still under construction. The dwellings are typical of many modern developments in reflecting traditional detailing and building forms. The Grange I consists of apartments, terraced, semi detached and detached dwellings. Detached dwellings predominate adjacent to the southern boundary. Our design approach would be to position detached dwellings along the southern boundary to ensure a smooth transition from Grange I to Grange II along this boundary.
- 2.91 Desborough itself is mainly made up of small Victorian terraced houses that were built to service the boot and shoe industry. There are also areas of 1920's semi detached houses, modern developments and Local Authority housing.
- 2.92 Desborough Grange is laid out in a typical pattern that is reflective of modern housing developments with a hierarchy of road types. The site is served by a loop road with one way into and out of the site.
- 2.93 Desborough itself is formally laid out with a 'grids' of streets in the Victorian and 1920's areas. The more recent developments are laid out in a typical highways dominated 'DB32' pattern.

- 2.94 The centre of Desborough is mainly populated by 2 storey dwellings. The Grange I features a variety of types from 2 storeys to 2.5 and 3 storey dwellings.
- 2.95 In terms of materials Desborough centre consists of mainly red brick and slate roofs although many roofs have now been replaced with concrete tiles. Many of the older terraced houses have been rendered; this is usually to cover up failing brickwork. Grange I reflects the materials found in Desborough centre, mainly red bricks with imitation slate or brown plain tile roofs.
- 2.96 In terms of detailing, the dwellings in Desborough centre are very simply detailed with simple stone heads and cills. There are also stone heads above front doors. The windows would have been timber sash but most of them have now been removed in favour of upvc replacement windows.
- 2.97 The simple detailing found in Desborough centre is generally carried over to the Grange I with modern interpretations of traditional details.

Page 22



Red brick is the common walling material in desborough. The Grange I also features predominately red brick
Render is also commonly used, breaking up the extent of red brick
Roofing material was originally slate, many roof have now been replaced with concrete tiles. Grange I features modern imitation slate
Bay windows are common both in Desborough Town Centre and on Grange I
Eaves treatments are commonly brick detailing on both Grange I and Desborough Centre

- 2.98 Havelock and Loatlands Primary School are approx. 1 mile away from the Grange II development. Montsaye Community School is just over 2 miles away situated in Rothwell and Bishop Stopford School in Kettering is just over 7 miles away.
- 2.99 The town centre of Desborough is situated 0.8 miles away to the South of the development. This is within walking distance, but there are several bus routes in the area as shown below.

Bus Routes - Numbers 18 & 19

18: Market Harborough - Desborough - Rothwell - Kettering19: Desborough - Rothwell - Kettering





2.100 Within the town centre there is a wide spectrum of facilities including a doctors surgery, a vets practise and a local small supermarket, for more local facilities, see maps below.

🞯 Pub Hotel/Bed & Breakfast Chinese Take Away Doctors Surgery Vets Practise 🗍 Library + Church 🗘 Tea Shop Newsagents Post Office Eccal Shop Car Garage Junior School **℅** Hairdressers £ Bank **Opticians** Butchers 🖒 Travel Fish Shop





## Involvement

#### 3.1 STAKE HOLDER PARTICIPATION

A full public consultation has been carried out. The consultation was held in three stages with a town council presentation, design workshops and public exhibitions being held.

#### 3.2 TOWN COUNCIL

The town council presentation was held on 11th January. The meeting was informal; the purpose was to inform the council of the intention to develop a second phase of the Grange and to outline the constraints that would influence the eventual design of the scheme. A site constraints plan was shown to the council.

- 3.3 Generally the council were supportive of the proposals and accepted that development would happen there.
- 3.4 The issues raised by the council were access, a desire for bungalows, parking concerns as the current arrangements on Grange I are 'chaotic', access should be provided onto Back Lane/Pipewell Road.
- 3.5 Design Workshops

The design workshops were held on 22nd and 29th January. The members of the design team each chaired a group and explained the constraints the affected the design of the scheme. The constraints plan was used to illustrate this. The participants were then asked for their specific input on layout design, transport and ecology. This included suggesting locations for access, open space, play areas, primary school, local centre and allotments. The workshops were generally successful with participants keen to get involved.

- 3.6 The issues raised were the desire for access onto Back Lane/Pipewell Road, concern over the amount of additional traffic that would be generated through Grange I, concern that construction vehicles would be using the roads within Grange I.
- 3.7 The green buffer zones were welcomed and there was a desire for a 'green' looking development in contrast to the starkness of Grange I.
- 3.8 Most participants placed the Primary School and Local Centre at the centre of the development.

#### 3.9 **PUBLIC EXHIBITION**

The public exhibitions were held on February 18th and 19th.

- 3.10 The team had produced a number of boards covering aspects of the scheme and a worked up master plan had been produced since the design workshops. The vast majority of attendees were supportive of the proposals.
- 3.11 Most attendees were of the opinion that the site was a suitable location for such development and that the right balance of between housing, on site facilities and public open space had been struck.
- 3.12 As had been experienced at the design workshops there was a desire for access onto Back Lane.

#### 3.13 KETTERING BOROUGH COUNCIL

Representatives from Kettering Borough Council (KBC) were present at the town council meeting, the design workshops and exhibition.

3.14 A further meeting was held with KBC on 25th March. There were no consultee responses so far but the Planning Officers were able to give their own comments on the scheme as follows

#### 3.15 CONNECTIVITY

- Primary, secondary and tertiary routes to be identified
- More links into Back Lane Pedestrian, cycle or vehicular
- Cul-de-sacs along the southern, eastern and western boundaries to be changed to lower speed streets/ lanes
- More pedestrian/cycle links through central green • way
- Explore possibilities for vehicular/pedestrian/cycle links through to existing development. Include findings in the D & A
- Bus route: Explore whether this should continue into the north western area of the site
- Route into site leading to Local Centre has a number of turns, does this lead to a contrived route which will be difficult to use?

#### 3.16 **DESIGN**

- Additional 'key' buildings should be considered
- Too many parking courts
- Development needs design led well integrated car parking, likely to be a mix of on street and on plot parking with very few rear courtyards in line with 'Manual for Streets', 'Manual for Streets 2' and 'Car Parking What Works Where'
- Existing hedgerow should be retained (by north western swale)
- Consider key areas treatment

#### Involvement

#### 3.17 SCHOOL

There needs to be a drop off point

#### 3.18 Exhibition Boards:



#### Background

GRANGE

#### CJC Developments

The Grange received planning permission in 2001 and comprise a mix of housing, a country park and leisure centre. The leisure centre will include a skateboard and BMX track, and construction is due to begin in early March.

CJC Developments have now been working on the exciting plans for the Grange Phase II, which will provide a sustainable urban extension of 700 high quality homes, to the North The Grange.

#### Community Involvement

The proposals that you see today have been developed following consultation with Desborough Town Council, stakeholders and local residents. In January 2011 we hosted two design workshops that were attended by those residents living in closes provimity to the site

At these workshops, we asked local people to give us their input into the design and character of the new development, the environment and sustainability of the site, transport and access issues, and what facilities and services they would like to see rounded

We have looked to incorporate as many of these design issues as possible. Today is another opportunity for you to provide us with your

#### The Development Team



Page 28



#### 3.18 Exhibition Boards



Page 29



#### 3.18 Exhibition Boards



# Evaluation





## Evaluation



#### Opportunities & Constraints

4.1 The site has been assessed in terms of its opportunities and constraints. These have been identified and the plan above has been produced to illustrate them. These identified opportunities and constraints have been used in forming the illustrative master plan.

#### 4.2 Constraints

- Need to protect existing protected species on site
- Green Corridor to be maintained adjacent to open countryside
- On site surface water attenuation to be incorporated
- Existing trees and hedgerows to be retained as far as possible
- Differing orientation of dwellings to southern boundary to be considered
- Noise source at Albany Sheds requiring dwellings to be set back from boundary
- Visual impact of Great Bear Warehouse
- 4.3 Opportunities
  - Views out of site towards open countryside and country park
  - To provide much needed local facilities
  - To enhance the biodiversity of the site through the provision of green corridors
  - To provide much needed allotments
  - To extend the existing bus route
  - To provide a unique environment centred upon the swales

Page 32

Evaluation



4.4 Opportunities & Constraints Plan



# Design Concept & Principles



- 5.1 The concept plan shows how the scheme is centred on the hub that is formed by the local centre and school
- 5.2 The primary driver of the form of the master plan is the requirement for green corridors, the central swale and the large area taken up by the school and local centre.
- 5.3 The central hub (school/centre) is the focus of the development in conjunction with the swale to provide a distinctive environment at the centre of the site.
- 5.4 A central green spine through the site is formed by the swale, affording the opportunity for a unique, desirable setting for family housing.

- Design Concept
- 5.5 Higher density housing to the centre, lower density housing at the rural edge and adjacent existing development.
- 5.6

Storey heights will be higher towards the centre, lowering towards the development edge

5.7

Extension of bus route to provide a loop, serving the school and local centre

5.8

Site served via a hierarchy of routes with the main route through the site being a tree lined avenue delineating its importance.

5.9

Routes formed to create a series of perimeter blocks ensuring that all perimeter dwellings benefit from a view over open space and greenery.
#### 5.10 GENERAL

The site gives us the opportunity to deliver an exemplary scheme that preserves and enhances the biodiversity of the site. This can be achieved by implementing a Green Infrastructure programme which will ensure that the development sits comfortably within its landscape setting.

#### 5.11 **PRESERVATION OF CHARACTER**

It is important that the scheme enhances and reinforces the character of the area. There are two main influences on the character of the scheme. They are the existing Desborough town centre and the recently constructed Grange I. The proposed scheme will seek to be distinctive and yet retain elements from the vernacular architecture of Desborough centre whilst complementing Grange I.

#### 5.12 ENHANCEMENT OF CHARACTER

Grange II will respect the character of Grange I although given the total number of dwellings it will not seek to replicate it. With a combined total of around 1500 dwellings it would be desirable to see some differentiation between the two phases. The architectural style and materials will be a close match at the sites boundaries and may seek to subtly differentiate itself from Grange I as one moves further from the common boundary.

#### 5.13 SCALE AND ORIENTATION OF DEVELOPMENT

The storey heights will be complimentary to phase 1, with lower storey heights to the lower density site edges and taller storey heights at the centre. The common boundary will see the same storey heights as the existing site to aid cohesion between the phases.

5.14 Built form will orientate to address the public realm. At the common boundary dwellings will be set behind a landscaped buffer to allow breathing space and respect between the phases. The existing dwellings along the common boundary are of inconsistent orientation, so a set back here to allow for varying orientations is appropriate.

#### 5.15 LANDSCAPE SETTING – VIEWS IN AND OUT

The setting of the development has been carefully considered bearing in mind its boundaries with open countryside. The Green Infrastructure will see the retention of the existing boundary hedges with reinforcement where necessary in addition to 40-50m setbacks (along the northern and western boundaries) from the site boundary. This will ensure that the site does not impact heavily on the existing boundaries with open countryside.

- 5.16 There are no significant views into or out of the site to protect; the scheme design does afford significant new views across the country park and into the existing woodland. Impact will be reduced here by the selection of appropriately designed dwellings.
- 5.17 The buildings surrounding the site are generally low rise, with the exception of the Great Bear Warehouse. To preserve the established character of the skyline buildings are kept to generally low storey heights with most dwellings being 2 storey. 2.5 and 3 storey dwellings are used for emphasis or change in character.

#### 5.18 **DESIGNING TO REDUCE CRIME**

Crime will designed out of the scheme and the principles of Secured By Design will be adhered to. Where parking courts are present we will ensure that they only serve a maximum of six dwellings and that boundary treatments will allow for surveillance over the courts.

#### 5.19 DESIGNING TO ACCOMMODATE THE DISABLED

The scheme ensures that an eventual detailed scheme will be able to accommodate the required standards for disabled accesses to all dwellings, the school and local centre. Generally prams, pushchairs and wheelchairs will be accommodated by the use of dropped kerbs, appropriate gradients and ramps where necessary. Further consideration to this will be given at the detailed stage.

### 5.20 PROTECTING THE AMENITY OF EXISTING DWELLINGS

In terms of protecting the amenity of existing dwellings, the site only has existing residential development along one boundary. This is the common boundary with Grange I. A green buffer has been included in order to ensure that the privacy of the existing dwellings is not compromised. The distance from existing to proposed dwellings is between 22m and 30m.







6.1 Proposed Development Components







Local Centre



Infrastructure



Swales



Public Open Space/Amenity Space



Low Density Residential



Medium Density Residential



High Density Residential

#### 6.2 HOUSING

The AAP requires that Grange II contains a range of densities across the site between 35-55dph with an overall minimum density of 35dph. The AAP also states that where new and existing housing abut one another the new housing should be to a similar density to the existing.

- 6.3 The AAP also sets down how the density should vary across the site with lower density housing around the edges and particularly to the northern boundaries where there is a concentration of Green Infrastructure and open countryside.
- 6.4 The AAP suggests 30dph to the outer edges transitioning to 55dph at the centre around the School and Local Centre.
- 6.5 The scheme proposes up to 700 dwellings on 19.45ha net. This is in line with the aspirations of the Area Action Plan and results in a density of 35.9 dwellings per hectare. This provision is considered to be appropriate for the sites location and is similar to the provision on Grange I.
- 6.6 The dwelling mix is likely to made up of the following:
  - 20-25% 1/2 Bed dwellings
  - 35-40% 3 Bed dwellings
  - 30-35% 4 Bed dwellings
  - 5-15% 5 Bed dwellings
- 6.7 There is also an AAP and CSS requirement for 30% affordable housing to be secured by a S106 Agreement. This will be provided in groups of a maximum 25no dwellings to avoid high concentrations and to aid social

cohesion. The tenure split will be 60% rented and 40% shared ownership.

- 6.8 The development will provide a mix of housing that is primarily aimed at families and first time buyers. Again this is similar to the accommodation offered on Grange I.
- 6.9 The precise mix will be informed by the 2009 Rothwell and Desborough Housing Market Assessment or any subsequent Strategic Housing Market/Needs Assessment.

#### 6.10 **PRIMARY SCHOOL**

As required by the AAP a 2ha site has been provided for a primary school. The positioning of this has been given much consideration. It needs to be fairly central so that it can easily serve the most people, the bus route also needs to serve the school and it should not be too close to existing properties. Around half of the participants at the design workshops positioned the school at its proposed location.

#### 6.11 LOCAL CENTRE

There is a requirement in the AAP for a Local Centre. We have decided to position this close to the school to give the development a central hub.

- 6.12 The AAP outlines the content of the Local Centre as follows:
  - No more than a combined total of 500sqm (gross internal) of A1 (retail) or A5 (takeaway) uses
  - No more than three individual units of which no more than two units to be A5
  - Each individual unit will be no more than 200sqm

Page 40 Desborough Grange II

- 6.13 The AAP states that no other use classes will be accepted unless it can be demonstrated that they are needed to serve the day to day needs of the residents and do not compete with town centre.
- 6.14 In addition to the uses recommended in the AAP the following additional uses could be considered:
  - Use Class B1 (office)
  - Use Class C3 (residential)
  - Use Class D1 (nursery)
  - Use Class A4 (public house)

#### 6.15 LEISURE CENTRE

There is a new leisure centre being provided as part of the S106 obligations secured under the Grange I consent. In order to accommodate the additional pressure from Grange II the leisure centre will be extended as per the requirements in the AAP. This will include:

- Additional changing accommodation
- 3no glass backed ASB squash court with viewing area
- A multipurpose fitness room

#### 6.16 **OPEN SPACE**

The Kettering Open Space SPD provides a formula for working out the various constituent parts of the open space provision.

6.17 Using this we have established the following requirements, although the formula is complicated and these numbers have not been confirmed by KBC.

### Use & Amount

- 6.18 Parks and Gardens 1.32ha Natural and Semi Natural Greenspace – 5.63ha Outdoor Sports Facility – 15ha Amenity Greenspace – 3.53ha Allotments and Community Gardens – 1.76ha
- 6.19 Open Space requirement (exc Outdoor Sports) 12.27ha
- 6.20 The total open space provision is as follows:
  - Parks and Gardens Offset by 15ha country park adjacent to site
  - Natural and Semi Natural Greenspace (Swales, Green Corridors) 4.6ha
  - Outdoor Sports Facility Leisure Centre and pitches provided under Grange I S106
  - Amenity Greenspace (Bund, Green Buffers) 4.17ha
  - Provision for Children 4no LEAPs total 1600sqm plus associated open space surrounding LEAPs at Ironwood Avenue and adjacent school, total 0.63ha. Total provision for children 0.79ha
  - Allotments and Community Gardens 2.4ha provided in addition country park and increased Amenity greenspace
- 6.21 Total open space provision 11.91ha in addition to off site country park and leisure centre

#### 6.22 Green Space Use Plan



6.23 There are 3 distinct character areas at Grange II. The characters are appropriate to their location within the scheme.

The characters are:

- 1. Low Density Edge
- 2. Medium Density Transition
- 3. Higher Density Central Area

Higher Density Central Area
 Medium Density Transition
 Low Density Edge



#### 6.24 LOW DENSITY EDGE

Features defining Low Density Edge are:

- Located generally around the edge of the site laying adjacent to the Green Corridors and Green Buffers.
- Lower density housing made up of mainly detached and semi detached houses
- More amorphous informal shared surface road types
- Houses are 2 storey
- Informal landscape treatment with 3m setback
- Density in the region of 20-25dph





Low Density Edge





#### 6.25 MEDIUM DENSITY TRANSITION

Features defining Medium Density Transition are

- Located generally between the Low Density Edge and Higher Density Central Area this character zone forms a transition between the lower and higher density areas.
- Predominantly made up of semi detached dwellings with some terraced and detached
- Informal shared surface type roads and more formal conventional roads.
- More formal landscape treatment with 2m setback





Medium Density Transition







#### 6.26 HIGHER DENSITY CENTRAL AREA

Features defining Higher Density Central Area are:

- Located at the centre of the site forming a hub centred around the School and Local Centre. Also used at parcel centres for emphasis.
- Generally 2 -3 storey terraced dwellings
- Formal landscape treatment with minimal setbacks





High Density Central Area









#### 6.27 Road Hierarchy Plan





#### 6.28 MOVEMENT & CIRCULATION

There are two main access points from Grange I. One from Wood Avens Way at the western side of the site and one from Ironwood Avenue at the eastern side. An additional access is to be taken from Stoke Road via an existing field access. The three access points feed into the proposed road network.

- 6.29 We have used Manual for Streets to inform the street hierarchy as follows:
  - Main Boulevard
  - Streets
  - Secondary Streets
  - Mews
- 6.30 The Main Boulevard runs from the access at Ironwood Avenue through to the access on Stoke Road. From this the main streets and secondary streets are taken ensuring legibility of road types. The scale and layout of building and spaces is also influenced by the road type with more formal buildings on the boulevard giving way to less formal buildings on the secondary streets.

- 6.31 Grange I is served by a bus route and this has been extended into Grange II. The bus route enters the site at Ironwood Avenue and loops back to Wood Avens Way via the School and Local Centre where it joins back to established route.
- 6.32 The bus route has been positioned to allow easy to access from all dwellings. The aim is for all dwellings being located within 300m of the bus route.
- 6.33 Below: Proposed Bus Route through the site
- 6.34 Right: Existing bus route of the number 19 bus into Grange I.





- 6.35 There are two existing footpaths that cross the site. One crosses from a point on Back Lane to the west of the entrance to the West Lodge Farm Park and runs through to the existing footpath link on Grange II to the west of Ironwood Avenue. This footpath is to be diverted around the eastern edge of the site via the country park and will link to the existing footpath on Grange I.
- 6.36 The second existing footpath crosses the site from a point to the east of the Back Lane/Stoke Road junction and runs south west to the boundary with Magnetic Park. This will be incorporated into the open space on a slightly diverted route.
- 6.37 New pedestrian accesses will be formed alongside the main vehicular accesses at Wood Avens Way and Ironwood Avenue. A further footpath/cycle connection will be formed off the end of Rowan Close. This will connect into a new footpath/cycle way running through the green buffer and will also connect into the road network.
- 6.38 The proposed development site is surrounded by green infrastructure; to make the most of this asset a network of new footpath/cycle ways will enable access to these green areas. The intention is to create a circular route around the boundaries of the site for pedestrians and cyclists.



- 6.39 Most dwellings will be provided with a minimum of two parking spaces given that the nature of the proposed dwellings is family housing. In order to be able to deliver varied streetscenes a variety of parking solutions has been proposed.
  - Garages on plot Most dwellings will feature a garage with driveway parking
  - Parking on plot Parking space to the side or front of the dwelling
  - Secure Courtyard Parking Parking space and/or garage within a parking court
  - Coach House Parking Parking space and garage underneath a coach house within a courtyard
- 6.40 The type of parking is commensurate with the character areas of the scheme. For example the low density edge would feature on plot garage parking whilst the central core is likely to feature more parking courtyards.
- 6.41 There are a number of parking courtyards within the scheme. Whilst these are generally not always the preferred solution they offer the opportunity to remove cars from the street scene and are therefore important in terms of adding variety to the street scene.
- 6.42 For example we wanted the area around the swale to be uncluttered and free from cars so that the setting of the buildings is not compromised. In order to achieve this we have provided parking courts behind those units, removing cars from the street scene. For example we wanted the area around the swale to be uncluttered and free from cars so that the setting of the buildings is not compromised. In order to achieve this we have provided parking courts behind those units, removing cars from the street scene.



Garage On Plot



Parking On Plot



Secure Courtyard Parking



Coach House Parking





- 6.43 The scheme is surrounded on all sides except the southern boundary by open space. To maximise this advantage the scheme has been designed as a series of outward facing blocks which face out towards the open space.
- 6.44 The 'building blocks' of the site are the positioning of the school and local centre which need to be together, to form a hub the bus route which needs to serve them and the associated green infrastructure and swale for drainage.
- 6.45 With these in place the blocks can be structured to form a coherent layout.
- 6.46 Given the requirement for a Primary School and Local Centre it seemed logical and desirable that these were positioned close to the existing development and fairly central to Grange I and II combined in order to conveniently serve the maximum amount of people.
- 6.47 The bus route was then positioned as a loop from Wood Avens Way past the School and Local Centre and back to Ironwood Avenue. As the main feeder road, this then needed to be extended to the additional access onto Stoke Road.
- 6.48 The swale was then added running from the high point of the site down towards the country park providing an open green area through the centre of the site and providing breathing space between the school and dwellings as well as a vista through the site.
- 6.49 At this point the basic structure to the layout was set and the secondary roads and individual dwellings were added to form the completed layout.

- 6.50 Key spaces and nodes are marked by the use of paved squares which will generally feature taller buildings, finer detailing, street furniture and street trees.
- 6.51 The key route through the site is marked by a tree lined boulevard which runs from Ironwood Avenue, past the School through to the Stoke Road access.



6.52 The Master Plan





Stage 1 Local Centre & School are positioned



Stage 2 Bus route & main road is added



Stage 3 Swale is added



Stage 4 Secondary roads & individual dwellings are added.





Stage 5 Squares added & key buildings identified.

Stage 6 Key route through the site is identified.

Page 54



- 6.53 The storey heights of the proposed dwellings will vary according to their position on the site and their function in the townscape. Generally the storey heights will range from 2 to 3 storeys. The affordable element may also include a number of bungalows.
- 6.54 Dwellings to the central core will be generally taller to define the central area, moving out towards the low density edge sees the building heights reduce to 2 storey with a transitional area between varying from 2 2.5 storeys.
- 6.55 The southern common boundary with Grange I features 2 storey dwellings which have been proposed here in order to not dominate the existing dwellings along this boundary.



### Density & Design

- 6.56 We have positioned the higher density housing around the central core where more people will be able to benefit form the facilities offered by the local centre and school. The bus route also runs through the central core and will therefore be able to serve the maximum amount of passengers. This is in line with the requirements of the AAP.
- 6.57 We have borne in mind the position of the site on the edge of Desborough which is adjacent to open countryside, accordingly we have ensured that the scheme is not too urban which is confirmed by the density of 35.9 dwellings per hectare which is in line with the minimum 35 dwellings per hectare mentioned in the AAP.
- 6.58 Generally the edges of the scheme are low density and feature detached housing which is appropriate to the open nature of the green infrastructure and to the existing dwellings which are present at the sites boundaries
- 6.59 The various densities across the site also serve to reinforce the nature of the character areas.
- 6.60 Key Buildings are positioned to terminate vistas and to add interest at node points coupled with finer architectural and streetscape detailing. They may also feature a raised storey height. These aid legibility within the development and assist in navigating ones way through the site. They also are distinguished by additional detailing such as enhanced bays and door ways.
- 6.61 Key Areas have upgraded surface, boundary treatments and landscaping with finer architectural detailing.





Key Areas Plan





Page 56



- 6.62 The landscape design has been considered as an integral element of the scheme. The landscape and ecology consultants were considered at an early stage and the necessary green infrastructure was incorporated.
- 6.63 A number of Green ways will be created around the site to create new habitats and enhance existing ones. The most significant of these is perhaps the northern green way which will be between 25 and 40m wide and will incorporate existing hedging along Back Lane/Pipewell Road. In addition to retaining the existing hedging additional structural planting will be incorporated to reinforce existing hedging where required. The northern green way will also feature grassland which will be managed for wildlife
- 6.64 The 30m wide central green way divides the Grange II site and is centred on an existing hedge and an area of scrub and trees: these will be retained and reinforced with an additional 10m of native woodland planting. Protective species are present in the central greenery and have been accommodated.
- 6.65 The western green way is formed from the existing bund which will feature further native woodland planting with grassland managed for wildlife.
- 6.66 The southern green way is a 10-15m wide buffer between the existing Grange I and Grange II to allow breathing space between the phases. This will feature 5m of native woodland planting.
- 6.67 The central swale is formal in character where it is close to the development centre and becomes more natural towards the low density edge. This will be planted with wet land plant species.

#### 6.68 ALLOTMENTS

An areas of allotments is proposed within the north western area of the site. These will be offered for rent to local people by Kettering Borough Council.

6.69 The existing site provides a good starting point for creating an ecologically diverse scheme. As outlined in the ES in more detail the existing habitats will be retained and enhanced through reinforcement with additional planting. All new planting will be native and this will further encourage the development of wildlife habitats.

### Appearance

- 6.70 The development will form an extension of Grange I, therefore in order to ensure a smooth transition between the phases, the architectural style and detailing at the southern end of the site will be similar to that found on Grange I. Looking slightly further afield, Desborough centre also offers a palette of Victorian details and these are equally valid in forming an architectural language for the site.
- 6.71 In order for the wider site to set itself a little more apart from Grange I, the proposed dwellings to the centre and north of the site could reflect slightly fresher detailing, influenced by the Victorian style.
- 6.72 Materials will be representative of those found in Desborough centre and Grange I with red bricks, grey imitation slate or brown pan tile roofs, stone heads and cills, and white joinery. This would generally apply across the site with more rural detailing being appropriate around the development edges.
- 6.73 Surfacing to roads will generally be in Tarmac with block paving used to reinforce character areas or add emphasis.
- 6.74 As this is an Outline Application, design codes have not been prepared. Kettering Borough Council have confirmed that these can be dealt with at the Reserved Matters stage.
- 6.75 Right: Examples of housing at Grange I.

















- 6.77 The developer will also be promoting an adjacent site at Magnetic Park as a Renewable Energy Centre. It is envisaged that combined heat and power for the site will be produced there via a variety of means which could include Energy from Waste and solar. The Energy Centre will provide power 24 hours a day which is not always appropriate for housing sites as there is low demand over night. In the case of Grange II, the excess power generated over night will be used by the commercial buildings at Magnetic Park including the Great Bear warehouse.
- 6.78 Additionally, the developer is also keen to promote a system called Envac. Envac is a sustainable waste collection system transporting waste through underground pipes to a collection building from where the waste is collected. Using Envac means that there will be no requirement for refuse vehicles to visit the site, therefore reducing carbon emissions. In the UK the system has been used at a new residential development at Wembley, adjacent to the new stadium. Further afield it has been retro fitted into Barcelona and has been used in cities as diverse as Stockholm and Dubai.
- 6.79 The way Envac works is as follows:

Users throw their waste into readily accessible inlets which can either be inside the dwelling or in the street. Here, the bags are stored temporarily above a closed storage valve. All full inlets are then emptied at regular intervals. Automatic emptying is governed by a control Sustainability

system in a collection station building on the periphery of the area which is linked to the inlets via a system of underground pipes.

#### 1) Emptying.

When the control system senses it is time to empty the inlets, a number of fans are started which build up a vacuum in the pipe system. First, a supply air valve is opened in order to allow transport air to enter the pipe system. Then the storage valves beneath the inlets are opened one by one. The waste bags fall down into the horizontal pipe system and are sucked away to the terminal.

#### 2) Collection station.

Waste at the collection station is sucked through a cyclone, where it is separated from the transport air. It then falls down into a compressor where it is compressed and then fed into a sealed container. The transport air is released via a flue after having passed through dust and cleaning filters and silencers.

#### **INLET DESIGN**

The inlets are available in a number of designs. They can be placed on every floor indoors, or in the doorway at street level, or even outdoors. They can be wall-mounted or freestanding, both indoors and out.

Further Envac information can be found in the Appendix.

Page 60 Desborough Grange II

#### 6.80 OTHER SUSTAINABILITY MEASURES

The developer is also keen to promote electric cars. It is widely acknowledged that there a not enough electric car charging points outside major cities. Therefore it is proposed to include charging points at the Local Centre and allotments.

- 6.81 Kettering Borough Council have an Energy Policy whereby 10% of all energy required must be produced from renewable sources on site. The Energy Centre would more than achieve this requirement but would be the subject of a separate application.
- 6.82 If the Energy Centre was to be refused then the 10% renewable energy would be produced by solar panels providing solar hot water heating.



- 6.83 The submitted scheme has evolved from the initial development framework. The development framework was produced having established the sites opportunities/ constraints and requirements of the AAP.
- 6.84 It was primarily produced to get a feel for how the site could be laid out and for the design team to comment upon prior to producing a more detailed layout
- 6.85 The layout was circulated to the design team to comment upon.
- 6.86 Comments were fed back. A selection of the comments are listed below.
  - The Green Infrastructure needed to be much more significant
  - The balancing pond could be positioned off site
  - The team generally felt that the school and local centre should be more central to the Grange as a whole rather then just central to Grange II
  - A significant set back would be required at the Stoke Road frontage in order to mitigate against noise generated off site by Albany sheds. It was also advised that the bund would need to be extended to protect against noise from the vacant commercial plot on Magnetic Park.
  - The developer advised that Rowan Close could not be used for vehicular access
  - The school site was found to be too small whilst the local centre site was too large
  - Greater setbacks were required against the countryside edge
  - The bus route should form a loop from Ironwood Avenue to Wood Avens Way.

- 6.87 Following these comments the design workshops were held. These proved to be very informative and comments were taken on board relating to preferred accesses, school, local centre, open space and allotment positions.
- 6.88 The layout was then redesigned to produce a much more detailed design taking into account comments received from the design team and design workshops. The public exhibition was held and the revised layout exhibited.
- 6.89 Following the public exhibition a meeting was held with Kettering Borough Council when planning officers gave their initial feedback to the layout as follows:
  - Primary, secondary and tertiary routes to be identified
  - More links into Back Lane Pedestrian, cycle or vehicular
  - Cul-de-sacs along the southern, eastern and western boundaries to be changed to lower speed streets/ lanes
  - More pedestrian/cycle links through central greenway
  - Explore possibilities for vehicular/pedestrian/cycle links through to existing development. Include findings in the D & A
  - Bus route: Explore whether this should continue into the north western area of the site
  - Route into site leading to Local Centre has a number of turns, does this lead to a contrived route which will be difficult to use?
  - Additional 'key' buildings should be considered
  - Too many parking courts
  - Development needs design led well integrated car parking, likely to be a mix of on street and on plot parking with very few rear courtyards in line with

'Manual for Streets', 'Manual for Streets 2' and 'Car Parking What Works Where'

- Existing hedgerow should be retained (by north western swale)
- Consider key areas treatment
- There needs to be a drop off point for the school
- 6.90 Following this feedback the master plan was re-looked at and the following changes made:
  - Primary, secondary and tertiary routes were identified in the Design and Access Statement
  - A footpath/cycle link between the two parcels was added through the central greenway
  - An additional footpath/cycle link from Rowan Close
    was added
  - The option has been given for the bus route to continue to the north west of the site, see proposed bus route plan page 16
  - The route leading to the local centre and school now has less turns
  - The key buildings have been reconsidered and there are now more key areas where the whole environment is considered such as surface treatments, fenestration, boundary treatments and landscaping are considered. Key Buildings are also present to reinforce the key areas
  - The number of parking courts has been reduced following planner and police advice. There are still some parking courts present to enable variation of the street scene but these are small and will serve only 6 dwellings.
  - The area around the northern swale has been redesigned to form a new key area and to retain the existing hedge
  - Drop off points have been added around the school

6.91 Additionally the landscapers required a greater set back to the north eastern boundary to allow for separation between the development and existing woodland and greater screening to the exposed edge. The Drainage Engineer also requested space here to accommodate sewers.

**Design Evolution** 

6.92 Following these comments the layout was further revised to give the submitted layout.

#### 6.93 Framework Development Plan



Page 64

# Implementation



Page 65

### Implementation

- 7.1 This planning application is for Outline Consent for the development of 700 dwellings. Once the Outline Consent has been granted, the site will be put to the market and will be sold to developers in phases of 100-200 units.
- 7.2 The Reserved Matters applications will be submitted once the parcels have been sold. The remaining Matters will be scale, layout, appearance and landscaping. At this point design codes will also be submitted in order to ensure a consistent scheme and compatibility between the parcels.

7.3	Phase	Description
	1	112 dwellings around the 2 access points from Grange I
	2	106 Dwellings. Entrance features and squares established
	3	119 Dwellings. Bus route operable
	4	87 Dwellings. School / local centre now contained
	5	424 Dwellings. School and Local centre triggered after 4 previous phases.
	6	109 Dwellings. Southern parcel now complete
	7	172 Dwellings. Stand alone parcel to north west area of site

7.4 The phasing plan is below:



# Summary



### Summary



- 8.1 This design and access statement has been prepared in support of the submitted outline planning application for the construction of up to 700 dwellings at Grange II Desborough.
- 8.2 The statement sets out the vision for the development and assess the sites physical and socioeconomic contexts, it outlines the opportunities and constraints and proposes a master plan that responds to them. The master plan is fully supported by an explanation of the design principles and design concept.
- 8.3 The statement also sets out how the existing wildlife habitats will be retained, enhanced and incorporated into the site and the appearance of the dwellings will relate to the local vernacular and new housing at Grange I.
- 8.4 It can be shown that the access proposals have been fully considered and selected to ensure that the proposed development is seen as an extension of Grange I and Desborough. The accesses ensure that Grange II adequately serves pedestrians, cyclists and vehicles and also makes provision for public transport.
- 8.5 Grange II will benefit from the future Energy from Waste plant which will be the subject of a separate planning application. If this is forthcoming then all dwellings will receive combined heat and power from a sustainable source making Grange II one of the most sustainable schemes in the county.
- 8.6 The proposal therefore meets the criteria and aspirations set down in 'The Vision' at the beginning of the Design and Access Statement.

Page 68



Page 69



### Sustainability Statement

This statement has been prepared to accompany the outline planning application that is being submitted in support of the development of a residential scheme comprising 700 units.

#### POLICY BACKGROUND

The North Northants Core Spatial Strategy, Policies 13 and 14 cover sustainability and Kettering Borough Council has a Supplementary Planning Document that covers sustainability which was adopted February 2009.

The SPD requires that the checklist within the document is followed and referred to in any statement.

This Statement will set out how the scheme responds to the questions that are set in the SPD.

#### SPD RESPONSE

#### Character

1.1 Does the scheme feel like a place with a distinctive character?

Whilst the application is not for a detailed scheme, the outline sets the parameter for the eventual reserved matters applications.

The layout is heavily influenced by the requirement for Green Infrastructure and has resulted in a number of 'greenway' being proposed in and around the site. The greenways are generally located around existing features such as mature hedges and help to form a network of green spaces around the site.

In addition swales will be created. The first swale is in

the north west of the site and this will be formed around an existing water body.

The materials would be sympathetic to the surroundings and would lend distinctiveness to the scheme setting it apart in a positive way from its surroundings.

These factors all contribute to creating a scheme with a distinctive character

1.2 Do the buildings exhibit architectural quality?

Desborough features a variety of building styles from the traditional shoe workers terraced houses of the 19th Century to the modern day interpretations of them along with semi detached housing from the 1920s and Local Authority housing built after the war.

The detail of the houses will be reserved for later approval but any reserved matters applications are likely to feature housing similar to that on Grange I. To ensure distinctiveness it would be desirable for Grange II to be sympathetic to Grange I but subtly different from it.

Variations in roof tile types and colours will be used to break up the roofs and add interest.

The dwellings would draw their features from buildings found within the general Desborough locality with rhythms generated by window and door openings being generally reflective of those found locally.

The detail palette could comprises 4 course falling arches or stone heads over window openings, snapped brick cills or stone cills, cottage or sash style windows with glazing bars, dentil brick course to eaves and verge. These have been distilled from local examples



### Sustainability Statement

1.3 Does the scheme exploit existing buildings, landscape or topography?

In terms of landscape and topography the site is generally flat with approx. 5m fall over 500m

There are retained hedges to the northern, eastern and western boundaries as well as across the site. These will be retained and reinforced where necessary to become green corridors. The form of the development is very much influenced by the existing landscape.

There are no existing buildings on site to exploit.

1.4 Is the design specific to the scheme?

The design is very much specific to the scheme and responds to opportunities and constraints presented.

#### Constraints

- Need to protect existing protected species on site
- Green Corridor to be maintained adjacent to open countryside
- On site surface water attenuation to be incorporated
- Existing trees and hedgerows to be retained as far as possible
- Differing orientation of dwellings to southern boundary to be considered
- Noise source at Albany Sheds requiring dwellings to be set back from boundary
- Visual impact of Great Bear Warehouse

#### Opportunities

• Views out of site towards open countryside and

country park

- To provide much need local facilities
- To enhance the biodiversity of the site through the provision of green corridors
- To provide much needed allotments
- To extend the existing bus route

The design of the scheme was developed in response to the constraints and opportunities identified above.

The scheme is surrounded on all sides except the southern boundary by open space. To maximise this advantage the scheme has been designed as a series of outward facing blocks which face out towards the open space.

The 'building blocks' of the site are the positioning of the school and local centre which need to be together, the bus route which needs to serve them and the associated green infrastructure and swale for drainage.

With these in place the blocks can be structured to form a coherent layout.

Given the requirement for a Primary School and Local Centre it seemed logical and desirable that these were positioned close to the existing development and fairly central to Grange I and II combined in order to conveniently serve the maximum amount of people.

The bus route was then positioned as a loop from Wood Avens Way past the School and Local Centre and back to Ironwood Avenue. As the main feeder road, this then needed to be extended to the additional access onto Stoke Road.

The swale was then added running from the high point of the site down towards the country park providing an open

Desborough Grange II

Page 71



green area through the centre of the site and providing breathing space between the school and dwellings as well as a vista through the site.

At this point the basic structure to the layout was set and the secondary roads and individual dwellings were added to form the completed layout.

Key spaces and nodes are marked by the use of paved squares which will generally feature taller buildings, finer detailing, street furniture and street trees.

The key route through the site is marked by a tree lined boulevard which runs from Ironwood Avenue, past the School through to the Stoke Road access

#### **Continuity and Enclosure**

2.1 Are streets defined by a coherent and well structured layout?

As described the layout responds to the constraints that are present. These constraints do however allow for a well structured and coherent layout to be formed around them.

We have used Manual for Streets to inform the street hierarchy as follows:

- Main Boulevard
- Streets
- Secondary Streets
- Mews

The main boulevard gives the layout a strong back bone on which to build the layout. The Boulevard runs from the access at Ironwood Avenue through to the access on Stoke Road. From this the main streets and secondary streets are taken ensuring legibility of road types. The scale and layout of building and spaces is also influenced by the road type with more formal buildings on the boulevard giving way to less formal buildings on the secondary streets.

2.2 Are public spaces and pedestrian routes overlooked and do they feel safe?

All dwellings offer surveillance over public space with coherent active frontages formed by their alignment with the access road. The private drives are also well overlooked by active frontage.

It has been ensured that there are no unsurveilled spaces in which undesirables can lurk.

Good surveillance is also present at the site entrances where a number of dwellings can see the entrance from the access road giving residents an overview of comings and goings.

There are a number of footpaths and cycle ways running around the site edge and through the site. The layout has been designed as a series of outward facing perimeter blocks. This ensures that all footpaths are well surveilled and thus safe.

As a result of these features it can be said that the scheme would feel a safe and secure place in which to live.

2.3 Are private spaces well designed with respect to their intended user?

Generally the scheme will be occupied by small families.

Page 72



Garden sizes are well sized and are adequate for family use. The affordable units will feature defined areas for bin storage, sheds for cycle storage and rotary driers.

Private space is present to building frontages with hedging and/or railings defining the boundary between public and private spaces.

#### **Ease of Movement**

3.1 Does the scheme integrate with existing roads, paths and the surrounding development?

Pedestrian and vehicular linkages are provided Stoke Road, Wood Avens Way and Ironwood Avenue. Footpath/ cycle linkages are provided to Back Lane, and Rowan Close.

This integrates the site into the local road and footpath network.

3.2 Does the building layout take priority over the roads and car parking, so that highways do not dominate?

The site is split into number of perimeter blocks with the road threaded between them. Using this approach a characterful layout has been generated that puts the position of the dwellings first.

Parking is well related to dwellings served, generally being located adjacent to the dwelling or within small courts.

3.3 Are the streets pedestrian, cycle and vehicle friendly?

The access roads can accommodate a range of vehicle types including large delivery, emergency and refuse

vehicles. At the higher hierarchy road pedestrians benefit from separate footpaths on both sides of the road, there are also shared surface roads where pedestrians share space with vehicles in a traffic calmed environment.

There is also bus access from Ironwood Avenue and Wood Avens Way forming a loop through the centre of the site. These sections of the site roads will be designed as bus routes.

3.4 Does the development have easy access to public transport?

Desborough is served by two regular Stagecoach bus services (nos 18 and 19) which provide a service to Kettering, Rothwell and Market Harborough. There will be bus stops positioned along the bus route at convenient spacings. All dwellings will be within 300m of the bus route. This all contributes to there having to be less reliance on the car and encourages modal shift.

3.5 Are transportation routes resilient to changing environmental conditions?

The site roads are not within a flood risk area and so will not be liable to the increased risk of flooding due to climate change.

The on site surface water drainage will drain to a swale network within the site before entering a further swale system running across the country park. The swales will eventually drain to the attenuation pond that was constructed for phase 1 before entering the public surface water sewer. The attenuation pond will be enlarged to accommodate the additional run off created by Grange II.

Page 73 Desborough Grange II



#### Legibility

4.1 Do buildings and layout make it easy to find your way around?

The road layout has been designed around a hierarchy of routes so that one can intuitively find ones way around the development. For example the main boulevard runs from the south east to the north west of the site. From this all parts of the site can be reached from streets, secondary streets and mews.

The site will feature key buildings and spaces at important locations such as node points, around the school and local centre and the swale. These all help to aid navigation around the site, creating distinctive areas.

### Adaptability, Resilience and Environmental Sustainability

5.1 Do internal spaces and a layout allow for adaptation, conversion or extension?

The affordable housing that is required will most likely comply with Lifetime Homes. As such these dwellings will be able to be adapted to the occupiers needs as they change. Under Lifetime Homes provision has to be made for all requirements listed below:

- All homes have a 1200mm level platform at the front doorway or an alternative level access doorway, if not possible.
- Level access thresholds will be provided into the designated primary entrance to all dwellings.
- The path access to the main entrance complies with Access Standard and the gradient will be kept to a minimum or gently sloped. Steps will be avoided wherever possible. In the case of an unavoidable

situation, steps of maximum 150mm rise will be provided.

- Path access will be provided around each dwelling to enable easy access to all doors and windows on the ground floor.
- A covered porch, lean-to or door surround canopy will be provided to the front door.
- The width of doorways and hallways comply with the current disability building regulation standard.
- Parking bays have been arranged to incorporate generous bay widths and within easy reach or adjacent to the primary entrance. Internal design has been considered for disability or wheelchair manoeuvrability. All dwellings have a ground floor cloakroom of appropriate size.
- The primary lounge areas are large enough to accommodate a bed space, if required.
- Partitions are designed to be non-structural or demountable to enable the dwellings to adapt if required, yet strong enough for the fixing of adaptations such as handrails.
- The trussed rafter roof designs will allow for attachments to be made to the ceiling, with an appropriate fixing solution.
- Switches, sockets and controls are positioned at a height to comply with disability standard and are within the specified reach zone.
- Stairs lifts can be added to the dwellings.
- Windows and doors are simple to operate and located within an easy reach position.
- Main living rooms have been retained on the ground floor of the dwelling.
- The private dwellings are likely to feature metal stud partitions which can be de mounted and reconstructed if an occupiers needs changed.



5.2 Has the scheme made use of advances in construction or technology that enhance its performance, quality or attractiveness?

The detail of how the scheme will be constructed will be made at reserved matters stage. It is likely that the dwellings will be constructed from brick and block construction which combined with energy efficiency measures and renewable energy (solar hot water heating) ensures compliance with the latest Building Regulations. The affordable housing will also employ further measures in order to meet Code 3 or 4 of the code for sustainable homes.

5.3 Does the scheme incorporate on-site renewable energy generation or a decentralised energy supply and incorporate energy conservation and energy efficient design measure?

The developer will also be promoting an adjacent site at Magnetic Park as a Renewable Energy Centre. It is envisaged that combined heat and power for the site will be produced there via a variety of means which could include Energy from Waste and solar. The Energy Centre will provide power 24 hours a day which is not always appropriate for housing sites as there is low demand over night. In the case of Grange II, the excess power generated over night will be used by the commercial buildings at Magnetic Park including the Great Bear warehouse.

Additionally, the developer is also keen to promote a system called Envac. Envac is a sustainable waste collection system transporting waste through underground pipes to a collection building from where the waste is collected. Using Envac means that there will be no requirement for refuse vehicles to visit the site, therefore reducing carbon emissions. In the UK the system has been used at a new residential development at Wembley, adjacent to the new stadium. Further afield it has been retro fitted into Barcelona and has been used in cities as diverse as Stockholm and Dubai

The developer is also keen to promote electric cars. It is widely acknowledged that there a not enough electric car charging points outside major cities. Therefore it is proposed to include charging points at the Local Centre and allotments.

Kettering Borough Council have an Energy Policy whereby 10% of all energy required must be produced from renewable sources on site. The Energy Centre would more than achieve this requirement but would be the subject of a separate application.

If the Energy Centre was to be refused then the 10% renewable energy would be produced by solar panels providing solar hot water heating

As this is an affordable scheme it has been designed to comply with Code 3 of the CSH, as such there will be a degree of renewable energy included which will be in the form of solar hot water heating. This will also ensure compliance with Policy 14 of the NNJPU CSS which requires 10% of the sites energy needs to be generated on site from renewable sources.

5.4 Does the scheme have appropriate water conservation measures?

The dwellings will make use of low water usage appliances and sanitary fittings to ensure that the requirement of 105 litres per person per day is met.

Water butts will be provided to each dwelling to

### Sustainability Statement

provide additional water resources for garden care and maintenance.

5.5 *Does the scheme have appropriate flood risk management strategies?* 

The surface water drainage is first discharged to the swales from where it will be discharged to the attenuation pond that was constructed for Grange I. This will need to be enlarged in order to accommodate the additional run off. The surface water will then be discharged into the surface water system at green field run off rates as a maximum.

5.6 Does the scheme promote waste management and recycling?

As stated above, the developer is keen to promote recycling via the envac system and the potential energy from waste facility off site. This will be subject to a separate planning application.

Should the energy from waste facility be refused planning consent then the scheme will promote waste management and recycling through more conventional means as follows

The affordable units will feature dedicated internal recycling storage within kitchens or cupboards as required by HQI. Recyclable waste will be sorted in the appropriate recycling boxes by the householder to enable efficient collection and sorting.

Non recyclable waste will be stored externally on dedicated bin standing positions.

As the scheme is served by an adoptable road, refuse

collections will be able to be made from kerb side or via bin collection points where required.

A Site Waste Management Plan (SWMP) will be produced for this site. It is a legal requirement that a SWMP is provided for all projects over the value of £300,000. The SWMP will enable a reduction in the amount of discarded construction waste.

5.7 Does the scheme incorporate green infrastructure and ecological considerations?

The landscape design has been considered as an integral element of the scheme. The landscape and ecology consultants were considered at an early stage and the necessary green infrastructure was incorporated.

A number of Greenways will be created around the site to create new habitats and enhance existing ones. The most significant of these is perhaps the northern greenway which will be between 25 and 40m wide and will incorporate existing hedging along Back Lane/ Pipewell Road. In addition to retaining the existing hedging additional structural planting will incorporated to reinforce existing hedging where required. The northern greenway will also feature grassland which will be managed for wildlife

The 30m wide central greenway divides the Grange II site and is centred on an existing hedge and an area of scrub and trees; these will be retained and reinforced with an additional 10m of native woodland planting.

The western greenway is formed from the existing bund which will feature further native woodland planting with grassland managed for wildlife.



The southern greenway is a 10-15m wide buffer between the existing Grange I and Grange II to allow breathing space between the phases. This will feature 5m of native woodland planting.

The central swale is formal in character where it is close to the development centre and becomes more natural towards the low density edge. This will be planted with wet land plant species.

An area of allotments is proposed within the north western area of the site. These will be offered for rent to local people by Kettering Borough Council

The existing site provides a good starting point for creating an ecologically diverse scheme. As outlined in the ES in more detail the existing habitats will be retained and enhanced through reinforcement with additional planting. All new planting will be native and this will further encourage the development of wildlife habitats.

5.8 Does the scheme make use of recycled land and/or materials?

The site has previously been worked as quarry from the 1920s through the 1960s.

The developers of the individual land parcels may well use recycled material in the construction of the dwellings. For example recycled aggregate could be used.

5.9 Are buildings orientated and designed to maximise levels of solar gain, daylight and natural ventilation?

Most dwellings have front or rear elevations that face south, this will allow good performance from the solar panels and will also maximise solar gain and day lighting.

Window sizes are subject to achieving the correct daylight factor under Code 3 of CSH.

5.10 Does the development work with the natural features of the site?

The existing hedgerows will be retained and reinforced where necessary. A green infrastructure scheme will be created around these.

Physically, the scheme is devoid of any actual landscape features

#### Diversity

6.1 Does the development contain an appropriate type and mix of uses for its location?

The site is close to Desborough centre and there are employment facilities close to the site. It is also well served by transport links. There is an area of housing adjacent to the site. It is therefore considered that a residential use is appropriate for the site.

In addition to housing the site will be providing a primary school and local centre.

6.2 Does the development provide (or is it close to) community facilities, such as a school, park, play areas, shops, pubs or cafes.

Desborough has a selection of shops whilst more extensive facilities such as a larger range of shops, banks, cafes and pubs are located a short drive or bus ride from the site in Kettering or Market Harborough.

Page 77 Desborough Grange II



The facilities in Desborough can all be accessed without the need for travel by car and can easily be reached by foot or cycle.

*Is there a tenure mix which reflects the needs of the local community?* 

There will be a provision of 30% affordable housing as require by the CSS and AAP. The exact mix will be decided at reserved matters stage.

*Is there a mix of accommodation that reflects the needsand aspirations of the local community?* 

The development will provide a range of accommodation from 1 bedroom units through to 5 bedroom units. There will be terraced, semi detached and detached units.

*Is the density of the built form appropriate for its location?* 

The scheme proposes 700 dwellings at a density of 35.9dph. The AAP requires a minimum of 35dph. The density is therefore compliant with this requirement.

Given the location of the site adjacent to an existing housing development, its use is appropriate to its location

#### **Quality of the Public Realm**

7.1 Is car parking well integrated so it supports the street scene?

Car parking is either tucked away in small courts or adjacent to the dwelling served.

7.2 Is public space well designed and does it have suitable management arrangements in place

The public open space will be offered for adoption.

7.3 Does the public realm contribute to the environmental sustainability of the scheme?

By virtue of the sites existing hedgerows the Green Infrastructure strategy will see a real contribution to environmental sustainability.

The drainage strategy for the scheme relies on the swales and balancing pond to provide the surface water attenuation in order to reduce run off to Greenfield levels in line with PPS 25

Grange II will be fully served by the utilities network. It is proposed that Grange II will provide dwellings with connections to gas, electricity, water and telecommunications. Additionally dwellings will connect to foul and surface water drainage.

The surface water drainage will drain to swales and an attenuation pond before being released into the wider network. The foul water will drain to the existing piped system.

When Grange I was designed it was ensured that the utilities were designed with sufficient capacity to serve both Grange I and Grange II.

If it is subsequently found that there is insufficient capacity then the appropriate upgrading measures will be taken.

As the proposed development avoids damage and disturbance to existing trees and hedges it follows that installation of services will avoid the same.

As the site has been quarried in the past there is no risk that installing services to the site will result in disturbance to any archaeological remains.

In summary, it can be demonstrated that Grange II can be served by the required utilities with no disturbance to existing trees or archaeology





t: 01604 500040 e: info@resdevltd.co.uk Unit 5, Twigden Barns, Creaton, f: 01604 505942 w: www.resdevltd.co.uk Northampton, NN6 8NN