

Burnbank Farm
Outline Application For New Dwellings
Sustainability, Design and Access Statement

Ref	Item	Comments
a)	Conserves and enhances the special qualities of the National Park. (The special qualities are identified as: a landscape rich in biodiversity and geodiversity; a rich cultural heritage; a true sense of tranquillity; a distinctive landscape character)	
	Consultation and scoping studies - Demonstrate that you have carried out the appropriate consultation with the Authority and relevant nature conservation organisations, as to the presence of important species and habitats on site.	A pre application enquiry has been made with Northumberland National Park. Advice has been given on the requirement for an ecological survey and guidance also sought on the suitability of the Consultant to carry out the survey. This survey was initially carried out and this has also now been upgraded and more information included with the survey. Further discussions have taken place with the LPA and the application has been revised to take on board various responses.
	Detailed surveys and impact assessments - Demonstrate that you have detailed surveys and impact assessments, if required following consultation/scoping above.	A survey has been carried out and this accompanies the application along with the updated survey. The report setting out the findings of the survey make it clear that it is unlikely that the development of the field would have any negative impact upon protected species, or ecology in general.
	Design measures that encourage Biodiversity and Geodiversity - List the design features that you will incorporate in your development in order to encourage biodiversity, for example: green roofs. Outline how the development may provide opportunities for others to enjoy Biological and Geological diversity.	The proposal will use traditional materials and will involve landscape planting of native species where required. The addition of new housing for families in Greenhaugh will allow others to live in the park and enjoy the many benefits which the National Park has. The proposal also now includes mitigation to include planting of native species hedges on site to the relevant boundaries. This will provide additional habitat and also replace small sections of hedge lost where new accesses are provided.
	Rich cultural heritage - Explain how the proposed development will conserve and enhance sites such as Scheduled Ancient Monuments, Listed Buildings and Conservation Areas.	The proposal will not impact upon cultural heritage. It will support the existing settlement of Greenhaugh through the creation of new dwellings which will support the existing infrastructure in the village which is identified as a sustainable settlement in the National Park LDF.
	True sense of tranquillity - Explain how the proposed development will conserve and enhance the tranquillity of the park (for example freedom from noise and visual disturbance).	There will be no real or perceived loss of tranquillity caused by this development. The proposal adds a residential use which does not create significant noise and the careful design of the dwellings using traditional materials will not create visual disturbance.

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	<p>Distinctive landscape character - Outline how the proposed development will have a minimum impact on landscape character and sensitivity; including details of any proposed hard or soft landscaping.</p>	<p>The proposal continues the linear nature of the village of Greenhaugh and maintains the developed lines to the front and the rear. The proposal does not extend beyond the limits of the village (School / Farm) to the North West. The use of natural vernacular materials and a mixture of hard and soft landscaping to front and rear will form part of the reserved matters application. The appearance of the dwellings has now been specified to be stone and slate to match the vernacular in the village. At the request of the LPA, additional indicative layouts have also been provided to illustrate the various options available to create a harmonious development in the village.</p>
b)	<p>Makes efficient use of land, materials, and infrastructure.</p>	
	<p>Land - Describe how the proposed development makes efficient use of the land (for example using the topography of the land to provide shelter from prevailing winds). Also consider the amount of development being proposed and how that is suitable for the site and surrounding area.</p>	<p>The proposed development uses a small strip of existing agricultural land behind an existing wall / hedge and also continues the linear nature of the village with a single line of houses. The traditional arrangement of gardens to the front of the houses is also continued whilst there are areas of private gardens to the rear. The proposal also uses existing highway accesses and new accesses to meet Highways Authority requirements. The new road and parking is generally hidden from public view behind the new houses along with parking which is also located close to the new proposed dwellings.</p>
	<p>Materials - Describe how the proposed development aims to make the most efficient use of materials by sourcing them locally, using recycled material and using sustainable timber which is FSC-certified for example.</p>	<p>Wherever possible the development will use locally sourced materials such as hardcore, stone and recycled material such as slate etc.</p>
	<p>Infrastructure - Explain how the development makes efficient use of the existing infrastructure, for example connection to roads, water supplies, power grids and communications.</p>	<p>All existing services exist on site or in very close proximity including mains drainage, electricity, BT and water. Surface water will be disposed of by soakaway and not to mains drainage. Foul water will go to mains drainage and NWL have already confirmed there is no issue with capacity of the existing system. The new properties will also be located very close to the existing road network and existing highway accesses will be used where appropriate.</p>

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c)	Provides opportunities for all to understand and enjoy the special qualities of the National Park.	
	Interpretation / Education - Explain how the information discovered through scoping studies and detailed surveys under section 'a' will be used to facilitate interpretation and education, including any specific measures taken i.e. sharing of information with specialist protection groups etc. Tourism related development may also provide opportunities for people to enjoy the special qualities.	This proposal is for residential use and this will not impact specifically on interpretation / education other than creating additional dwellings which will allow more people to live and work in the Park. The potential for these dwellings to also provide more live space for people to work in complimentary commercial developments in the Park should also be recognised and this in turn also reduces the need for these people to travel into the Park thereby reducing commuting. Depending on layout it will be possible to incorporate work space into the properties.
d)	Promotes the local communities economic and social well being and their ability to access services.	
	New business and business expansion - Provide details of how the proposed development creates or expands business i.e. number of jobs created, sourcing local produce.	This proposal will create residential accommodation for those wishing to live and work in the Park. The opportunity also exists through appropriate design to create Live / Work Space through these new dwellings and this would be the subject of the reserved matters application. Some of the indicative layouts shown include the incorporation of garage space which could alternatively become workspace or workspace could be created through the use of work pods located in an appropriate situations.
	Community facilities - Provide details of how the proposed development provides or protects community facilities.	This proposal will create family homes which will automatically create the opportunity to support local community facilities such as the School, Public House, Village Hall and other facilities in the wider area.
	Tourism and recreational development - Describe how the proposed development will maximize opportunities for visitors to increase their understanding of the National Park and its special qualities. Explain how the proposed development will integrate with existing visitor facilities. For tourist accommodation development please state the number of new additional bed spaces provided and whether these are serviced (e.g. B&B) or non serviced (e.g. Self Catering).	This proposal is not intended to specifically create visitor accommodation. However there is no reason that should a family decide to utilise additional free bed space for B & B etc. that this could not take place. Greenhaugh is an excellent location for this as it has existing facilities such as the Public House which would benefit from this type of space and additional visitors. Any uses such as this would also bring more visitors to the Park to allow them to enjoy the unique qualities which the Park offers. This includes other facilities close by such as the Boe Rigg at Charlton.

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	Transport and Accessibility - Describe how the proposed development meets the accessibility needs of the whole community and visitors (for example: dropped kerbs, ramps and automatic doors).	All dwellings will be disabled accessible and will have WC facilities at ground floor. A reserved matters application will detail design and this will incorporate all statutory requirements.
	Designing out Crime - Describe how the proposed layout and design measures help to reduce the likelihood of crime.	The detail design will incorporate modern crime resistant windows / doors etc. The use of limited accesses and the general layout of the development will also make elevations visible to those using the access road and also generally widely visible in the village. The addition of more people into the village also increases an additional monitoring presence in the village.
e)	Reduces the causes and impacts of climate change, particularly by maximizing renewable energy generation and energy efficiency in buildings.	
	Renewable energy generation - Does the proposed development comply with Policy 26 Renewable Energy and Energy Efficiency of the Core Strategy, which requires all new units of residential, employment, community and tourism development to include renewable energy in order to offset at least 10% of the developments predicted energy needs? Please indicate the types of renewable energy technologies used and their predicted output in Kw/h.	Embedded generation in the properties will include the consideration of Solar Hot water to appropriate roof pitches and also the incorporation of wood burning stoves etc. Consideration will also be given to PV and other sources or embedded generation or alternative heat sources coupled with the high levels of insulation. This will be agreed when a Reserved Matters Application is submitted.
	Energy efficiency - Describe how the proposed development will maximize energy efficiency.	The detailed design of these dwellings subject to a Reserved Matters Applications will use the highest economically viable levels of insulation in the properties and will comply with current Building Regulations. Air tightness also plays an important part in modern energy efficiency and consideration will also be given to whole dwelling heat recovery / ventilation etc. The general appearance will however be dictated by the use of traditional materials of stone and slate.

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f)	Demonstrates high quality design and sustainable construction.	
	High quality design - Explain how the proposed development will be of a high quality design, which is appropriate to the setting of the National Park.	This Application is outline. However it is likely that the proposal will use traditional materials such as stone and slate with traditional details. A reserved matters application will deal with choice of materials
	Sustainable construction - Explain how the proposed development will be constructed in a sustainable manner.	It is likely that the proposal if constructed using stone and slate will use recycled stone and slate in general construction. Base layers of road / slab constructions will uses recycled hardcore whilst finish layers will use locally sourced stone as appropriate. Wherever possible local labour and materials will be used.
	Scale - Consider the size of buildings and spaces and show how they are right for the site and surroundings.	The proposal is for seven dwellings provisionally in three pairs of semi-detached properties and a single detached property at the North end of the site. The scale and massing of the properties will be split with single storey elements mixed with the two storey elements. Maximum ridge height will be in the order of 8m and eaves height of 5m. The size of dwelling suggested matches other traditional dwellings in the village and the single storey elements again mirror those found in the village. The linear nature of the development also follows the previous development of the village
	Appearance - Describe how you would like the place to look following completion of the development. This involves considering the use of materials, architectural style, lighting, texture etc.	This proposal via the use of traditional materials and following the previous development line of the village will sit very well in the landscape. The traditional materials will weather and blend with the existing traditional materials found in the village and this will quickly harmonise new with the old. Careful consideration of lighting will be required but this must consider the need to deter crime and also ensure the health and safety of those living in the proposed development.
g)	Promotes accessibility via public transport, cycling, or walking.	
	Distance from public transport - What is the walking distance from the proposed development to the nearest form of access to public transport?	Public transport is available in Lanehead and a bus operates to Greenhaugh First School
	Distance from designated cycle routes - What is the distance from the proposed development to the nearest designated cycle route.	The proposed dwellings lie adjacent to the Public Highway and there are a number of designated cycle routes in the area

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	Vehicular movement - Please give details of expected vehicular movements generated by the site, with reference to daily totals and distribution, throughout the day.	It is expected that there will be an additional seven - ten vehicles at the site up to a maximum of fourteen if each household had two cars. This would generate in the region of a maximum of perhaps twenty eight vehicle movements per day
	Parking - How many parking spaces will the proposed development provide - including spaces for disabled access and parking for bicycles?	The proposed dwellings will have a minimum of two spaces per dwelling and potential garage space for cycle parking etc.
	Access - Outline your approach to access with particular reference to the inclusion of disabled people.	Each dwelling will have level access.
h)	Conserves scarce resources.	
	Scarce resources - Explain how the proposed development will ensure that the use of scarce resources, such as gas and electricity, is kept to a minimum.	Each property will have some embedded generation to reduce demand upon central generation methods. In addition each property will have high levels of insulation and improved air tightness.
i)	Conserves water resources, air, and soils.	
	Water usage - Describe how the proposed development meets high water efficiency standards, incorporates the use of new technologies to recycle and conserve water resources and promotes the use of sustainable drainage schemes (for example: grey-water recycling or rainwater collection systems).	The proposed dwellings will comply in all respects with current Building Regulations including the use of dual flush WC's etc. Consideration will also be given to rainwater recycling at reserved matters stage.
	Soils - Describe how the proposed development aims to protect soil resources and ensure they are able to fulfil as many of their functions as possible, particularly the storing, transporting and filtering of water.	All new "hard" surface areas will use sustainable drainage methods such as permeable surfaces and this will include areas draining onto soft landscaping to alleviate rapid surface water runoff.

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j)	Reduces the amount of waste produced and increases the amount recycled.	
	For major development (as defined in the Core Strategy) - Site Waste Management Plan: please provide a copy of the Site Waste Management Plan, using the methodology as recommended by the Department of Trade and Industry. Demolition protocol: Using the Institute of Civil Engineers Demolition Protocol methodology, provide a target for reclaiming materials from the demolition site for re-use and recycling.	The characteristics and specific impact of this proposal do not constitute Major Development and do not have a significant impact on the special qualities of the National Park. Any "waste" materials arising from the development of this "clean" site will be utilised on the existing developed area or the area immediately surrounding it.
	For small scale development - Describe how during the construction stage, waste materials will be reduced, reused or recycled. Demonstrate how the proposed development aims to promote the recycling of waste.	All materials arising from development (top soil, sub soil, dry stone walling) will be utilised on site or in the surrounding area.
k)	Prevents inappropriate development in areas which are at risk of flooding or which contribute to the risk of flooding.	
	Potential flooding - Consult the Environment Agency as to the likelihood of flooding. Identify what measures have been taken to reduce the possibility of flooding and mitigate the effects.	The proposal is not at risk of flooding and will not increase the risk elsewhere. An existing cundy runs through the site and was part recently renewed to safeguard capacity. The proposed location of dwellings is not seriously constrained by this cundy and a number of optional layouts have been explored. However should an alternative layout require the diversion of the cundy this could be carried out without significant impacts.
l)	Highways Comments	
	Introduction	Following comments from the Highways authority a speed survey has been carried out. The highways consultant identified three locations for the speed survey to be carried out. A plan showing the location of the survey points is included with the application. The results of the speed survey are shown below.

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	Speed Survey Results	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="4" style="text-align: center;">Average 7 Day 85th Percentile Speeds - mph</th> </tr> <tr> <th rowspan="2"></th> <th colspan="3" style="text-align: center;">Site</th> </tr> <tr> <th style="text-align: center;">1 - North</th> <th style="text-align: center;">2 - Mid</th> <th style="text-align: center;">3 - South</th> </tr> </thead> <tbody> <tr> <th style="text-align: center;">Southbound</th> <td style="text-align: center;">30.9</td> <td style="text-align: center;">29.1</td> <td style="text-align: center;">25.2</td> </tr> <tr> <th style="text-align: center;">Northbound</th> <td style="text-align: center;">29.2</td> <td style="text-align: center;">29.7</td> <td style="text-align: center;">25.5</td> </tr> </tbody> </table>	Average 7 Day 85th Percentile Speeds - mph					Site			1 - North	2 - Mid	3 - South	Southbound	30.9	29.1	25.2	Northbound	29.2	29.7	25.5
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	Highways Consultation	<p>These results have been conveyed by email to the Highways Authority on a number of occasions by email and followed up with telephone calls and voice mail messages. However no response has been received regarding the requirements for visibility splays for the new accesses. It has therefore been necessary to use currently available material from Northumberland County Council and Central Government to establish visibility splays.</p>																			
	County Council Guidance	<p>County Council Highways Authority guidance is given in their document "Residential Roads and Footpaths in Northumberland" This document gives guidance on roads in Northumberland including private drives and shared surface roads etc. The proposals used for the new dwellings in Greenhaugh using the speeds established from the surveys have assumed an x distance of 2.4m and y distances of either 20m (Private Drives serving up to 4 houses) or 40-43m (Table page 19 and Manual for streets 2007 table 7.1) In accordance with paragraph 4 page 12, the private drives also have turning spaces incorporated within. The dimensions used are as set out below from figure 8. It is felt that either of these dimensions are achievable in what is a very slow speed village zone.</p>																			

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	Visibility from Private Drives	<p style="text-align: center;">Access road on shared surface</p> <p style="text-align: center;">2.0m (10m for S.S.)</p> <p style="text-align: center;">2.4m minimum</p>																																															
	Junction Dimensions (NCC Document)	<table border="1"> <thead> <tr> <th colspan="2">Connecting Roads</th> <th rowspan="2">Radius (metres)</th> <th colspan="2">Visibility (metres)</th> <th colspan="2">Junction Spacing (metres)</th> </tr> <tr> <th>Road A</th> <th>Road B</th> <th>X</th> <th>Y</th> <th>Connecting roads adjacent</th> <th>Connecting roads opposing</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Local Distributor</td> <td>Local Distributor</td> <td>10.5</td> <td>9.0</td> <td rowspan="2">90 in 30 mph zone, 120 in 40 mph zone 150 in 50 mph zone</td> <td rowspan="2">80</td> <td rowspan="2">40</td> </tr> <tr> <td>Access Road or Shared Surface ¹</td> <td>10.5</td> <td>4.5</td> </tr> <tr> <td rowspan="3">Access Road</td> <td>Access Road</td> <td>6.0²</td> <td>4.5</td> <td>40</td> <td rowspan="3">25</td> <td rowspan="3">8</td> </tr> <tr> <td>Access Road serving up to 20 dwellings or Shared Surface</td> <td>6.0</td> <td>2.4</td> <td>40</td> </tr> <tr> <td>Private Drives</td> <td>3.0</td> <td>2.4</td> <td>20</td> </tr> <tr> <td rowspan="2">Shared Surface</td> <td>Shared Surface</td> <td>4.5</td> <td rowspan="2">2.4</td> <td rowspan="2">10</td> <td rowspan="2">-</td> <td rowspan="2">-</td> </tr> <tr> <td>Private Drives</td> <td>2.0</td> </tr> </tbody> </table>	Connecting Roads		Radius (metres)	Visibility (metres)		Junction Spacing (metres)		Road A	Road B	X	Y	Connecting roads adjacent	Connecting roads opposing	Local Distributor	Local Distributor	10.5	9.0	90 in 30 mph zone, 120 in 40 mph zone 150 in 50 mph zone	80	40	Access Road or Shared Surface ¹	10.5	4.5	Access Road	Access Road	6.0 ²	4.5	40	25	8	Access Road serving up to 20 dwellings or Shared Surface	6.0	2.4	40	Private Drives	3.0	2.4	20	Shared Surface	Shared Surface	4.5	2.4	10	-	-	Private Drives	2.0
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	Department for Transport Manual for Streets	The DFT guidance on design of streets etc. does give more up to date guidance of the design of junctions and visibility etc. Guidance on safe stopping distances (SSD) is given in table 7.1 along with guidance on x and y dimensions in paragraph 7.7. The table is reproduced below.																																																				
	DfT Manual for Streets Table 7.1	<table border="1"> <thead> <tr> <th>Speed</th> <th>Kilometres per hour</th> <th>16</th> <th>20</th> <th>24</th> <th>25</th> <th>30</th> <th>32</th> <th>40</th> <th>45</th> <th>48</th> <th>50</th> <th>60</th> </tr> </thead> <tbody> <tr> <td></td> <td>Miles per hour</td> <td>10</td> <td>12</td> <td>15</td> <td>16</td> <td>19</td> <td>20</td> <td>25</td> <td>28</td> <td>30</td> <td>31</td> <td>37</td> </tr> <tr> <td colspan="2">SSD (metres)</td> <td>9</td> <td>12</td> <td>15</td> <td>16</td> <td>20</td> <td>22</td> <td>31</td> <td>36</td> <td>40</td> <td>43</td> <td>56</td> </tr> <tr> <td colspan="2">SSD adjusted for bonnet length. See 7.6.4</td> <td>11</td> <td>14</td> <td>17</td> <td>18</td> <td>23</td> <td>25</td> <td>33</td> <td>39</td> <td>43</td> <td>45</td> <td>59</td> </tr> </tbody> </table>	Speed	Kilometres per hour	16	20	24	25	30	32	40	45	48	50	60		Miles per hour	10	12	15	16	19	20	25	28	30	31	37	SSD (metres)		9	12	15	16	20	22	31	36	40	43	56	SSD adjusted for bonnet length. See 7.6.4		11	14	17	18	23	25	33	39	43	45	59
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	Summary	Taking into account the NCC Highways guidance document and the DfT Manual for streets guidance, the indicative layouts clearly illustrate the viability of various access locations at both 20m and 40-43m y distances. However these matters are reserved matters details to be agreed at a later date hopefully with guidance from NCC.																																																				