

The Inspector,
c/o The Development Plans Manager,
South Lakeland District Council,
Lowther Street,
Kendal,
LA9 4DL



10 July 2012

Dear Sir,

We wish to make the following comments on the conformity of South Lakeland District Council's Land Allocations DPD with the new National Planning Policy Framework (NPPF).

We make these comments with particular reference to site R121M, but also include more general concerns about the unsoundness of their document.

I am writing as an individual and on behalf of **SOLEK** (Save Our Landscape East Kendal).

We have taken out many of the relevant references in the NPPF in respect to this particular submission, and will illustrate that the **Land Allocations DPD is in no way in conformity with the NPPF.**

This letter needs really to be read in conjunction with our other individual and SOLEK responses.

The site lies on the Eastern Side of the valley, and in a very prominent position.

We have included the site plan for additional information and guidance **(attached)** when reading our submission. Our lay submission will be supported by the professional documentation supplied by Mike Hyde Planning Associates.

We do not accept the judgements of the LPA to be sound, so we are testing R121m against the NPPF.

In all respects this documentary response should be read in conjunction with our previous submissions.

There are five main areas that we feel that R121M is not in conformity with the NPPF:

- NATURAL ENVIRONMENT
- BIO-DIVERSITY
- FLOODING
- HIGHWAYS
- COMMUNITY ENGAGEMENT

Natural Environment.

Paragraph 7 states that planning's environmental role is to contribute to protecting and enhancing our natural, built and historic environment.

Paragraph 109 states that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, and we have argued to that effect consistently. This takes the argument in Para 7 much further. For example R121M had County Landscape designation and was turned down for development on appeal in 1999.

Paragraph 17 says that one should protect the Green Belts around settlements, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it.

And although Cumbria does not have any Green Belts, these important green spaces that fringe the market town are just as important in order to retain the historical nature and setting of the town.

77. The Local Green Space designation should only be used.....where the green space holds a particular local significance, for example because of its beauty, historic significance, recreational value (including as a playing field), tranquillity or richness of its wildlife. (My under-linings)

SLDC state that Policy CS1.1 identifies the need to safeguard the essential character of buildings that make a positive contribution to the historic interest of the area,

When the Inspector in 1999 dismissed the appeal he commented on the importance of retaining the integrity of the traditional farm buildings bordering R56. And in their very brief site development notes SLDC already recognise the importance of retaining the field structure, stone walls etc.

Policy CS8.2 states proposals for development should be informed by and sympathetic to the Historic Landscape Character Assessment, special qualities and local distinctiveness of the area and settlement character, setting of and views into conservation areas and individual built/manmade features that contribute to landscape and settlement character.

Kendal should be viewed in these settlement terms.

Gillespies was SLDC'S skimpy landscape assessment document, and it was riddled with errors – gardens in Sedbergh Road were up for development, and there was no heed of topography, for example.

170. Where appropriate, landscape character assessments should also be prepared, integrated with assessment of historic landscape character, and for areas where there are major expansion options assessments of landscape sensitivity.

And this is what the Town Council sought to do.

SLDC refused to accept the Town Council's independent, detailed and accredited Landscape Character Assessment (Galpin Report) as part of their evidence base. It had been commissioned because there was an obvious gap in the evidence base at a local level, and SLDC officers had agreed the brief.

SLDC also refused to accept, as part of their evidence base, the landscape character assessment work submitted by the Friends of the Lake District.

Both of these documents fit in with the NPPF and recommended that R121M should not be included in the Land Allocations, with Galpin concluding that R121M was the most sensitive of the 19 Kendal sites.

The latest proposal is to build a road across these first two fields, that have been removed from building development – on landscape grounds – only to have a an access road with all of the necessary lighting etc. attached!

Cumbria County Council Policy in any case states that you should not sub-divide fields for development, and 60 dwellings hardly constitute a major development.

SLDC summarily dismissed the Town Council's alternative strategy based on the Taylor Review, which said that you do not just build and build and build on the edges of our existing market town(s).

They recognise that the site and its surroundings contain a number of landscape features including tree groups, a belt of trees adjoining properties on Oak Tree Road, stone walls, wet areas, ponds, springs and watercourses some of which have biodiversity significance. **(Landscape pictures attached)**

Paragraph 17 adds that 'Allocations of land for development should prefer land of lesser environmental value, and paragraph 110 - Plans should allocate land with the least environmental or amenity value.

BIO-DIVERSITY

Paragraph 7 states that planning's environmental role is to contribute to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity etc.

109. The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

114. Local planning authorities should set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.

Adopted Core Strategy policy CS8.4 makes several provisions for the protection, enhancement and restoration of biodiversity and geo-diversity, including requirements for all new developments to protect, enhance and restore the biodiversity and geo-diversity value of land and buildings, minimise fragmentation and maximise opportunities for restoration, enhancement and connection (including links to habitats outside South Lakeland) and incorporate beneficial biodiversity/geo-diversity conservation features. The policy makes special provisions for UK Priority habitats and species,

They do recognise that the site and its surroundings contain a number of landscape features including tree groups, a belt of trees adjoining properties on Oak Tree Road, stone walls, wet areas, ponds, springs and watercourses some of which have biodiversity significance.

However, SLDC is actually intending to destroy the natural and well established biodiversity of this area and the surrounding area too. They have not even correctly represented the extent of the two Great Crested Newt ponds, the latter actually in R141, (**See diagram attached**), and the orchard.

All sites for example will be required to be subject to an ecological assessment at such time as a planning application was submitted for that site, they say, but with such a sensitive site it should not be left to the planning application stage. The word 'mitigation' is merely put forward as an excuse to retain the site in the plan.

The Forward states '.....including moving from a net loss of bio-diversity to achieving net gains for nature.'

Flooding and Climate Change

Paragraph 17 states that Planning Authorities should take full account of flood risk.

Core Strategy Policy CS1.1 addresses mitigation against and adaptation to climate change, and it claims that provision (will be) made for resolving surface water drainage issues.

However, when asked in February 2012, the Kendal Planner could not even say what provision.

CS8.8 addresses the issue of development and flood risk, and it states that both the Core Strategy and the Land Allocations documents contain a proactive approach to mitigating and adapting to climate change, taking full account of flood risk.

The Land Allocations site assessment methodology claims to have taken account of the latest fluvial, tidal and surface water information and advice from key bodies to minimise flood risk. One of their own environmental professionals they consulted indicated (initially) that the land would be developed 'over his dead body'.

However, with respect to R121M, it did not take account of the Study carried out by Professor Robert Jackson (**enclosed**).

The situation is so unpredictable. This week a spring that we last saw over twenty-five years ago opened up. Problems are not only local to Oak Tree Road (this week numbers 31, 33, 35 and 37) and Rowan Tree Close (this week number 12) but also on Castle Green Road and beyond (**pictures enclosed**).

The situation is worsening, as can be seen from the growth of the ponds and also the amount and speed of the water coming off the site.

3.21 SLDC Site information indicates that 'The eastern part of Kendal has surface water drainage issues and the Stock Beck Flood Alleviation Scheme has recently been implemented. There is an existing and complex flood issue, but there is scope for mitigation. On this site, there is an established flood risk to the site. The catchment may include railway drainage. There are issues concerned with sheet runoff, flooding from the watercourse and an undersized and substandard culvert under Oak Tree Drive/ Rowan Crescent. A site specific Flood Risk Assessment should thoroughly investigate and determine all the flood constraints and opportunities to mitigate the impact of any development and improve the existing situation. The lower part of site could be used for flood attenuation to provide betterment to Stock Beck Flood Alleviation Scheme. Sustainable Drainage is a requirement for this site.

SLDC recognises the problems on the eastern side of Kendal, but then seems to be prepared to compromise the the road drainage network and the Stock Beck Flood Alleviation Scheme, and take no account of climate change.

100. Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.

And development here is neither necessary nor in any way appropriate. This area floods probably twice each year already (**pictures attached**).

102 a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. It won't because of flooding complexities on this side of Kendal. This must also be seen in the general context of Kendal's flooding problems highlighted in last Saturday's Guardian. (**document attached**)

HIGHWAYS

4. Promoting sustainable transport (paragraphs 29-41)

Specific to R121M, Paragraph 32 says that all developments that generate significant amounts of movement should take account of whether safe and suitable access to the site can be achieved for all people.

One could anticipate that a site of 60 dwellings in this part of town could contribute an additional 80 to 90 cars.

When we met the Kendal planner in February this year, he said that the preferred option was to open up Oak Tree Road. The following day we discovered from the Highways Department of Cumbria County Council that they hadn't even measured the width of the road – 4.8 meters – for two-way traffic **(picture attached)**.

We would strongly argue that Oak Tree Road could not possibly be opened up for vehicular access – width, steepness of the road, access point onto Castle Green Lane and traffic flow on the main road.

Should access be made off the A684 then a road, lighting etc would cross two fields SLDC already accepts of high landscape quality, we assume.

SLDC seeks access onto a site that should not be developed and cannot be justified – via an access road that cannot be justified in planning terms.

Section 10 CS8.8

The Land Allocations document allocates land in accordance with this overall strategy, thus reducing the need to travel and in turn, minimising greenhouse gas emissions

The Strategy places a strong emphasis on supporting investment in public transport services particularly those which serve the Principal and Key Service Centres.

All development will be designed to reduce the need to travel and to maximize the use of sustainable forms of transport appropriate to its particular location. We have also seen no increase in the use of alternative modes of transport.

Further work will be undertaken in order to fully identify the mechanisms required to implement the necessary infrastructure. As part of this work, viability will need to be tested.

This last section highlights the aspirational nature of their thinking still.

We have seen nothing but a reduction in services, and since SLDC is not prepared to take on Town Council (Taylor) recommendations, the volume of additional traffic outside Kendal will not warrant any additional services.

No serious infrastructure plan has appeared and no serious proposals are available to show how the vision statement for 2025 will be achieved in reality.

Atkins was commissioned and produced a poor result for SLDC. CCC Highways Department did the next report and it was not promising. Finally CCC were asked to produce another report, and we cannot understand why this turned out to be much more promising for SLDC.

Community Engagement

Forward. This should be a **collective** enterprise. Yet, in recent years, planning has tended to exclude, rather than to include, people and communities.

We are allowing people and communities back into planning.

1. Local people and their **accountable** councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

17. (Local Authorities should) **empower** local people to shape their surroundings.

69. Local planning authorities should create a **shared vision** with communities of the residential environment and facilities they wish to see. To support this, local planning authorities should aim to involve all sections of the community in the development of Local Plans and in planning decisions, and should facilitate neighbourhood planning. They should promote safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space; enhance the sustainability of communities; provide recreational facilities etc.

76. Local communities through local and neighbourhood plans should be able to identify for special protection green areas of particular importance to them.

155. Early and **meaningful engagement** and **collaboration** with neighbourhoods, local organisations and businesses is essential. A wide section of the community should be **proactively engaged**, so that Local Plans, as far as possible, reflect a **collective vision** and a set of **agreed priorities** for the sustainable development of the area, including those contained in any neighbourhood plans that have been made.

167. Key stakeholders should be consulted in identifying the issues that the (environmental) assessment must cover.

The key words are notional when trying to work with SLDC.

SLDC has gone through a process, but forgotten what the original question was: namely to find the most appropriate land available for development, and in the most appropriate locations.

In fact, they have become totally wedded to the process.

In theory ordinary stakeholders might feel optimistic about their views carrying some weight, and feel able to work with the LPA.

But in reality this is not the case.

It comes down to what is meaningful consultation and there being a willingness to be flexible.

All we have seen is intransigence, and a desire to get the process out of the way as quickly as possible.

In their response to the Inspector SLDC say:

Although land allocations are innately controversial and give rise to concerns particularly from people who are directly affected, both the Core Strategy and the Land Allocations DPD are founded on extensive consultation and, where possible, land allocations have been brought forward in consultation with Parish and Town Councils.

This is a professionally cynical and offensive approach to take. Those most likely to be affected will be those most likely to respond. However, they do have local knowledge and their views should be considered and not summarily dismissed. We do not all have the time and energy to respond to the issues on every site. Nor do we have the essential knowledge.

This is the view that both planners and politicians have expressed publicly throughout the whole 'consultation' process.

They continue:

There is no obvious conflict. Tensions between local priorities and meeting strategic needs will be managed.

This displays an unbelievable level of arrogance.

They took no or little notice of the concerns expressed by individuals, organisations, groups or elected bodies. Unhappiness and frustrations will continue, if this attitude continues.

During the process there have been over 200 written objections, and two hasty petitions signed by over 400 people.

And finally:

A strong focus on effective and participatory development management will guide the implementation of land allocations.

Meaningful participation would be good, but it has not been apparent up to now.

The Forward states that 'Our standards of design can be so much higher'.

SLDC planners have refused already that Kendal Town Council and their group of consultants be involved in design briefs.

WELLBEEING

It is obvious from the start of the NPPF just how much emphasis is placed upon the importance of the wellbeing of those affected and likely to be affected by any future developments.

The Forward states clearly that *Sustainable* means ensuring that better lives for ourselves doesn't mean worse lives for future generations.

Sustainable development is about change for the better.

Our natural environment is essential to our wellbeing, and it can be better looked after than it has been.

Our historic environment – buildings, landscapes, towns and villages – can better be cherished if their spirit of place thrives, rather than withers.

9. Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including moving from a net loss of bio-diversity to achieving net gains for nature.

SLDC is quite correctly intent upon providing a lot of low-cost/affordable/social housing, but they have forgotten to take into consideration the views of those who would have tackled the problem differently. Sadly it has become an obsession and dulled their judgement. You sense, however, that ordinary people and their views are irrelevant.

We should be planning for now and for the future, but for all of us and by all of us.

It has all been railroaded through.

We see little convincing evidence that in all honesty we will be better off in the future.

CONCLUSION

The Forward states:

- Planning must be a creative exercise in finding ways to enhance and improve the places in which we live our lives.
- Planning should always be a creative exercise in finding ways to enhance and improve the places in which people live their lives and it should produce a good standard of amenity for all existing and future occupants of land and buildings.

SLDC took it as a reactive exercise, and could have changed their tack about three years ago when localism rightly appeared on the agenda.

They were motivated and driven by the need to find a huge amount of land at any cost.

9. Protecting Green Belt land (paragraphs 79-92)

(SLDC does not respond to this section, since there are no Green Belts in South Lakeland).

It defies all logic not to be able to see that green spaces at the edge of settlements would often make good sense/the equivalent of green belts.

79. The Government attaches great importance to Green Belts, (though the land round Kendal is not defined as Green Belt!) The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

80. Green Belt serves; to check the unrestricted sprawl of large built-up areas; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns.

Taylor worried about urban sprawl, especially for market towns.

We already are suffering from urban sprawl, and the unsustainability is already apparent. It is too far for many of our residents to consider walking into town, for example. Distances are in some areas on the edge of town already relatively substantial.

SLDC refused to consider the Town Council's alternative strategy based on the Taylor Review and which said that you do not just build and build and build on the edges of our existing market town(s) and create that urban sprawl.

Section 8 highlights the problem in that most development is to be carried out in the key service centres, 'whilst allowing for a small amount of development

in settlements with fewer services and facilities in order to ensure that these settlements can also continue as vital and viable communities.'

SLDC have missed an opportunity to make smaller settlements into viable and vibrant places.

Sustainability can be better achieved through Taylor.

The Town Council in their response to the first land allocations proposals highlighted the importance of the setting of Kendal and that for the most part the approaches to Kendal should not be developed. No notice was taken.

What SLDC have produced is not sustainable.

Paragraph 182 reminds us that the plan must be **justified**. The plan should be the most appropriate strategy, when considered against the reasonable alternatives.

Sound evidence, above and below, was disregarded, dismissed or carefully omitted.

- SLDC refused to accept the Town Council's independent Landscape Character Assessment (Galpin Report) as part of their evidence base.
- They also refused to heed, as part of their evidence base, the landscape character assessment work submitted by the Friends of the Lake District.
- Suspect evidence became the bible, and indicated a gross lack of misinformed preparation at the early stage, compounded later by grossly inadequate preparation taking place for certain sites.

1. Building a strong, competitive economy (paragraphs 18-22)

The Gillespies study assessed the overall deliverability of sites in considering the suitability and overall marketability of each site, noting any significant constraints.

It certainly did not point out the significant constraints linked to R121M. It had been a cursory, **map** exercise.

There has been an obvious lack of site preparation, and everything will be left until later before issues are looked at in detail:

- Highways - Oak Tree Road has not even measured etc.
- Flooding - Evidence, visual and documented, not taken into account etc.
- Landscape - Refusal to take on board accredited evidence and site history etc.
- Biodiversity.- Unwillingness to follow legislation/guidelines etc.

Add to this a lack of meaningful community engagement.

Everybody is in favour of affordable housing, but not at any cost. I would worry too that their plan will not deliver it in any case.

Unfortunately, SLDC's Land Allocations DPD is unsound, and not in conformity with planning guidance, logic and the NPPF.

We would ask that you remove R121M from the Land Allocations Document, and find the DPD itself unsound.

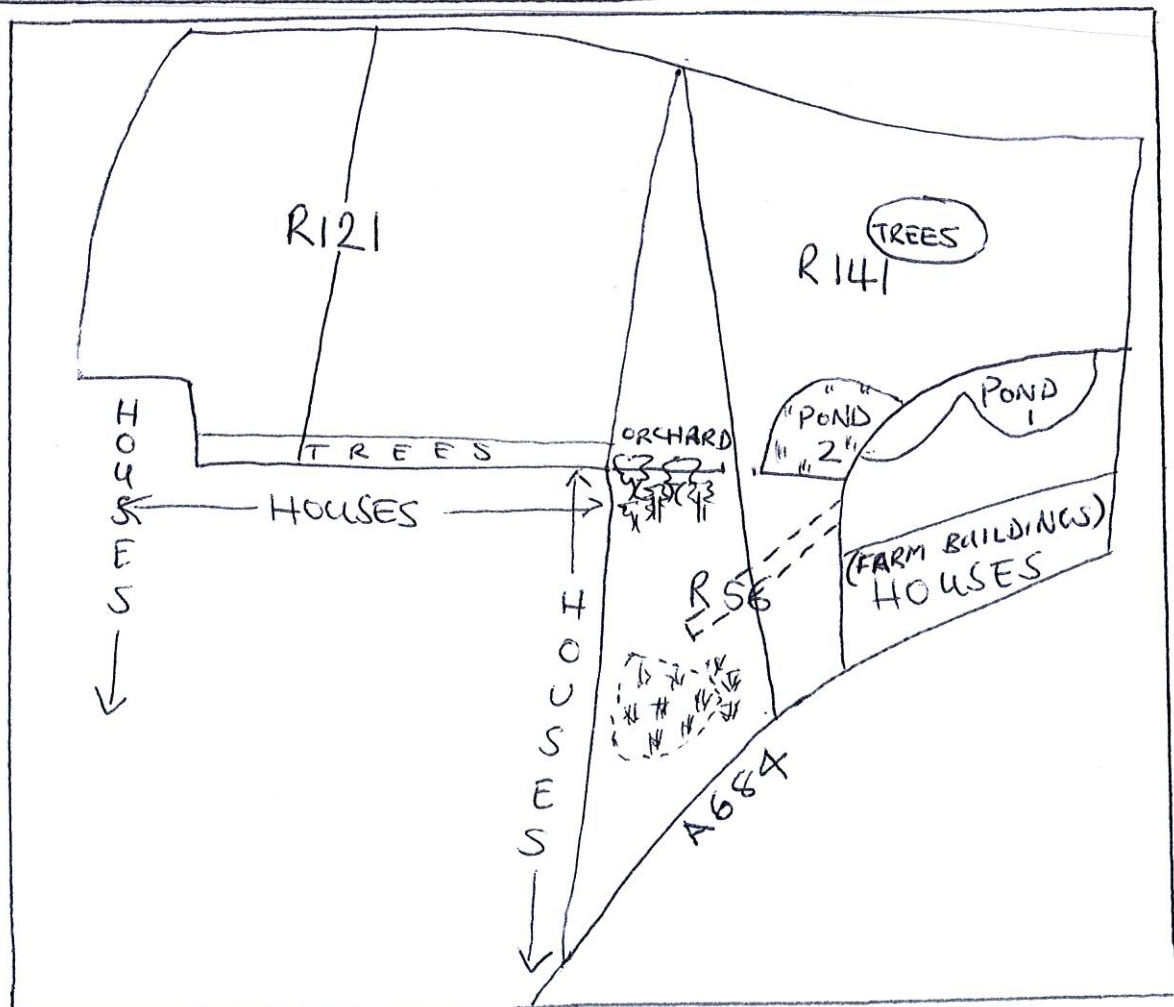
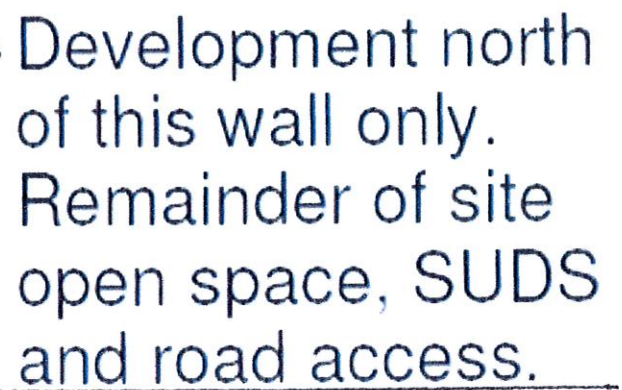
We would like to re-state our willingness to speak at the Hearing.

Yours Sincerely,

A large black rectangular box redacting the signature of Austen Robinson.

Austen Robinson

(On behalf of SOLEK)

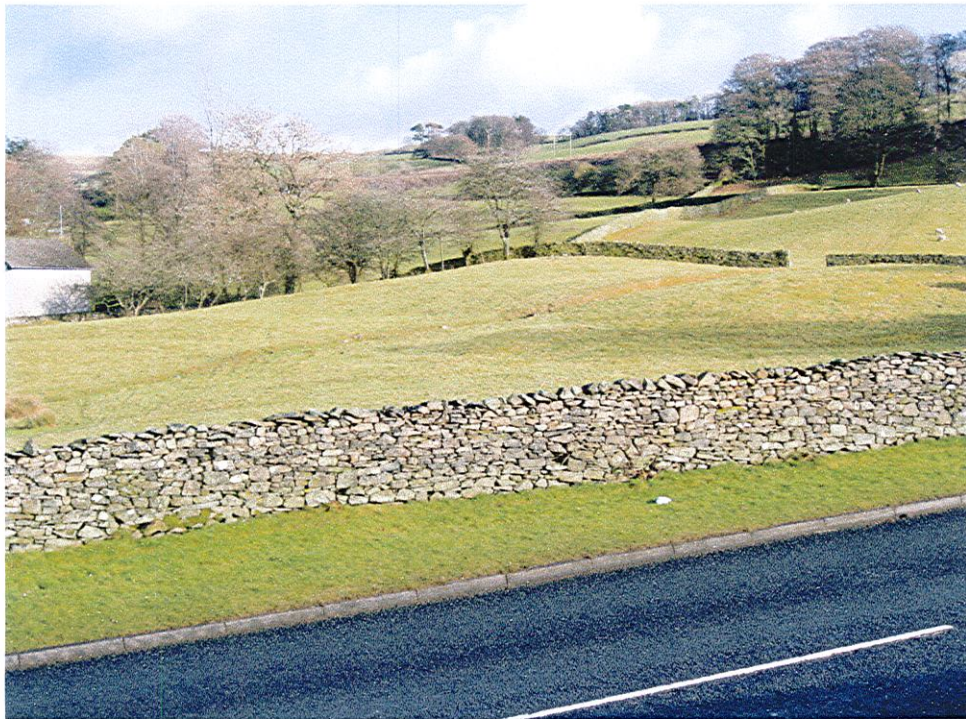




LANDSCAPE (1)



LANDSCAPE(2)



LANDSCAPE(3)



HIGHWAYS - OAK TREE ROAD (1)



(2)



BODERSITY (1)



Biodiversity(2)

RECORDED DELIVERY

South Lakeland District Council
Development Plans Officer
South Lakeland House
Kendal
LA9 4DL

Our ref: JH/CS/A00759-4

Your ref:

17 November 2011

Dear Sir/Madam

**South Lakeland Local Development Framework
Site Reference Numbers : R121, R141 and R56**

We have been consulted by Frances Astor of Greystead, 93 Sedbergh Road, Kendal who last wrote to you on the 5 September 2011 (copy letter enclosed). In that letter Mrs Astor indicated that she was in the process of commissioning her own expert advice and she has now done so.

We enclose a copy of a Preliminary Expert Report produced by Professor Robert Jackson which is dated the 29 September 2011 and, whilst the last round of consultation closed on, we believe, the 9 September 2011 we ask that this Report be logged and considered as part of the process.

Although we have sent this letter by recorded delivery we would be grateful if you could acknowledge receipt of it (and in particular the Expert Report) and confirm that the contents of the Report will be considered as part of the process.

Yours faithfully

Thomson Wilson Pattinson

Secretary - 01539 815749

App A

**Independent Expert Opinion in
Water, Construction & the Environment**

***South Lakeland District Council
Proposed Housing Development - Kendal
Preliminary Expert Report – Sept 2011***

JACKSON Consulting

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*Accredited Mediator for Civil & Commercial Disputes (ADR Group)
*Former Member of Council - The Academy of Experts

STATEMENT

Report:

*South Lakeland District Council
Proposed Housing Development - Kendal
Preliminary Expert Report – Sept 2011*

Prepared on instructions from:

*Thomson Wilson Pattinson
Solicitors
114-116 Stricklandgate
Kendal
Cumbria
LA9 4QA*

Statement of Truth:

I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

Signed:

Professor Robert P. Jackson CEng CWEM FICE FCIWEM MAE

Date:

29th September 2011

1.0 South Lakeland Local Development Framework

1.1 The Allocations of Land Development Plan dated November 2008 states

1. It is the Council's aim to find the most sustainable sites for development.
2. The Council is committed to conserving and enhancing the distinct character of the District ...
3. The key challenge will be to identify sufficient land to accommodate this development whilst at the same time affording appropriate protection to South Lakeland's high quality environment.
4. In order to achieve a sustainable distribution of development, the preferred locational strategy suggests that development be focussed primarily in the towns of Kendal and Ulverston.
5. Limited development in rural areas will be supported under certain circumstances.
6. Evidence base studies and consultation with local residents have demonstrated that the District faces major challenges to address issues of affordability of housing.
7. A quality environment, accessible countryside, water areas, green space and good leisure and cultural facilities will be an important factor in attracting new investment to the area, enhancing the quality of life for existing and future communities, supporting wildlife and providing natural adaptation and mitigation mechanisms against the effects of climate change.
8. The scale of housing and employment growth required in the plan period is likely to result in considerable pressure for development within settlements. In many circumstances, this may be preferable to development of green-field sites and consistent with acceptable principles of sustainable development.

2.0 Flood Risk

2.1 Even in areas generally free from flooding, local conditions and exceptional rainfall can lead to flooding. Developers and planning authorities should therefore take a precautionary approach in taking decisions when flood risk is an issue.

2.2 The drainage catchment is already susceptible to intermittent flooding as evidenced by the Stock Beck Action Group and further upstream urbanization is likely to exacerbate these problems rather than alleviate them.

2.3 Consequently, there is a need to adopt a precautionary approach by ensuring that both the available scientific evidence and the scientific uncertainties which exist in relation to flood risk are taken into account when determining planning applications. Proceeding from the known facts and taking a precautionary approach to the uncertainties inherent in the decision-making process, will enable more open and better informed decisions to be made.

2.4 The precautionary principle requires that if a threat of serious or irreversible damage to the environment or human health exists, a lack of full scientific knowledge about the situation should not be allowed to delay containment or remedial steps if the balance of potential costs and benefits justifies enacting them. The precautionary principle is particularly relevant to dealing with the hazard of flooding since, because of local variability and uncertainties, it is often difficult to be prescriptive about the levels of risk. Hence, its application acknowledges the uncertainty in flood estimation.

2.5 The above begs the question, was a formal Flood Risk Assessment requested by South Lakeside District Council with the planning application for the proposed development?

2.6 An assessment of the risk of flooding to the proposed development was made by reference to the Environment Agency's (EA) flood map website. This revealed that the proposed development is adjacent to an area subject to flooding from rivers or sea without defences. However, the EA employs low resolution flood mapping to create indicative flood maps in order to provide a cautious estimate of flood risk but, on a more local scale, this mapping may not be accurate.

2.7 Due to their size, some watercourses are sometimes not modelled as part of the EA Flood Map. Consequently, as the modelling undertaken by the EA to derive an 'indicative' flood map may not include some local watercourses, the EA modelling may have limitations with regard to the area under investigation. Such potential limitations may give rise to significant uncertainties with respect to catchment flooding.

2.8 As well as assessing the risk to the site posed by fluvial (river) flooding, a comprehensive Flood Risk Assessment would need to consider flooding from other sources including groundwater. Any detailed flood modelling of the local drainage catchment within a Flood Risk Assessment would therefore be able to challenge the EA's modelled flood levels and its corresponding indicative flood zones.

3.0 Climate Change

3.1 The risk of potential future flooding is compounded by gaps in the understanding of how the changing climate will affect areas currently at risk of flooding. This risk is expected to increase significantly over time with the danger of flooding becoming more real each year with wetter winters and more frequent storms.

3.2 There is an increasing body of scientific evidence that the global climate is changing as a result of human activity. The nature of climate change at a regional level will vary: for the UK, projections of future climate change indicate that more frequent short-duration, high-intensity rainfall and more frequent periods of long-duration rainfall of the type responsible for the 2000 floods could be expected. These kinds of changes will have implications for river flooding and also for local flash flooding.

3.3 These risks, coupled with the risk of rising groundwater levels, must be addressed as part of the planning application process since development which would have a significant probability of being affected by flooding or would increase the probability of flooding elsewhere should not be permitted.

3.4 With changing climate the risk of flooding is expected to increase significantly over time. The UK floods of 2007 caused 55,000 properties to flood, 7,000 people had to be rescued and 13 people died; the resulting insurance bill topped £3.5bn.

4.0 Hydrogeology

4.1 Within an aquifer, the water table is rarely horizontal, but reflects the surface relief due to the capillary effect in soils, sediments and other porous media. When water reaches the zone of saturation the movement of water is no longer vertical but is horizontal in the direction of the slope of the water table; the slope of the water table, or hydraulic gradient, depends on the rate at which water is added to the system and the permeability of the material. Notably, perched aquifers reduce rates of recharge to underlying regional aquifers and redirect subsurface water flow along horizontal flowpaths.

4.2 The proposed development site to the south of Sedbergh Road comprising fields R121; R141 and R56 contains numerous land drainage ditches together with springs and seepages, and ponds. Springs and seepages occur whenever water-bearing conduits intersect the ground surface and these features serve to confirm that the area has a complex hydrogeology.

4.3 The relationship between rainfall and water levels within the ponds needs to be established and forms another unknown that should have been resolved at the planning application stage since the planning authority must take the probability of flooding from groundwater into account when determining planning applications; the interaction between surface waters and ground waters is of fundamental importance to flood risk in the area of the proposed development.

4.4 It is interesting to note that the 1968 OS Map (1:2500) confirms two ponds to the south of the development site (R141) yet subsequent ordnance mapping only confirms the presence of a single pond. This suggests that one of these ponds has, since 1968, dried out.

4.5 Given the above observations, it is likely that this pond is a Temporary Pool, sometimes referred to as a Vernal Pool or Pond that is hydraulically connected to a perched water table located beneath the site. These pools are temporary bodies of water that are usually devoid of fish. They are termed 'vernal' because they are often, but not necessarily, at their peak in the spring ('vernal' - of, relating to, or occurring in the spring).

4.6 Most Vernal Pools are dry for at least part of the year and fill with winter rains. Some pools may remain at least partially filled with water throughout the year but all dry up periodically. Relatively little is known about how perched aquifers regulate hydrogeological processes in Vernal Pool landscapes. However, it is likely that a perched aquifer maintains a saturated connection with local Vernal Pools and that perched aquifer hydrology plays an important role in stream base flow and Vernal Pool function.

4.7 Any significant changes in the management of the local aquifer, for instance by substantially increasing pumping to abstract groundwater, would have no effect on a Vernal Pool since perched groundwater flows laterally and downward at rates that are unaffected by the position of the regional water table. However, the presence of a Vernal Pool in the area would further suggest a complex hydrology/hydrogeology.

5.0 Conclusion & Recommendations

5.1 A detailed site inspection revealed that

1. the proposed development sites do not constitute the most sustainable sites for development;
2. the proposed development will not conserve and enhance the distinct character of the District;
3. the proposed development will not afford appropriate protection to South Lakeland's high quality environment;
4. the circumstances that warrant the proposed development in a rural area are unclear;
5. the proposed development will not address issues of affordability of housing;
6. the proposed development will not support wildlife nor provide natural adaptation and mitigation mechanisms against the effects of climate change;
7. the proposed development of a green-field site is not consistent with acceptable principles of sustainable development; and in so doing
8. the proposed development does not comply with the provisions of the South Lakeland Local Development Framework Allocations of Land Development Plan November 2008.

5.2 Specifically, there would appear to be numerous uncertainties with respect to flood risk and further investigative works are suggested to permit the preparation of a detailed report on this matter.

5.3 Further investigative works should comprise a detailed desk study which includes, but is not limited to, an inspection, review and assessment of

1. Environment Agency Drainage Catchment Modelling Data
2. Environment Agency Catchment Abstraction Management Strategies (CAMS); six year plans that record how the Environment Agency is going to manage water resources within a relevant water catchment
3. Environment Agency Groundwater Source Protection Zones
4. British Geological Survey Hydrogeology Maps (Major & Minor Aquifers)
5. British Geological Survey Superficial Deposits Distribution Maps
6. British Geological Survey Superficial Deposits Engineering Geology Maps
7. British Geological Survey Geomorphology & Drainage Maps
8. British Geological Survey Hydrogeology & Flood Limits Maps
9. Further Hydrological and Hydrogeological data and memoirs held at the British Geological Survey in Keyworth, Nottinghamshire



(R121)



(R121)



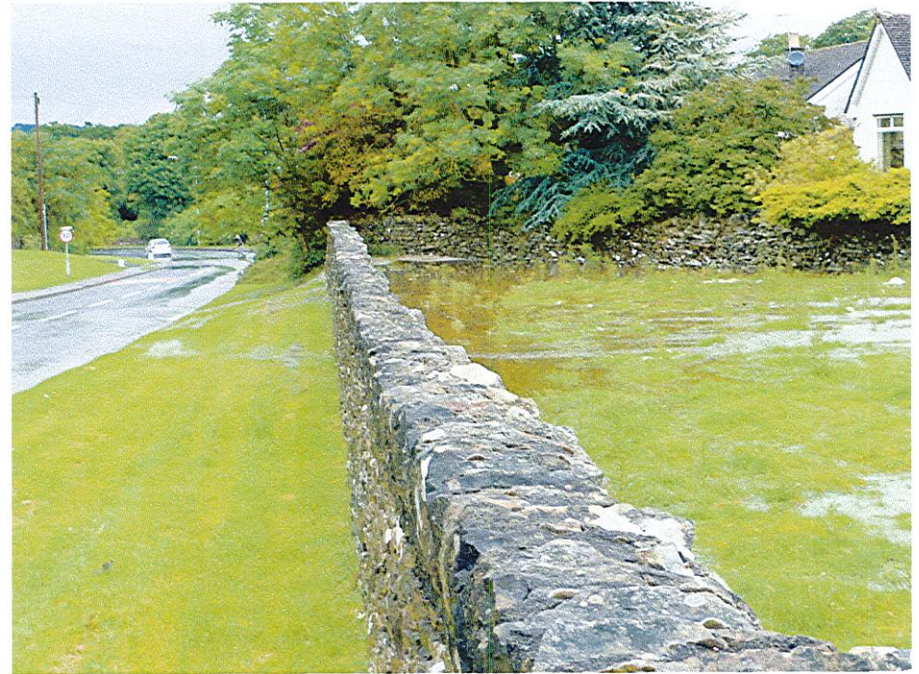
(Above 31 Oak Tree Rd)

FLOODING 66 SENBERGH ROAD

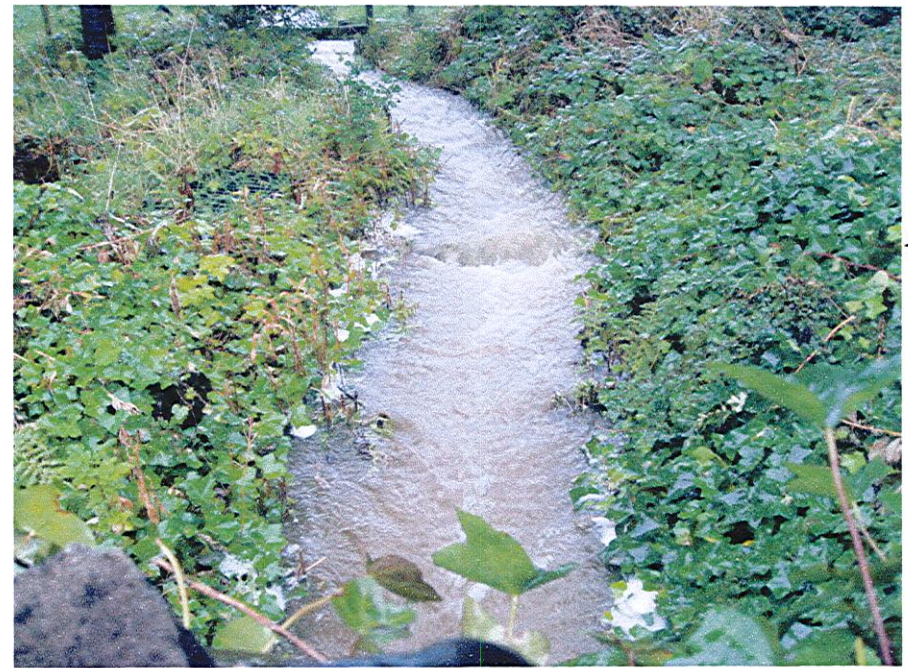


(FLOODING
31.08.09
AT 27.04K
TREE ROAD

FLOODING R56 & A684



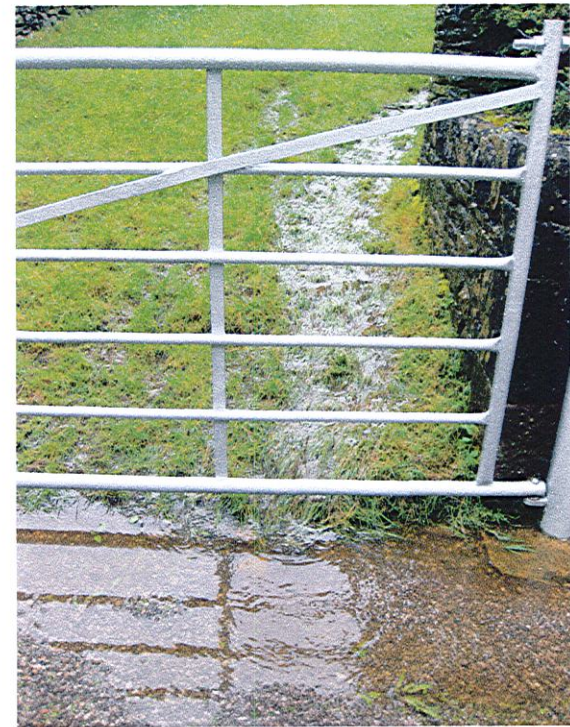
FLOODING R56 and A684



FLOODING
ABOVE 37
OAK TREE
ROAD -
31.08.09)
(RIZI)



FLOODING 31 & 33 OAK TREE ROAD



66. Sedbergh
Road.
(R121)

300 flood defence schemes fall foul of spending cuts

Damian Carrington

Nearly 300 flood defence schemes across England have been left unbuilt owing to government budget cuts, according to documents obtained by the Guardian.

Thousands of homes have flooded in recent weeks, causing hundreds of millions of pounds of damage. But in some places overwhelmed by the deluge, flood defences in line for funding in 2010 were never begun.

"We know flooding is the biggest threat the country faces but the government is wilfully disregarding the scientific advice," she said. "In the end it will cost the country more. Every £1 spent saves £8, not to mention the human trauma avoided."

Tim Farron, president of the Liberal Democrats and MP for Kendal, where a £325,000 scheme for the river Kent failed to materialise, said: "The

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demand for flood defences is rising when the pressure on public funds is also rising. But the cost to taxpayers is probably less than the cost of dealing with the damage afterwards."

The number of homes at risk of flooding is set to quadruple in the next 20 years, the government's official advisers, the Committee on Climate Change, warned this week.

Like Croston, Kendal in Cumbria had in 2010 been in line for a scheme that was not subsequently built, but has suffered recent flooding. The £325,000 project would have helped tame the river Kent. "It is an immensely powerful river, going from source to sea in just 15 miles," said the local MP Tim Farron, president of the Liberal Democrats. "It can rise a metre in an hour." He said a couple forced from their home in June's floods had lived in the town for 50 years and never been flooded until two years ago, since when they had been flooded three times. "We definitely

need new flood defences here. There is a specific need in this growing town. We should not be removing flood defence schemes or seriously delaying them."

Guardian 14.07.12.