



Pye Green Valley Development Brief

December 2005



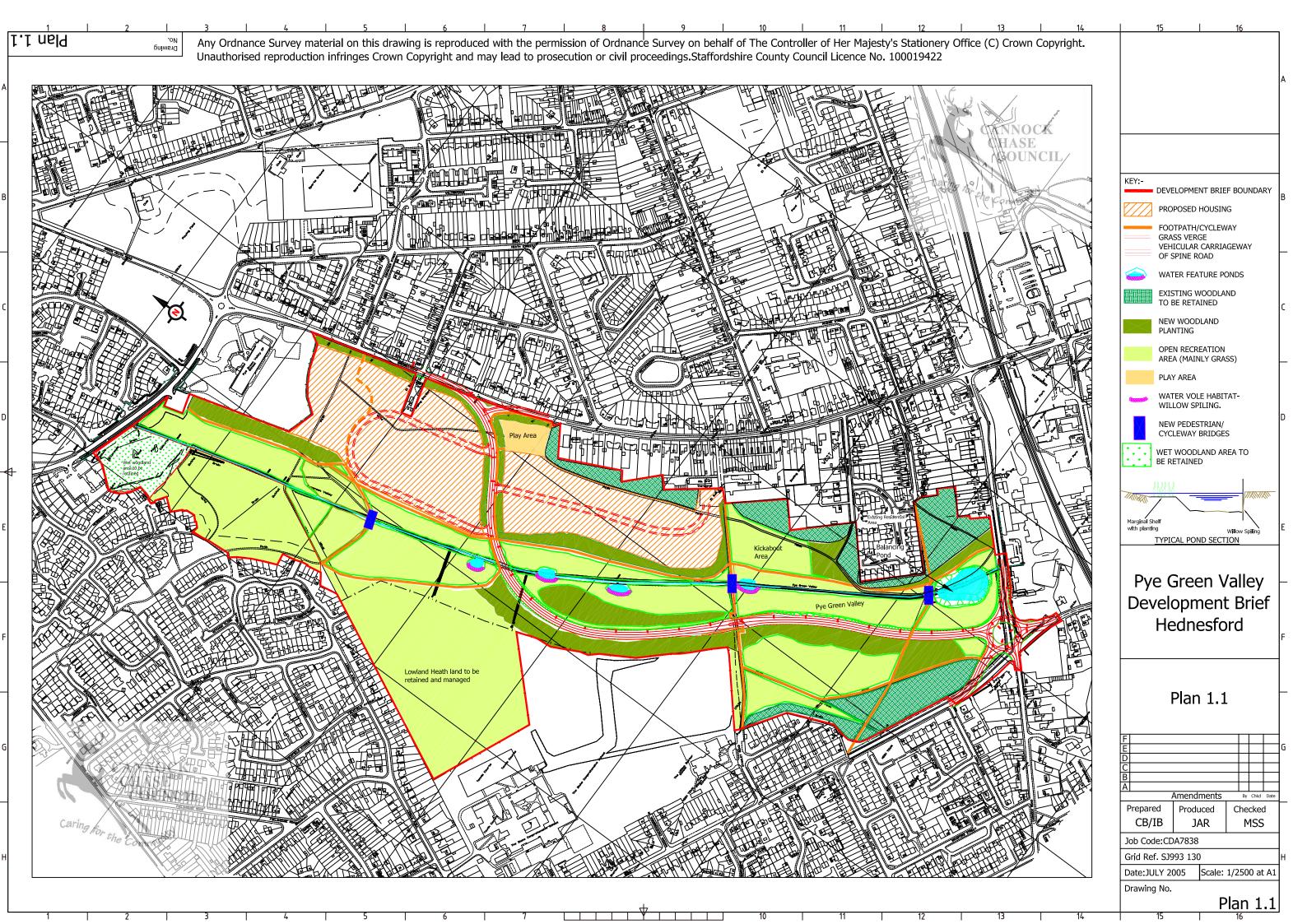
PYE GREEN VALLEY

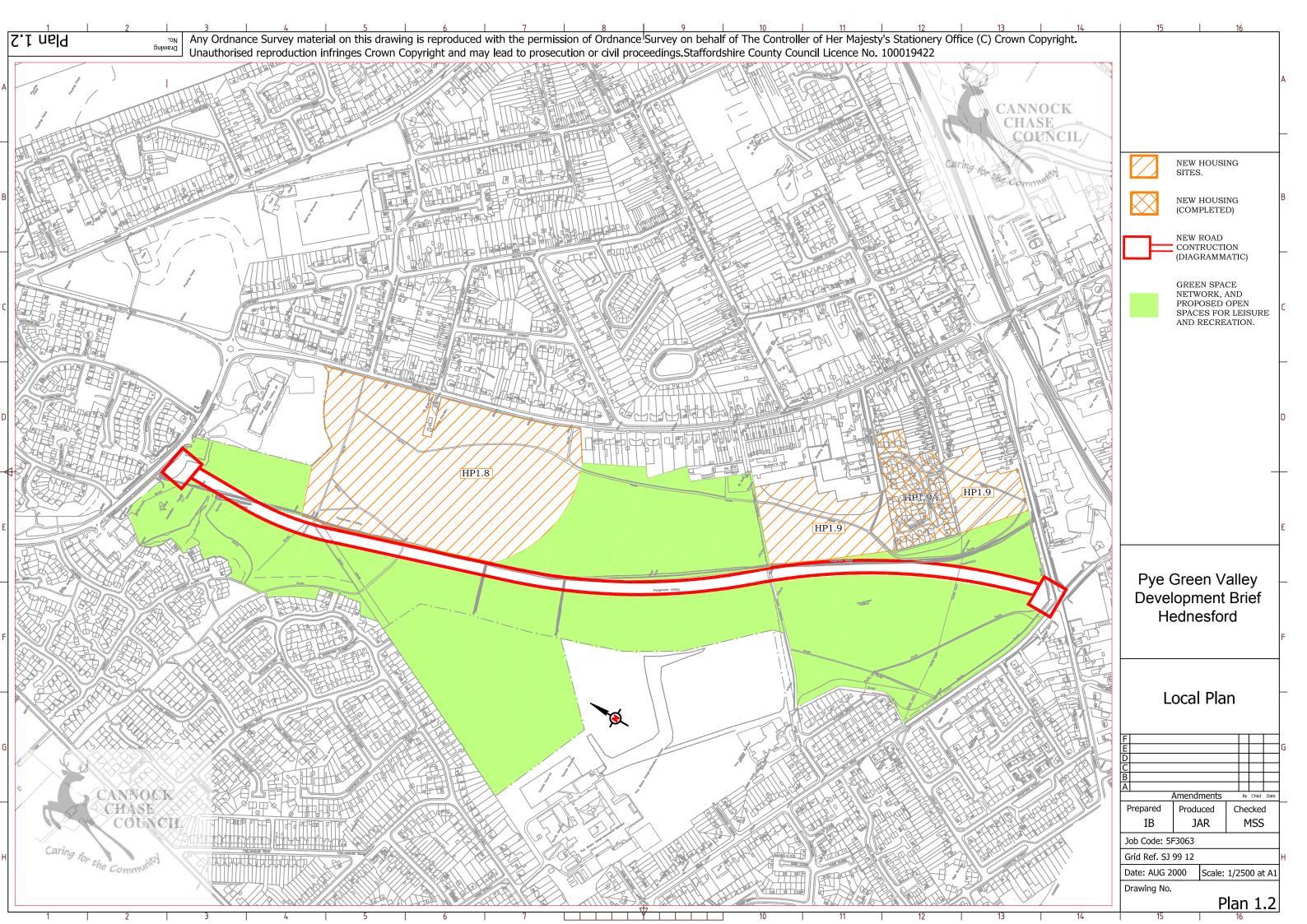
DEVELOPMENT BRIEF

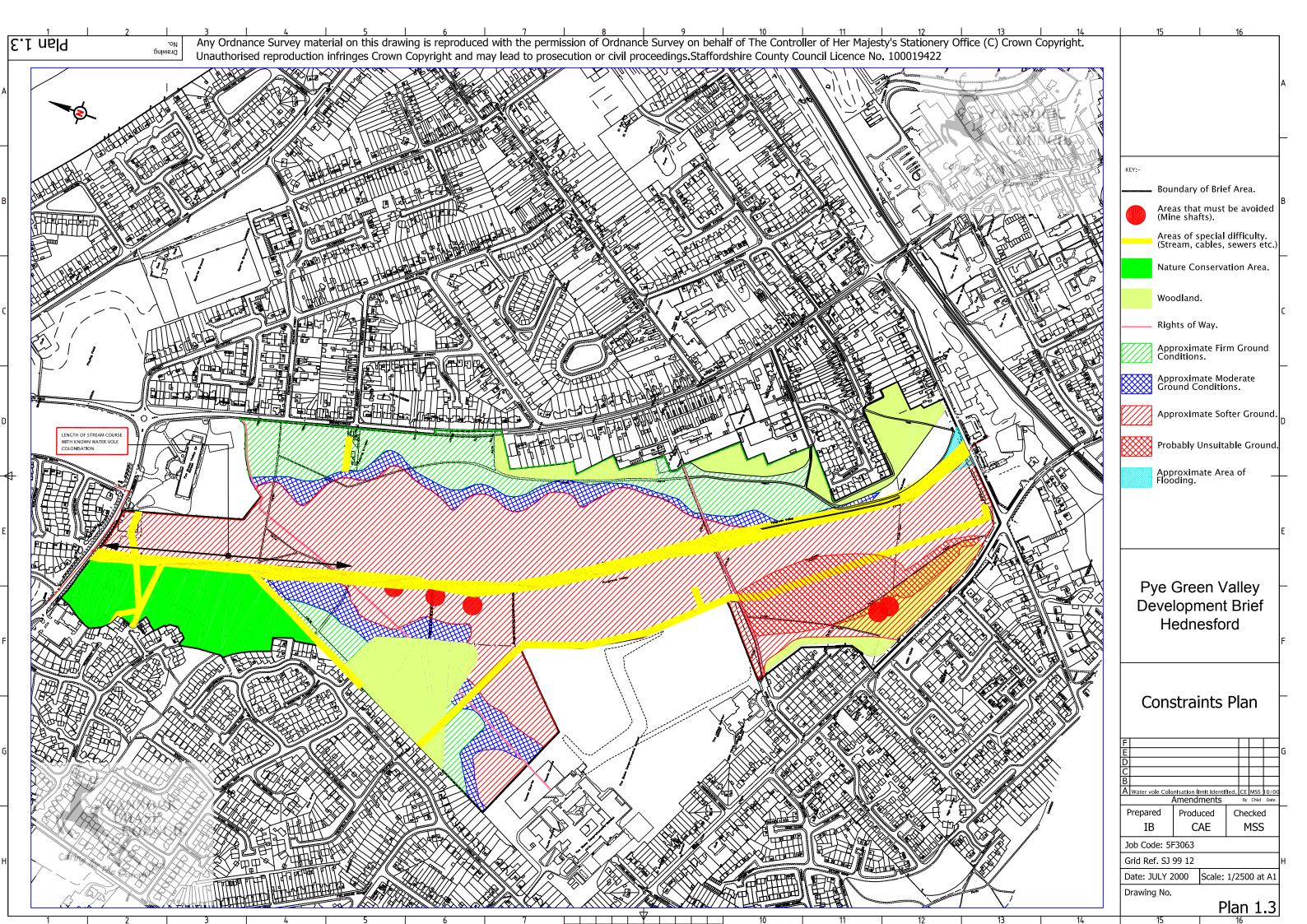
DECEMBER 2005

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1. **INTRODUCTION**

- 1.1 The Pye Green Valley lies approximately 2.5 km north of Cannock Town Centre and 0.5 km west of Hednesford Town Centre. Approximately 45 ha of currently largely open land is included in this Development Brief. The boundary of the area covered by this Brief is shown in Diagram 1.1.
- 1.2 The Cannock Chase Local Plan 1997 proposes that parts of the Pye Green Valley should be developed for residential purposes, with a new spine road running up the Valley and enhanced open space on the remainder. The Local Plan also states that it is necessary for a Development Brief to be prepared for a number of developments including proposals HP1.8/HP1.9 Pye Green Valley/Lower Pye Green Valley. A copy of the Local Plan Figure 6.7 is shown in Diagram 1.2.
- 1.3 Staffordshire County Council in consultation with Cannock Chase District Council prepared a draft Brief for consultations in 2004. Staffordshire County Council is the major owner of the land covered by the Brief and was accordingly requested to prepare the Brief. Cannock Chase District Council own land south of Rose Hill, a wet woodland area known as The Spinney.
- 1.4 It is the purpose of the Brief to provide more detailed guidance for the development of the valley. It addresses the means of making the development happen as a whole, with the creation of buildings, services, access and landscape concurrently to form a single proposal capable of being actually and acceptably provided.

2. HISTORY AND CONTEXT

- 2.1 Pye Green Valley was the location of the former West Cannock Collieries, Nos. 1, 2 and 3, a prosperous coal mining area providing local employment within the Cannock area for a large workforce. Several seams of coal were mined at moderate depths under and around the Pye Green Valley. Ordnance Survey plans going back to 1880 show the site to be principally occupied by West Cannock Colliery, with colliery buildings associated with pits Nos. 1 and 4 to the north and pit No. 3 in the south. A mineral railway linked both sites. Later editions of these plans, in 1917, show further development of the Colliery, together with reservoirs and spoil mounds. The colliery ceased operating as a working mine in the late 1950's. This long history of coal workings on the site, together with the tipping of some household refuse, left much of the valley in a derelict state composed of black and red wastes, foundations and large mounds.
- 2.2 In 1977, the County Council submitted a scheme for the reclamation of this land to the Department of the Environment. It subsequently received a derelict land grant and match funded a scheme to enable removal of the dereliction by surface level improvement of the landscape including the provision of playing field terraces for Blake Technology College and re-contouring, seeding and planting. The land reclamation scheme greened the surface and capped the shafts, but funding did not include any soil treatment or compaction below a very thin surface layer. It was completed by 1981 and some tree and shrub planting was carried out.

- 2.3 As part of the work related to the reclamation scheme, Cannock Chase District Council prepared in November 1979 a Draft Development Brief for Pye Green Valley. This included both the county land that has remained largely open and the District Council land north of Rose Hill that has subsequently been developed for housing and a local centre. This Draft Brief was subject to consultation in 1980 and was adopted as District Council Policy in March 1981. The Brief included allocations for approximately 25 hectares of new housing. 18 hectares of this has been completed. The undeveloped allocation is on the County Council land west of Greenheath Road and south of the new primary school. The development proposals had earlier received outline planning permission in February 1979 from Cannock Chase District Council. Subsequently a series of detailed planning approvals for developments in general accordance with the 1981 Brief have been implemented.
- 2.4 In 1990 Cannock Chase District Council commenced preparation of a new Local Plan for the whole district area covering the period until 2001. This Plan was formally adopted on 1 March 1997 following an extensive consultation process, including a Public Inquiry. It sets out the principles for the Pye Green Valley that this Brief should follow in accordance with the requirements of Section 54A of the Town and Country Planning Act 1990.
- 2.5 The relevant extracts of the Local Plan text are set out in Annex A at the rear of this document and an extract of the Proposals Map is shown as Diagram 1.2.
- 2.6 The Valley is within the designated area for the Forest of Mercia. This is one of 12 Community Forests throughout England. They cover large areas, usually on the edges of towns and cities, and are places where major environmental improvements will create improved landscapes for wildlife, work, education and recreation. The development proposed must strike a balance between retention of the open valley and the provision of tree planting within and around the development areas.

3. SITE APPRAISAL

- 3.1 The total area covered by the Brief includes approximately 45 ha of largely open land in the County Council's ownership, together with the wet woodland spinney adjacent to Rose Hill in the north of the valley, and other open land to the south of this that is owned by the District Council.
- 3.2 Residential development and schools bound the Valley. In the north is the Pye Green Valley Primary School and there are two schools, Blake Technology College and William Baxter in the south west of the Valley, incorporating a number of playing fields. The fencing surrounding the schools that bound the valley is quite prominent and tends to detract from its overall appearance. Major roads adjacent to the Brief Area include Rose Hill to the north; Greenheath Road to the east; Belt Road to the south; and Cannock Road to the south east. There are a variety of smaller estate roads to the west, including View Street. This serves a large housing area west of the Valley. There are local shops at Rose Hill and scattered along the lower part of Greenheath Road. Hednesford Town Centre is to the west of the lower valley.
- 3.3 There are clearly defined pedestrian routes across and along the valley.

Ground Conditions

- 3.4 The Valley falls south eastwards from a height of approximately 195 m at Rose Hill in the north, to approximately 159 m around Belt Road/Cannock Road in the south. The site lies mainly on Bunter Pebble Beds, except for parts of the south and centre of the Valley, where glacial boulder clay and Middle and Lower Coal measures are exposed at the surface. Below the Bunter Pebble Beds lie the Middle Coal Measures. The Pye Green Brook runs the full length of the Valley, with a number of small trees adjacent, providing a significant, but understated, landscape feature. The previous reclamation scheme encountered very little soil and growth cover is very thin. There are no archaeological features within the site.
- 3.5 In 1990, the County Council commissioned a detailed geological/geotechnical and mining report for Pye Green Valley. The principle conclusion of this report showed that, whilst most of the land could sustain some form of built development, the better building areas are located on the eastern and western fringes of the Valley, decreasing in quality towards the centre of the Valley. The presence of five abandoned mine shafts which had been capped and treated was also noted and roads and buildings should not be sited in close proximity to them. Their locations are shown on the Constraints Plan Diagram.
- 3.6 When the expected footprint of buildings and gardens is in final preparation a further ground investigation will need to be carried out on affected areas to determine the engineering properties and contamination levels.

Topography and Landscape

- 3.7 As part of the reclamation scheme, both the stream and foul sewers were reconstructed. Hydraulically this works well within the Valley, but the capacity downstream is restricted and there is occasional flooding close to and across Station Road. A 1:2500 topographical survey of the valley Drawing No. 5F3063/R00/02 is available from the Development Services Department, Riverway, Stafford, ST16 3TJ.
- 3.8 There are important long views up and down the valley that currently unify it as a single entity and some of the adjacent housing areas also have views across the valley. The through views of the valley are important to its landscape unity. The central stream course has an artificially regular profile created at the time of reclamation to minimise erosion of the soft fill materials through which it runs. The Valley above Stanley Road is also visible in long views into the site from the south east. The buildings on the ridgelines that surround this part of the Valley are more prominent and cause it to be seen as part of the urban area beneath the high forest lands of Cannock Chase to the north. The ridgelines obstruct long views from all other directions, but much of the Valley itself is very open grassland with some areas of low trees and bushes, mostly around the edges of the Valley.
- 3.9 Close to Rose Hill on the western side of the valley is a substantial area of wet woodland that is both of nature conservation importance and softens the appearance of the area. This must be protected. Other areas of key woodland coming into the early stages of maturity are the sloping area from West Hill Avenue down to Cannock Road and the area of woodland fronting Belt Road east of Wyvern Grove. The woodland at the rear of property fronting Greenheath Road in the middle part of the valley serves to screen

- housing and a few businesses. Much of the remainder of the valley is open and largely void of features other than grassland.
- 3.10 More locally there is a view down the very open and broad valley from Rose Hill over the stream crossing and across the valley from much of the adjacent housing. The modern styling of Pye Green Valley County Primary School gives the surrounding area a different character. The land near Greenheath Road has a west facing slope away from it and there is an area south of Pye Green Primary School with a north west facing slope. Greenheath Road climbs over a low ridge and the vertical curves restrict visibility and with them the ability to form a new junction into the Valley. The succession of existing street junctions into this part of Greenheath Road also restricts the ability to form a junction into the proposed development. Nonetheless there is an open frontage with used pedestrian routes into the Valley at both ends and at other points.
- 3.11 The western side of the upper and middle valley is characterised by a slope rising towards an almost continuous line of the rear gardens of houses in an elevated position. To the south of the wet woodland there is an open space link to the west that forms part of a continuous corridor. There are paved pedestrian routes linking the estate roads and the open valley between gardens. There is also an unnamed cul-de-sac from Chalcot Drive leading to a fence, with a steep drop from its termination into the valley. Close to the boundary of Blake school, View Street falls to the south and there are some bungalows at a level slightly lower than the adjacent ground with the Valley. This ground is part of a roughly triangular area that has been fenced off in the past allowed to regenerate naturally. The southern part of this area slopes gently to the south and away from the Valley.
- 3.12 Along the rear boundary of the Blake Technology College the valley narrows. This is accentuated by the presence of a development in gradually increasing depth on the Greenheath Road site. The valley also turns gradually from running almost southwards to a south easterly direction. Stanley Road is a well used road, used as a public path. To the east of this the rate of fall of the stream also steepens and as a result the north eastern valley side also becomes more sloping. At the top of the open slope there is a band of tree planting. Growth has been limited by soil conditions and the result is mostly a series of large bushes. The former Stanton's Bakery stood on a ridge of elevated ground that has now been redeveloped for housing. The effect of this combined with a matching ridge to the south of the stream is to create a definite sense of enclosure in the eastern half of this area.
- 3.13 The bottom portion of the Valley has a different character. The slopes are steeper and the longest views much shorter. This is enhanced by both the rounded shape on the mound on the south side of the stream and the maturing woodland on the steep part of the south east facing slope up from Cannock Road. The whole area is prominent from Cannock Road north of the Hightown junction and the woodland area is prominent in wider views. The mound on the south side of the lower valley should be retained in its present form to both enclose the narrower valley and form a key feature in views up from the bottom of the valley.
- 3.14 Fronting Belt Road the mound falls to the frontage with an area of woodland planting creating a pleasant feature. Growth of the woodland has been restricted by the shallow

depth of soil above colliery materials and at present the effect is more that of an area of large bushes. It is nonetheless an attractive feature.

4. THE LOCAL PLAN ALLOCATIONS

- 4.1 Diagram 1.2 shows the Local Plan proposing residential development on an area south of Pye Green County Primary School including the whole frontage to Greenheath Road. This allocation extends across the valley to the stream course. This will visually subdivide the top section of the valley from the middle portion, but it does enable a wide area of green space to be retained on the north east side of the middle valley in the area of the properties fronting Greenheath Road. If the overall concept of through open space up and down the valley is to be retained, the boundary of the built proportion of the housing should be restricted to continue the western boundary of the school at an approximately constant distance from the stream.
- 4.2 The housing allocation between West Hill Avenue and Cannock Road is an area of prominent woodland visible from outside the valley. Its development for housing or other purposes will substantially affect the overall setting of the lower valley area and the topography and access issues make it very difficult to lay out with development.
- 4.3 Part of the woodland fringe in the middle valley is on areas that were allocated for development in both the 1981 Brief and the current Local Plan. An extension of this area of development north of Stanley Road will have less impact than similar development in other parts of the valley, but an adequate remainder of recreational space and substantial new fringe landscaping will be required. The ground conditions for building are more favourable at the edges of the valley and close to the stream soft ground will cause difficulty.
- 4.4 The surrounding housing on the north east side of the Valley was mostly built in stages between about 1850 and 1940. Density varies between 18 and 30 dwellings per hectare. Development on the other sides of the Valley is largely post-war except close to Blake school. Density varies between 25 and 33 dwellings per hectare. The higher density is largely the result of shorter rear gardens. The most recent developments tend to have the highest densities.

5. **DEVELOPMENT CONSTRAINTS**

Service routes should be planned as an integral part of the development concurrently with the landscaping, pedestrian, highway and housing layout in a manner that will not cause damage to features or cause obstructions when repairs become necessary. The following gives a general indication of the availability of services and constraints. Prospective developers will need to check information with the relevant service providers. Diagram 1.3 broadly indicates known constraints.

5.1 **Gas**

5.1.1 A 10 inch main runs along Rose Hill from the west as far as Corsican Drive. This has the capacity to be extended to serve the northern housing site and may also serve part of the central housing site. Other older mains are present in Cannock and Greenheath Roads. The main under Western Road that used to serve Stanton's Bakery may have sufficient

capacity to serve the central housing site in addition to the redevelopment of the bakery site without the need for construction of an alternative main.

5.2 **Electricity**

- 5.2.1 A number of electricity substations are located within the existing housing estates to the east, west and south of the Valley. There are also substations at the end of Stanley Road and also along Greenheath Road, adjacent to Florence Street.
- 5.2.2 There is currently a 33kV electricity underground cable, in part as a pair of closely parallel cables, running approximately north west to south east and near the Blake Technology College boundary fence. Landscape and highway designs will need to take account of the precise position of this oil filled cable, in accordance with utility provider requirements.
- 5.2.3 Further overhead power lines between Greenheath Road and View Street have largely been removed or diverted, but underground cables remain. The utility provider has previously indicated that adequate supplies can be made available to the proposed housing sites in the Valley.

5.3 Foul and Surface Water Sewers

- 5.3.1 There is a foul sewer close to the stream along the centre of the Valley that accommodates flows from north of Rose Hill. This is 225 mm diameter in the northern portion and 300 mm diameter past Stanley Road in the southern portion. This should be sufficient to cope with the development, but this will need to be confirmed when numbers of dwellings and the overall layout strategy have been agreed. The compaction and bearing strength of the ground in the centre of the valley is low and any construction work within 10 metres of the sewer may affect the integrity of the pipework and reconstruction in a more robust channel would be required. There are also foul sewers in Rose Hill, Greenheath Road and Cannock Road and the lower part of Belt Road.
- 5.3.2 The surface watercourse down the centre of the Valley is hydraulically adequate for much of its length, though visual and habitat improvements to create a more naturalistic course with off-line pools and other features are required. Water voles are believed to be present in the northern part of the stream course and this will affect any alterations to it. The outfall culvert beyond Cannock Road and thence downstream is inadequate and flooding occurs. This can be resolved by construction of a balancing lake to accommodate all the hydraulic requirements from the proposed roads and developments. The excavated material will need to be tested for contamination and an assurance that any reconstructed watercourse will not leach contaminants from the surrounding spoil will be required.

5.4 Water Supply

5.4.1 South Staffordshire Waterworks Company has pipework and apparatus in most roads surrounding the Brief area. Supply is maintained using a booster station within the upper area of proposed housing off Greenheath Road and a similar facility off Limepit Lane. Supply can be made available to all proposals within the Brief area, but additional main laying along the new distributor road and possibly Belt Road is likely to be required.

5.5 Telecommunications

5.5.1 The pattern of telecommunications equipment is ever changing and becomes more complex, with an increasing number of operators. There are not thought to be any particular difficulties, but intending developers are advised to make the necessary enquiries shortly before commencement of their design process.

5.6 **Ground Stability**

- 5.6.1 The land was reclaimed in the early 1980's on a low cost surface treatment basis only. The majority material is loosely compacted colliery tip shale with miscellaneous remains buried within it. It has however had a twenty year settlement period since reclamation.
- 5.6.2 The 1990 geotechnical report shows the positions of five mineshafts within the landscaped area and gives information on ground conditions. The report shows that generally ground conditions are best at the edges of the valley and deteriorate towards the centre. Prospective developers should make themselves aware of the contents of this report, which is available via the County Property Services Office, Green Hall, Lichfield Road, Stafford. The report does refer to the need for more detailed localised investigation of areas to be developed.
- 5.6.3 Generally fill materials and natural drift deposits cover the site. The fill is inherently variable and therefore unsuitable as a foundation horizon without improvement; the drift deposits are considered to be suitable. Deeper rotary borehole investigations proved the presence of shallow coal seams. There may be associated mine workings that could be a source of instability to any proposed building. The foundations of the former Colliery buildings were left buried in situ by the reclamation scheme. There is no reason to expect contamination not ordinarily associated with the colliery wastes, but any developer should be satisfied that conditions are acceptable. Prior to the reclamation significant quantities of red shale are known to have been present in the spoil mounds and the use of sulphate resistant materials will be necessary.
- 5.6.4 Bearing these factors in mind, it is an essential requirement that any future developer make a more detailed geotechnical appraisal that is specific to proposed building and works footprints. It is not considered economic or useful to carry out this investigation until detailed development proposals defining the specific locations to be investigated are available.

5.7 **Rights of Way**

5.7.1 The Valley is crossed by the Byway Open to All Traffic (BOAT No. 8) known as Stanley Road. There is also Public Footpath No. 6 which runs from Greenheath Road immediately south of the primary school to a dead end north of Blake Technology College. These formal paths will require protection or diversion as part of an overall plan.

5.8 **Ecology**

5.8.1 In 2004, Cannock Chase Council commissioned Staffordshire Wildlife Trust to carry out an ecological survey of the Pye Green Valley. The type of survey carried out is a Phase 1 Habitat Survey, the methodology for which is set out as part of the complete survey report at Annex B. The following is a non-technical summary together with further advice from the Wildlife Trust.

"This Phase 1 survey has identified several key management issues and has highlighted the need for more specialist surveys to be carried out. These are:-

- The grassland is mainly dominated by vigorous grasses and is quite rank in places. However, some sections show signs of greater diversity, the sward comprising of finer grasses and a greater number of herbs. With appropriate management the grassland has the potential to increase in diversity. It appears that the site has not been cut or grazed this year. Therefore, it would be beneficial to cut and heavily aftermath graze the grassland to reduce the vigour of the grasses. A hay meadow management regime should then be adopted and implemented in the future. Additional hay meadow species could be introduced through hay strewing.
- Wet woodland [adjacent to Rose Hill] is a UK Biodiversity Action Plan (BAP) and Staffordshire BAP habitat. It is a Site of Biological Interest (SBI) which is a County level designation of site with valuable nature conservation interests. The value is as wet woodland, the waterlogged areas with sphagnum spores and deadwood being of particular interest. The SBI is suffering from insufficient management. Some areas of the wood appear to have dried up, the boardwalks throughout the wood are damaged, signs are in need of repair and there is a severe problem with tipping from nearby gardens. Wet woodland is very valuable for many invertebrates that rely on specific habitats such as old willows, submerged roots, leaf litter and rotting wood for the completion of their life cycles. In addition, wet woodland also provides habitat for many bird, moss and lichen species. With this in mind this area should be retained and enhanced and a detailed management plan created. Invertebrate survey work would also be beneficial. Management could include coppicing or pollarding willow; and retention of dead wood i.e. standing, fallen deadwood, brash and log piles. Repair and maintenance of the boardwalk and removal of tipped material are also necessary.
- Lowland Heathland is a UKBAP and Staffordshire BAP habitat. It is understood that this section of Pye Green Valley [to the north of Blake Technology College] was left to regenerate naturally following closure of the colliery in 1957. Therefore, it requires a large input of management, as birch and Scot's pine scrub has become dominant in places. Heathland is an important habitat for invertebrates, especially solitary bees and wasp that are Staffordshire BAP species. Invertebrates associated with heathlands can be broadly divided into two groups; those that feed on the flowering plants such as heather and gorse and those that rely on warm open spaces and bare ground to burrow. Management of the site should seek to maintain and enhance these conditions.
- Common lizard has been recorded adjacent to the area of heath. It is strongly suspected that the lizards are resident in the area of heath; therefore it is

recommended that a reptile survey be carried out. This survey should focus on the heath area and adjacent grassland.

- On the day of survey 10 skylarks were observed throughout the central grassland section of the site. Skylarks favour large open areas of grassland and avoid boundary features such as hedgerows and blocks of scrub due to the risk of predation. Skylarks rarely nest in fields less than 3 ha in size (A. Gouldstone, RSPB pers. Comm.). The large area of grassland and ditches at Pye Green Valley provide favourable habitat for skylarks. The skylark is a UK and Staffordshire BAP species and is protected under the EC Birds Directive and the Wildlife & Countryside Act 1981. A skylark survey should be undertaken to identify the number of skylarks and breeding sites throughout Pye Green Valley. Any development should ensure that as much open grassland as possible is retained (with no areas less than 3 ha) and boundary features and scrub is not increased.
- A possible badger latrine was found at Pye Green Valley. There is also an unconfirmed badger record from a local resident. Due to the legal protection the badger receives it is recommended that a full badger survey is conducted before any development plans are made.
- A small colony of water voles were recorded on the stream in 1999. A recent survey indicates that there is still limited water vole activity in the northern section of the stream adjacent to the SBI. There is great scope for habitat enhancement for water voles at Pye Green Valley, and any development should incorporate habitat enhancement into its plans.
- A survey for water vole signs was carried out on the Pye Green Valley Brook and associated drains on 24, 28 September and 3 November, 2004.
- A number of possibly active burrows were found on the northern stretch of the brook, adjacent to the area of wet woodland. However, there were no other signs to confirm that water voles were using the burrows, probably due to the late time of year. A few old (disused) burrows were also scattered in other parts of the brook downstream. To confirm whether or not water voles are actually present, a further check will be needed in favourable survey season, ideally May/June. To facilitate survey and improve waterside habitat, mowing of one or both banks plus trimming of overhanging trees should be carried out before March.
- White clawed crayfish could possibly be present in the brook a survey may be necessary if excavation works/landscaping are proposed for the brook in future.

Impacts of Proposed Development

The area of suspected water vole presence does not look to be directly affected by the 3 current options for the road layout [from the draft Brief in 2004]. However, work on the road should ensure that the banks are not affected by leaving a suitable buffer and ensuring pollution prevention measures are upheld. [the road proposals in this revised Brief do not impact on the area of current water vole activity]

Mitigation

- If water voles are found to be present, it will not be possible to translocate them. Damage to the area must be avoided by leaving a 10 metre buffer along the brook where works may affect the banks, and other indirect effects minimised and mitigated. Culverting should be avoided to prevent extra barriers to water vole movement. We further advise that works to the brook/surroundings and future management should seek to enhance and increase water vole habitat to ensure the conservation of the population, in line with Staffordshire Biodiversity Action Plan (SBAP) objectives (see recommendations).
- If water voles are found to be absent from the site, specific mitigation for this protected species will not be needed. However, as watercourses are a key habitat in the SBAP, improvements to restore and enhance natural features of the brook, habitat creation and sustainable drainage features would all be highly advisable to include in landscaping plans.
- The harvest mouse is an important species in Staffordshire, and it has only been recorded at 15 sites in the county. The habitat at Pye Green Valley appears suitable for harvest mice. A survey could be carried out to establish if they are present on the site.

Conclusion

The faunal species found at Pye Green Valley favour open un-wooded habitats. Site enhancements should strive to maintain and improve open grassland, heathland and wetland rather than focusing on tree and shrub planting."

6. **PROPOSALS**

General

- 6.1 Development proposals should be in accordance with the Cannock Chase Local Plan 1997, as interpreted and developed by this Brief. They should also take into account national planning guidance contained in Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs). Since the adoption of the Local Plan, certain aspects of national policy have been changed with the revision of certain PPGs. Of particular relevance to the development of Pye Green Valley are PPG3 "Housing" (March 2000) and PPG17 "Planning for Open Space, Sport and Recreation" (July 2002). The provisions of PPG13 "Transport" are also important.
- 6.2 Local Plan policies relevant to the development of Pye Green Valley are attached at Annex A.
- 6.3 Plan 1.1 shows the spatial principles for the development of the Valley proposed in this Brief. Development proposals will be expected to adhere to the principles identified for areas for housing development, road and junction alignments, open space provision (including the balance between open grassland and woodland), watercourse and ecology proposals, and footpath and cycleway routes.

Housing

- 6.4 The proposed housing areas are broadly based on Draft Option 3, which was the preferred of the three draft options from the public consultations. The area proposed for residential development is 8.58 ha. This compares to a Local Plan allocation of 10.8 ha. The housing area is confined to the east of the Valley between the primary school and Stanley Road. The Local Plan housing allocations south of Stanley Road are not pursued.
- 6.5 The development proposals envisaged in the Local Plan assumed an average density of 25 dwellings per hectare. The provisions for PPG3 "Housing" indicate that new housing sites should have a range of higher densities with a minimum of 30 dwellings per hectare. The District Council, in carrying out an Urban Capacity Study as part of the preparation of its Local Development Framework has reassessed the housing allocations in Pye Green Valley assuming a density at the minimum contained in PPG3. Consequently housing proposals should be based on a minimum average density of 30 dwellings per hectare. Given the characteristics of the site a density in the region of 35 dwellings per hectare may be achieved. Given the opportunity for higher density it is anticipated that there will be a range of housing provision in the region of 260 to 300 dwellings.

Affordable and Aspirational Housing

6.6 The Council's emerging Housing Strategy, drawing on the Housing Needs Survey 2003, identifies a need for the provision of affordable housing as provided for in the Local Plan. The District Council will seek the agreement of the County Council, as landowner of the development areas, to provide a minimum of 30% of the development as affordable housing.

- 6.7 The independently commissioned Housing Needs Survey found that of the 194 affordable housing provision required annually to 2011, the majority (61%) should be social rented, a third (33.5%) low cost market and a small proportion (5.5%) of shared ownership. The mix of affordable housing provided will need to be in line with the 2003 survey.
- 6.8 The emerging Housing Strategy aims to achieve a broad choice of housing across the District, including provision of new housing that would be described as 'aspirational'. The District Council will seek the agreement of the County Council to provide up to 20% of the development as aspirational housing. The location and nature of the aspirational housing will be agreed between the Local Planning Authority and the developers of the site.

Housing Area Design Principles

- 6.9 The design of the housing development must be based on the principles set out in the Staffordshire Residential Design Guide which is adopted Supplementary Planning Guidance on residential design quality. It sets out the processes to be followed to build a design concept which has a visual and functional integration with its setting. The key contextual elements are already described elsewhere in this brief, including the location, overall density of the residential development, the movement networks (pedestrian, cycle and vehicle) external to the housing areas and the landscape framework.
- 6.10 The applicant must use this context to develop a design concept for the housing areas which:-
 - Achieves visual integration of the development with its surroundings;
 - Uses built form and layout concepts to create an imaginative but legible design producing a sense of place, not following conventional suburban built form/layout relationships;
 - Gives priority in movement requirements to the needs of pedestrians and cyclists over those of motor vehicles;
 - Provides a mix of housing to meet the needs of all sections of the community;
 - Integrates new landscape (trees, hedges, shrubs, walls and fences) into the development including planting of street trees;
 - Maximises energy conservation by design and orientation of dwellings;
 - Provides for sustainable urban drainage design solutions;
 - Minimises the risk of crime by a combination of natural surveillance and (where appropriate) positive security measures to provide for defensible private space.
- 6.11 These issues will be addressed in a design and access statement to accompany the planning application.

- 6.12 Housing Area roads will need to comply with the current Staffordshire County Council Design Guide of Highway Requirements for Development.
- 6.13 Parking will be in accordance with Cannock Chase Council's Parking Standards, Travel Plans and developer contributions SPD (July 2005).

Planting

6.14 A tree planting/landscaping scheme for the housing areas, and intervening open space, must be submitted to the District Council by any developer and must include details of soil treatment and species in accordance with the guidance on Trees, Landscape and Development. Landscape treatment to roads, footpaths, within open spaces and private gardens is essential and will have an important effect on the quality of development within the Pye Green Valley. Particular attention should be given to landscaping along the valley fringes and road frontages. Planting proposals should take account of the positions of any sewers and other services. The routing of new services should be coordinated with the landscape planning.

Play & Recreation Facilities

- 6.15 The adopted standard for children's play provision in new housing areas is 0.8 ha (2 acres) of play spaces per 1000 population.
- 6.16 The District Council has recently undertaken a study to identify the future open space and recreation needs of the District (including indoor recreation facilities) as required by Planning Policy Guidance Note 17, Planning for Open Space Sport & Recreation. The study identifies a lack of equipped play areas in the Ward within which Pye Green Valley sits for all age groups, and it is appropriate to address this need as part of the overall development proposals. The emerging policy which identifies a need for new and improved indoor facilities in the District also needs to be addressed. These matters will be included within the proposed planning obligation under S106 of the Town & Country Planning Act 1990.

Transport

- 6.17 The Local Plan proposes a new 7.3m carriageway road (the Pye Green Valley Distributor Road) from Rose Hill, west of the primary school, to the junction of Cannock Road/Belt Road/Stafford Lane at Hightown. Consultations have shown considerable concern about the impact of this road on the environment, ecology and character of the Valley, as well as on the Pye Green Valley primary school. In response to these concerns it is proposed that the Pye Green Valley Distributor Road will not run the length of the valley, but will join with Greenheath Road between Florence Street and Blewitt Street.
- 6.18 The road is essential for access to the proposed housing developments and must be funded by them. The justification for this is the distributor function and the restricted multipurpose and substandard design features of Greenheath Road especially that part south of Blewitt Street. The construction of the completed Distributor Road will be funded by an agreement under Section 278 of the Highways Act 1980.

- 6.19 The developer will be required to construct the complete length of new distributor road as generally detailed in the proposals. This road will link the new housing in the north of the Valley to the principal road network in the south. If services are required close to footpaths and/or cycleways a separate parallel service strip should be provided to reduce excavation cost and damage and obstruction of the footpath/cycleway during repairs. Any plans for landscaping should specify service strips and routes. Provision should be made for up to 10m of landscaping either side of the 9.1m highway strip. The amount and design of this landscape strip will be subject to consideration of the ecological concept for the Valley as largely open grassland. The works will include the construction of the new junction at the lower end of the Valley. This junction will contain a single roundabout and be capable of accommodating Cannock Road, Belt Road and Stafford Lane as illustrated on Plan 1.1. At planning application stage, the design and final route of the distributor road will be assessed for compatibility with the ecology and habitat issues identified by the Wildlife Trust, especially in respect of water vole and skylark habitats.
- 6.20 The Pye Green Valley Distributor Road must be suitable for use as a bus route. There will be a need to consult bus operators, and the County Council as co-ordinator of public transport, during detailed design to ensure that requirements for routes and stopping points are correctly provided, including areas of pavement and shelters in accordance with a 'Bus Quality Partnership' standard and the Staffordshire Residential Design Guide. The distributor road must also be landscaped to minimise its wider impact, with the landscaping for it forming part of the detailed proposals for the road. Proposals including financial contributions, designed to encourage the use of public transport, will be sought from the developers.

Winchester Road Extension

- 6.21 The Local Plan separately proposes a new road from Hightown to link to the A460 known as the Winchester Road Extension. The proposal is included within Policy T15C of the Staffordshire and Stoke-on-Trent Structure Plan 1996-2011 as an important proposal, dependent in substantial part on the availability of external finance. Recent traffic assessment work carried out by the County Council as Highway Authority suggests that the requirement for this road is not triggered by the development proposed for Pye Green Valley. Accordingly, provision of the Winchester Road Extension is not a requirement of this Brief.
- 6.22 Any planning application must be accompanied by a transport assessment (TA). The parameters of the TA must be agreed with the Highway Authority and should identify the traffic impact of the Pye Green Valley proposals on the surrounding road network together with issues of accessibility to public transport by cycling and walking. The TA should identify any consequential improvements to the road network and any contributions required towards future improvements including public transport. The delivery of the agreed improvements will be through obligations under S106 of the Planning Act and agreements under S278 of the Highways Act.

Footpaths and Cycleways

6.23 An in principle requirement of this Brief is to retain and improve the informal routes which have been created over time, both across and along the Valley. This includes Public

- Footpath FP6 which crosses the Valley. Where it is necessary to divert the footpath, the developer will be required to set in place and fund the necessary procedures. It includes also, the retention of Stanley Road.
- 6.24 The existing routes will be augmented by additional footpath/cycleways required to link the new development into the wider community. A footpath/cycleway, segregated from the distributor road, will be required to extend the full length of the Valley as an important link for recreational and access uses. The general arrangement of footpath/cycleway routes is shown on Plan 1.1.
- 6.25 The development should cater for pedestrian routes between the following points:-
 - (a) Greenheath Road opposite Ebenezer Street to Chalcot Drive, the eastern portion of this will be part of Public Footpath No. 6.
 - (b) Greenheath Road by Roadrunner shop to Chalcot Drive.
 - (c) Rose Hill to Cannock Road; there are alternative routes dependent upon the development option chosen.
 - (d) Along Stanley Road.
 - (e) A link from route a to route d to become the remainder of a diverted Public Footpath No. 6.
 - (f) West Hill Avenue to Belt Road opposite Haigh Close/Platt Street.
 - (g) Western Road to route c.
- 6.26 Government Planning Policy Guidance Notes make it clear that design should not be primarily influenced by the requirements of the motor vehicle. Prospective developers will be expected to prepare a pedestrian/cycling strategy that provides safe routes to school and other local facilities including bus stops. The routes incorporated in any layouts will need to be carefully thought through and be as direct as possible, with appropriate hard surfaces, lighting and follow secured by design principles. The desirability and practicability of alignments leading down the valley away from the distributor road should be specifically addressed, as should the form of major crossings of the road. The principal routes should not be longitudinally above services where repairs are likely to lead to obstruction or surface irregularity.
- 6.27 Detailed proposals must include pedestrian/cycle routes and links with surrounding networks.

Open Space and Landscapes – General Principles

6.28 The Phase 1 Habitat Survey carried out by Staffordshire Wildlife Trust has shown the predominantly grassland habitat of the Valley to be of limited ecological diversity. The Trust have shown also that, with appropriate management, the grassland has potential to increase in diversity. This distinctive landscape feature of the Valley when combined with effective management of those areas of significant existing and potential ecological

- value the wet woodland habitat of The Spinney; the lowland heath regenerating near to Blake Technology College; the potential of the brook course to provide enhanced water vole habitat sets the landscape, open space and ecology objectives for the Valley.
- 6.29 The development of the Valley must aim to maintain and improve open grassland, heathland and wetland habitats rather than focusing on tree and shrub planting. The brook course needs to be 'de-engineered' to produce a more natural form to improve its habitat value. The management issues and specialist survey work set out in the summary by the Wildlife Trust in section 5.8 'Ecology' must be addressed by submission of appropriate information on these issues to support planning applications.
- 6.30 Future management of the Valley is crucial to increasing its biodiversity. The District Council will seek to agree with the County Council, as landowners of the open space within the Valley, an appropriate means of securing effective management. This must provide opportunities for the local community to be involved and may involve the transfer of the open space to the District Council. Any resource requirements of the management of the open space will be secured through Agreements under S106 of the Planning Acts.
- 6.31 The consultation on the Draft Brief, including the responses from the police, together with the District Council's work under PPG17 on people's perception of open spaces, have emphasised the importance of active management of open spaces to improve community safety. There is a desire from all stakeholders to prevent inappropriate use of the open space, with many citing incidents involving young people. Whilst recognising that this is an existing issue, the District Council will seek to agree with the County Council and other stakeholders, a management approach to the open space capable of addressing this aspect of community safety. The new development has a catalytic role in enabling enhanced management or activity programmes to be tested, and the District Council will look to secure resources from it to do so.

Woodland and Planting

- 6.32 Existing areas of woodland, largely on the fringes of development in the south of the Valley, will be retained. New areas of woodland will be limited to within and on the edge of housing areas and in relation to the distributor road.
- 6.33 The landscaping will need to draw a difficult balance between softening the open vistas of much of the Valley, softening the impact of existing and proposed development, and the need to create and improve habitat and recreational facilities as part of the development. Policy B6 of the Local Plan seeks to protect the network of Green Spaces including Pye Green Valley that exist throughout the Cannock Urban Area. The retention of the continuous band of open space is a key element in the future use of the Valley. The landscape works are an integral part of the overall scheme of development and must be designed concurrently as a part of it.
- 6.34 Details of woodland and screen planting will be required to be submitted concurrently with the detailed housing layouts and with any other elements of design, e.g. the distributor road, that may precede the housing. The details must fulfil the requirements of the adopted Supplementary Planning Guidance on Trees, Landscape and Development which sets out the information required to accompany planning applications in Cannock Chase District. Subject to the ecological assessments, the planting will take

the form of tree belts designed to break up the housing mass. Landscape design must avoid services and take account of the need for access to maintain them. It should provide visual interest whilst providing a minimum of concealment for misuse of the open space.

- 6.35 The existing ground conditions require site specific ground tests of any planting areas for compaction, contamination and growth potential. These should establish the ground and planting treatments required. The manner in which soil is prepared and treated before and during the planting and development process is of key importance in the success of the planting. Further guidance is given in Forestry Commission Bulletin 110, Reclaiming Disturbed Land for Forestry, available at H.M.S.O. and applicants will be expected to include a method statement for landscape works including any soil decompaction and importation.
- 6.36 The views from Cannock Road up the Valley are one of the key features of the site, which should be retained in their existing open format, so far as essential development will allow. Restricting this view removes the impression of open space, even if open ground is retained further up the valley.

Planting Maintenance

6.37 District Council policies require that developers be responsible for replacing and replanting any trees/shrubs within an approved landscaping scheme that are diseased or die within the first twenty years of planting.

Balancing Lake

6.38 At the lower end of the Valley a balancing lake will be required. This will be constructed in accordance with the hydraulic and nature conservation requirements of the Environment Agency and the ecological assessment. A soft edge with a design to achieve some nature conservation value in an attractive setting is desirable, but hydraulic requirements and safety are important also in this highly accessible sloping area. The whole stream course is subject to similar considerations. The construction of the balancing lake must be coincident with the commencement of construction of the first housing area.

Services

6.39 In accordance with Cannock Chase Council's Adopted Supplementary Planning Guidance for Developer Contributions 2000, Agreement(s) under Section 106 of the Town and Country Planning Act will ensure the provision of all services and facilities required off the site of the development in accordance with current standards. Detailed figures cannot be calculated until detailed housing proposals are available. Those on the site will be secured by condition except where inclusion in a wider agreement is more appropriate.

7. THE DEVELOPMENT PROCESS

- 7.1 The scale of the proposed development involving construction of some 300 dwellings and a new highway of 1.2km in length falls within the categories of development set out in Schedule 2 of the Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 1999 when an assessment needs to be made as to whether a formal Environmental Statement should accompany a planning application. Taking into account the location within an urban area with no nationally designated protected sites nearby and the scale thresholds identified in Annex A to Circular 02/99 Environmental Impact Assessment, it is considered that a formal Environmental Assessment will not be required.
- 7.2 Planning applications will fall to the District Council to consider, and there will be requirements to enable the development to proceed in an acceptable manner that cannot be satisfied merely by the imposition of planning conditions. There are other necessary works or actions that can only be delivered by the Local Authorities, or are on land outside the application site. These are normally the subject of agreements under either Section 106 of the Town and Country Planning Act 1990, or Section 278 of the Highways Act 1980.
- 7.3 The following aspects of this development will need to be the subject of a planning obligation under S106 of the Town & Country Planning Act 1990:-
 - (i) Provision, improvement and maintenance of open space, sport and recreation facilities.
 - (ii) Management of land for nature conservation purposes.
 - (iii) Provision of affordable housing.
 - (iv) Provision of transport infrastructure including improvement to the existing road network and public transport facilities.
 - (v) Provision of drainage infrastructure.
 - (vi) Provision of education facilities.

POLICIES AND REFERENCES IN THE CANNOCK CHASE LOCAL PLAN

Plan Proposal HP1

Sites for New Housing

Land is allocated for the development of 2,295 new dwellings over the Plan period. The following sites are proposed and detailed on the Proposals Map:-

HP1.8	Pye Green Valley, Hednesford	7.3 ha	180 dwellings
HP1.9	Lower Pye Green Valley, Hednesford	3.5 ha	80 dwellings
HP1.9A	Former Stanton's Bakery Site, Hednesford	1.5 ha	45 dwellings
	(Now completed)		

Justification (Site HP1.8 Pye Green Valley, Hednesford)

"In translating the Proposals of the Staffordshire Structure Plan (1978), the Pye Green Valley Development Brief (1981) identified three broad areas in the northern and central parts of the Valley for residential development. Areas 1 and 2 have been developed. Area 3, in the central part of the valley fronting Green Heath Road, remains to be developed. At the time of the preparation of the Development Brief it was envisaged that ground conditions would delay any development in this part of the Valley for up to ten years from the completion of the derelict land reclamation scheme in 1981. The site is still considered to be an appropriate location for residential development. Developer contributions will be sought towards the provision of the Pye Green Valley Distributor Road (Policy T4.15) in accordance with Department of the Environment Circular 1/97, "Planning Obligations"."

Justification (Site HP1.9 Lower Pye Green Valley, Hednesford)

"The Pye Green Valley Development Brief (1981) proposed a 2.2 ha site for industrial development within the Valley. Through the preparation of the Local Plan, the opportunity has been taken to review this allocation.

The District Council proposes that the land formerly allocated for industrial development and an area of land between West Hill Avenue and Station Road be allocated for residential development. Developer contributions will be sought towards the provision of the Pye Green Valley Distributor Road (Policy T4.15) in accordance with Department of the Environment Circular 1/97, "Planning Obligations"."

Local Plan - Policy T4

New Road Construction and Improvement Schemes – Protection of Routes

"The District Council will safeguard land for the construction of the following schemes to be implemented within the Plan period:-

- T4.1 Winchester Road Extension (new road)
- T4.13 Hightown Junction (Stafford Lane/Belt Road, Cannock Road), Hednesford (improvement)
- T4.15 Pye Green Valley Distributor Road (new road)."

Justification (T4.1 Winchester Road Extension (new road))

"A new road will be provided from the A460/A4601 junction to Hightown, Hednesford, along the route shown on the Proposals Map.

The highway scheme is included in the Staffordshire Structure Plan, Policy 54, as a potential project for completion during the period 1986-2001.

The District Council considers this to be a key element of the strategic highway network within the District and its completion is essential to the longer term development of the Pye Green Valley and Hednesford areas in particular."

Justification (T4.13 Hightown Junction (Stafford Lane/Belt Road, Cannock Road), Hednesford (improvement)

"A new traffic island will be required to link into the proposed Winchester Road Extension (Policy T4.1) and the Pye Green Valley Distributor Road, (Policy T4.15) to replace the existing traffic light controlled junction, which will be inadequate to cater for the predicted traffic growth at this location Developer contributions will be sought in line with Policy T5."

Justification (T4.15 Pye Green Valley Distributor Road (new road))

"A new road will be provided between Rose Hill and Hightown through the existing Valley. The road will be required as part of the strategic highway network of the District and to facilitate the development of new housing areas shown on the Proposals Map and detailed in the Housing Proposal HP1 (Sites HP1.8 and HP1.9/1.9A).

The requirement for the new road was originally detailed in the Pye Green Valley Development Brief (March 1981), including a diagrammatic route. However, in the light of changing circumstances and overall development strategy for the District, it is considered appropriate to propose a redefined line for the road.

The road will connect with the Winchester Road Extension (Policy T4.1) to form part of a wider scheme to provide an uninterrupted north-south traffic route along the Cannock Eastern Primary Route, A460, bypassing Cannock Town Centre and removing extraneous traffic from the Chadsmoor area. Developer contributions towards the cost of construction of the road will be sought, as detailed in Policy T5.

The opportunity will also be taken during the Plan period, to consider, in consultation with the appropriate authorities, the extension of the road from Rose Hill to the A34(T) in the vicinity of Pottal Pool."

Local Plan Policy T8

Bus Services

"The District Council will, in liaison with the bus operators and the Transport Authority, examine measures to improve the operation of bus services through the improvement of bus station facilities and to reduce delays to bus services caused by traffic congestion, by the introduction of bus priority measures in Cannock and Rugeley."

Justification (Policy T8)

"The District Council considers it important to encourage the provision of a comprehensive network of bus services and will work actively in co-operation with CENTRO, Staffordshire County Council and service operators, to help promote, retain and improve existing service levels.

The existing framework for the operation of bus services is relatively new, having been established under the Transport Act 1985. This has established a competitive operating environment in which services are operated on a commercial basis and operators encouraged to provide their services without subsidy. Where the latter cannot be satisfied, the County Council subsidise those journeys which are considered to be socially desirable. At the current time this accounts for approximately 10-15% of the services within the District. The criteria for supporting such journeys are specified in the Passenger Transport Policy Statement No. 3 (1994), prepared by Staffordshire County Council, under the requirements of the Transport Act 1985. The District Council actively promotes the marketing of bus operators' publicity material through the provision of information points at the District Council's Area Offices. The District Council also promotes support for the provision of bus services through its own system of concessionary fares to senior citizens.

The role of bus services in reducing traffic congestion and generating economic activity within town centres is also recognised. Bus services also provide mobility to that part of the population who do not own or have access to cars at all times. The 1991 Census, shows that 27% of the Cannock Chase District Population, do not own cars. The provision of an adequate network of bus services also reduces the need to travel by car and helps reduce carbon dioxide emissions.

CENTRO, brand name for the West Midland Passenger Transport Executive, is responsible for the promotion of public transport within the former West Midlands County. While it does not directly sponsor any bus service within the District, it is responsible for managing various bus and rail travel card schemes in southern Staffordshire, including Cannock Chase District. The District Council recognises the importance of maintaining and improving public transport links with the West Midlands conurbation and will continue to work with co-ordinators and providers of bus services to achieve this aim.

The provision of bus priority measures will be investigated during the Plan period, including discussions with bus operators and relevant transport authorities, and appropriate schemes considered as part of the Local Plan review. Funding for such measures may be sought through Policy T5, Private Sector Developer Contributions. It is intended that future Transport Polices and Programme, Balanced Package bids for the Cannock/Rugeley area, will include bus priority measures for Cannock and Rugeley."

Proposal TRP3

Open Space for Recreation and Leisure

"Major areas of open space will be protected and, where appropriate, developed for the enjoyment and recreation of residents and visitors. The main sites, as shown on the Proposals Map are:

(iv) Part of Pye Green Valley, Hednesford *Justification*

It is part of the District Council's Green Space Network strategy to maintain a large area of open space within Pye Green Valley. Not only is this an important local amenity, but also an important link from the built-up area into the countryside of Cannock Chase itself. Any development proposals outside those provided for in the Local Plan will be strongly resisted. The site is identified within the Forest of Mercia Plan (October 1993) as capable of accommodating development within a woodland setting.

The following additional policies of the Local Plan are also relevant factors in considering proposals within and made as a consequence of this Brief:-

C15	Protecting Trees
	· · · · · · · · · · · · · · · · · · ·
C18	Forest of Mercia
B6	Green Space Network
B8	Design Principles for New Built Development
H2	Types of Demand (including affordable housing)
H3	Design
H4	New Housing Open Space
T5	Private Sector Developer Contributions (Transport)
IMP1	Developer's Contributions (including education)
DC5	Car Parking Standards
DC6	Space about Dwellings"

A Phase 1 Habitat Survey of Pye Green Valley



S Henshall November 2004



Executive summary

The Staffordshire Wildlife Trust was commissioned by Cannock Chase District Council to conduct a Phase 1 Habitat Survey of Pye Green Valley. The survey revealed the site comprised a mix of habitats including semi-improved neutral grassland; amenity grassland: acidic grassland; wet woodland; planted broad-leaved woodland, scrub, dry dwarf heath and watercourses. The site appears to be of importance for skylark, a Staffordshire Biodiversity Action Plan (SBAP) species. The heath area is potentially valuable for invertebrates and reptiles.

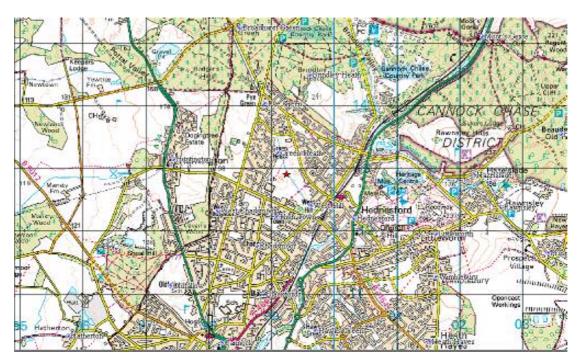
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1.0 Background

The site known as Pye Green Valley is located at SJ 993 128, 2.5km north of Cannock town centre and 0.5km to the west of Hednesford town centre, Staffordshire (see Map 1). The site is approximately 45ha and is sandwiched between areas of residential housing; Pye Green Valley Primary School lies to the north, and Blake School to the West. There is an existing grade 2 Site of Biological Importance (SBI) that lies in the north west corner of the site. The SBI comprises of an area of wet woodland dominated by willow and birch with waterlogged areas supporting sphagnum mosses.

Pye Green Valley was the location of the former West Cannock Collieries 1, 2 and 3. In 1977 the site was reclaimed, providing a playing field for the nearby school and a large area of public open space comprising mainly of grassland, some areas were planted with trees and shrubs. Pye Green Valley was highlighted in the Cannock Chase Local Plan 1997. It was proposed that part of the area should be developed for residential purposes, with a new road running the length of the valley to provide access to the housing. The remainder of the site was intended to be retained as open space and enhanced.



Map 1. Red star indicates the location of Pye Green Valley.

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Staffordshire Wildlife Trust has been commissioned by Cannock Chase District Council to carry out Phase 1 Habitat Survey and protected species search of Pye Green Valley.

2.0 Methodology

The site survey was carried out in accordance with the Joint Nature Conservation Committee (JNCC) Phase 1 Habitat Survey. Along with a description of habitat types on site, a detailed flora species list was compiled for each notable habitat type. Each species recorded in a habitat is given a score on the DAFOR scale. DAFOR is used to assess the abundance of a given species in a given area. These categories are often prefixed with the word 'locally'. 'Locally', as in locally abundant, is used to describe species assemblages that are confined to, or most prominent in, a particular area.

Figure 1. DAFOR scale

D	Dominant
A	Abundant
F	Frequent
0	Occasional
R	Rare

In addition to the recording of habitats and floral species, any miscellaneous fauna was recoded to enhance the survey and aid in identifying suitable management for the site.

The habitat types have been digested using MapInfo Geographical Information System (GIS) (see Map 2). The use of MapInfo enables the various habitat types to be measured accurately and for further changes to the site to be monitored.

3.0 Results

3.1 Description of habitats

Pye Green Valley is dominated by a large expanse of relatively species poor semi-improved neutral grassland. The grassland was created (seeded) over 25 years ago as part of the site reclamation. Vigorous grasses, including perennial rye grass, Yorkshire fog, false oat grass and meadow foxtail dominate much of the sward. Cock's-foot and tufted hair-grass are present in lesser amounts. The northern and south-western sections of Pye Green Valley, comprise of a sward dominated by fine leaved grasses such as common bent, red fescue and crested dog's-tail. Herbs are occasional throughout the sward. These include ribwort plantain, common mouse-ear, common cats ear, common vetch, red clover, tufted vetch, dandelion and hairy tare. Hay meadow species such as common knapweed, bird's foot trefoil, meadow vetchling and yarrow are locally frequent. Soft rush and common sedge are rare in the sward. Some areas have become quite rank, with dock and thistle species becoming locally abundant.



Photograph of the central grassland area at Pye Green Valley.

There is also an area of amenity grassland to the north west of the site and a small pocket of acidic grassland adjacent to an area of dry dwarf heath. The area of acid grassland in characterised by red fescue, tufted hair grass, wavy hair-grass, heath bedstraw and tormentil.

An area of dry dwarf heath lies to the west of the site. It is understood that this area was allowed to regenerate naturally and has received little or no management since

the site was reclaimed in 1977. The most conspicuous species in this section are heather, gorse, broom, bramble and bracken. Common century, heath bedstraw, tormentil and sheep's sorrel are present in smaller amounts. Due to a lack of management Scots pine and birch scrub has become abundant-dominant in places. There are small pockets of bare ground and several wet areas, the latter frequented by moss and rush species. Rubble and garden waste dumping has resulted in ruderal species becoming dominant along the western section adjacent to the houses.



Photograph of the dry dwarf heath to the west of the site.



Photograph of bare ground, an important habitat for invertebrates and reptiles. Pockets of planted broad-leaved woodland and scrub lie along the east and southwest boundaries. These are composed of a mix of oak, birch, beech, sycamore, willow, alder, rowan, elder and hawthorn.

A Grade 2 Site of Biological Importance (SBI) (91/93/05) lies to the north west of the site. This comprises of an area of wet woodland dominated by willow and birch carr with water logged areas and ditches. The waterlogged areas support sphagnum mosses including *Sphagnum palustre* and *Sphagnum recurvum*, as well as fool's watercress, wavy bitter cress and soft rush. The ditch edges and exposed rocks in the stream support several species of moss and liverworts. This SBI has become degraded due to a lack of management. Some areas are drying out, the board walk, paths and signage have fallen into disrepair and there is an issue with rubble and garden waste tipping.



Photograph of the SBI, the area of willow and birch carr with logged areas dominated by sphagnum mosses.

There are areas of continuous bracken and tall ruderal to the south of the wet woodland and to the west of the heath area, these areas also support scattered birch scrub.

A small stream flows north to south through the centre of the site, several drains and ditches feed into it. The stream is relatively shallow and small; much of the stream is less than one metre wide. The stream flows over a gravel and pebble bed, and riffles are frequent throughout. Much of the stream displays a trapezoidal profile (a straight, steep sides). Some sections of the stream banks and bed have been reinforced with hardcore and plastic webbing, however in many places this has been eroded. The banks in the lower section of the stream are quite steep and are devoid of vegetation, whereby the upper section supports a shallower bank profile with more marginal vegetation. Tall grasses and ruderals dominate the bank tops especially along the central and lower sections. Willow and alder are an occasional feature along the bank

top. Soft rush, brooklime and fool's watercress are present along the upper sections. Angelica is rare in this part of the site.



Photograph of the upper section of the stream at Pye Green Valley.



Photograph of the lower section of the stream, showing the steep eroded banks and bank side willow, (water vole surveyors in the background).

3.2 Species list

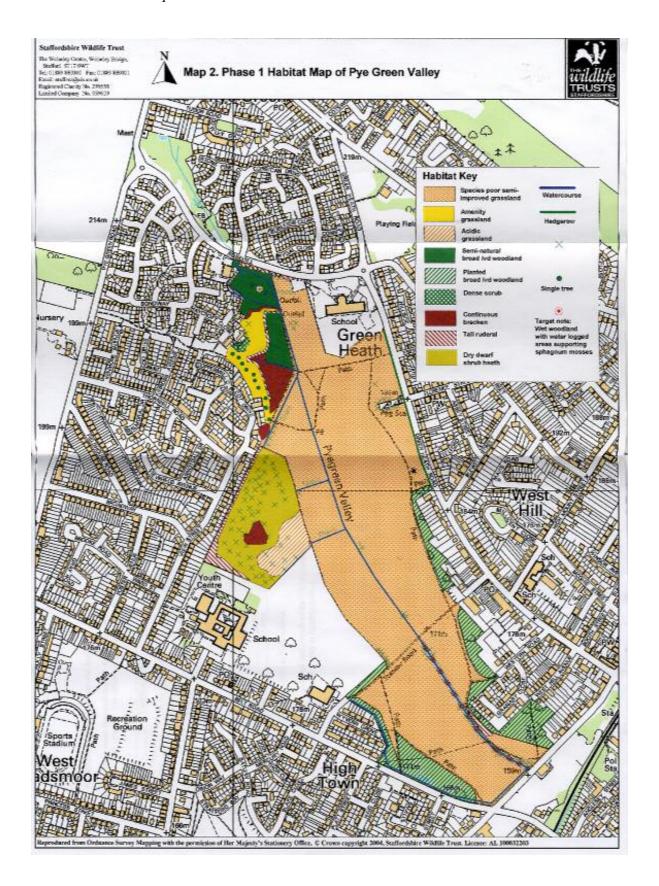
Common name	Latin Name	DAFOR	Habitat
Alder	Alnus glutinosa	LA	WS
A moss	Polytrichum commune	LA	WW
Angelica	Angelica sylvestris	R	WC
Annual meadow grass	Poa annua	0	G
Beech	Fagus sylvatica	LF	WS
Bilberry	Vaccinium myrtillus	R	WW
Bird's foot trefoil	Lotus corniculatus	LF	G, H
Bog mosses	Sphagnum spp.	LA	WW
Bracken	Pteridium aquilinum	LA	WS, WW
Bramble	Rubus fruticosus	LA	WS, WW
Broad buckler fern	Dryopteris dilatata	O	H, WW, WC
Broad leaved dock	Rumex obtusifolius	F	G, H
Brooklime	Veonica beccabunga	LA	WC
	Ü	LF	G, H, WS
Broom	Sarothamnus scoparius		
Bush vetch	Vicia sepium	0	Н
Cock's-foot	Dactylis glomerata	F	G,H
Colt's-foot	Tussilago farfara	0	G
Common bent	Agrostis capillaris	LA	G
Common catsear	Hypochaeris radicata	0	G, H
Common century	Centaurium erythraea	LA	H
Common chickweed	Stellaria media	F	WW
Common hawthorn	Crataegus monogyna	LF	H, WS
Common knapweed	Centaurea nigra	LF	G
Common mouse ear	Cerastium fontanum	A	G
Common nettle	Urtica dioica	F	WS, WW
Common sedge	Carex nigra	R	G
Common sorrel	Rumex acetosa	R	G
Common toadflax	Linaria vulgaris	О	Н
Common vetch	Vicia sativa	О	G
Crack willow	Salix fragilis	О	WS, WW
Creeping bent	Agrostis stolonifera	A	G
Creeping soft grass	Holcus mollis	LA	WW
Crested dog's tail	Cynosurus cristatus	LA	G, H
Creeping buttercup	Ranunculus repens	F	G
Creeping thistle	Cirsium arvense	LF	G
Dandelion	Taraxacum officinale	LA	G, H
Elder	Sambucus nigra	О	WS
European larch	Larix decidua	0	WS
False oat grass	Arrenatherum elatius	LD	G
Field horsetail	Equisetum arvense	LF	Н
Field rose	Rosa arvensis	О	Н
Fools watercress	Apium nodiflorum	LF	WW
Goat's-beard	Tragopogon pratensis	0	G
Goat willow	Salix caprea	LA	WS, WW
Gorse	Ulex europaeus	LA	H
Greater plantain	Plantago major	F	G
Hairy tare	Vicia hirsuta	A	G
Hard rush	Juncus inflexus	LF	Н
Hazel	Corylus avellana	O	WS
110201	Corytus avettana		** 5

Heather Calluna vulgar	is LD	Н
Heather Calluna vulgar. Heath bedstraw Gallium saxatil		H
Hedge bindweed Calystegiasepin		WS
Hogweed Heracleum spho		G, WW
Holly Ilex aquifolium	0	WS
Hop trefoil Trifolium camp		G
Japanese knotweed Fallopia japoni		WS
Lady fern Athurium filix-f		WW, WC
Marsh thistle Cirsium palustr		WW
Meadow buttercup Ranunculus acr		G
Meadow foxtail Alopecurus pra		G
Meadow vetchling Lathyrus prater		G
Mugwort Artemisia vulga		G
Pendunculate oak Quercus robur	F	H, WS
Perennial rye grass Lolium perenne	A	G
Ragwort Senecio jacoba		G, H
Red bartsia Odontites verno		Ğ
Red clover Trifolium prate		G, H
Red fescue Festuca rubra	LA	G, H
Rhododendron Rhodendron po	nticum O	H, WW
Ribwort plantain Plantago lance		G, H
Rosebay willowherb Chamaenerion	LD	H
angustifolium		
Rough meadow-grass Poa trivialis	F	G
Scots pine Pinus sylvestris	LA	Н
Sheep's fescue Festuca ovina	LF	Н
Sheep's sorrel Rumex acetosel	la R	Н
Silver birch Betula pendula	LA	H, WS
Smooth hawksbeard Crepis capillar	is LA	G, H
Soft rush Juncus effusus	LF	G, H, WC
Spear thistle Cirsium vulgare		G
Sycamore Acer pseudopla		WS
Tormentil Potentilla erect		Н
Tufted hair-grass Deschampsia co	espitosa LF	G
Tufted vetch Vica cracca	0	G
Wavy bittercress Cardamine flex		WW
Wavy hair-grass Deschampsia fl		Н
White clover Trifolium repen		G
Yarrow Achillea millefo	olium LF	G
Yorkshire fog Holcus lanatus	A	G
Fauna Latin name	No statuses	
	given	
Blackbird Turdus merula		
Cinnabar moth Tyria jacobeae		
Field grasshopper Chorthippus br	unneus	
Fox Vulpes vulpes		
Great tit Parus major		
Jay Garrulus gland		
Kestrel Falco tinnuncui	lus	
Long tailed tit Aegithalos caud		

Small tortoiseshell	Aglais urticae	
Skylark	Alauda arvensis	
Wren	Troglodytes troglodytes	

The habitat codes are as follows: WS- woodland and scrub habitats, WW- wet woodland, G- grassland, H- heath land and WC- watercourses.

3.3 Habitat map



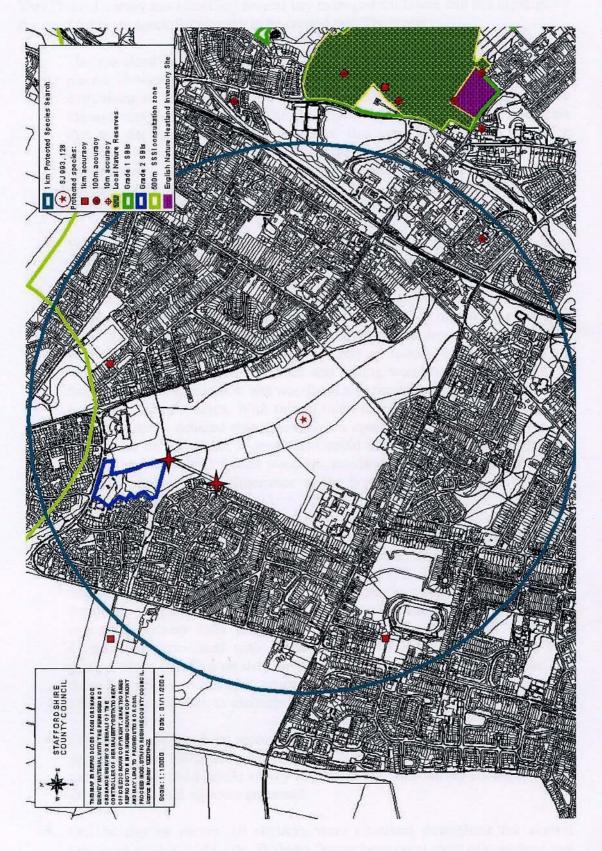
3.4 Protected species and BAP species search

A protected species search was carried out for the Pye Green Valley site for and a 1km radius around the site; refer to map 3. The following species were found to be associated with the site:

Scientific name	Common name	Sex/stage	Date	Grid ref
Protected Species				
Plecotus auritus	Brown long-eared bat	2 present	24/09/89	SJ 9913
Pipistrellus pipistrellus	Pipistrelle bat	1 dead	23/05/93	SJ 999 121
		male		
Sciurus vulgaris	Red squirrel*	-	1975	SJ 9812
Avicola terrestris	Water vole	Small	14/05/99	SJ 991 133
		colony		
Lacerta vivipara	Common lizard	3 cat kills	18/07/99	SJ 990131
BAP Species				
Alauda arvensis	Skylark	10 adults	23/09/04	SJ 992 129
		present		
Gallinago gallinago	Snipe	1 adult	28/02/03	SJ 9913

^{*} Red squirrel is now believed to be extinct in Staffordshire.

Barn owl *Tyto alba* have also been recorded just outside of the 1 Km search zone; it is highly likely that barn owls use Pye Green Valley as hunting habitat.



the location of the Grade 2 Site of Biological Importance on the site. Red icons show the location of protected species records. Since this search was Map 3. Protected species search. A map of Pye Green Valley showing the site and the 1 Km protected species search area. The blue outline denotes carried out two other protected species records have been brought to our attention, these are shown with red stars (10m accuracy)

4.0 Recommendations

This Phase 1 survey has identified several key management issues and has highlighted the need for more specialist surveys to be carried out. These are:

- The grassland is mainly dominated by vigorous grasses and is quite rank in places. However some sections show signs of greater diversity, the sward comprising of finer grasses and a greater number of herbs. With appropriate management the grassland has the potential to increase in diversity. It appears that the site has not been cut or grazed this year. Therefore, it would be beneficial to cut and heavily aftermath graze the grassland to reduce the vigour of the grasses. A hay meadow management regime should then be adopted and implemented in the future. Additional hay meadow species could be introduced through hay strewing.
- Wet woodland is a UKBAP and Staffordshire BAP habitat. The SBI is of value as an area of wet woodland; the waterlogged areas with sphagnum mosses and deadwood are of particular interest. The SBI is suffering from insufficient management. Some areas of the wood appear to have dried up, the boardwalks throughout the wood are damaged, signs are in need of repair and there is a severe problem with tipping from nearby gardens. Wet woodland is very valuable for many invertebrates that rely on specific habitats such as old willows, submerged roots, leaf litter and rotting wood for the completion of their life cycles. In addition wet woodland also provides habitat for many bird, moss and lichen species. With this in mind this area should be retained and enhanced and a detailed management plan created. Invertebrate survey work would also be beneficial. Management could include coppicing or pollarding willow; and retention of dead wood i.e. standing, fallen deadwood, brash and log piles. Repair and maintenance of the boardwalk and removal of tipped material are also necessary.
- Lowland Heathland is a UKBAP and Staffordshire BAP habitat. It is understood that this section of Pye Green Valley was left to regenerate naturally following closure of the colliery in 1977. Therefore it requires a large input of management, as birch and Scot's pine scrub has become dominant in places. Heathland is an important habitat for invertebrates, especially solitary bees and wasp that are Staffordshire BAP species. Invertebrates associated with heathlands can be broadly divided into two groups; those that feed on the flowering plants such as heather and gorse and those that rely on warm open spaces and bare ground to burrow. Management of the site should seek to maintain and enhance these conditions.
- Common lizard has been recorded adjacent to the area of heath. It is strongly suspected that the lizards are resident in the area of heath; therefore it is recommended that a reptile survey be carried out. This survey should focus on the heath area and adjacent grassland.
- On the day of survey 10 skylarks were observed throughout the central grassland section of the site. Skylarks favour large open areas of grassland and avoid boundary features such as hedgerows and blocks of scrub due to the risk

of predation. Skylarks rarely nest in fields less than 3ha in size (A. Gouldstone, RSPB pers. Comm.) The large area of grassland and ditches at Pye Green Valley provide favourable habitat for skylarks. The skylark is a UK and Staffordshire BAP species and is protected under the EC Birds Directive and the Wildlife & Countryside Act 1981. A skylark survey should be undertaken to identify the number of skylarks and breeding sites throughout Pye Green Valley. Any development should ensure that as much open grassland as possible is retained (with no areas less than 3ha) and boundary features and scrub is not increased.

- A possible badger latrine was found at Pye Green Valley adjacent to woodland in the eastern section of the site. There is also an unconfirmed badger record from a local resident. Due to the legal protection the badger receives it is recommended that a full badger survey is conducted before any development plans are made.
- A small colony of water voles were recorded on the stream in 1999. A recent survey indicates that there is still limited water vole activity in the northern section of the stream adjacent to the SBI. There is great scope for habitat enhancement for water voles at Pye Green Valley, and any development should incorporate habitat enhancement into its plans.
- The harvest mouse is an important species in Staffordshire, and it has only been recorded at 15 sites in the county. The habitat at Pye Green Valley appears suitable for harvest mice. A survey could be carried out to establish if they are present on the site.

5.0 Conclusion

The faunal species found at Pye Green Valley favour open un-wooded habitats. Site enhancements should strive to maintain and improve open grassland, heathland and wetland rather than focusing on tree and shrub planting.

ANNEX C – LIST OF ORGANISATIONS CONSULTED

Hednesford Town Council

Severn Trent Water

South Staffordshire Water Plc

Forest of Mercia

Staffordshire Police (Architectural Liason Officer)

Sport England

English Nature

Arriva Midlands North

British Telecoms Plc

Environment Agency

Staffordshire Wildlife Trust

Cannock Chase Sports Council

Travel West Midlands

Green Bus Service

Cannock and District Access Group

Cannock Chase Primary Care Trust

Chase CVS

Blake Valley Technology College

Stafford and Mid Staffs Archaeological Society

Staffordshire Playing Fields Association

Tower Residents Association

West Hill Primary School

William Baxter School

Woodland Close Residents Association

National Playing Fields Association

Cornish Houses Residents Association

First Community Health

Pye Green Valley Primary School

South Staffordshire Health Authority

Hednesford Traders

Transco

The Coal Authority

CPRE (Staffordshire Branch)

The Housing Corporation

Midlands Electricity