A57/A628 Mottram - Tintwistle Bypass & A628/A616 Route
Restraint Measures

Proposed formal response to the Highways Agency by the
Peak District National Park Authority

(For consideration as part of the item for Authority on
7 April 2006)
Formal response by the Peak District National Park Authority

Introduction
The attached pages reflect the comments and observations on the Draft Orders and associated documents for the proposed construction of the A628 Tintwistle – Mottram Bypass.

The comments supplied by the Authority focus on the impacts of the scheme on our two primary purposes as set out in the Environment Act (1995), namely;

- Conserving and enhancing the natural beauty, wildlife and cultural heritage of the area;
- Promoting opportunities for understanding and enjoyment of the special qualities of the area by the public.

Background
The Authority recognises that there is an acute traffic congestion problem in the villages of Mottram, Hollingworth and Tintwistle, with Tintwistle being of particular concern, as some of the village is within the National Park. It is acknowledged by the Authority that the level of traffic congestion along the A628 within Tintwistle has detrimental impacts on the environment, road safety and accessibility. In combination, these impacts result in a reduction in the quality of life for Tintwistle residents.

The Authority has always given in principle support to the A57/A628 Tintwistle - Mottram Bypass because of the relief it would provide to the village of Tintwistle. This in principle support has been stated in our own policies within the Peak National Park Structure Plan (1994) and the Peak District National Park Local Plan (2001). Our in principle support for a Bypass is also stated in the context of the South Pennine Integrated Transport Strategy (SPITS). However, the Authority’s in principle support for any scheme has always been governed by a caveat that the proposed scheme would have to meet all SPITS objectives, including “to reduce the overall demand for travel” and “to make adequate provision for legitimate cross-Park traffic in a way that; furthers National Park purposes and public body duties towards nature conservation”. Consequently, we have always reserved the right to pass judgement on any scheme until the details of it have been released through Draft Orders.

In framing our response we have provided a summary of key implications of the proposed scheme on the National Park, which draws on the detailed comments that follow in the subsequent sections.

Key implications
We consider the impacts of the proposed Bypass, as detailed in the Draft Orders and associated documents, provide the following concerns and key implications on the National Park.

Traffic Figures
Growth in Traffic
The proposed scheme leads to an unacceptable increase in traffic through the National Park. The Authority is extremely concerned about the forecast significant increase in traffic across the Peak Park Screenline. It is inevitable that changing one section of the road network will affect the network as a whole, as vehicles will re-route to find the quickest route, and some additional journeys will be generated. However, the growth in traffic detailed in the Traffic Forecasting Report is very alarming for the Authority. The Authority acknowledges that there is a predicted decrease in annual average traffic flows on the A57, with a decrease of 2% in 2010 (from 5,300 to 5,200 vehicles) and 1% in 2025 (from 6,000 to 5,900 vehicles). There is also a predicted decrease in traffic on the A635, this is 36% in 2010 (from 5,200 to 3,200 vehicles) and 48% in 2025 (from 7,200 to 3,700 vehicles). However, these decreases in traffic are not nearly as great as the significant increases in traffic on other cross-Park routes. Average annual traffic flows on
the A628 east of the A6024 are predicted to increase by 57% in 2010 (from 11,400 to 17,800 vehicles) and 95% in 2025 (from 11,400 to 22,100 vehicles). Annual average daily trips on the A6024 are predicted to increase by 116% by 2010 (from 1600 to 3500 vehicles) and 100%, in 2025 (from 1900 to 3800 vehicles). Screen line figures (in the Forecasting Report Appendix D Full Screenline) indicate that a significant amount of this growth represents traffic that is generated by the scheme (around 3000 vehicles per day). Thus, the Authority suggests that the decreases in traffic on the A57 Snake and A635 do not outweigh the significant increases in traffic on the A6024 and A628. This is particularly significant taking into account the appalling accident rate of the A6024 and impacts of the increases in traffic on the A628 on the National Park. In addition, increases in traffic of this scale appear to conflict with the aim of the scheme.

Re-routing traffic
The Traffic Forecasting report states that traffic will increase on the Peak Park screenline, with increases in annual average daily trips of 27% in 2010 (from 23,400 to 29,700 vehicles) and 34% in 2025 (from 26,400 to 35,500 vehicles) (Page 4-4). The report goes on to state that this traffic increase is predicted to be on the A628, due to drivers changing routes from their existing ones, predominantly from the M62 and A635. The Authority is extremely concerned that vehicles would re-route from the M62 into the National Park with the proposed scheme in place. The M62 is primarily a strategic long distance route, which indicates that cross-Park traffic would increase, as the traffic from the M62 would not otherwise have crossed the Park. The proposed scheme aims to avoid causing transference of traffic from the M62, and includes restraint measures to mitigate against this. But clearly the proposed mitigation, in the form of traffic restraint along the Bypass and A628 corridor eastwards, is insufficient for this purpose.

Traffic Data
The National Park Authority is still not satisfied regarding the validity of the baseline traffic flow data. The baseline data is taken from 2001 traffic flows, which was a spurious year for traffic flows within the National Park, owing to the effects of Foot and Mouth disease. Whilst the effects would not have been as great on the A628 as elsewhere within the National Park, there was an overall decrease in traffic flows within the National Park as a whole during the Foot and Mouth crisis. Should Foot and Mouth have affected the baseline data, even by a relatively small amount, when traffic flows have been modelled up to 2025, the predictions could be significantly incorrect. This is not only of importance for the traffic flow data itself, but also has implications on the air quality and noise predictions, as they are based on the 2001 traffic flow data.

Landscape
The Authority considers it is inevitable that the proposed route for the Bypass will have a very intrusive impact on the Landscape of the National Park, since it will cross the generally south facing hill slopes above the settlements of Mottram, Hollingworth and Tintwistle. Whilst the route’s impact on any existing residential development in the immediate area will be minimal, the road will be clearly visible from the hill slopes to the south-east which face Longendale. The road will also be viewed fairly closely from Padfield Main Road and from the Trans-Pennine Trail, both on the National Park boundary.

Apart from the obvious scarring caused by a linear green-field site, the related additional impacts of noise, air and light pollution will all contribute to an overall effect on the landscape quality of the area. Furthermore, longer term pressures on the planning and development status of the newly created hinterland between the Bypass and the existing road could further impact on views from the National Park, as the quality and character of the severed landscape produced is inevitably downgraded.

The Authority is also concerned that the Bypass would have a significant adverse impact on the character of the older part of Tintwistle village, which comprises the Conservation Area designation within the National Park. While the three communities to be relieved of heavy through traffic will obviously be receptive to the proposals, it is unfortunate that Tintwistle’s Conservation Area will be devastated by the new road.
While the viaducts proposed to cross the three main wooded cloughs along the route, as well as several bridges, would undoubtedly protect much of the wildlife and watercourses beneath, they would in themselves have a more permanent significant impact on the landscape and from many viewpoints compared to embankments and cuttings. Their design and the degree of damage and encroachment caused by the construction process are therefore detailed issues of immense importance, so the materials proposed would need to be chosen in order to help integrate the viaducts into the Dark Peak landscape.

The Authority considers that the general landscape proposals, both within and on the edge of the National Park, are not sufficiently varied or subtle enough to reflect the local landscape and agricultural character.

One of the most sensitive and controversial features of the road proposal, entirely within the National Park, is the eastern end of the Bypass at the new roundabout proposed at Townhead Farm, the junction of the old road with the new. This major feature would certainly adversely impact on the appearance and adjacent landscape setting of the eastern ‘spur’ of the Conservation Area.

The Authority does not disagree with the ‘Qualitative comments’ in the AST that the scheme is ‘at odds with the local landscape pattern and landform’; is ‘visually intrusive’; is 'likely to diminish a range of characteristic features and their setting’; and finally, 'would be damaging to a high quality landscape', all of which leads to the assessment that the overall landscape impact of the proposed Bypass would be, as stated in the table, 'large adverse'.

**Plans & Policies – National Parks and Access to the Countryside Act 1949**

There is concern that the proposed scheme would conflict significantly with the Authority's key purposes as laid down in section 5 of the National Parks and Access to the Countryside Act 1949. There is also little evidence that in exercising their functions the Highways Agency have had regard to National Park purposes as required by section 11A of the 1949 Act. The Authority would have liked to have seen more weight given to this Act, especially when 1.3 kilometres of the proposed road would be within the National Park, and the proposed scheme as a whole has such significant adverse impacts on the National Park.

Furthermore, as there appears to be a lack of reference to the Environment Act 1995 within the Draft Orders, apart from within Volume 2A of the Environmental Statement, following specific comments from the Authority on the Draft Environmental Statement, the Authority queries whether the Highways Agency were aware of, and therefore paid due regard to Section 62 duties, when the proposed scheme was designed.

**Proposed Scheme Objectives**

The National Park Authority is extremely concerned that the scheme does not meet its objectives. Firstly, the Authority is extremely concerned that the proposed scheme does not sufficiently meet its overall aim. The Traffic Forecasting report states that “For the section of the A628 in Hollingworth, the forecast reduction in general traffic volumes is not as great as for other sections of the proposed road to by Bypassed…This is because there are secondary traffic re-assignment benefits as a result of the scheme.” (Page 4-4, section 4.3). The predicted reduction in traffic on the A628 Hollingworth for 2025 when the do minimum and do something are compared is 15%, from 17,000 to 14,500 vehicles per day. A reduction of 15% is insignificant when compared to the traffic volume reductions in Tintwistle of 71% and Mottram of 93%. The Authority therefore queries whether the current proposal meets the scheme’s aim adequately, especially when assessing the proposed scheme holistically and attempting to balance the benefits to the three villages and disbenefits to the National Park of the proposal.

Secondly, the Authority queries whether the proposed scheme meets its own objective that is stated within the scheme description contained within the AST. The proposed scheme description states “To deter a transfer of traffic from other cross Pennine routes onto the A628 in the Peak District National Park, restraint measures to be incorporated…” . The Authority queries
whether this objective is met, as the significant growth in traffic on the A628 corridor is predominantly due to transfer from the M62.

Thirdly, the Authority acknowledges that the proposed scheme is inline with an element of the SPITS strategy, but is not inline with the strategy as a whole. The proposed scheme is inline with the eighth element of the strategy, which is “Improvements to the A57/A628/A616 core trunk road across the National Park” (Page 4 of the SPITS business plan). However, following on from the overarching eight elements, detail is provided regarding what each element encompasses, and contains objectives for each element. It is within these details that the Authority suggests the proposed scheme is not inline with the SPITS business plan as a whole. Thus, the proposed scheme is only inline with an element of the SPITS strategy, and not the strategy as a whole, as it conflicts with other elements of the strategy. In addition, the crucial point to remember about SPITS is that the strategy is a package of ‘integrated’ measures. The Authority is concerned that the proposed scheme does not take this fundamental framework/philosophy of the strategy into consideration, as it is selecting an element of the strategy to be implemented with no reassurance that other measures of the strategy will be implemented at the same time or indeed soon afterwards in order to maintain the ‘integrated’ package of measures. Furthermore, selecting one element of the strategy to be implemented may have an adverse impact on the SPITS strategy, as it is only the combination of measures that achieve the overall aim of the strategy. To conclude, the Authority queries that if the proposed scheme conflicts with elements of the SPITS strategy, does this constitute ‘supporting’ it, as the objective states.

Fourthly, the scheme’s objective of minimising the impact on the Peak District National Park has not been met. The predicted traffic growth as a result of the proposed scheme and all the secondary impacts of this, for example on air quality, noise and access and recreation, is significantly detrimental to achieving our first key purpose. In addition, the significant adverse impacts of the proposed scheme on the landscape are unacceptable. This is both the direct impacts of the road itself and its associated infrastructure, and the indirect impacts of the significant visual impact of the scheme on and from the National Park. Furthermore, the proposed scheme is assessed to have an adverse impact on Section 62 of the Environment Act 1995. The Authority suggests that in combination, these adverse impacts on National Park are evidence that the proposed scheme’s objective has not been met.

Furthermore, the Authority is not convinced that the proposed scheme meets its objective relating to safety. The Authority is extremely concerned about the validity of the safety section of the AST. The AST assessment is ‘slight beneficial’ due to the accident reductions over 60 years. However, when looking through the remainder of the report, there is no safety data contained within it; page 86 of the report has the title ‘Safety’, yet the remainder of the page is blank. The Authority has reservations regarding some of the assumptions and conclusions made in the safety section of the Economic Appraisal Report. Firstly, a statement regarding the accident rate through the three villages to be bypassed appears to conflict with Volume 1 of the Environmental Statement. This is of particular importance, as one of the proposed scheme’s objectives is “to improve safety for all road users in the villages of Mottram, Hollingworth and Tintwistle” (ES Vol 1, P9), yet there seems to be conflicting information provided on the accident rates on this section of road. Secondly, the Authority is concerned that the second COBRA model in the Economic Appraisal Report, which was used to predict accident rates in the rest of the network (excluding the bypass and its corridor) “…was run using default severity splits and mainly default accident rates” (P10). The Authority is alarmed that the Highways Agency has not obtained the accident data for the rest of the network in order to have an accurate baseline. The Authority suggests that due to the varied landscape and standards of the roads in the rest of the network, accident rates will not always conform to default rates. For instance, one such road in the rest of the network where the accident rate is not inline with default rates is the A6024, where the accident rate is 62 per hundred million vehicle kilometres, compared to a national average of 50. Therefore, the Authority queries the validity of the predicted accident rates for the rest of the network. Thus, the evidence provided to the Authority so far does not provide us with sufficient comfort that the proposed scheme meets its objective relating to safety.
Finally, the significant increase in traffic predicted through the National Park, especially in the absence of proposals for demand management on other cross-Park roads, means that the scheme does not meet its objectives relating to ‘Integration’, and ‘Environment’, nor the ‘Regional Planning Bodies’ objectives on Environmental sustainability on having regard to United Kingdom and European duties. In addition, the traffic generational effects of the proposed scheme are in conflict with Government policy on sustainable development.

Access & Recreation
There is major concern about the amenity of routes crossed by the A628 between Townhead Farm and the A6024 junction as a result of predicted traffic growth by a possible 84%, and a growth of 56% between the A6024 junction and Flouch by 2010.

Proposed Scheme Alternatives
The National Park Authority is concerned that alternative options to the proposed scheme were not fully assessed. Firstly, a lorry ban on the A628 was assessed as an inappropriate solution to the traffic problems but solutions to the traffic issues on the A628 cannot be explored in isolation, as changing this road has implications for the surrounding ones. Secondly, the National Park Authority is concerned that the public transport alternative that was assessed was not comprehensive. Thirdly, these two alternatives were considered in isolation from each other, whereas it would have been more appropriate to have considered the combined impact of demand management measures together with public transport enhancement, as envisaged in SPITS. Finally, there is an inconsistent treatment of alternative strategies and the preferred strategy.

The Environmental Statement mentions that a lesser scheme was considered, but the document has insufficient justification about why this option was rejected. The text mentions the lesser scheme not meeting design standards, but there is no assessment of the balance to be struck between meeting design standards and meeting Section 62 duties. The Authority would still like to see more consideration of a lower capacity scheme with a design that would achieve the primary aim of removing congestion from the villages while at the same time generating less additional traffic.

The Authority is aware that the Highways Agency is currently carrying out a study into HGV restriction in the National Park. The Authority would like to know whether the results of this study will be made available to us, and if so, when this is likely to be.

Sustainability of the proposed scheme
The Authority is extremely concerned that so much extra capacity has been designed into the proposed scheme. Not only does the extra capacity lead to unacceptable traffic flow increases within the National Park and adverse indirect impacts of this, but it also raises concerns regarding the future sustainability of the scheme. The Government paper ‘Managing Our Roads’ (2003) acknowledged that we cannot build our way out of congestion, because the provision of new capacity simply generates additional journeys. The paper states that where additional road capacity is provided, the demand must be controlled, because without such control measures, the result is a request for further capacity in a few years time. These findings raise concerns for the Authority, as the proposed scheme would be operating nearly at capacity in its opening year. Therefore, the Authority is extremely concerned that there will be pressure for further measures to be put in place soon after the proposed scheme opens in order to relieve congestion on the proposed Bypass. This would have further detrimental impacts on the National Park: a large proportion of the route passes through the SAC/SPA/SSSI, and any future measures to upgrade the corridor would almost inevitably result in significant adverse direct and indirect impacts to the site, including further land take, increased pollution loads and increased visual and noise disturbance to moorland wildlife.

Furthermore, and of just as much concern to the Authority is that in terms of congestion, it is inevitable that if a dual carriageway suddenly changes to a single lane section, the congestion ‘pinch point’ is where the dual section meets the single section. The Authority is concerned that due to the significant increase in traffic on the A628 there will be considerable congestion leading
up to and on the single carriageway section, which is the section of the proposal within the National Park. The Authority is extremely concerned that the predicted traffic levels on the Bypass could lead to traffic queues for approximately one to two hours a day just inside the National Park boundary. If traffic were to be queuing for this length of time daily, this provides the Authority with immediate concerns, in terms of the increased traffic noise, air quality impacts, and visual impacts.

Air Quality
The National Park Authority is concerned that the air quality assessment is biased towards urban areas, and residential properties. We would suggest that this is not appropriate for the extended study area within the National Park, which is a sparsely populated area with high conservation designation. We also feel that it is inappropriate for the assessment in the extended study area to include both highly urbanised areas and the rural wilderness of the National Park. The impacts on each area should be judged separately and measured according to different and appropriate criteria.

In addition, the Authority is concerned that the air quality modelling factors in improvements in air quality relating to developments in engine and fuel technologies. These improvements in engine efficiency and fuel economy would not be as a direct result of the proposed scheme, and as such should not be included in the modelling.

Furthermore, the National Park Authority is concerned that the Air Quality modelling is limited to 2010, and that the modelling has not been carried out through to the 2025 design year either with or without the scheme. As all other impacts of the proposed scheme have been modelled through to 2025, it would be more consistent if air quality impacts were modelled for 2025. The Authority acknowledges that the reason for this is because the advances in fuel efficiency and engine technology have been factored into the modelling, by 2025 it appears that air quality increases in the area surrounding the proposed scheme. However, as stated in the paragraph above, it is inappropriate to factor engine advances into the modelling calculations, as they are not a direct impact of the proposed scheme. If these advances do not occur at the rate predicted, the air quality predictions will be completely misleading.

Noise
The methodology for assessing the impact of noise upon the area surrounding the proposed scheme is not appropriate given the rural nature of the area where the Bypass is proposed. The methodology utilised to assess noise impacts is weighted towards urban areas, where it would be appropriate to assess how many dwellings are affected by a proposal. However, in this rural setting, the impacts on buildings used by humans are not the only element that needs to be considered – there are impacts on wildlife and tranquillity that should be taken into consideration. Places that help people to feel tranquil are a valuable resource, and as such, recent work commissioned by CPRE, the Countryside Agency, and co-funded by the North East Regional Assembly, Northumberland Strategic Partnership, Northumberland National Park Authority, and Durham County Council seeks to provide a broad understanding of what tranquillity is and why it is important. The Authority is concerned that this type of noise impact would affect the National Park through the significant increase in traffic flows in the National Park and surrounding area. To this end, the Authority feels that the results of the noise impacts are incomplete, as only the impacts on humans and on buildings have been taken into consideration. Thus, it is difficult to determine all the noise implications of the scheme upon the National Park.

Methodologies
The Authority suggests that the procedures and methodologies of the environmental impact assessments are not unalterable. Indeed, Volume 11 of the Design Manual for Roads and Bridges is currently being reviewed, which implies that there is scope for using different forms/methods of assessment. At present, the assessment methodologies do not adequately take account of the Peak District National Park’s special qualities, and are tailored to assessment within an urban environment or townscape, which is completely inappropriate for a National Park setting. Secondly, it would appear that some of the methods used to assess the impacts of the proposed scheme are based on a tally system, thus, the benefits to one area are cancelled by
the disbenefits to another. The Authority queries whether tally systems are suitable, as they do not compare like with like, it is arguable whether the disbenefits to a rural area can be offset by benefits to an urban area.

**Ecology**

The Authority is concerned about the land take within the Natural Zone (and land of similar quality) for the proposed scheme. The loss of the majority of the heather moorland at Holybank Quarry (a UK Biodiversity Action Plan Priority habitat) and fragmentation of the remainder are of significant concern to the Authority. This loss of and damage to existing heathland and heath/grass/rocky habitat mosaics is not adequately compensated for, either in terms of quantity or quality.

The Authority is concerned about the impacts of the proposed scheme on species. Firstly, bats (European Protected Species) are likely to be affected by direct destruction of roosting sites and substantial areas of associated sheltered feeding areas. Mitigation measures are considered inadequate. Secondly, the Authority feels that it is difficult to see how the loss of the localised invertebrate species could be adequately mitigated or compensated for given the likely loss of the majority of the Quarry sites. Thirdly, the Authority has not been provided with sufficient information to assess the potential impacts of increased traffic resulting from the proposed scheme on breeding birds within the extended A628 corridor.

The potential effects of increased air pollution on the internationally important heathland and blanket bog habitats of the SAC and SSSI are of major concern given the limitations of the air quality predictions discussed elsewhere in this response.

The Authority is extremely concerned regarding pressure to further upgrade the A628 corridor, as this would almost inevitably result in significant adverse impacts on the SAC/SPA/SSSI area.

**Cultural Heritage**

The National Park Authority is extremely concerned about the credibility of the data used in the Cultural Heritage section as there has not been direct discussion over archaeological mitigation and there is an absence of some details of archaeological fieldwork. Therefore, the Authority suggests that the Cultural Heritage Assessment, which informs the Environmental Statement, is inadequate.

**Geology and Soils**

The Authority still feels that it is difficult to be able to comment upon the possible effects of movement and transfer of contaminated land upon the National Park environment, when this investigation is yet to take place. Therefore, the Authority would welcome the opportunity to see these results and be informed of any necessary mitigation measures.

**Road Safety**

As stated earlier in this summary, the Authority is extremely concerned about the validity of the safety section of the Appraisal Summary Table and some of the assumptions within the safety section of the Economic Appraisal Report. Setting this aside, the Authority is extremely concerned about the forecast increase in traffic on the A6024 Woodhead Road. Annual average daily trips on the A6024 are predicted to increase by 116% in 2010, from 1,600 vehicles in the do minimum situation to 3,500 with the proposed scheme. By 2025, the increase when do minimum and do something scenarios are compared is 100%, from 1,900 to 3,800 vehicles per day. These figures alone are alarming, and when coupled with the fact that the A6024 currently has an accident rate of 62 per hundred million vehicle kilometres, compared to a national average of 50, the increase becomes more significant. The A6024 is steep and tortuous, with gradients in excess of 1:7; increasing traffic on the route to the extent that the proposals do can only exacerbate an already poor accident rate. The significant increase in traffic on the A6024 provides the Authority with a further concern, regarding the implementation of measures to reduce the number of accidents on this road. The Authority is concerned that soon after the opening year, Derbyshire County Council, as highway authority, will be forced to implement an accident reduction scheme on the A6024. The Authority queries the rationale of proposing a
scheme that will need further measures implemented in order to counteract the disbenefits of the proposed scheme.

**Categorisation of Response**
The National Park Authority objects to the scheme as it stands. The reasons for objecting to the scheme are two fold.

1. The National Park Authority is extremely concerned that the scheme does not meet its overall aim, objectives and sub-objectives sufficiently.

2. Due to the severity of the impacts that the proposed scheme would have on the National Park, as summarised above. The fundamental reasons for objecting are the following.
   - The predicted traffic growth and all the secondary impacts of this, for example on air quality, noise and access and recreation, is significantly detrimental to achieving our first key purpose.
   - The significant adverse impacts of the proposed scheme on the landscape are unacceptable. This is both the direct impacts of the road itself and its associated infrastructure, and the indirect impacts of the significant visual impact of the scheme on and from the National Park.

The two key points of objection stated above are heightened by the fact that the Authority is not satisfied that the evidence set out by the Highways Agency provides the Authority with sufficient comfort that all alternatives to a bypass have been fully explored, or that the proposed bypass is the best engineering design to provide the aim of the scheme with the least detrimental impacts on the National Park. In addition, many of the methodologies adopted for assessing the impacts of the proposed scheme are totally inappropriate for a National Park setting.
Technical observations
Volume 1 Environmental Statement
Page 9, section 2.1.1 and page 10, section 2.3.3 in association with page 22, section 2.6.1

The Authority welcomes and supports the aim of the proposed scheme, which is to provide relief from congestion in the villages of Mottram, Hollingworth and Tintwistle, rather than the proposed scheme providing more capacity along the transport corridor. However, this aim conflicts with the forecast traffic increases east of Tintwistle, where there are predictions of an 84% rise in 2010 and 133% in 2025 (with the current of 10,500 and forecast with Bypass being 19,300 and 23,300 vehicles). If the aim of the proposed scheme is to relieve villages, with traffic calming of the Bypassed roads, the Authority queries why so much extra capacity is designed into the proposal.

Page 9, section 2.2
The Authority supports the scheme objectives and is pleased that SPITS features in them. However, the predicted huge increase in traffic through the National Park, especially in the absence of proposals for demand management on other cross-Park roads means that the scheme will not meet its objectives. One of the schemes objectives is as follows:

“Integration – to look for multi-modal opportunities, to support regional and local transport strategies with particular reference to the South Pennine Integrated Transport Strategy (SPITS)...”

The Authority suggests that the proposed scheme is inline with an element of the SPITS strategy, but is not inline with the strategy as a whole. The proposed scheme is inline with the eighth element of the strategy, which is “Improvements to the A57/A628/A616 core trunk road across the National Park” (Page 4 of the SPITS business plan). However, following on from the overarching eight elements, detail is provided regarding what each element encompasses, and contains objectives for each element. It is within these details that the Authority suggests the proposed scheme is not inline with the SPITS business plan as a whole. The first objective within element one of the SPITS business plan is “To reduce traffic levels on the non trunk cross-National Park routes without adverse economic or social impact” (page 5 business plan). The first objective within element four of the plan is “To reduce the overall demand for travel” (page 6 business plan). The first objective within the eighth element is “To make adequate provision for legitimate cross-Park traffic in a way that; furthers National Park purposes and public body duties towards nature conservation” (page 7 business plan). The Authority queries how the proposed scheme reduces the overall demand for travel when predicted traffic increases on the Peak Park screenline are 27% in 2010 and 34% in 2025 when the do minimum and do something scenarios are compared (Figures taken from the Forecasting Report). Moreover, the Authority suggests that with projected traffic figures on the A628 east of Tintwistle forecast to increase by 84% to 19,300 vehicles in 2010 and by 133% to 23,300 vehicles in 2025, the proposed scheme does not further National Park purposes. Thus, the proposed scheme is only inline with an element of the SPITS strategy, and not the strategy as a whole, as it conflicts with other elements of the strategy. To conclude, the Authority queries that if the proposed scheme conflicts with elements of the SPITS strategy, does this constitute ‘supporting’ it, as the objective states.

The scheme’s objectives to minimise the impacts of the proposed scheme on the Peak District National Park and the further environmental objectives imposed by the Regional Planning Bodies have not been met. The traffic increases provided in the Environmental Statement and Traffic Forecasting Report, and quoted in the previous point are, in this context, unacceptable. This is in direct contradiction to the scheme’s objectives and also breaches Government policy on protected landscapes.

Furthermore, the traffic generational effects of the proposed scheme are in conflict with Government policy on sustainable development, including considerations relating to climate change and the need to reduce CO₂ emissions.

The huge increase in traffic predicted through the National Park, especially in the absence of proposals for demand management on other cross-Park roads, means that the scheme does not meet its objectives relating to ‘Integration’, and ‘Environment’, nor the ‘Regional Planning Bodies’
objectives on Environmental sustainability on having regard to United Kingdom and European duties.

Page 9, section 2.2.2
This first bullet point of this section, regarding Regional Planning Bodies imposing conditions about environmental sustainability, is not met. The National Park Authority suggests that the proposed scheme directly generating more traffic conflicts with this objective, and thus it is not met.

Page 10, sections 2.3.3, 2.3.6, 2.3.8 and 2.4.2
The Authority acknowledges that the proposed scheme’s overall aim is to address environmental and safety problems within the three villages of Mottram, Hollingworth and Tintwistle, however, the present proposal would provide greater capacity on the A57(T)/A628(T)/A616(T). The Authority suggests that a road designed to a lower capacity would still meet the aim of the scheme yet not generate such a significant amount of traffic and would reduce the environmental impacts. The National Park Authority queries what the rationale is for creating physical capacity rather than designing to lower speeds and capacity.

The Authority notes the new information provided in section 2.9.2 regarding a lesser scheme, and that this was discounted due to its failure to adequately Bypass the villages or meet design standards, however, this is an extremely brief summary that provides no evidence for these statements. To this end, the Authority would like to see the background information that provides evidence for the conclusions made in this section of the Environmental Statement.

The Authority has a second concern regarding building in the extra capacity in the proposed scheme. Not only does the extra capacity lead to unacceptable traffic flow increases within the National Park, but it also raises concerns regarding the future sustainability of the scheme. The Government paper ‘Managing Our Roads’ (2003) acknowledged that we cannot build our way out of congestion, because the provision of new capacity simply generates additional journeys. The paper states that where additional road capacity is provided, the demand must be controlled, because without such control measures, the result is a request for further capacity at a later point. These findings raise concerns for the Authority, as the proposed scheme would be operating nearly at capacity in its opening year. Therefore, the Authority is extremely concerned that further measures will need to be put in place in order to relieve congestion on the proposed Bypass, which could have further detrimental impacts on the National Park.

Furthermore, and of just as much concern to the Authority is that in terms of congestion, it is inevitable that if a dual carriageway suddenly changes to a single lane section, the congestion ‘pinch point’ is where the dual section meets the single lane section. This is very concerning for the Authority, as due to the significant increase in traffic on the A628 the Authority is concerned that there will be considerable pressure just after the proposed scheme opens to increase capacity at the single lane section, and this is in the National Park. Widening this section of road would lead to direct impacts on the National Park in terms of the actual road and associated infrastructure, and indirect impacts, in terms of a further increase in traffic and all the effects as a result of this.

Page 14, sections 2.4.23 to 2.4.26
The Authority is encouraged to see that this section, which is within the National Park, will be screened to a considerable extent, within the immediate corridor of the Bypass. However, the concerns that we highlighted within our response to the Draft Environmental Statement, regarding the climbing lane providing extra capacity, still remain. This development is within the National Park, and as such should be subject to PPS7 tests, for example the development of a layby for westbound traffic, with regard to the new road building at Tintwistle. The Authority suggests the opportunity of the natural topography should be used to design down the road and the incline used as a method of traffic restraint, but the implementation a climbing lane would counteract this natural traffic restraint.
The signalled roundabout, lighting, and additional road building to divert the existing A628 have significant negative landscape and visual impacts on the National Park. The Authority queries whether the signal controls would still be necessary if the road was designed to lower capacity.

The Authority welcomes traffic calming treatment of the Bypassed roads. The Authority queries why this cannot be extended by other types of demand management, in order to reduce the level of traffic generated by the proposed new road (for example, car clubs).

The Authority queries whether further realignment of the proposed Bypass is possible at the eastern end of the proposal, in order to minimise the significant direct and indirect impacts of the proposed scheme on the National Park.

The proposed scheme leads to an unacceptable increase in traffic through the National Park, especially in the absence of demand management on other cross-Park roads. Increases of 84% by 2010 and 133% by 2025 on the A628 east of Tintwistle compared to 2001 flows are unacceptable.

The poor presentation of the traffic figures in this section makes ‘do nothing’ and ‘do something’ comparisons extremely difficult.

The Authority queries how the existing accident data statistics have changed from the Draft Environmental Statement to the Final Environmental Statement. The Authority acknowledges that this table has been updated to include data from 2004 (although it is noted that the table title is incorrect, as it is the same as that in the Draft Environmental Statement), however, the provided data from all the years differs between the two documents. Reasons for the change in baseline data need to be given.

The Authority suggests that this section has not been updated so that it describes the figures provided in Table 2-1. The figures quoted in this section are those provided in the Draft Environmental Statement. Clarification is required as to which set of data is the correct version.

The National Park Authority is concerned that alternative options to the proposed scheme were not fully assessed. Firstly, a lorry ban on the A628(T) Woodhead pass between the A6024 junction and the A616(T), was rejected by the consultants, with the conclusion that “However these would be re-routed onto less suitable routes…” (page 23). The Authority suggests that this is why a comprehensive and integrated package of measures is necessary, with restraint measures on roads surrounding the A628. Solutions to the traffic issues on the A628 cannot be explored in isolation, as changing this road has implications for the surrounding ones. CPRE developed a strategy for the issues associated with the A628, titled ‘SPITS: The Way to Go!’. The lorry restriction element of this was recently independently assessed to see whether the measures in the strategy were feasible, which the consultants confirmed that they were. The Authority suggests that an objective assessment of CPRE’s package of measures should be undertaken to assess whether the measures are feasible both in terms of providing solutions to traffic issues in this area, and in terms of obtaining funding for implementing these measures. To this end, the National Park Authority would like to see the alternative option of a lorry restriction on the A628, coupled with restraint measures elsewhere further explored before the proposed scheme progresses further. The Authority is aware that the Highways Agency is currently carrying out a study into HGV restriction in the National Park. The Authority would like to know whether the results of this study will be made available to us, and if so, when this is likely to be.
Secondly, the National Park Authority is concerned that the public transport alternative that was assessed was not comprehensive. The alternative explored only a rail based alternative. The Authority suggests that as this is a semi-local route, a bus based scheme would have had more of an impact on modal shift from the private car to bus, and thus a decrease in traffic on the A628 and surrounding roads.

Thirdly, there is an inconsistent treatment of alternative strategies and the preferred strategy. The preferred strategy of a Bypass is not assessed individually – it is combined with traffic calming measures on Bypassed roads to show beneficial results in respect of villages. However, the alternative strategies are each assessed individually. For instance, a lorry ban only, and public transport improvements, in the form of rail, only. Thus, the impact of alternatives if implemented as a total package together with other measures of traffic calming cannot be seen. The Authority suggests that an integrated package of measures, including a HGV restriction and restraint measures on other necessary roads, and a combination of public transport improvements, would reduce traffic including HGVs in the area surrounding the A628 and contribute to modal shift from the private car to public transport as public transport would be more reliable due to an overall decrease in traffic. The National Park Authority would like to see this investigated and fully assessed.

Finally, if the assessment of an alternative integrated package of measures is rejected, the Authority would like to see the background data referred to in section 2.9.2 regarding a lesser scheme. The Authority would like to see an assessment of a lower capacity scheme in addition to the current proposed one. Such an assessment should cover an alternative design that generates less additional traffic but still achieves the aim of removing congestion from the villages. The proposed design of the scheme has a capacity (2010) far in excess of a 100% increase through the Peak District National Park. Restraint by way of signalling junctions decreases this to an extent but still allows an increase of over 84% on the A628 and, if the related Glossop Spur is granted permission, a 50% increase on the A57 Snake Pass. It is suggested that assessment should be made of whether it is possible to design in the restraint instead. For example, a single carriageway from the M67 to the Mottram showground, and with lower design speeds throughout the whole scheme. This lower capacity and design speed scheme may also have the added benefit of an alignment that impinged on less land within the National Park.

Page 81, Section 5: EIA
The Authority acknowledges that the assessment has been done according to standard guidance (section 5.1.2), however, the Authority would like to see different methodologies used where protected areas are concerned, so that the unique impacts on this environment are appropriately assessed. For instance, the current guidance provides inadequate measures for severance, noise, landscape intrusion in the National Park extended area, and there is no specific measure for, or a section relating to, tranquillity. In addition, the cumulative impact assessment is inadequate for the extended National Park area, and there is no assessment/mention of National Park special purposes, including tranquillity value and impact of this on emotional and physical health and well-being of visitors.

Page 83, section 5.2.5
In principle, the Peak District National Park Authority supports a Bypass as part of SPITS package. In the absence of the other elements of the package that in principle support is held in abeyance.

Page 83, section 5.2.8
The Authority is concerned that the assessment’s conclusion of the scheme would have an overall beneficial impact in terms of compliance with Government policy seems to be based on a tally of the number of areas of policy beneficially or adversely affected, rather than on their significance (‘…a fewer number of other environmentally related polices would be hindered…’ our emphasis).
Page 95, section 5.9
The air quality assessment pays particular attention to ‘sensitive locations’ (section 5.9.2), but this does not include the National Park. The National Park Authority queries why this was not taken into consideration, and suggests that the National Park has not been adequately taken into account in the procedures. The Authority would therefore like to see the National Park categorised as a sensitive location, and assessed as such.

The overall conclusions on the regional assessment of an adverse effect in relation to emissions as a whole is concerning for the Authority. Therefore, the Authority suggests that an assessment should be made of whether this problem could be minimised by designing a scheme to a lower capacity and with slower traffic speeds, as this would reduce the significant increase in traffic and vehicles would be travelling closer to their optimum fuel efficiency.

Page 100, section 5.11
The Authority suggests that the National Park landscape and biodiversity conservation areas should be included as ‘community facilities’ within the section on the impacts on pedestrians, cyclists, equestrians and community facilities. At present, the assessment is inadequate because it does not include the National Park as a community facility.

Page 101, sections 5.11.8 to 5.11.9
There is inadequate consideration of the importance of non-motorised users (NMU) in the National Park context, and there is inadequate coverage of severance in relation to open access and Public Rights Of Way/trails. Again, the Authority suggests that the conclusion on the impact for the National Park in the extended study area is incorrect. A doubling of traffic volumes would have a significant adverse impact on the National Park.

Page 102, section 5.12
There is an unfair treatment of non-motorised users in the National Park extended area. This section includes an assessment of changes in stress levels induced by driving: the Authority queries why there is no assessment of the stress relieving and health giving properties of non-motorised travel in the National Park and the impact of the scheme on this.

Page 112, section 5.15
There is an inadequate discussion of the effect of cumulative impacts on nature conservation in the extended National Park area. The Environmental Statement covers only the direct effects of the proposed scheme in the main study area and concludes that the impacts can be dealt with through mitigation – this does not take account of impact on the National Park within the extended area, including those parts that attract the highest United Kingdom and international environmental designations.

It is disappointing that only the Glossop Spur has been included in this chapter. This represents a loss of opportunity to discuss some of the potential for demand management and public transport proposals outlined in the SPITS strategy and Local Transport Plans 2006-11.

Page 113, section 5.15.12
The Authority suggests that delimitation of the extended study area is flawed, especially when interaction with other schemes is considered. The Authority suggests that the extended study area should include the A57 Snake Pass and the A6024.

Within the extended study area there is an incorrect assessment of the impact of the proposed Glossop Spur on landscape in the National Park. The Environmental Statement concludes that the impact is neutral, but there would be much higher traffic figures through Glossop and along the A57 Snake Pass, which would significantly impact on the special qualities of the Peak District National Park. The same can be said for the ecological (5.15.15ff), air quality (5.15.22ff) and noise (5.15.28ff) effects. Additionally, in terms of noise (and apart from the fact that a noise assessment based on dwellings is inadequate in a National Park setting) it is misleading for the Environmental Statement to conclude that the Glossop Spur would have a ‘Negligible’ impact (5.15.37) because a similar number of dwellings would experience positive and negative noise
effects. The Authority suggests that the overall impact of noise might be neutral, but it cannot be classified as negligible.

**General Comments on Volume 1**
The National Park Authority has significant concerns regarding the predicted huge growth of traffic generated by the proposed scheme and the direct and indirect impacts of this on the special qualities of the National park. This is further exacerbated by the absence of counteracting proposals for other cross-Park roads or mitigating the effects within the extended area.

The procedures and methodologies utilised in the Environmental Statement inadequately take account of the significant impacts on the protected landscape where the scheme is proposed. Equally as important, the methodologies do not enable an adequate assessment to be carried out of whether Section 62 duties have been adhered to, which is of immense importance to the National Park Authority.

The Authority suggests that the procedures and methodologies of the environmental impact assessments are not unalterable. Indeed, Volume 11 of the Design Manual for Roads and Bridges is currently being reviewed, which implies that there is scope for using different forms/methods of assessment. At present, the assessment methodologies do not adequately take account of the Peak District National Park's special qualities, and are tailored to assessment within an urban environment or townscape, which is completely inappropriate for a National Park setting. Secondly, the assessment methodologies do not include an assessment of whether the increases in traffic on the A628 through the National Park are (or can be) balanced out by restraint measures on other cross-Park routes, thus providing a situation where the A628 increases in traffic but other cross-Park routes do not experience increases in traffic.

Related to the above point, the Authority has concerns regarding the methodology and procedures relating to the extended study area. The concerns can be surmised in the following bullet points;

- i) The extended study area does not include the area affected by the joint proposals for the Bypass and Glossop Spur.
- ii) The assessment does not include mitigation measures in the National Park extended study area.
- iii) The impact on the National Park area of the extended study area is not presented separately from the impact on the non-National Park area of the study area. Therefore, it is extremely difficult for the Authority to fully assess the impacts of the proposed scheme on the National Park and whether Section 62 duties have been adhered to. The Authority suggests that it is a relatively simple task to separate the two areas contained within the extended study area.

The proposed scheme objectives of minimising the impact of the proposed road on the Peak District National Park and the further environmental objectives imposed by the Regional Planning Bodies have not been met. Thus, the traffic increases shown in the Environmental Statement are, in this context, unacceptable: east of Tintwistle the figures show 84% increase at 2010 and 133% increase by 2025 – presumably with the potential of increasing further after that. This is in direct contradiction to the scheme’s objectives and also breaches Government policy on protected landscapes.

Section 2.9 of the Environmental Statement mentions that a lesser scheme was considered, but the document has insufficient justification about why this option was rejected. The text mentions not meeting design standards, but there is no assessment of the balance to be struck between meeting design standards and meeting Section 62 duties. The Authority would still like to see more consideration of a lower capacity scheme with a design that would achieve the primary aim of removing congestion from the villages while at the same time generating less additional traffic. The Authority is concerned that the scheme has a capacity (2010) far in excess of a 100% increase through the National Park, with restraint by way of signalising junctions dampening this down somewhat, but still allowing the more than 80% increase east of Tintwistle. Again, the Authority queries why restraint cannot be designed into the scheme instead. For example by way
of a single carriageway from the M67 to the Mottram showground, and with associated lower
design speeds throughout the whole scheme, thus making the route far less attractive to new
traffic.
Volume 2A Environmental Statement – Plans and Policies

Page 7, section 1.3.20
The Authority is encouraged to see that our comments on the Draft Environmental Statement have been taken into consideration, so that this section reads “...however, these adverse effects would be in part offset by beneficial effects in the area of the existing trunk road to be Bypassed within the National Park village of Tintwistle.”

As stated within our response the Draft Environmental Statement, the National Park Authority is disturbed that the proposed scheme is in conflict with national policy. The Authority questions whether the beneficial impacts on regional and local policy outweigh the adverse impacts the proposed scheme has on national policy, and whether a scheme that contradicts national policy should be taken forward.

Page 9, Table 1-2
The Authority is encouraged to see that our comments regarding compliance of the proposed scheme with the SPITS strategy have been taken into consideration, so that it now states the proposed scheme is compliant with a key aspect of SPITS. However, the Authority still has reservations regarding the overall impact assessment on this policy. The scheme does not seek to “…reduce the length and number of journeys by car, reduce the environmental impacts of travel...” (page 9) as stated in the PPG 13 objectives. The scheme would increase the number of journeys, as illustrated with the provided traffic figures, where there is an 84% increase in traffic flows at 2010 and 133% increase by 2025. Thus, the scheme does not reduce the environmental impacts of travel, as it significantly increases traffic through the National Park. To this end, the National Park Authority cannot see how the impact assessment is ‘beneficial'; it is suggested that it is more likely to be ‘adverse’.

Page 14, section 1.4.14 and Page 15, section 1.4.18
The Authority is grateful that our comments regarding Structure Plan policy T5 have been taken into consideration.

Page 29, Table 1-3
The Authority is encouraged to see that it is recognised that the proposed scheme only assists in achieving an element of the SPITS strategy. However, the Authority is still concerned that the impact of the proposed scheme on the SPITS strategy is still classified as ‘beneficial’. It is acknowledged that the proposed scheme benefits the eighth element of SPITS, however, the Authority is concerned that it does not benefit the strategy overall. The crucial point to remember is that, as it states in the title, the SPITS strategy is a package of ‘integrated’ measures. The Authority is concerned that the proposed scheme does not take this fundamental framework/philosophy of the strategy into consideration, as it is selecting an element of the strategy to be implemented with no reassurance that other measures of the strategy will be implemented at the same time or indeed soon afterwards in order to maintain the ‘integrated’ package of measures. Furthermore, selecting one element of the strategy to be implemented may have an adverse impact on the SPITS strategy, as it is only the combination of measures that achieve the overall aim of the strategy. Thus, implementing one element of the strategy may conflict with the strategy as a whole.

Page 36, Table 1-3
The Authority is encouraged to see that all policies within the structure plan have now been taken into consideration.

Page 69, Table 1-7
There is concern that the proposed scheme would conflict significantly with the Authority's key purposes as laid down in section 5 of the National Parks and Access to the Countryside Act 1949. There is also little evidence that in exercising their functions the Highways Agency have had regard to National Park purposes as required by section 11A of the 1949 Act. The Authority would have liked to have seen more weight given to this Act, especially when 1.3 kilometres of the proposed road would be within the National Park, and the proposed scheme as a whole has such significant adverse impacts on the National Park.
General Comments on Plans and Policies
There is no mention of Circular 12/96 used in planning decisions to interpret the provisions of the Environment Act.

The Authority feels that there is a need for clarity regarding the meaning of “beneficial in part” in summary sections. This needs to be clarified.

The Authority has significant difficulties in comparing the impacts on one valued environment over another, for example, comparing the Natural Zone and Conservation Area. Both environments are important, and as such, the Authority believes that benefits to one environment do not outweigh disbenefits on another. This makes it extremely difficult for the Authority to make judgements on basis of overall cost and benefit to the National Park, including benefits to social and economic well being.

The Authority disagrees that Structure Plan policy GS1 should be assessed as a neutral impact. The assessment should not confuse the overall conclusion on balance with individual impacts on policy.

As with the above comment, the Authority disagrees with the assessment of a neutral impact on the natural zone. Again, the assessment should not confuse the overall conclusion on balance with individual impacts on policy.
The removal of most HGVs through Tintwistle on the current A628, would undoubtedly help to improve the appearance of the Conservation Area, especially the part of it which lies outside the National Park, near to where it abuts the main road, at the lower end of the village. However, the Authority is in no doubt, and is concerned, that the proposed Bypass would have a significant adverse impact on the character of the older part of the village, off Old Road, which comprises the Conservation Area designation within the National Park. It would cut through the area of open land, which lies high above the village and provides an effective visual backdrop. Here it would run extremely close to several properties on Church Street, especially below Harry’s Quarry, albeit in a false cutting.

Although the lower end of the heart of the old village, containing the majority of the listed buildings, would no doubt benefit from the reduced volume of traffic, the setting and character of the Conservation Area would be seriously impacted by the close proximity of the proposed road.

At the time of designation in 1995, the Conservation Area appraisal referred to the imminent Bypass scheme:- “The area of open land and disused quarries form a dramatic backdrop to the village seen from the south”. The character “is likely to be severely affected by proposals for the Bypass. Landscaping details for that scheme would need to be carefully considered to minimise the impact of the road on the village, retain quarry faces wherever possible and to retain the overall appearance of open moorland towering behind the Conservation Area”. In spite of all the evidence pointing to the disadvantages of the new road’s impact on Tintwistle, this would be partly outweighed by the overall noise, pollution and vibration reduction within the village. Therefore, both hard and soft landscape features should be visually enhanced immediately, but more especially if the streetscene of the old A628 can be further upgraded, with some modest additional funding from the scheme’s capital ‘pot’. In particular, the renewal and addition of street furniture in a traditional design, repaving and extension of footways in the vicinity of the Conservation Area would be welcome, in conjunction with some modest carriageway narrowing with integrated landscaping. The problem the Authority has with the present proposals appears to be a lack of any firm commitment to ‘townscape enhancement’.

Despite the detailed design proposals involving some of the works further west, it needs to be remembered that the precise effect of the excavation and earthworks required within Holybank Quarry is difficult to assess from the plans provided. The quarry has for a long time been an important, publicly accessible area of open space and nature conservation, owned and managed by the Parish Council, with fencing and tree planting carried out some years ago with the benefit of grant aid from the National Park Authority. It is therefore even more important that the proposals should provide adequate mitigation on this particular site.

Further east, at the approach to Tintwistle from the existing A628, the Townhead Farm and Burness ‘extension’ of the Conservation Area would be significantly adversely impacted upon by the installation of the proposed new roundabout, so its boundary would need to be amended to exclude this section, thereby calling into question the value of Conservation Area status.

The Authority feels that there has been a lack of proper evaluation of the impact of the proposed road on the Conservation Area in the report. Therefore, the Authority would like to see more evidence, and in particular, visualisations are justified here, bearing in mind that the proposed road could potentially have as much, if not more of an impact, on many residents within Tintwistle Conservation Area as it would in Mottram.

Finally, the proposed road would have a significant impact on the north side of Padfield Conservation Area, to the south of Tintwistle, outside the National Park.

This section of the Environmental Statement provides an excellent analysis of the landscape and settlement pattern of the Mottram-Tintwistle area. However, one of the more significant observations is that the settlements and routes follow the valley foothills and traditionally keep
clear of the flood plains. It is therefore important to underline the fact that the proposed Bypass would be an alien feature superimposed, in part, on the higher slopes of the northern valley side, completely contrary to most traditional main roads.

Furthermore, the proposed road would inevitably dissect the traditional field pattern, including many old field walls and boundary hedges, as well as tree groups, copses and wooded cloughs – mostly outside the National Park.

**Page 157, Section 3.7: Predicted Impacts and Mitigation - General**

Following detailed description of the landscape character of the extended study area, this section describes graphically the impact of the proposed road on the local environment and the measures proposed to help mitigate those effects.

While the viaducts proposed to cross the three main wooded cloughs along the route, as well as several bridges, would undoubtedly protect much of the wildlife and watercourses beneath, they would in themselves have a more significant permanent impact on the landscape and from many viewpoints compared to embankments and cuttings. Their design and the degree of damage and encroachment caused by the construction process are therefore detailed issues of immense importance, so the materials proposed and their colours and texture would need to be chosen very carefully, in order to help integrate the viaducts into the Dark Peak landscape.

It is noted that neither of the outer slopes of the proposed new embankment located between the Swallows Wood and Arnfield viaducts are intended to be planted, despite their respective widths, varying from 25 up to 90 metres. The more significant slope also happens to be on the south (reservoir) side of the road and therefore ultimately ‘landlocked’, with a 1 in 5 gradient and generally more suited to trees and shrubs than to agricultural use.

The Authority considers that the general landscape proposals, both within and on the edge of the National Park, are not sufficiently varied or subtle enough to reflect the local landscape and agricultural character.

**Page 158, Section 3.7.9**

It is regrettable that no street tree planting is proposed within Tintwistle Conservation Area, in an attempt to mitigate some of the lost amenity north of the village, nor indeed any compensatory street trees elsewhere in the village, particularly to help return the existing A628 to a more local, residential street.

**Page 159, Section 3.7.13: lighting**

It is confirmed in this paragraph of the Environmental Statement that no street lighting would be provided along the single carriageway section of the Bypass, but it is also clarified that the proposed Townhead Farm roundabout – a very prominent feature in views from across the valley – would be illuminated by lighting columns 25 metres apart and the approaches to it at 40 metres spacing. This artificial lighting in a rural area is of significant concern for the Authority.

**Page 159, Section 3.7.15: signage**

The impact of the excessive number and size of highway signs is a national environmental problem, but one which needs to be and can be seriously and objectively addressed in a scheme of this kind. A new road scheme on this scale can aim to reduce (in number and size) and rationalise warning and information signs as an example of good practice to other highway Authorities.

**Page 160, Section 3.7.23: tree loss**

Tree losses would inevitably prove to be of quite major significance along the route of the new road, and yet the actual tree and hedgerow losses to be sustained are not at present indicated on any of the main drawings. Such vital and controversial detailed information does need to be clarified, if only to show the extent of replacement planting in the vicinity of the new road, close to where the losses are currently located. The Highways Agency and their consultants have recently acknowledged this omission.
The type of replacement planting should also be specified, i.e. whether plantation, screen belt, or hedgerow / individual trees, depending on the particular circumstances. However, as stated previously, there is obviously a need to group trees around existing landscape features, to create additional visual focal points, both for drivers and external viewpoints alike. The aim should be to accentuate the beneficial effect of the proposed cuttings, by means of embankment planting, some of which may grow above the top edge of the cutting to provide additional screening of high sided vehicles, and also more specific plantations or enclosures, designed to reduce the accentuated linear scarring effect of the new road.

Finally, there is a need to develop a clear strategy for the integration of the proposed road corridor into the surrounding landscape. This can be achieved through collaboration with adjoining landowners and environmental agencies, to provide amended field boundaries and small areas of tree planting in order to help reduce the linear impact described above.

**Pages 161; 162, Section 3.7.25; 3.7.26: field boundaries**

Many existing field boundary walls would need to be demolished because of their close proximity to the road and related engineering works. The foundations of these should at least be retained at ground level, to ensure that evidence of them is preserved for the foreseeable future.

It is acknowledged that the loss of stone wall and hedgerow boundaries would be more than compensated by the provision of new hedges and walls, the former being far superior in quality and species range than any existing hedges.

**Page 170, section 3.8.38**

It is difficult to envisage how obtrusive the proposed road would be when viewed across the hillside of Crossgates Farm and the edge of Tintwistle Low Moor from the west side of Tintwistle, Arnfield reservoir dam and the existing A628. The problem is made worse by the fact that there is very little tree cover on this hillside.

**Page 171, section 3.8.39**

As has already been highlighted in the section about the Tintwistle Conservation Area, one of the most sensitive and controversial features of the new road proposals, completely within the National Park, is the eastern end of the Bypass at the new roundabout proposed at Townhead Farm, the junction of the old road with the proposed road. This major feature would certainly adversely impact on the appearance and adjacent landscape setting of the eastern ‘spur’ of the Conservation Area. The concentration of embankments, modern street lighting, traffic signals, signage and constantly queuing HGVs would certainly produce an extremely urbanised feel and appearance to what is effectively a rural setting. The report acknowledges that this combination of urban infrastructure within such a constricted area would produce ‘a localised adverse effect on the rural character of the existing A628 corridor’. We believe that this is something of an understatement, given the extent of the highway infrastructure proposed.

**Page 171, section 3.8.40**

This section of the report reinforces the need for adequate tree planting on new embankments and cuttings to mitigate the most intrusive effects of the new road. This is especially the case to the east of Swallows Wood, where the impacts are considerable on the residents of the scattered farms and cottages in this vicinity, as well as on recreation users of the area, bearing in mind that this is an extremely popular area with walkers, particularly from the nearby towns and villages.

**Page 171, section 3.8.44**

As mentioned previously, the earthworks affecting Holybank Quarry need to be specifically detailed, both in terms of their local impact and significance, but also for the restoration of a locally indigenous heather moorland vegetation. It is acknowledged that it would take considerable time for the appropriate surface vegetation to become successfully established, but suitable tree planting in part of the quarry area would help to provide basic landscape cover and screening of the road itself and its associated earthworks, whilst leaving suitable embankments,
within the former quarry boundary for re-establishing the locally dominant heather moorland vegetation.

Page 172, section 3.8.50: effects on views from areas of recreation and linear routes
This and the following paragraphs of the Environmental Statement analyse in some detail potential views of the new road from various sites and pedestrian sites and trails. However, they appear to under-estimate the impact from the B6105 road through Longdendale and likewise from most of the myriad of public footpaths in the valley. There is also mention of the effect on views of the road from the open access land of Hollingworth Moor and, more relevant to the National Park, from Tintwistle Low Moor and the Pennine Bridleway. The lack of much existing tree cover makes this section of the route considerably more prominent than further west.

Page 173, section 3.8.53
Although the viaducts proposed to cross the various wooded cloughs would undoubtedly allow continued access for wildlife and undisturbed flow in the watercourses, the secluded nature of these cloughs and the feeling of remoteness would inevitably be lost. The extent of new planting and its after-management, provided it is carried out as proposed, would be particularly important in mitigating the disturbance created throughout the construction period. Obviously this is particularly pertinent to Swallows Wood Nature Reserve, to the north of Arnfield Reservoir and just outside the National Park.

Page 180, section 3.9.11 and Page 202 to 203, 3.11.3 to 3.11.7: visual impact assessment and effects on landscape/townscape character and quality – extended study area
The predicted traffic flow increase on the existing A628 of 84% in 2010 and 133% in 2025 is alarming, and the specific landscape impact of this is probably more dependant on the consistency and speed of flow of the traffic, the eventual proportion and number of HGVs (predicted in the report to be a smaller proportion than at present – although because of the overall increase, this smaller proportion would represent a greater number), and whether or not there is likely to be more persistent congestion and queuing vehicles than is currently seen through the Longendale valley and at Langsett.

Obviously, the extent of visual impact is dependent on any particular location through the valley having the advantage or otherwise of nearby tree screening from a number of both mature and newly established plantations.

Page 190, section 3.10.20: landscape effects – Hollingworth Brook Valley
The report acknowledges and reinforces in this section the view that the Bypass proposals would have a seriously intrusive impact on the local landscape character, including a Special Landscape Area and on protection of the setting of the National Park. There is also an acceptance that even in the longer term full mitigation would not be feasible.

Page 190 to 194, section 3.10.21-27: landscape effects – Arnfield Reservoir to Tintwistle Low Moor
This area is predominantly within the National Park and varies between secluded, rolling pastures with occasional trees, tree groups and stone walls and open, wild moorland. Therefore, it is inevitable that the landscape impact would be of major significance, as we have reiterated throughout this response. It appears that the actual and more pronounced ‘false’ cuttings proposed are likely to have only limited benefit in seeking to hide such a massive scar across the hillside. There is obviously a need to rationalise the proposed landscaping, in conjunction with the affected field boundary walls, and new embankments and cuttings, to produce more of a mosaic effect in the landscape, rather than accentuating the linear scarring. Likewise, there is a need to offset the loss of trees in the rear gardens of properties in Tintwistle Conservation Area, with some carefully designed, mixed screen planting, which also fits comfortably within a moorland edge setting.

In this area, both Holybank and Harry’s Quarry would be significantly adversely impacted on by the proposed road and the former, long disused and a tranquil, isolated site, which is currently a
nature conservation area, would be provided with an alternative ‘bridge’ access (also serving the adjacent moorland) despite the loss of almost all its amenity value.

Finally, in this area, the proposed road junction and roundabout proposed at Townhead Farm would have a major adverse impact on views from across the valley, as well as the close-up impact, which would be substantial and have significant adverse impacts on that part of the Conservation Area as well as its setting, in spite of the landscaping mitigation proposed.

The report admits that the proposed scheme would have a damaging impact that cannot be fully mitigated and would ‘have a permanent physical and visual impact on a landscape within a National Park, a Conservation Area and a Special Landscape Area’.

Page 197, section 3.10.52
In conclusion, we agree with the report’s findings that overall, within the whole of the ‘Main Study Area’, ‘there would be a ‘Large Adverse’ effect on the landscape’ for the reasons already outlined and with which we fully concur.

Page 201, sections 3.10.76 to 3.10.81: impact on townscape
As detailed previously and as explained in this section of the Environmental Statement, the old village of Tintwistle, especially the major part of the Conservation Area (in the National Park) owes its character and setting to its close relationship with the surrounding mainly moorland landscape.

Despite the mitigation provided by extensive screen mounds and tree planting, old Tintwistle, with its ‘very high townscape value’ is bound to suffer an adverse impact from such a major road scheme. The close proximity of the road to the village suggests that, even after 15 years, the mitigation put in place would be unlikely to redress the balance very significantly, at least to the north side of Old Road, while properties to the south side would certainly benefit from a less intrusive and HGV dominated Church Street (existing A628).

Finally, there are two landscape issues that do not appear to be mentioned in the Environmental Statement, namely kerbs and verges.

General comments on Landscape
Ever since the ‘Brown Route’ was originally selected as the favoured route some 12 years ago, it appears to have been acknowledged by the Highways Agency that this option was potentially very intrusive in the landscape, since it would pass across the steep slopes, high above the settlements of Mottram, Hollingworth and Tintwistle. As proposed, the road would be clearly visible from the facing hill slopes to the south-east, with even closer views from the Padfield Main Road, on the National Park boundary, above the Longendale Trail. There are more distant but still clear views from the B6105 road between Glossop and Crowden, west of Devil’s Elbow, well within the National Park. These viewpoints actually accentuates the linear impact and landscape scarring created by this particular route, since they are more or less in line with the direction of the Bypass, between Amfield Reservoir and Tintwistle village.

Each of the above viewpoints provides prominent views of the proposed new junction roundabout, comprising the eastern end of the Bypass. Furthermore, from dusk onwards the augmented streetlighting and proposed new traffic signals, along with the inevitable impact of queuing vehicles themselves, all concentrated at a sensitive location, are likely to exacerbate the basic, obtrusive impact in the landscape of the roundabout itself and its associated earthworks and infrastructure.

We acknowledge that, given the original decision about the Bypass route, considerable effort has been made in the proposed scheme to conceal the road, either in a genuine cutting or a ‘cut and fill’ type of ‘false cutting’ wherever feasible. However, this operation in turn implies far more substantial ground disturbance during the construction period and an even longer period of visual scarring. It does also provide an opportunity for more subtle screen planting, preferably in
variable widths, including more substantial clumps of trees in places, related closely to existing hedgerows and field boundary trees.

Despite the mitigation measures described above, the landscape impact of the proposed road would be enormous, especially where it passes from the north end of Arnfield Reservoir on a partly exposed embankment over Arnfield Brook. It then dissects Crossgates Farm through a series of false cuttings, as it passes the National Park boundary and crosses the edge of Tintwistle Low Moor, only a short distance above the village itself.

The Design Manual for Roads and Bridges is currently being revised, in particular in relation to landscape and visual impacts. This is in recognition that the United Kingdom's landscape is an important national resource. The new methodology will be based on guidance produced by the Landscape Institute, Institute of Environmental Management and Assessment, the Countryside Agency and Scottish Natural Heritage. This states that landscape and visual assessments should be undertaken as part of an iterative process with the developing scheme, so that adverse impacts can be designed out. The Authority suggests that the new DMRB methodology could be piloted on a scheme in this area, so that the adverse impacts on landscape, as outlined above, can be designed out of the scheme.

**Fundamental Issues regarding landscape**

The impact of the proposed Bypass on the upper part of the Tintwistle Conservation Area, i.e. Church Street, below Harry’s Quarry can only be mitigated by additional screen planting above the properties on the north edge of the village. Positive enhancement of the fabric of the actual Conservation Area itself within the village would provide further, welcome mitigation for local residents, especially if accompanied by the provision of appropriate, traditional-style street furniture.

The effect of de-trunking the present A628 – Woodhead Road – through Tintwistle ought to be to de-clutter the street scene, largely as proposed; narrow the road visually by creating parking lay-bys, suitably landscaped and including avenue-type tree planting to improve the shopping street’s ambience along with improved, preferably unit-type re-paving of the footways. In addition, traffic calming measures are needed, as well as road safety improvements at the New Road junction – currently an extremely dangerous and intimidating junction for drivers turning into Woodhead Road. The additional cost of such upgrading will be a small fraction of the total capital costs of the road scheme.

The alternative of what would appear to be an overnight abandonment of the existing A628 road would obviously be somewhat depressing for local residents, who would feel that the benefits to their everyday lives were limited to the exchange of sudden relief from the scourge of HGVs in one part of the village for constant noise, vibration and pollution in another area, above the old part of the village.

The other point of major landscape impact, well within the National Park boundary is obviously the proposed Bypass junction with the old road at Townhead Farm, to the east of the village, where the need for a roundabout at a hillside location means that there will be an extended horizontal area created and supported by a new embankment. As stated in the Authority’s overall response to the Environmental Statement, this major, engineered feature is alien to a National Park setting and will totally destroy the area’s additional status as a Conservation Area.

It is the inadequate consideration of the proposed road’s visual impact on the National Park that is one of the Authority’s principle landscape objections to the proposed scheme. It is suggested that additional weighting ought to have been given to the proposed road’s encroachment into and proximity to several protected landscapes, both inside and outside the National Park, compared to most other road schemes of a similar scale.

The Authority suggests that while the proposed false cuttings and resultant embankments are extremely effective in partially screening high sided vehicles on several prominent sections of the road, their very nature – as engineered bunds – will tend to accentuate the linear characteristics
of the road. Similarly, the roadside tree planting, where proposed, will further reinforce this landscape impact, particularly when viewed from Padfield and Hadfield, the Longdendale Trail and other vantage points in the Longdendale valley.
The National Park Authority is concerned about the ranking of importance in the Environmental Statement with regard to Grade 1 and 2* being only of National Importance and Grade 2 having Regional Significance. The Authority feels that what is important is that they are all historic buildings that are protected by law. This also applies to the interpretation of conservation areas.

The Authority is concerned about the nature of the data presented in this section of the Environmental Statement. The Authority has been supplied with a copy of the Cultural Heritage Assessment, which informs the Environmental Impact Assessment that is contained within the Environmental Statement. However, this report was itself only in draft form. It is therefore inadequate, particularly since it would appear that the University of Manchester Archaeological Unit (UMAU), the archaeological consultants who did the final phase of assessment, intended to discuss and agree archaeological mitigation for sites within the National Park with relevant Officers from the National Park. As section 2.11.1 states “The following proposals for mitigation of the known sites and areas identified as being of archaeological potential have been made for the Greater Manchester section of the route, following consultation with the Assistant County Archaeologist for Greater Manchester, the Development Control Archaeologist for Derbyshire, excluding the National Park [amend after draft consultation].” Consultation on archaeological mitigation has not yet been undertaken with the National Park Authority, although an initial discussion has taken place between the Highways Agency consultants and relevant Officers at the Authority.

The Authority is aware that some mitigation of archaeological sites within the National Park has been suggested within the Environmental Statement, however in the absence of discussion and further information we are not in a position to advise on whether or not these proposals are adequate for the special qualities of the National Park.

The Cultural Heritage assessment which has been submitted does not include a full report on trial trench 16, which was excavated in Spring this year, or a report on the archaeological watching briefs which the Authority understood would be undertaken on any engineering test pits.

In the absence of further direct discussion over archaeological mitigation, and the absence of some details of archaeological fieldwork, the Authority suggests that the submitted EIA is incomplete. The Authority has significant reservations about assessing what impacts the proposed scheme has on the National Park, in terms of cultural heritage, based on an unfinished document.

To conclude, on the basis of the above flaws in the cultural heritage data, the National Park Authority would want to see further detailed consideration of the impact of the proposed scheme on the historic environment of the National Park, in the light of all the available evidence that has been collected so far.
Land take

The Authority is concerned about the direct land take at both Holybank and Harry’s Quarry and the land between the two. This is all identified as Site 10 in the Environmental Impact Assessment Phase 2 Vegetation Survey. Under the Wildlife and Countryside (Amendment) Act 1985, the National Park Authority is required to map areas of “mountain, moorland, heathland…which, in the opinion of the Authority, it is particularly important to conserve.” In addition, the Countryside Commission (now the Countryside Agency) provided statutory guidance on each of these. The Authority identifies these areas on the Local Plan map (published 2001) as the Natural Zone. Policies C1 of the Structure Plan and LC1 of the Local Plan apply to such land, and state the following.

- **Structure Plan policy C1: The Natural Zone**
  
  *Development will not be permitted in the gritstone moors…or other land in the Natural Zone, other than in exceptional circumstances.*

The ‘exceptional circumstances’ are set out in the Local Plan Policy LC1:

- **Local Plan policy LC1: Conserving and Managing the Natural Zone**
  
  *Where development is permitted, detrimental effects must be minimised by the use of, for example: appropriate siting; landscaping; layout and design; materials and construction.*

Although it is difficult to be precise about alignment of the proposed Bypass on the ground, approximately 260 metres of the proposed route passes through ‘Section 3 and Natural Zone’ Moorland at Holybank Quarry, and falls within Phase 2 survey site number 10 of the Environmental Impact Assessment Vegetation Survey. This is illustrated on Map 1, which accompanies this response, as black crosshatch. Relevant Authority Officers have carried out a visit to this site, and subsequently suggest that one area of Section 3 and Natural Zone land immediately East of Holybank Quarry should be deleted, but that further areas of land between Holybank and Harry’s Quarries are of Section 3 and Natural Zone quality. This is also illustrated on the accompanying Map 1. The Authority suggests that the red hatched areas should be added to the Section 3 and Natural Zone Map, and the single area (marked “-“ in red) to the East of Holybank Quarry should be deleted from the map. The accompanying aerial photograph (Map 2) shows the proposed additions are clearly similar in character to adjacent land already within the Section 3 and Natural Zone, and comprise heath/grass mosaics with over 25% dwarf shrub cover. The net result is that approximately 520 metres of the proposed route passes through land which is either within the Natural Zone or is of similar qualities. This is evidenced in section 8.2.1 of the Environmental Impacts Assessment Vegetation Survey, as it states, “the scheme would result in the loss of the vast majority of this area [Site 10].”

In addition to the Section 3 and Natural Zone status and quality of this land, the vast majority comprises upland dwarf-shrub heath, or a mosaic of this and unimproved acid grassland. Upland Dwarf-shrub Heath is a UK Biodiversity Action Plan Priority Habitat, and is listed under Section 74 of the CROW Act 2000 as a habitat of principal importance for which the government has a responsibility to further its conservation.

Although heather moorland is extensive both adjacent to and in a wider area around the study area, the area of heathland at Holybank Quarry in particular has the following distinctive qualities compared to the adjacent moorland.

- It occurs in a mosaic with acid grassland and rocky habitats such as quarry faces, scree and spoil slopes.
- It has a very varied microtopography and much more sheltered conditions than the adjacent exposed moorland.
- It is not subjected to burning or heavy grazing, giving rise to a diverse age structure and species composition. Consequently the moss layer is particularly well developed under the heather canopy and the heath is diverse with a high frequency of Bilberry.
A number of species recorded reflect these conditions, being local in the Peak District and not generally characteristic of open moorland sites. These include Western Gorse and Bell Heather, and invertebrates such as the Green Hairstreak butterfly and the groundhopper Tetrix undulata.

The loss of the majority of this habitat and fragmentation of the remainder are therefore of significant concern to the Authority.

In addition, the loss of the stand of Western Gorse in the field immediately east of Holybank Quarry (target note 112 of the Phase 1 Vegetation Survey) is of some concern to the Authority, though translocation to the newly created road embankments would be an acceptable solution.

**Species of concern: Bats**

The Authority is concerned about the impacts the proposed scheme will have on bats in the area. The use of Holybank and Harry’s Quarries for roosting, feeding and possibly hibernating is of significance, particularly as bats are European Protected Species.

Proposals affecting European protected species must pass three tests before they may derogate from the protection afforded by the Habitats Directive and the Conservation Regulations 1994. These three tests are the following.

- That the development is ‘in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment’ (Regulation 44(2)(e).
- That there is ‘no satisfactory alternative’ (Regulation 44(3)(a).
- That the derogation is ‘not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their range’ (Regulation 44(3)(b). Favourable conservation status is defined by Article 1(l) of the Habitats Directive, which is reproduced in Annex G of PPG9.

The presence of up to 5 species (45KHz Pipistrelle, Noctule, Daubentons, Brown Long-eared and Leislers) makes this a significant site, and particularly the possible presence of Leislers, which are particularly scarce. The bats are likely to be affected by direct destruction of roosting sites and substantial areas of associated sheltered feeding areas, and possibly significant decline in remaining habitat quality through disturbance, severance of flight lines and road traffic accidents. Proposed mitigation appears to be limited to encouraging bats to utilise another existing site, i.e. Stonebrake Quarries by the repair of a wall linking the sites. However this site is markedly different from both of the other quarries, essentially comprising a series of spoil/rubble mounds and scattered small deep depressions. Large rockfaces with extensive fissures appear to be lacking and, whilst the other two quarries are essentially on the valley side and relatively sheltered due to their topography, Stonebrake Quarries are on the exposed open moorland top and appear far less suitable for either feeding or roosting.

**Species of concern: Reptiles**

The loss of much of the Holybank Quarry site is of concern, but the Authority is of the opinion that provision of alternative heath/rocky habitat mosaics on embankments plus translocation of any individuals to Stonebrake Quarries is an acceptable solution.

**Species of concern: Invertebrates**

Several of the species recorded at Site 10 (Holybank and Harry’s Quarries) are local in the Peak District context, reflecting the diverse topography, mosaic of heath/grass/rocky habitats and sheltered nature of the site. These include the following.

- Green Hairstreak butterfly (Callophrys rubi) - described as a “large population” in the Vegetation Survey.
- Hieroglyphic Ladybird (Coccinella hieroglyphica).
- Bilberry Bumblebee (Bombus monticola) - put forward as a UK Biodiversity Action Plan Priority Species, and very local in the Peak District.
• Common Groundhopper (Tetrix undulata) - local in the Peak District and with very few Dark Peak sites.
• Pill Woodlouse (Armadillidium vulgare) - a common species in southern England but approaching the North West edge of its range here.

The presence of species such as these reflect the unusual nature of the habitat in Holybank Quarry in particular, and reinforce its distinctive nature compared to typical moorland sites. The Authority feels that it is difficult to see how the loss of these localised invertebrate species could be adequately mitigated or compensated for given the likely loss of the majority of the Quarry sites. The Authority feels that the creation of similar habitat on the road embankments may go some way towards compensatory measures, but the quality of such replacement habitat is discussed below.

Inadequacy of habitat mitigation/compensation measures
The Authority suggests that if the principle of sustainability is to be embraced, it should result in no net ecological loss. The Authority is concerned that the loss of and damage to existing heathland and heath/grass/rocky habitat mosaics is not adequately compensated for, either in terms of quantity or quality.

The Environmental Impact Assessment does not quantify the loss of different habitats nor the amount to be created. However, the proposed landscaping maps and description of mitigation in Section 8.3.4 of the Environmental Impact Assessment Vegetation Survey indicate that heathland creation will be confined to the new road embankments, largely within the existing heathland sites (although there is some extension westwards to the National Park boundary). Thus the habitat creation is largely incidental to the road construction, and the Authority feels that it is difficult to see how it would even equate to the area lost.

Regarding quality, a block of moorland adjacent to existing moorland habitat, but distinctive from it in several respects (see above paragraphs), would be lost. The proposed replacement is a narrow linear strip strung out along, and in very close proximity to, an extremely busy road. Whilst some of the topographical variation currently found in the Holybank Quarry might be replicated to some degree by the new habitat, it will be more isolated from adjacent moorland, subject to higher air pollution levels, visual, light and noise disturbance, fire risk and air turbulence than the existing site.

Therefore, the Authority disagrees with the assessment that with regard to Site 10 (Holybank and Harry’s Quarries area) that the residual impact will be “slight adverse”, since the quality has been assessed as of medium value, the impact major negative and the compensation/mitigation is inadequate both in terms of quantity and quality of compensatory habitat proposed.

The Authority suggests that adequate provision of replacement habitat should take the form of creation of a block of habitat in a suitable location, adjacent to existing semi-natural habitat. In order to compensate for the loss of the mature and diverse nature of the existing habitats, the area of compensatory habitat created should exceed the area of existing habitat and incorporate diverse features as far as possible. This could, for example, take the form of creation of a block of habitat adjacent to existing moorland, which could either create replacement moorland habitat or create alternative habitat such as wet or flower-rich grassland on the moorland edge, which would complement the existing moorland habitats.

The habitat creation measures provide little information on the detail of how they will be carried out, whether it be for tree planting, heathland creation or “species-rich grassland” creation. The Authority suggests that seed should be locally sourced, sowing of commercial “wildflower mixes” to create “species-rich grassland”, for example, is unacceptable. The Authority suggests that the future management of the resultant habitats needs to be identified.
Effects on Extended Study Area
The Authority has three areas of significant concern regarding the potential effects on the wider study area, all relating to the Peak District Moors SAC/SPA/Dark Peak SSSI, and all as a result of the predictions of the significant increase in traffic flows on the A628.

Generation of demand for future route upgrade
As stated elsewhere in our response, of major concern is that the predicted increase in traffic flow will create future demand to further upgrade the A628 corridor across the National Park. The proposed Bypass would be operating at almost capacity in its opening year of 2010, so there would be pressure to either upgrade the entire route, or the single carriageway section in the National Park. A large proportion of the route passes through the SAC/SPA/SSSI, and any future measures to upgrade the corridor would almost inevitably result in significant adverse direct and indirect impacts to the site, including further land take, increased pollution loads and increased visual and noise disturbance to moorland wildlife.

Air pollution
Traffic emissions of Nitrous Oxides in particular are of significant concern to the Authority due to the resulting deposition of Nitrogen. This is known to have detrimental effects on vegetation and ecosystems above certain levels. These effects are the result of several factors including the following.

- Direct toxic effects on vegetation.
- Accumulation of nitrogen in the soil, resulting in greater availability to plants and consequent changes in vegetation composition (favouring nitrogen-tolerant species over nitrogen-sensitive ones).
- Increased plant susceptibility to secondary stresses such as drought, frost, pathogens and pests.
- Increased nitrogen leaching into watercourses.
- Soil acidification.
- Changes in soil microbial activity, influencing nutrient availability.

Studies suggest that levels of nitrogen deposition from traffic are generally restricted to a band within 200 metres of the edge of the carriageway. However it is unclear whether such limits are likely to apply in an open, exposed upland situation. Dwarf-shrub heath and blanket bog, which are the principal habitats along the route of the A628 through the National Park, and are two of the key habitats for which the SAC and SSSI has been notified, are known to be susceptible to damage by nitrogen deposition. Likely effects include changes in the composition of the moss layer on blanket bogs (with the Sphagnum bog mosses, a critical peat-building component of bog systems being particularly susceptible); reduction in moss and lichen cover; decrease in heather cover with dwarf-shrubs tending to be replaced by grasses and other graminoid species; and preferential replacement of other sensitive species such as Sphagnum bog mosses with grasses.

The Appropriate Assessment submitted with the Environmental Impact Assessment concludes that the proposed scheme would have no significant impact due to air pollution on the blanket bogs of the SAC. This conclusion appears to be based on the following three factors.

(i) The “critical load” of nitrogen deposition for blanket bog (the most sensitive habitat) is already substantially exceeded by background levels along the A628 corridor.
(ii) The contribution of the A628 road traffic (existing and predicted) to air pollution levels is a small proportion of the total nitrogen deposition, given background levels.
(iii) Nitrogen deposition from road traffic on the A628 would not differ significantly between the do-nothing and do-something scenarios, i.e. the scheme would make very little difference to nitrogen pollution levels.

Taking each of these factors in turn, the Authority has the following comments and concerns.

(i) The concept of critical loads, which provide a quantitative estimate of exposure to pollutants below which significant harmful effects do not occur, according to present knowledge, is widely accepted. The critical loads of 5-10 kg/ha/yr given for blanket bog in the Appropriate Assessment are reasonable and in line with current nationally and internationally recognised
levels. At the lower levels effects such as changes in the composition of the bryophyte (moss) layer are likely to occur. This may be particularly important on blanket bogs where it may in turn influence the peat-forming capacity of the bog. The Authority acknowledges that the predicted total nitrogen depositions listed in the Assessment are well above the critical loads for blanket bog, i.e. background nitrogen levels can already be expected to be causing significant damage to the blanket bog habitats in the area regardless of the potential road effects. However the key point is that critical loads are a level below which significant damage is not known to occur. Even where such levels are already significantly exceeded, further increases may well cause further damage. Thus there is the potential for further increase to cause further damage.

(ii) The contribution of road traffic emissions to nitrogen deposition levels is predicted to be around 7-8% of the total nitrogen deposition load (either with or without the proposed scheme). This is not an insignificant proportion. For example, the road contribution to total nitrogen deposition along the A628 is estimated to be 2.39 kg/ha/yr under the “do something” scenario. This is about 48% of the minimum critical load for blanket bog, i.e. if background levels are disregarded the road emissions would provide about half the amount of nitrogen deposition needed to result in significant ecological effects. Furthermore, as we have stated throughout this response, improved vehicle technology is factored into predictions of future nitrogen deposition levels resulting from the road. As we have stated before, these technological improvements are not as a direct result of the proposed scheme, and therefore they should not be factored into the calculation, as there is no guarantee that these will occur. In addition, there is no “exit strategy” or mitigation measures should predicted technology benefits in technology under perform.

(iii) The prediction that the scheme will make very little difference to nitrogen deposition along the A628 is particularly important. The Authority is concerned that the basis of such predictions are not clearly set out in the Appropriate Assessment, and nor does the methodology for calculating this appear to be set out in the Environmental Impact Assessment as a whole. It does not appear credible that the significant predicted increases in traffic flow will not result in substantial increases in nitrogen deposition. The Environmental Statement appears confusing and contradictory on this topic in places, for example, page 401 of Volume 2A states “a comparison of the Do-minimum and Do-something scenarios indicates that there would be an overall increase in all emissions with the scheme…this increase in speed and traffic flows results in an increase in emissions, which offsets any vehicle technology benefits.” The methodology for calculating these predictions therefore needs setting out in a much more clear and transparent way.

Increased visual and noise disturbance to breeding birds
The moorlands through which the A628 passes are designated as internationally important (SPA) for breeding Merlin, Golden Plover and Short-eared Owl, and as nationally important (SSSI) for a wide range of other moorland birds such as Curlew and Dunlin. The presence of the A628 across the moors, with its existing traffic levels, is clearly likely to be having a significant impact on breeding bird numbers in the vicinity of the route as a result of visual and noise disturbance, though there may be some “habituation” effect which offsets this to some extent. It may be that current traffic flow on the A628 is already above a “critical level” beyond which further increases will have minimal effects; however there is no assessment within the Environmental Impact Assessment of whether this is the case or not, or what potential effects might be. Therefore, the Authority has not been provided with sufficient information to assess this potential impact.
Volume 2A Environmental Statement – Geology and Soils
Page 341, section 6.4.17 (Baseline Situation; Soils and Seed Banks)
The National Park Authority notes with concern the presence of Japanese Knotweed and Himalayan Balsam within the Study Area, and trusts that it will be appropriately dealt with as proscribed under Section 34 of The Environmental Protection Act 1990 and the Wildlife and Countryside Act 1981 (as amended).

Page 345, section 6.4.38 (Baseline Situation; Contaminated Land)
Point of clarity, the paragraph states that “the licences that operate the landfills identified in table 6.3” (Potential Sources of Contamination: Registered Landfill Sites) “have both lapsed”; three licences are listed in the table. The Authority seeks clarification that the licence for the Waste Transfer Station (TG01) is still valid.

Page 345, section 6.4.39 (Baseline Situation; Landslips)
Point of clarity, The Geotechnical Survey Report is given a date of June 2006, it is assumed this should be 2005.

Page 346, sections 6.5.7 to 6.5.10 (Environmental Impacts; Contaminated Land)
It is impossible to comment on the potential for the disturbance and redistribution of contaminated land without detailed land contamination investigations being undertaken. When these investigations are undertaken, this Authority would still welcome the opportunity to comment on them.

Page 348, section 6.5.17 (Environmental Impacts; Soils and Seed Banks)
The National Park Authority is still concerned about the potential loss of seed banks within the existing topsoil, particularly within the moorland at the eastern edge of the scheme.

Page 348, section 6.5.18 (Environmental Impacts; Soils and Seed Banks)
The National Park Authority notes with concern the presence of Japanese Knotweed and Himalayan Balsam within the Study Area and trusts that it will be appropriately dealt with as proscribed under Section 34 of The Environmental Protection Act 1990 and the Wildlife and Countryside Act 1981 (as amended).

Page 348, section 6.6.1, 6.6.2 (Mitigation and residual impact)
This Authority is still concerned that a full assessment of contaminated land has not yet been carried out, making it impossible to comment upon any impacts. Should the scheme progress we would still like to be kept aware of any possible impacts upon the National Park environment by contaminated land disturbance within the scheme and also to be consulted on mitigation/management measures.

Page 348, section 6.6.3 (Mitigation and residual impact)
The National Park Authority still welcomes any measures that make use of seed banks within the topsoil removed during the scheme, but only where this is appropriate to the current environment.

Page 349, section 6.7.5 (Summary)
The National Park Authority is pleased to note that the potential of contaminated land is recognised and that further careful site investigation is proposed in mitigation. We also welcome the assurance that in the event of contaminated land being identified; the contaminant materials would be dealt with according to relevant legislation.

General Comments on Geology and Soils
The National Park Authority still feels that it is difficult to make sense of a chapter dealing with geological impacts without the appropriate geological maps, cross-sections and borehole logs.

Furthermore, the Authority still feels that it is difficult to be able to comment upon the possible effects of movement and transfer of contaminated land upon the National Park environment,
when this investigation is yet to take place. As stated above, the Authority would welcome the opportunity to see these results and be informed of any necessary mitigation measures.
The National Park Authority is still concerned that the assessment for Air Quality used is based purely on an urban/semi urban environment, and therefore does not adequately address the impact of the scheme on a rural environment. This is of particular concern within the extended study area where there may be adverse effects upon wildlife and vegetation within the SSSI, SAC & SPA.

This paragraph states that the effects of traffic related airborne pollution are limited to a 200 metre bandwidth, but again this is suggested for an urban environment. The Authority queries whether bandwidths are the same in a rural environment, particularly at high altitude where dispersal of pollutants by air currents may be over a greater area.

The National Park Authority is still concerned that a significant increase in traffic along the A628 Woodhead Pass will lead to a significant decrease in air quality along the route within the National Park.

The National Park Authority seeks clarification as to why the four existing NO\textsubscript{2} diffusion tubes operated by Tameside MBC and High Peak BC have not been used to form the background concentrations.

This paragraph states that traffic flow data modelling is for 2001, the National Park Authority is still concerned about 2001 traffic counts being used in the modelling. This is related to the fact that 2001 was a spurious year for traffic flows within the National Park owing to the effects of Foot and Mouth disease. Whilst the effects would not have been as great on the A628, there was an overall dip in traffic flows within the National Park as a whole during the Foot and Mouth crisis. There may also have been a change in flows within urban areas, with leisure trips being made away from rural areas. The National Park Authority still seeks clarification on this point.

The National Park Authority’s concerns relating to 2001 traffic flow data (section 8.2.22) also apply to modelling for 2004. The National Park Authority still seeks clarification upon this point.

The National Park Authority’s concerns relating to 2001 traffic flow data (section 8.2.22) also apply to its being subjected to local scaling factors to produce a base year flow for 2004. The National Park Authority still seeks clarification upon this point.

This section details growth factors based around the 2001 to 2004 figures. Again, the National Park Authority sees the use of 2001 data as problematic for the reasons detailed in our response to section 8.2.22. The National Park Authority still seeks clarification upon this point.

The National Park Authority again queries the use of 2001 traffic flow data for the DMRB air quality model for the reasons given in response to section 8.2.22, and would still welcome clarification regarding this matter.

The National Park Authority queries the air quality modelling for all AQS pollutants with the exception of NO\textsubscript{2} using DMRB Air Quality model due to the use of 2001 traffic flow data for the reasons given in our response to section 8.2.22. Again this Authority would welcome clarification regarding this matter.
Page 411, section 8.2.47 (Methodology; Detailed Air Quality Dispersion Modelling)
The National Park Authority still seeks clarification as to whether any verification was carried out for modelling within the extended study area, making use of NO\(_x\) diffusion tubes HAMT 15 – HAMT 20.

Page 412, section 8.2.53 (Methodology; DMRB Air Quality Modelling)
This Authority is concerned that all sensitive receptors used in the study relate to human activity, and query their appropriateness when assessing impacts upon an environmentally sensitive area. We feel that in this context it would be useful to have receptors relating to environmentally sensitive areas i.e. within the SSSI/SAC/SPA.

Page 412, section 8.2.58 (Methodology; Generalised Air Quality Assessment)
The National Park Authority seeks clarification as to whether it is correct to assume that owing to the level of predicted increase in traffic flows along the A628 within the National Park, that it is not “scoped out” in terms of air quality assessment.

Page 413, section 8.2.64 (Methodology; Construction Phase)
The National Park Authority seeks clarification as to whether this takes into account the impact of HGV traffic transporting material to/from site and increases in congestion levels around the site during construction.

Page 417, section 8.3.10 (Legislation; Climate Change: the UK Programme)
The National Park Authority queries whether the proposed scheme is in accordance with the Kyoto protocol and the UK’s commitment to reduce CO\(_2\) emissions below 1990 levels by 2010.

Page 418, section 8.3.12 (Legislation; Air Quality and Transport)
This Authority questions whether the methodology used to predict air quality is appropriate. It seems unreliable to build in predictions relating to improvements in engine technology. The National Park Authority suggests that this is an external factor, and thus beyond the control/impacts of the scheme.

Page 422, section 8.4.10 (Baseline Environment)
The National Park Authority recognises current air quality issues within the National Park settlement of Tintwistle, and notes the predicted AQS exceedances for NO\(_2\) associated with climbing HGV traffic.

Page 424, sections 8.5.12 and 8.5.13 (Air Quality Impact Assessment – Localised Air Quality Assessment for Main Study Area; Detailed Air Quality Dispersion Modelling – Do-Minimum 2010)
The National Park Authority is alarmed that in a Do-Minimum (2010) scenario, the modelling predicts continued exceedances for NO\(_2\) associated with climbing HGV traffic, within the National Park settlement of Tintwistle.

Page 425, section 8.5.18 (Air Quality Impact Assessment – Localised Air Quality Assessment for Main Study Area; Detailed Air Quality Dispersion Modelling – Do-Something 2010)
The National Park Authority recognises the predicted benefits to air quality within the National Park settlement of Tintwistle that the Do-Something (2010) scenario would provide.

Page 425, section 8.5.20 (Air Quality Impact Assessment – Localised Air Quality Assessment for Main Study Area; Detailed Air Quality Dispersion Modelling – Do-Something 2010)
The National Park Authority is still concerned that under the Do-Something (2010) scenario, the predicted exceedance of NO\(_2\) at the Townhead junction would be above the levels warranting an AQMA in a residential area. It is also of concern that other sensitive receptors along the route would be in exceedance of AQS for NO\(_2\).
The National Park Authority is still concerned that under the Do-Something (2010) scenario an AQMA for NO$_2$ would need to be declared at Townhead Farm (within the National Park), whilst recognising that modelled restraint measures would contribute to this situation. However, even if traffic restraint were not factored in, some form of traffic management would be required at this junction to allow access/egress from the old A628.

The National Park Authority is concerned that there not been any monitoring for AQS pollutants other than NO$_2$.

The National Park Authority recognises the predicted baseline PM$_{10}$ exceedance within the National Park settlement of Tintwistle.

The National Park Authority recognises the predicted benefits to air quality for all pollutants at Receptor R48 in the National Park settlement of Tintwistle for the Do Something (2010) scenario compared with the Do Minimum (2010) scenario.

The National Park Authority is concerned about the predicted increase in concentration of all AQS pollutants at receptors R63 and R66 east of Flouch for the Do Something (2010) scenario, whilst recognising that this is a predicted side effect of modelled restraint measures.

The National Park Authority is concerned about the predicted increase in concentration of all AQS pollutants at receptor R61 near Townhead Farm for the Do Something (2010) scenario, whilst recognising that this is a predicted side effect of modelled restraint measures.

This Authority questions whether the methodology used to predict air quality is appropriate. Is it reliable to build in predictions relating to improvements in engine technology? The National Park Authority suggests that this is an external factor, and thus beyond the control/direct impacts of the scheme.

In the comparison between Do minimum (2010) and Do something (2010), the air quality assessment identifies an increase in speed as a cause for increased emissions if the proposed
scheme is implemented. The National Park Authority still queries whether more restraint could and should be built into the design of the scheme, hence lower vehicle speeds would be achieved, and thus, emissions would be reduced and air quality improved.

Page 441, section 8.8.3 (Air Quality Impact Assessment – Extended Study Area; DMRB – Localised Assessment)
As the proposed scheme is expected to lead to significant increases in traffic within the National Park portion of the extended study area, the Authority would welcome detailed modelling of annual average NO$_2$.

Page 442, sections 8.8.6 to 8.8.8 (Air Quality Impact Assessment – Extended Study Area; Baseline for Localised Assessment)
The National Park Authority recognises the high concentrations of PM$_{10}$ and NO$_2$ for the baseline year along the Woodhead pass, and that this has implications for the results of air quality in the modelled years.

Page 445, section 8.8.14 (Air Quality Impact Assessment – Extended Study Area; Do Minimum and Do Something – Localised Assessment)
The modelled concentrations for all pollutants are predicted to be below existing levels and below their objective concentrations. Again, the Authority questions whether it is appropriate to make predictions based upon anticipated benefits from better engine technology, as this is an external factor.

Page 446, section 8.8.15 (Air Quality Impact Assessment – Extended Study Area; Do Minimum and Do Something – Localised Assessment)
The National Park Authority is still concerned that from the Do Minimum (2010) to Do Something (2010) scenarios, there is an increase in all pollutants for receptors within the extended study area inside the National Park.

Page 446, section 8.8.17 (Air Quality Impact Assessment – Extended Study Area; Do Minimum and Do Something – Localised Assessment)
The National Park Authority is still concerned about the predicted increases in pollutant concentrations at these two receptors along the Woodhead Pass between Do minimum (2010) and Do something (2010). We are concerned that the predicted benefits of improved engine technology might not reap the rewards expected thus leading to higher than predicted levels of pollutants at these receptors and along the whole corridor. Furthermore, we are also concerned that if 2001 traffic flows are used for the modelling, then the predicted increases in traffic flows might be less than actually occur thus leading to even higher than predicted concentrations.

Page 446, section 8.8.19 (Air Quality Impact Assessment – Extended Study Area; Generalised Assessment)
Although the scheme would lead to overall benefits in air quality, the weighting of the assessment towards properties means that the overall impact of the scheme on the air quality of the National Park’s environment is not fully appreciated. The National Park Authority suggests that this method of assessment is not appropriate when looking at effects within the National Park.

Page 448, section 8.8.27 (Air Quality Impact Assessment – Extended Study Area; Regionalised Assessment)
If, as suggested, the proposed scheme would lead to an increase in emissions due to increased speeds across the route, the National Park Authority queries whether a lower speed limit on the route, which would also operate both as a restraint measure, would provide an improvement in air quality as vehicles would be travelling at a more fuel efficient speed.

Page 449, section 8.10.2 (Mitigation; Main Study Area – Operational Phase)
The National Park Authority is still concerned that changing the use of properties at Townhead junction is seen as mitigation. It might remove the need for an AQMA to be declared, but does not address the high level of AQS pollutants at this location.
Page 449, section 8.10.4 (Mitigation; Main Study Area – Operational Phase)
The National Park Authority would welcome a reduction in speeds on the proposed Bypass and further restraint measures as a means of reducing regional impacts, such as CO₂ emissions.

Page 450, section 8.10.8 (Mitigation; Extended Study Area – Operational Phase)
As previously stated in this response, the National Park Authority feels that due to the increases in all pollutants including CO₂ for the proposed scheme, it would be beneficial to reduce the speed limit of the proposed Bypass and along the A628 Woodhead Pass, to a level where vehicles are running at or close to their optimum fuel efficiency. In addition, this reduction in speed would act as a restraint measure for the route as a whole.

Page 450 to Page 452, sections 8.10.9 to 8.10.19 (Mitigation; Construction Phase)
The National Park Authority would welcome all measures to reduce the detrimental impacts on air quality within the National Park during construction. We would like to see an effort to ensure that crushing plant be located away from environmentally sensitive sites (8.10.13).

General Comments on Air Quality
The National Park Authority is concerned that the air quality assessment is biased towards urban areas, and residential properties. We would suggest that this is not appropriate for the extended study area within the National Park, which is a sparsely populated area with high conservation designation. We also feel that it is inappropriate for the extended study area to include both highly urbanised areas and the rural wilderness of the National Park. The impacts on each area should be judged separately and measured according to different and appropriate criteria.

This Authority is also concerned that the air quality modelling factors in improvements in air quality relating to developments in engine and fuel technologies. These are qualitative judgements rather than quantitative and cannot safely be predicted. In addition, they are not directly related to the proposed scheme – whether the proposed scheme is implemented will have no affect on engine technology. We would welcome remodelling of the figures using current engine technology to remove this external factor and give an indication of the worst-case scenario.

In addition, we are concerned about the traffic flow data used in the modelling and would welcome clarification as to whether the 2001 data used was adjusted to allow for the impacts of foot and mouth disease on traffic flows during that year. Moreover, the Authority is concerned regarding the validity of the data within the whole air quality section. This is due to the number of errors that were found in the Draft Environmental Statement - ranging from an incorrect interpretation of traffic model figures, figures that should not have been quoted in the Environmental Statement, errors in calculations, and figures being mistyped. The Authority is concerned that similar errors may still be present in the Final Environmental, especially given the very short period between comments on the Draft Environmental Statement and the Final Environmental Statement being published.

Furthermore, the National Park Authority is also concerned that the Air Quality modelling is limited to 2010, there does not appear to have been any modelling through to the 2025 design year either with or without the scheme. As all other impacts have been modelled through to 2025, it would be more consistent if air quality impacts were also modelled for 2025.

Finally, bearing in mind the effects on air quality of the scheme as it stands, much of which appears to be related to increased speeds along the route, we would welcome the designing in of lower speed limits to mitigate against pollution, and also to act as traffic restraint along the route.
Volume 2A Environmental Statement - Traffic Noise and Vibration
Page 457, section 9.2.1 (Methodology; Traffic Noise)
The Environmental Statement mentions “…noise sensitive premises such as dwellings, community facilities and users of recreational facilities and open space…” in the methodology section, 9.2.1 page 441, but does not appear to follow this through into a full assessment of the impact on the remoteness and tranquillity of the highland moorland areas – section 9.7 page 479. We are therefore concerned that the assessment concentrates on the human impact or on buildings and thus only examines the impact on humans, and does not look at the possible effects of noise and vibration on wildlife or ecology.

Page 458, section 9.2.5 (Methodology; Traffic Noise)
The National Park Authority queries whether it is appropriate to use human perceptions of changes in noise levels, when looking at impacts on the extended study area within the National Park, where the effects on wildlife may be greater than those on human beings.

Page 459, section 9.2.8 (Methodology; Traffic Noise Predictions)
The National Park Authority questions whether the same traffic flow data for the air quality section was used for this part of the modelling. If this is the case, this Authority would have the same concerns regarding the validity of this data as detailed in our response to the air quality section. These concerns are related to the fact that 2001 was a spurious year for traffic flows within the National Park owing to the effects of Foot and Mouth disease. Whilst the effects would not have been as great on the A628, there was an overall dip in traffic flows within the National Park as a whole during the Foot and Mouth crisis. There may also have been a change in flows within urban areas, with leisure trips being made away from rural areas. The National Park Authority still seeks clarification on this point.

Page 460, section 9.2.15 and 9.2.16 (Methodology; Vibration)
Similar to the comment above regarding the noise impacts of the proposed scheme, the Authority queries whether it is appropriate to use human perceptions of changes in vibration levels when looking at impacts on the main and extended study areas within the National Park, where the effects on wildlife may be greater than those on humans.

Page 460, section 9.2.17 (Methodology; Extended Study Area Methodology)
The National Park Authority welcomes the fact that the noise impact assessment has gone beyond the extended study area to look at impacts on additional road links with changes in traffic flows of +25% or –20%.

Page 460, section 9.2.18 (Methodology; Extended Study Area Methodology)
The National Park Authority is concerned that the extended study area methodology is strictly related to dwellings, and their proximity to the road. It does not seem to take into account either the effects on wildlife within high designation areas of conservation – SSSI/SAC/SPA, nor does it seem to acknowledge the effects on tranquillity that a significant increase in traffic noise would have on Open Access land bordering the route.

Pages 461 to 447, sections 9.2.20 to 9.2.29 (Methodology; Construction Noise)
This Authority is concerned that the construction phase could produce major adverse impacts on tranquillity within the National Park.

Page 466, section 9.52 (Baseline Environment – Extended Study Area)
The National Park Authority still queries why no surveys were undertaken for ambient noise levels within the Extended Study Area inside the National Park.

Page 467, section 9.6.1 (Traffic Noise Impact Assessment – Main Study Area; Noise Levels at Individual Receptors)
The National Park Authority recognises the benefits of the predicted decrease in noise levels at receptors L27, L28 and L32 for the National Park settlement of Tintwistle under the Do something (2010) and Do something (2025) scenarios, whilst also recognising that the effects at receptor L33 are mixed. It should be noted that Table 9-4 on Page 468 gives a Figure of 61.2
LA10,18-Hour dB for Receptor L32 (Front) for 2010 Do Minimum, whilst Sheet 3 of Figure 2.9.1 gives a figure of 51.2 LA10,18-Hour dB for Receptor L32 (Front) for 2010 Do Minimum. The National Park Authority seeks clarification as to which figure is correct.

Page 470, section 9.6.6 (Traffic Noise Impact Assessment – Main Study Area; Noise Levels at Individual Receptors)
The National Park Authority is still concerned about the increase at receptors L29, L30 and L31 being in excess of 10dB(A), whilst recognising that this is offset by benefits to dwellings along the old route in Tintwistle.

Page 470, section 9.6.10 (Traffic Noise Impact Assessment – Main Study Area; Noise Levels Assessment)
The National Park Authority welcomes a full NIR noise assessment to identify dwellings eligible for noise insulation.

Page 480, section 9.7.2 (Traffic Noise Impact Assessment – Extended Study Area; Distance Band Results)
This Authority is concerned that all Traffic Noise Impact assessment in the extended study area is related to property. As such, it does not take into account impacts on wildlife within the National Park, or the impact on the valued characteristics such as solitude and tranquillity for users of the National Park.

Page 480, section 9.7.3 (Traffic Noise Impact Assessment – Extended Study Area; Distance Band Results)
This Authority is still greatly concerned by a predicted increase in traffic along the A6024 of 158.4% and also of the increased noise levels within what is at present a relatively tranquil area. The fact that only two dwellings lie within 300 metres of the road along this route should not detract from the impact that an increase in traffic would cause to this area.

Page 487, section 9.7.12 (Traffic Noise Impact Assessment – Extended Study Area; Noise Level Assessment)
The National Park Authority is concerned that within the extended study area more dwellings are expected to experience noise increases than those that experience decreases with the scheme. It is therefore suggested that the benefits in terms of noise do not outweigh the disbenefits.

Page 487, section 9.7.16 (Traffic Noise Impact Assessment – Extended Study Area; Noise Level Assessment)
This Authority feels that when looking at the extended study area it is unreasonable to look at the wilderness areas of the National Park in conjunction with the urban areas of the study. Both should be looked at separately in terms of the affects of noise. The urban areas are by their nature densely populated with a high number of sensitive receptors (as defined by the study), whilst the National Park is sparsely populated with fewer sensitive receptors. The methods used to assess noise impact do not take into account the effects on visitors to the National Park and their perception of tranquillity. Moreover, the Authority is concerned that the methodology does not allow for the National Park itself to be identified as a ‘sensitive receptor’.

Page 492 to 494, section 9.8 (Construction Noise Impacts)
There does not appear to be any recognition of the potential short term affects of noise nuisance upon the Dark Peak SSSI during construction. This Authority would welcome investigation of this issue along with mitigation if this should be deemed necessary.

Pages 492 to 494, sections 9.9.6 to 9.9.11 (Mitigation Measures; Construction Noise Mitigation)
This Authority would welcome the principle for mitigation measures to reduce the levels of noise throughout construction. However, the landscape and ecological impacts of detailed design would need to be taken into consideration for individual mitigation measures.
General Comments on Traffic Noise and Vibration
The methodology for assessing the impact of noise upon the surrounding area does not appear to be appropriate given the rural nature of the area where the Bypass is proposed. The methodology used to assess noise impacts seems to be weighted towards urban areas, where it would be appropriate to assess how many dwellings are affected by a proposal. However, in this rural setting, the impacts on humans or buildings used by humans are not the only element that needs to be considered – there are impacts on wildlife and tranquillity that should be taken into consideration. Places that help people to feel tranquil are a valuable resource, and as such CPRE have designed a tool to map the tranquillity of any area. In addition, recent work commissioned by CPRE, the Countryside Agency, and co-funded by the North East Regional Assembly, Northumberland Strategic Partnership, Northumberland National Park Authority, and Durham County Council seeks to provide a broad understanding of what tranquillity is and why it is important. This research found that survey respondents often commented on the negative impacts from transport and vehicles. The research found that car noise was repeatedly identified as something you do not want to hear in a tranquil place, and that development on the landscape was not welcomed. The Authority is concerned that this type of noise impact would affect the National Park through an increase in traffic flows in the National Park and surrounding area. To this end, the Authority feels that the results of the noise impacts are incomplete, as only the impacts on humans and on buildings have been taken into consideration. Thus, it is difficult to determine all the noise implications of the scheme upon the National Park.
Volume 2A Environmental Statement – Pedestrians, Cyclists, Equestrians and Community Effects

Access and Recreation

Main Scheme

There is some negative impact of the main scheme as the Bypass enters the National Park where it crosses Arnfield Lane. We note that the plans showing Access Land (Vol 3 fig. 2.10.1) have been amended following our comments, however they are still incorrect. The loss of three areas of access land is regretted; however this is considered of less importance than maintaining access routes to the rest of Tintwistle Low Moor from Tintwistle. This is currently only shown as a footbridge at Holybank Quarry to cater for the diverted footpath 24 through the disused quarry. An application has been made by local residents to create an access point at Chapel Row to prevent the long detour to the Holybank Quarry footpath. The presence of a busy road adjacent to the access land would have an adverse effect on recreationalists in terms of noise and visual intrusion.

The Pennine Bridleway, which uses Arnfield Lane, would be accommodated by a short diversion and overbridge. The route would be maintained but there would be some local loss of amenity by the presence of a busy road underneath. Although this section of route is described as single carriageway, within the National Park there will be an east-bound climbing lane and a lay-by for westbound traffic, which would increase the visual dominance and noise of the road.

Extended Study Area

There is major concern about the amenity of routes crossed by the A628 between Townhead Farm and the A6024 junction as a result of predicted traffic growth by a possible 84%, and a growth of 56% between the A6024 junction and Flouch by 2010. This would become even worse by 2025 when there is a predicted doubling of existing traffic flows through the Woodhead Pass. As stated at 5.11.9 the increased traffic flows within the extended study area would cause a decline in the already poor journey amenity for path users crossing the A628. Of particular concern are the four crossings of national long-distance trails, the Pennine Way and three crossings of the Trans Pennine Trail. The latter is promoted as the only trans Pennine route suitable for all users (walkers, cyclists, horse-riders and disabled people where appropriate) and including families. Consideration should be given to warning signs and investigation into pedestrian and equestrian controlled traffic lights at these crossings (subject to Highways and planning approval) to enable safe crossing of the highway. There should also be further investigation into the possible re-routing of the Trans Pennine Trail across the Woodhead Tunnels to Winscar Reservoir to reduce the three A628 road crossings to one. (This has previously been proposed by Barnsley Metropolitan Borough Council but not pursued due to the environmental concerns of English Nature.)

2006 will see the completion by United Utilities of a concession horse-riding route linking several sections of restricted byways north of the A628 from Crowden eastwards to cross the A6024 and Woodhead Reservoir inlet close to Pikenaze Farm to join the restricted byway to Audernshaw Clough. This is likely to increase the numbers of equestrians using the Longdendale Valley as the Northern Horse Route will allow the completion of circular routes utilising the Pennine Way crossing and the Trans Pennine Trail crossings.

The presence of a car park and Youth Hostel at Crowden in close proximity to the Pennine Way and other public and concessionary footpaths close to moorland and reservoirs results in pedestrian crossings of the A628. Advance highway warning signs should be the minimum requirement here.

Summary of impacts on access and recreation

The implementation of the proposed Bypass and traffic restraint measures would have a moderately severe negative impact on users of the recreational routes and open access moorland within the Peak District National Park in terms of severance and loss of amenity (noise and visual intrusion).
Volume 2A Environmental Statement – Vehicle Travellers
Page 538, section 11.2.14
The Authority queries whether the traffic flow data used for this part of the modelling is the same as for the air quality modelling. If it is, we would welcome clarification on whether data from 2001 was used, and if so, whether allowance was made for the impacts of Foot and Mouth disease on those figures.

Page 547, section 11.6.2
The National Park Authority is concerned about the impacts of a lay-by at Tintwistle. These concerns relate to land take and visual impacts. This Authority is concerned that the route corridor should be as narrow as possible within the National Park, and although the lay-by would be shielded within screening mounds, there is the potential for greater visual impact from within the National Park to the North. In addition, due to vehicles having to accelerate quickly from the lay-by when rejoining fast moving traffic, there would be implications for traffic noise and emissions.

Page 548, section 11.6.5
This Authority would like to see signage within the National Park kept to the minimum, in terms of number and size necessary, to comply with safety.

Page 548, section 11.6.6
The National Park Authority would welcome moves to remove signage clutter within the National Park settlement of Tintwistle and replace it with more appropriate signage.

Page 549, section 11.7.3
The National Park Authority has concerns regarding the visual impacts of the proposed scheme. It is stated that roadside vegetation would be removed to provide “...the overall effect of creating an open view to the south across a rural landscape...” (page 549). It would be sensible to assume that if vehicle travellers can see the rural landscape, vehicles would be visible from the rural landscape. This is not only directly, in terms of the vehicles, but also the reflection of light off them. Furthermore, if there is no screening along the roadside, this may have implications for noise levels in the area surrounding the road, as there is nothing to cushion the sound.

Page 552, section 11.7.22
The National Park Authority has concerns regarding the visual and noise impacts of the proposed scheme. If brief views are experienced from the Bypass across to the National Park, it seems sensible to conclude that the road is visible from elsewhere in the National Park. Not only does this have significant visual impacts, but it has implications on the tranquillity of the area.

Page 553, section 11.8.3
The National Park Authority is concerned about the proposals for climbing lanes along the route. Whilst we recognise the benefits to air quality and a reduction in driver stress resulting from climbing lanes, we are concerned with the increased land take required for climbing lanes and the possible increase in visual impact from within the National Park. We are also mindful that slow moving HGV traffic would act as a natural restraint measure upon the route.

Page 553, section 11.8.4
This Authority would welcome an investigation into lower speed limits along the route, to act both as a restraint measure and to reduce emissions

Page 542, section 11.8.6
Whilst this Authority recognises the impacts of driver frustration that a reduction in speed limits for the route would bring, we would welcome an investigation into lower speed limits along the route, to act both as a restraint measure and to reduce emissions.

Page 555, section 11.8.14
Whilst this Authority recognises that the installation of traffic lights at the Townhead farm junction would lead to driver frustration, we feel that traffic restraint forms a vital part of the scheme. We
also feel that even without the factoring in of traffic restraint, some traffic management would be needed at this junction to allow egress from the old A628.

Page 555, section 11.8.16
The National Park Authority recognises that levels of stress would be higher on the single carriageway section of the scheme than on the dualled section. However we feel that this is related more to increased flows resulting from the scheme than to the fact that the route is single carriageway. The Authority would like to see an assessment of whether the impacts of the scheme could be mitigated by scaling down the scheme and reducing the design speed.

Page 556, section 11.8.18
The Authority acknowledges increased levels of driver frustration at the A628/A616 junction resulting from both increased traffic and restraint measures. However we feel that restraint is vital to mitigate against traffic increases above those forecast for 2010 and 2025 under the Do something scenario.

Page 556, section 11.8.19
Whilst this Authority recognises that the proportion of HGVs would decrease, the overall number would increase, so we are unable to understand how this is seen as being beneficial in terms of frustration and fear of accidents.

Page 556, section 11.8.21
The Peak District National Park Authority acknowledges that driver stress levels along the A628 west of the A628/A616 junction are predicted to be high with or without the scheme.

Page 557, section 11.8.25 and 11.8.26
The Authority has some reservations regarding the impact assessment of the scheme being beneficial for driver frustration and fear of accidents. The proposed scheme actually increases driver frustration and fear of accidents within the wider study area. The Authority suggests that this increase is not outweighed by the benefits in the main study area.

Page 557, section 11.8.26
Whilst this Authority recognises that the proportion of HGVs would decrease within the extended study area, the overall number would increase, so we are unable to understand how this is seen as being beneficial in terms of fear of accidents. However, we note that the report concludes that the overall increase in traffic levels would lead to an increased fear of accidents.

Page 557, section 11.8.28
This Authority is concerned that under the do something scenario for 2025 there would be an increased driver stress for the part of the A628 within the extended study area, when compared to the do minimum scenario. We are also concerned that this would mean that stress levels are high along the whole of the A628 within the extended study area.

Page 560, section 11.9.15
The Authority disagrees that the level of driver frustration is judged to be neutral, when for the whole of the extended study area and within the scheme at Flouch junction, the level of driver frustration would become worse. We feel that the effects on driver frustration are adverse if the extended study area is taken into account.

Page 560, section 11.9.17
The National Park Authority is concerned that the level of fear of accidents would increase due to the predicted increase in vehicle numbers.

Page 560, section 11.9.19
This Authority disagrees that the level of fear of accidents is neutral, when for the whole of the extended study area the level of fear of accidents would rise. We feel that the effects on the level of fear of accidents are adverse if the extended study area is taken into account.
This section of the report states that the modelling software cannot cope with more than one value of time therefore “...all costs are related to commuting rather than a combination of commuting and other trip purposes” (page 2-5). However, the values of time in Table 2.6, below this statement, are non-working time. The Authority suggests that non-working time would be the ‘other trip purposes’ that the report says have not been used as the value of time. Therefore, the Authority seeks clarification of which value of time has been utilised for calculations – non-working time or working time.

The Authority is concerned that the proposed scheme does not sufficiently meet its overall aim. The Traffic Forecasting report states that “For the section of the A628 in Hollingworth, the forecast reduction in general traffic volumes is not as great as for other sections of the proposed road to by Bypassed...This is because there are secondary traffic re-assignment benefits as a result of the scheme.” (Page 4-4, section 4.3). Having analysed the predicted traffic figures for the Bypassed roads, the Authority queries whether the proposed scheme sufficiently meets the aim of providing relief from traffic for the village of Hollingworth. The predicted reduction in traffic on the A628 Hollingworth for 2025 when the do minimum and do something are compared is 15%, from 17,000 to 14,500 vehicles per day. A reduction of 15% is insignificant when compared to the traffic volume reductions in Tintwistle of 71% and Mottram of 93%. The Authority therefore queries whether the current proposal meets the scheme’s aim adequately, especially when assessing the proposed scheme holistically and attempting to balance the benefits to the three villages and disbenefits to the National Park of the proposal.

The Authority suggests that the significant decrease in expected travel time for users between Mottram and Tintwistle makes the proposed route more attractive to users, which is why there is a significant increase in traffic flows. It is inevitable with predictions of 45 minutes saving in the morning peak by 2010, and 55 minutes by 2025, and the inter-peak saving predicted at 15 minutes in 2010 and 20 minutes in 2025, that people would re-route to the proposed road. It is for this very reason that the Authority queries the feasibility of designing a lesser scheme, and if this is not possible, designing more effective route restraint measures than those currently proposed. Both a scheme designed at less capacity and more/different route restraint measures would achieve less of a reduction in journey time savings, thus making the route less attractive to new users. Thus, such a scheme would not produce such significant increases in traffic flows through the National Park, and all the detrimental impacts that this brings with it.

The Authority is extremely concerned about the forecast increase in traffic on the A6024 Woodhead Road. Annual average daily trips on the A6024 are predicted to increase by 116% in 2010, from 1,600 vehicles in the do minimum situation to 3,500 with the proposed scheme.
2025, the increase when do minimum and do something scenarios are compared is 100%, from 1,900 to 3,800 vehicles per day. These figures alone are alarming, and when coupled with the fact that the A6024 currently has an accident rate of 62 per hundred million vehicle kilometres, compared to a national average of 50, the increase becomes more significant. The A6024 is steep and tortuous, with gradients in excess of 1:7; increasing traffic on the route to the extent that the proposals do can only exacerbate an already poor accident rate.

The significant increase in traffic on the A6024 provides the Authority with a further concern, regarding the implementation of measures to reduce the number of accidents on this road. The Authority is concerned that soon after the opening year, Derbyshire County Council, as highway authority, will be forced to implement an accident reduction scheme on the A6024. The Authority queries the rationale of proposing a scheme that will need further measures implemented in order to counteract the disbenefits of the proposed scheme.

The Authority is extremely concerned about the forecast significant increase in traffic across the Peak Park Screenline. It is inevitable that changing one section of the road network will affect the network as a whole, as vehicles will re-route to find the quickest route, and some journeys will be generated. However, the growth in traffic detailed in the table on D-4 is very alarming for the Authority. The Authority acknowledges that there is a predicted decrease in annual average traffic flows on the A57, with a decrease of 2% in 2010 (from 5,300 to 5,200 vehicles) and 1% in 2025 (from 6,000 to 5,900 vehicles). There is also a predicted decrease in traffic on the A635 of 38% in 2010 (from 5,200 to 3,200 vehicles) and 48% in 2025 (from 7,200 to 3,700 vehicles). However, these decreases in traffic are not nearly as great as the increases in traffic. Average annual traffic flows on the A628 east of the A6024 are predicted to increase by 57% in 2010 (from 11,400 to 17,800 vehicles) and 95% in 2025 (from 11,400 to 22,100 vehicles). Annual average daily trips on the A6024 are predicted to increase by 116% by 2010 (from 1,600 to 3,500 vehicles) and 100%, in 2025 (from 1,900 to 3,800 vehicles). The Authority suggests that the decreases in traffic on the A57 Snake and A635 do not outweigh the significant increases in traffic on the A6024 and A628. Especially when you take the appalling accident rate of the A6024 and impacts of the increases in traffic on the A628 on the National Park into account.

**General Comments on Traffic Forecasting Report**

As stated in other sections of this response, the National Park Authority is extremely concerned about the congestion levels on the proposed Bypass and thus the sustainability of the proposed scheme, in terms of future pressures to further upgrade the corridor. It is inevitable that if a dual carriageway suddenly changes to a single lane section, the congestion 'pinch point' is where the dual carriageway section meets the single lane section. This is very concerning for the Authority, as due to the significant increase in traffic on the A628 the Authority is concerned that there will be considerable congestion leading up to and on the single carriageway section, which is the section of the proposal within the National Park. The Authority is extremely concerned that the predicted traffic levels on the Bypass could lead to traffic queues for approximately one to two hours a day just inside the National Park boundary. If traffic were to be queuing for this length of time daily, this provides the Authority with immediate concerns, in terms of the increased traffic noise, air quality impacts, and visual impacts. In addition, this leads to future concerns regarding pressure to increase capacity at the single lane section, either with a subsequent scheme or an upgrade of the current proposed scheme to dual carriageway all the way along the A628 corridor. Both of these scenarios provide further direct impacts on the National Park in terms of the actual road and associated infrastructure, and indirect impacts, in terms of a further increase in traffic and all the effects as a result of this.
The National Park Authority has reservations regarding some of the assumptions and conclusions made in this section of the report. Firstly, the Economic Appraisal Report states that the existing route through the villages “has an average PIA rate higher than the rest of the road network modelled”, and that the rest of the proposed ‘bypass corridor’ has average or below average network rates. The Authority queries whether these two statements conflict with section 2.6 of Volume 1 of the Environmental Statement, which examined road traffic accidents. This section of the Environmental Statement concludes that the section of road to be bypassed “…has an accident rate, which is below the national average for a road of a similar standard” (ES Vol 1, P21). This is of particular importance, as one of the proposed scheme’s objectives is “to improve safety for all road users in the villages of Mottram, Hollingworth and Tintwistle” (ES Vol 1, P9), yet there seems to be conflicting information provided on the accident rates on this section of road.

Secondly, the Authority is concerned that the second COBRA model, which was used to predict accident rates in the rest of the network (excluding the bypass and its corridor) “…was run using default severity splits and mainly default accident rates” (P10). The Authority is alarmed that the Highways Agency has not obtained the accident data for the rest of the network in order to have an accurate baseline. The Authority suggests that due to the varied landscape and standards of the roads in the rest of the network, accident rates will not always conform to default rates. For instance, one such road in the rest of the network where the accident rate is not inline with default rates is the A6024, where the accident rate is 62 per hundred million vehicle kilometres, compared to a national average of 50. Therefore, the Authority queries the validity of the predicted accident rates for the rest of the network.

The two above concerns regarding the validity of the safety data lead the Authority to question the Present Value of Costs (PVC) in Table 9 on page 11. Should the underlying data used for predicting future accident numbers be incorrect, the PVC will also be incorrect. Furthermore, if this were the case, the BCR would also be incorrect, as the accident benefits of the proposal are an element of this calculation.

Setting aside the Authority’s concerns regarding the validity of the data within this section, the Authority has analysed the data provided. The Authority is extremely concerned about the forecast number of personal injury accidents in both 2010 and 2025 with the proposed scheme in place. The predicted decrease in accidents on the ‘Bypassed and local roads’ (36% in 2010 and 27% in 2025 when the do minimum and do something are compared) clearly mean that the aim of the scheme regarding a reduction in accidents along the Bypassed road is met. However, the Authority is concerned that this aim will be met at the expense of the number of accidents in the rest of the corridor. The Authority queries whether the decreases in accidents on the Bypassed road justify the increases of 41% in 2010 and 57% in 2025 in accidents in the rest of the corridor when the do minimum and do something scenario are compared. The Authority acknowledges that accidents in the rest of the network are predicted to decrease by 0.3% in both 2010 and 2025 when the do minimum and do something are compared, but again, the Authority questions whether these decreases justify the increase in accidents in the corridor. This is especially alarming as the A628 already has a poor accident rate, with it being one of the worst 10 roads in the United Kingdom for accidents. Looking at the forecast increase in traffic on the A628, the Authority is concerned that the accident rate will be further exacerbated with the implementation of the proposed scheme. Therefore, the Authority suggests that the proposed scheme is met at the expense of accidents elsewhere, thus overall safety does not improve, the proposed scheme merely reallocates the accidents to elsewhere in the network.

The Authority is concerned that the proposed scheme’s Benefit to Cost Ratio (BCR) is almost wholly due to the Business User Benefits. The Authority is concerned that these benefits to business users are as a result of the savings in travel time. It is these savings in journey time that cause the significant increase in traffic in the National Park, and thus the direct and indirect
significant adverse impacts on the National Park. The Authority queries whether the significant adverse impacts on the National Park can be offset by these benefits to business users.
The Authority queries whether the proposed scheme meets its own objective that is stated within the scheme description contained within the AST. The proposed scheme description states “To deter a transfer of traffic from other cross Pennine routes onto the A628 in the Peak District National Park, restraint measures to be incorporated...”. The Authority queries whether this objective is met, as the growth in traffic on the A628 corridor is predominantly due to transfer from the M62.

Environment – Noise
The Authority strongly feels that the methodology for assessing the noise impacts of the proposed scheme is totally inappropriate for the rural setting of the road. Therefore, the assessment that 577 less people are annoyed by the noise impacts of the proposed scheme is completely misleading. This methodology only takes the resident population surrounding the proposed scheme into account, as it is based on the number of dwellings that the proposed scheme affects; the Authority suggests that this methodology is inappropriate in a National Park setting, where visitors would be affected by the proposed scheme, in terms of the significant detrimental impacts on the tranquillity of the area. Furthermore, the methodology does not give consideration for the impacts of the change in noise on fauna or flora; for example, there is no assessment of the number of nesting birds affected by the proposed scheme, and the impacts that this could have on the bird population within the area.

Environment – Air Quality
The Authority strongly feels that the assessment in this section of the AST is completely misleading. As detailed earlier in our response, the National Park Authority is concerned that the air quality assessment is biased towards urban areas, and residential properties. We would suggest that this is not appropriate for the extended study area within the National Park, which is a sparsely populated area with high conservation designation. We also feel that it is inappropriate for the extended study area to include both highly urbanised areas and the rural wilderness of the National Park. The impacts on each area should be judged separately and measured according to different and appropriate criteria.

Furthermore, we are concerned that the air quality modelling factors in improvements in air quality relating to developments in engine and fuel technologies. These are qualitative judgements rather than quantitative and cannot safely be predicted, and as important is the fact that these advances in technologies are not direct impacts of the proposed scheme.

Environment - Greenhouse Gases
The Authority is extremely concerned that there is such a significant increase in carbon dioxide with the proposed scheme when compared to the do minimum. This is in direct conflict with the Government policy to reduce carbon dioxide emissions. This concern is heightened by the Authority’s concern that the methodology used to forecast air quality changes is flawed. As detailed earlier in this response, the Authority feels that incorporating improvements to fuel and engine technology is inappropriate, as these are not a direct impact of the scheme. Therefore, if these technologies do not advance as quickly as predicted, the carbon dioxide emissions will actually be worse than the predicted values in the AST, and thus the situation would be even worse than the predicted one.

Environment - Landscape
The Authority does not disagree with the 'Qualitative comments' that the scheme is 'at odds with the local landscape pattern and landform'; is 'visually intrusive'; is 'likely to diminish a range of characteristic features and their setting'; and finally, 'would be damaging to a high quality landscape', all of which leads to the assessment that the overall landscape impact of the proposed Bypass would be, as stated in the table, 'large adverse'.

Regarding the more detailed landscape assessment topics, the Authority is concerned that the report's conclusion seems to vary in terms of the degree of adverse impact. We consider that the
categories chosen are a little subjective, with obvious overlap and therefore to some extent confusing definitions.

The Authority queries the value of some of the assessments within this report. The landscape 'pattern' category includes a detailed analysis of the character of the area, including the agricultural field pattern and areas of woodland towards the west end of the proposed route, on the south facing slopes of Longdendale. In contrast to that is the large scale moorland, mainly Tintwistle Low Moor, on the boundary of and within the National Park, as well as the valley bottom reservoir system and areas of plantation woodland, on all of which the Bypass would produce what is considered to be a 'slight adverse' effect. With the proposed Bypass traversing such a contrasting area, the Authority queries how you can assess the impacts of the proposed Bypass to be 'slight adverse' on them all.

As far as 'land cover' is concerned, the landscape impact is estimated to be 'slight adverse'. This involves the typical agricultural pattern of the area, with its attendant permanent pasture within a drystone wall or hedgerow enclosed field pattern and also some ancient woodland - mainly in the stream cloughs which feed the reservoirs, and finally heather moorland on the higher ground above the eastern end of the proposed Bypass route.

The impact of the proposed Bypass on what is described as the 'cultural' landscape, which includes Tintwistle Conservation Area and scattered farmsteads and hamlets e.g. Townhead Farm and Burness - a satellite of the Conservation Area, as well as many old tracks and 'hollow ways', is considered to be 'moderate adverse'. The Authority is concerned that not all aspects of this category have been taken into account. This section should also include quarries, as prominent man-made remnants of mainly nineteenth century human activity, to provide high quality building stone for the construction of the reservoirs in the valley bottom, together with all their attendant infrastructure, not to mention even the managed heather moorland, which brought enormous changes to the landscape at a similar time.

The category that raises the main concerns for the Authority regarding landscape impacts is 'tranquillity'. The assessment of the impacts of the proposed scheme on tranquillity is 'large adverse', this is mainly because the Bypass is proposed on the middle northern slopes of the valley - a generally remote and therefore currently fairly tranquil area. Since the effect of the proposed Bypass, both outside the National Park and immediately above Tintwistle village and its Conservation Area will be to remove that sense of tranquillity altogether, the only opportunity for mitigation would be to provide significant earth bunding, acoustic screens and tree and shrub planting, which would only be effective in the longer term. An issue slightly underestimated in this assessment is the additional HGV traffic anticipated as a result of the Bypass, which will have a significant adverse impact on the sense of tranquillity in the upper Longdendale valley, in the vicinity of the existing A628 road. However, in the assessment this is considered to have a 'negligible effect'.

Finally, the impact of the new road on the overall landscape 'character' of the valley is reported to be 'moderately adverse', mainly by virtue of its impact on views from a variety of vantage points, but principally from the Pennine Bridleway and from open access land. The lack of significant tree cover tends to aggravate this problem within a wide variety of landscape types.

**Environment - Heritage of Historic Resources**

The Authority disputes the assertion that 'Conservation Areas are local designations'. Although designated locally, Conservation Areas are covered by national legislation. In addition, the Authority considers that Listed Buildings have national importance, not purely local or regional, as detailed in the assessment.

The Authority disagrees with the statement that the proposed scheme would only have a 'moderate adverse' affect on Tintwistle Conservation Area due to land-take of agricultural land within the Conservation Area. The Authority is extremely concerned that the report fails to mention that the proposed Bypass would cut the Conservation Area in half, and would have
adverse impacts on noise and air pollution in the area, and visually impact on the most historic part of it, all of which are within the National Park.

Environment - Biodiversity

Main Study Area

Statutory Sites

The Authority suggests that Section 3/Natural Zone moorland should be added, with high value and major negative impact, and therefore very adverse assessment score.

Habitats and Vegetation

Regarding the Phase 2 NVC survey site 10 (Holybank Quarry), the Authority disagrees that there would be a minor negative impact. The Authority suggests that this should be major negative since majority will be lost and remainder fragmented, and proposed compensation is inadequate both in terms of quantity and quality. Thus assessment score should be moderate adverse at best.

Butterflies and Moths

The loss of/substantial damage to the integrity of a “large population” of the local Green Hairstreak is significant. Thus the value should be medium, and there would be a major negative impact and hence assessment score moderate adverse.

Terrestrial Invertebrates

For Survey Site 6 (Holybank Quarry) the presence of several local species including one proposed UK Biodiversity Action Plan priority species (Bombus monticola) means the value should be medium/high, impact major or intermediate negative and hence assessment score moderate adverse at best.

Reptiles

Mitigation measures are not likely to be complete so there is likely to be at least slight adverse residual impact.

Bats (roosts and foraging)

The proposed mitigation seems to be confined to rebuilding a wall as a flight line to another already existing site. The Authority suggests that this is not adequate compensation of some direct loss of roost site, significant loss of sheltered feeding and major disturbance and flight line disruption in Holybank Quarry. Therefore impact is major negative and assessment score large or very large adverse.

Extended Study Area

SSSI/SPA/SAC

Given significant reservations about the assessment of air quality impacts; the lack of assessment of noise/visual disturbance of traffic increases on breeding birds; and possible upgrade pressure, the impact cannot be considered neutral - intermediate negative is more likely to be appropriate, hence potential large adverse impact.

Safety – Accidents

The Authority is extremely concerned about the validity of this section of the AST. The AST assessment is 'slight beneficial' due to the accident reductions over 60 years. However, when looking through the remainder of the report, there is no safety data contained within it; page 86 of the report has the title 'Safety', yet the remainder of the page is blank. The Authority is concerned that the proposed scheme has been able to progress this far without this vital information. Therefore, due to a lack of this critical information, the Authority is not in a position to evaluate whether the assessment of 'slight beneficial' is justified.

The Authority is extremely concerned regarding the validity of the data that is provided within the AST. The ‘quantitative measure’ column of the table gives a reduction of 674 PIA’s over the 60 year evaluation period, however, guidance states that this should be broken down into the
severity of the accidents. Thus, the number of fatal, serious and minor accidents should be contained within this column.

The Authority queries whether increases in accidents along the A628 corridor can really be offset against safety gains within the three villages proposed to be Bypassed, as concluded within the AST. As the Authority does not have all the data that it requires to make an informed assessment of the impacts of the proposed scheme on safety, it is difficult to make a judgement. However, it appears sensible to assume that existing accidents along the A628 will mainly be rear end shunts and accidents at junctions, as vehicle speeds are constrained by the amount of congestion along this route. Both of these accident types are fairly small in scale and are unlikely to result in major injuries. However, with the proposed Bypass in place, there will no longer be such constraints on the speed of vehicles along the new section of road, thus when accidents do occur, they are more likely to be of a greater scale, and thus result in more severe injuries. It would also seem sensible to assume that the number of accidents would be greater than the number that currently occur on the existing A628 corridor, this is due to two factors.

Firstly, the speed of traffic will have increased, as vehicles are no longer constrained by the traffic congestion within the three villages to be Bypassed and there will be not be any vulnerable users alongside the Bypass unlike the current situation in the villages. Thus, due to this increase in vehicle speed when accidents do occur, they are more likely to be of a greater scale, and therefore result in more severe injuries.

Secondly, as stated in other Draft Order documents, the majority of the growth in traffic on the A628 is a consequence of vehicles transferring from the M62. This means that when making journeys that were previously made on the M62, these vehicles will be used to travelling at high speed to make that particular journey, and being able to fairly easily overtake slow moving traffic, as the M62 is a multiple lane route. However, when the vehicles re-route to the A628, they will find that there is a decrease in vehicle speed due to both the lower speed limit of the road (on sections of the proposed Bypass) and the inability to pass slow moving traffic as easily as not all the route has multiple lanes. This will lead to two scenarios; some vehicles travelling at speeds that the proposed Bypass is not designed for, as they will be used to travelling at 70 miles per hour when making the particular journey, thus causing accidents as the road is not designed for this speed. In addition, there will be driver frustration, and inevitably vehicles will try to pass slow moving traffic in inappropriate places, thus leading to accidents when overtaking. Both causes of accidents will lead to more severe accidents than those on the current A628.

Furthermore, the Authority is concerned about the accident rate along the existing A628 corridor. The A268 corridor already has an accident rate more than twice the national average, and when travelling on the route the number of times the drystone walls are damaged provides clear evidence of this. Therefore, the Authority queries whether this road can cope with the significant increase in traffic forecast for this road in terms of further exacerbating an already appalling accident record.

Integration – Land-Use Policy
The National Park Authority is extremely concerned that Section 62 under the Environment Act 1995, has not been taken into consideration within the land-use policy section of the Appraisal Summary Table. Due to the fact that 1.3km of the proposed scheme would lie within the National Park, and the proposed Bypass as a whole would significantly impact on the National Park, the Authority would have expected to see an assessment of how the proposed scheme impacts on Section 62. The total absence of reference to this Act is alarming for the Authority.

Furthermore, the Authority has thoroughly examined many reference documents relating to the proposed scheme, and the only reference to the Environment Act 1995 is in the Policies and Plans section of Volume 2A of the Environmental Statement. The Authority suggests that this reference was only added after we made the following comment on the Draft Environmental Statement:

“There is no mention of Sections 61 and 62 of the Environment Act 1995 that discuss the statutory purposes of National Park designation and the duty imposed on relevant Authorities to
have regard to these purposes when exercising or performing functions so as to affect land in a National Park. The Highways Agency is a relevant authority under section 62 of the Environment Act.”

Therefore, given the lack of reference to this Act within the Draft Order documents, the Authority queries whether the Highways Agency were aware of, and therefore paid due regard to Section 62 duties, when the proposed scheme was designed.

The Authority disagrees with some of the assessments of how the proposed scheme impacts on individual land-use policy. The Authority queries how the proposed scheme is assessed to be ‘beneficial’ for PPG13 when one of the strategic goals of this policy is to reduce the need to travel and encourage sustainable travel patterns. Therefore, the Authority suggests that the assessment should be ‘adverse’. In addition, as stated previously, the proposed scheme is compliant with an element of SPITS, however, progressing this element may be detrimental to the strategy as a whole because it was designed as an integrated package of measures. Furthermore, the Authority has given in principle support to the A57/A628 Tintwistle - Mottram Bypass, however, we have always reserved the right to pass judgement on any scheme until the details of it have been released through Draft Orders. Therefore, the Authority queries whether the proposed scheme can be assessed as beneficial for this policy.

Furthermore, the Authority disagrees with the overall assessment of the proposed scheme being ‘Beneficial’ on land use policy. This is for a number of reasons. Firstly, the incorrect assessment of the proposed scheme on the individual policies in the above paragraph. Secondly, the proposed scheme has adverse impacts on PPG2, PPS7 and PPS9. Thirdly, the proposed scheme is assessed to have an adverse impact on national policy as a whole. Therefore, it appears that the adverse impacts of the proposed scheme on national and environmental policy have been assessed in the AST to be outweighed by the benefits to local and regional policy. The Authority queries whether the assessed benefits really do outweigh the disbenefits.

**Integration – Other Government Policies**

The Authority disagrees that the proposed scheme contributes to a ‘safe’ network. Setting aside our concerns regarding the validity of the AST section on safety, the Authority queries how the proposed scheme provides a ‘slight beneficial’ impact on safety, as based upon the assessment within the AST, the proposed scheme has a ‘slight beneficial’ impact on accidents and ‘slight adverse’ impact on security. Using the Highway Agency apparent ‘tally’ system when assessing impacts, the conclusion for safety would be ‘neutral’.

The Authority disagrees with the overall assessment that the proposed scheme would have a ‘beneficial’ impact on other Government policy. The proposed scheme provides benefits to some policies and disbenefits to others, therefore, the Authority suggests that the assessment should at best be ‘neutral’.

**General comments on the AST**

The Authority queries the value of the AST when it would appear that the methodology used to assess the impacts of the proposed scheme is a tally system, thus, the benefits to one area are cancelled by the disbenefits to another. For example, within the ‘other Government Policies’ section the disbenefits to environmental policies appear to be cancelled out by the benefits to transport and economy policies. The Authority queries whether the tally system is a suitable one, as you are not comparing like for like, therefore, what is the real value of the concluding assessment.

The Authority queries whether the weighting system utilised in the AST is valid. The benefits of the proposed scheme are mainly at a local level, i.e. for the 3 villages to be Bypassed. It would appear from the final assessment of each sub-objective that the local benefits have been weighted so that they outweigh the regional and national disbenefits. The Authority queries whether the local benefits should have priority over regional and national impacts of the proposed scheme.
The only objective where all sub-objectives benefit from the proposed scheme is the economy. This leads the Authority to query whether economic benefits are the main drivers for the proposed scheme being progressed. If this is the case, the Authority is concerned that this is a totally inappropriate reason for proposing a road that not only has a section of it within the National Park, but the route as a whole has significant adverse impacts on the Park.
The National Park Authority is concerned about the negative impact of the proposed scheme on recreational users at Bottoms and Valehouse Reservoirs.

The National Park Authority is concerned about the moderate impact of the proposed scheme on the water supply related to Groundwater.

The Authority seeks clarification regarding Table 4-2 Magnitude of impact, the increased spillage risk and pollutant load related to the River Etherow is described as a "Minor Positive". Please could it be clarified whether this is the correct assessment of the impact.

The National Park Authority is concerned about the impairment of recreational enjoyment at Bottoms and Valehouse Reservoirs as a result of Visual Intrusion resulting from the proposed scheme.

The National Park Authority is concerned about the reduced reliability of groundwater supply at non-licensed groundwater abstractions, and would welcome mitigation measures.

The Authority seeks clarification regarding the base of cohesive glacial till, which is given as 192m in BH211. Please could it be clarified that this is correct.

The National Park Authority is concerned about the effects of blasting and hydraulic blasting of rock upon the local ecology, in particular the impacts on bats and nesting birds.
Compatibility of Proposed Scheme with Relevant Policy

Authority Policy

Peak Park Structure Plan 1994

T5: New Road Schemes

This policy identifies land to be safeguarded for Department of Transport schemes, including a Bypass of the A628. However, whilst the then Board agreed in principle with this scheme, the Board reserved judgement about the detail of any proposed scheme.

GS1: Development in the Peak National Park

This policy seeks to protect the valued characteristics of the National Park by controlling development. In order to achieve this, development that is incompatible with the National Park purposes will not normally be permitted, and major development including that for which a national need is identified will be subject to rigorous examination. The latter of which will only be permitted in exceptional circumstances where there is no reasonable alternative and must be shown on balance to be in the overall public interest. It is this policy that is fundamental to the Authority’s in principle support for a Bypass of the A628, and as such, must be met. At present, the Authority is not convinced that all reasonable alternatives have been thoroughly examined, and as such, do not feel that we have been provided with sufficient evidence to assess whether this policy has been met.

T3: Cross-Park Traffic

This states that no new road for cross-Park traffic will be constructed, with the exception of those in T5, unless there is a compelling national need which cannot be met by any reasonable alternative means and which is demonstrated to be in overall public interest, in accordance with policy GS1. As stated in the paragraph relating to GS1, at present, the Authority is not convinced that all reasonable alternatives have been thoroughly examined, and as such, do not feel that we have been provided with sufficient evidence to assess whether this policy has been met.

T9: Design Criteria for Transport Infrastructure

This states that “Transport infrastructure, including lighting, signing and other street furniture, will be carefully designed to take full account of the valued characteristics of the National Park” (P99).

Local Plan

LT3: Cross-Park traffic: road and rail

This states that “Cross-Park transport infrastructure projects will be opposed unless there is a net environmental benefit to the National Park and wherever practicable they also provide economic benefits and meet local transport needs.” (page 134). The Authority suggests that the first element of this policy is not met, as increases in traffic on the Peak Park screenline indicates an environmental disbenefit, due to the impacts on the National Park of this increase in traffic.

LT4: Safeguarding land for new road schemes

This policy states that land will be safeguarded for the A57/A628 Mottram Tintwistle Bypass, and that this scheme is supported in principle due to the relief that it would give to the settlement of Tintwistle. As with T5 of the Structure Plan, judgement is reserved on the detail of a proposed scheme.

LT18: Design criteria for transport infrastructure

States that the highest standards of environmental design and materials should be used in transport infrastructure to conserve and enhance the valued characteristics of the area.

Regional Policy

SPITS

The Authority acknowledges that the proposed scheme is inline with an element of the SPITS strategy, but is not inline with the strategy as a whole. The proposed scheme is inline with the eighth element of the strategy, which is “Improvements to the A57/A628/A616 core trunk road across the National Park” (Page 4 of the SPITS business plan). However, following on from the overarching eight elements, detail is provided regarding what each element encompasses, and
contains objectives for each element. It is within these details that the Authority suggests the proposed scheme is not inline with the SPITS business plan as a whole. Thus, the proposed scheme is only inline with an element of the SPITS strategy, and not the strategy as a whole, as it conflicts with other elements of the strategy. In addition, the crucial point to remember about SPITS is that the strategy is a package of ‘integrated’ measures. The Authority is concerned that the proposed scheme does not take this fundamental framework/philosophy of the strategy into consideration, as it is selecting an element of the strategy to be implemented with no reassurance that other measures of the strategy will be implemented at the same time or indeed soon afterwards in order to maintain the ‘integrated’ package of measures. Furthermore, selecting one element of the strategy to be implemented may have an adverse impact on the SPITS strategy, as it is only the combination of measures that achieve the overall aim of the strategy. To conclude, the Authority suggests that the proposed scheme conflicts with the SPITS strategy.

National Policy
National Parks and Access to the Countryside Act 1949
There is concern that the proposed scheme would conflict significantly with the Authority's key purposes as laid down in section 5 of the National Parks and Access to the Countryside Act 1949. There is also little evidence that in exercising their functions the Highways Agency have had regard to National Park purposes as required by section 11A of the 1949 Act. The Authority would have liked to have seen more weight given to this Act, especially when 1.3 kilometres of the proposed road would be within the National Park, and the proposed scheme as a whole has such significant adverse impacts on the National Park.

Furthermore, as there appears to be a lack of reference to the Environment Act 1995 within the Draft Orders, apart from within Volume 2A of the Environmental Statement, following specific comments from the Authority on the Draft Environmental Statement, the Authority queries whether the Highways Agency were aware of, and therefore paid due regard to Section 62 duties, when the proposed scheme was designed.