SUPPLEMENTARY PLANNING GUIDANCE TO THE APPROVED
STAFFORDSHIRE AND STOKE-ON-TRENT
STRUCTURE PLAN 1996-2011

Code of Practice
for the
Assessment of the Impact and
Determination of Mitigation
Measures
arising from
Heavy Commercial Vehicles
generated from
Mineral and Waste Developments

AS REQUIRED BY
STAFFORDSHIRE COUNTY
COUNCIL

Staffordshire
County Council
AIMS AND OBJECTIVES OF THE CODE

- To protect highway safety.

- To secure and maintain the structural integrity of public highways.

- To minimise the environmental impacts arising from traffic movements.

- To provide a clear framework for developers and regulators in dealing with the traffic implications of Planning Applications for minerals and waste developments.

- To provide advice on the regulatory framework for transport issues.

- To provide guidance on the preparation of a Transport Assessment of mineral and waste development proposals.

- To provide advice on measures which can be taken to mitigate effects of traffic movements associated with Minerals and Waste developments.
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1. **INTRODUCTION**

1.1 The County Council has an obligation to assess the highway and transportation impact of mineral and waste related development proposals in order that they may satisfactorily be assimilated into the transport network.

1.2 To ensure consistency of approach when determining planning applications it is important that this authority provides a clear and coherent code in terms of the criteria used to identify what constitutes a material impact and the assessment of possible solutions.

1.3 The County Council has prepared a ‘Policy Framework on Road Freight’ which has been produced as a supplementary document to Staffordshire’s Local Transport Plan 2000. It sets out a clear framework to guide the development of local area transport strategies and support development control decisions where appropriate.

1.4 Although lorries associated with mineral and waste related developments can have a significant impact on air quality, noise and road safety, such developments play an important role for local and national economies. The goal is to find a suitable balance between economic and environmental pressures.

1.5 The aims of this Code of Practice are to:

- Protect highway safety;
- Secure and maintain the structural integrity of public highways;
- Minimize environmental impacts;
- Provide advice on regulatory processes;
- Provide guidance on the preparation of Transport Assessments;
- Provide advice on mitigating the negative effects of traffic.

**Highway Safety**

1.6 During the three year period 1996 – 1998, 1200 personal injury accidents involving heavy goods vehicles (over 3.5t GVW) were reported in Staffordshire, costing the community some £77 million.

1.7 The effects of a development on highway safety can be assessed in the context of established technical criteria. Once the extent of impact has been determined this provides a basis for determining the most appropriate form of mitigation. See later comments on providing ‘safe access’.
Structural Integrity

1.8 Government consultation has confirmed the concerns over the damage to road surfaces caused by heavy lorries. The 1999 National Road Maintenance Condition Survey (NRMCS), of which Staffordshire’s roads form a part, has indicated that the country’s road network is in its worst condition since the survey began around 30 years ago.

1.9 The deterioration in the condition of the non-principal road network is currently assessed using the MARCH system which identifies costs and prioritises maintenance work following a detailed annual survey of the surface condition of the worst sites, identified by means of preliminary visual inspections. The assessment indicates an overall increase in the percentage of the network that exhibits major deterioration in the form of potholes, surface cracking and wheel track rutting. The upward trend is particularly marked on rural roads, whilst the condition of urban roads has shown a slight improvement.

1.10 The effects of a development on the structural integrity of the road need to be quantified to avoid unnecessary maintenance burdens falling upon the public. Once the extent of impact has been determined this provides a basis for determining the most appropriate form of mitigation. See later comments on ‘maintenance’.

Environmental Impact

1.11 The significance of the environmental impact arising from HCV’s is much more difficult to assess. Nevertheless, in the interests of establishing whether proposals constitute a material environmental impact this Code of Practice sets out a methodology to be applied in such cases.

1.12 It could be argued that any increase in HCV’s constitutes a material environmental impact on some receptors (i.e. people) and sensitive areas. The impact of HCV’s, however, has to be considered in the context of the need to distribute mineral resources from wherever they are located and indeed from wherever they are allocated in the Local Plan. Similarly, waste related traffic is often associated with the infilling of redundant mineral workings and the additional HCV movements need to be considered in the context of benefits associated with reclamation of those workings.

1.13 Heavy Goods Vehicles (HGVs/heavy lorries) are those vehicles over 3.5 tonnes maximum permissible gross vehicle weight (GVW). For rigid vehicles the maximum allowed GVWs are:

- 17 tonnes on 2 axles
- 25 tonnes on 3 axles (26 tonnes if fitted with ‘road friendly’ suspension)
- 32 tonnes on 4 axles
Figure 1
Commercial Vehicle Flows on the County Road Network
1.14 Heavy commercial vehicles (HCVs) are defined as those goods vehicles having an operating or maximum laden weight exceeding 7.5 tonnes and are the vehicles most frequently affected by environmental weight restriction orders.

1.15 Figure 1 shows the commercial vehicle flows currently on Staffordshire’s Strategic Highway Network (SHN) (excluding motorways, and core and non-core trunk roads). It is evident that a significant number of roads on the SHN carry 751-1250 commercial vehicles (> 3.5 Gross Vehicle Weight) per day in each direction. Two small sections of the A50 and A34 in North Staffordshire carry over 1250 commercial vehicles per day in each direction.

1.16 County Council officers have carried out an assessment of inter-urban road capacity on the SHN. Figure 2 shows that the majority of the SHN currently operates satisfactorily in terms of congestion levels, although significant delays do occur at a number of junctions at peak times. However, by 2014, if road traffic continues to increase in line with the National Road Traffic Forecasts, a significant number of road lengths will start to approach or exceed design capacity in the morning peak hour. This is shown in Figure 3.

2. POLICY AND REGULATORY FRAMEWORK

National and Local Policy

2.1 This section provides a short review of government policy and guidance relevant to the effects of traffic associated with mineral workings. It also provides an appraisal of the regulatory framework available to provide control and influence over the movement of HCV traffic.

2.2 Planning Policy Guidance Note (PPG) 13: Transport published by the Department of the Environment Transport and Regions in March 2001 states that:

“Well designed traffic management measures can contribute to planning objectives in a number of ways, including:

- reducing community severance, noise, local air pollution and traffic accidents;
- promoting safe walking, cycling and public transport;
- producing better and safer local road conditions in rural areas and reducing the impacts of traffic in sensitive locations, while facilitating the access that is important to maintaining a vibrant rural economy."

“47. Minerals can only be worked where they are found and the transport of minerals can have significant environmental impacts…… Mineral planning authorities should encourage the establishment of voluntary mineral site transport plans in consultation with local communities.”
2.3 Annex C Minerals Planning Guidance (MPG) 3 (revised) March 1999: Coal Mining and Colliery Spoil Waste – this states that:

“Planning conditions and obligations cannot control the right of passage over public highways. If there is serious doubt whether local roads can accommodate such increase in heavy traffic as the proposed development is likely to generate, then, unless improvements are made or there is convincing evidence that control of traffic is feasible, planning permission may have to be refused.

The MPA should therefore:

- consider the need to agree or specify planning conditions relating to the:
  - site entrance, e.g. which way vehicles can turn;
  - provision of signposting;
  - sheeting of lorries before leaving the site;
  - provision of information and instructions to drivers e.g. requiring the posting of a notice at the site exit requesting all drivers either to use or avoid particular routes

- liaise with the Highway authority to limit the size, weight, or axle loads of vehicles using particularly difficult roads.

The industry should:

- avoid sensitive areas and the use of large vehicles in narrow winding roads by agreeing routes;

- require that their drivers and others use agreed routes;

- offer a legally binding agreement on matters which cannot be satisfactorily covered by planning conditions, e.g. road related improvements'. (Note: It is assumed that this is intended to imply a Grampian condition that requires a separate legally binding agreement e.g. Section 278 Agreement, Highways Act, 1980.)


“Planning conditions cannot control the right of passage over public highways, however, it is open to applicants to offer voluntary agreements on traffic management schemes to provide, for example, for traffic to and from the site to only use specified routes and to regulate traffic levels at particularly sensitive times of the day.”
2.5 Minerals Planning Guidance (MPG2) July 1998: Applications, Permissions and Conditions states:

“C9. Offers are sometimes made by mineral operators to restrict their lorries to particular routes. Such schemes have sometimes proved successful but not all lorries calling at a site are likely to be in the control of the operator and in law a planning condition cannot control the right of passage over public highways. Some measure of control may result from a condition requiring the posting of a notice at the site exit requesting all drivers either to use or avoid particular routes. Highway authorities have powers under the Road Traffic Regulation Act 1984 to make traffic regulation orders to prevent the use of certain roads by unsuitable types of traffic e.g. heavy commercial vehicles. But such orders, which might restrict by weight or size, would apply to all traffic in prohibited class irrespective of its origin or destination since it would be impracticable to distinguish vehicles visiting a particular site. If there is serious doubt whether local roads can accommodate such increase in heavy traffic as the proposed development is likely to generate, then, unless improvements are made or there is convincing evidence that control of traffic is feasible, planning permission may have to be refused.”

2.6 Planning Policy Guidance Note 10: Planning and Waste Management – this states:

‘Waste Planning Authorities should identify the routes most suitable for use by heavy lorries and, subject to other planning considerations, seek to locate new plant along these routes. Proposed lorry routes should also be considered at the planning application stage. Planning conditions cannot control the right of passage over public highways but some measure of control can be applied through a condition or a legal agreement, requiring the operator to post notices at the site exits requesting all drivers to use, or avoid, certain routes. Consideration should also be given to whether a local traffic management scheme is required.

Planning Permission should normally be refused, especially where residential amenity would be seriously affected if:

- the existing road network is unsuitable and cannot be improved sufficiently as part of the application, as a result of a highway agreement, by means of a planning obligation via a unilateral undertaking or by an agreement under Section 106 of the Town and Country Planning Act 1990; and

- no alternative to road transport is available at a reasonable cost.

Where there is concern that the numbers of vehicle movements to and from a site may have adverse effects on residential property along access routes, it may be appropriate to set a limit on the amounts of materials or the number of movements to be handled over specified periods. Ideally, such a condition will be self-policing by the operator, for example through keeping auditable weighbridge records.’
2.7 **Mineral Planning guidance Note 14: Environment Act 1995: review of Mineral Planning Permissions** – this provides guidance in respect of the consideration to be given of updated planning conditions in the review of old mineral planning permissions. There is specific reference to conditions relating to access, traffic and protection of the public highway. Para. 103 states:

“Conditions dealing with measures to prevent dust, mud, spillage’s on the public highway will be appropriate to all sites and conditions relating to the display of agreed vehicle routes may be appropriate to some sites…… Offers are sometimes made by mineral operators to restrict their lorries to particular routes. Such schemes have proved successful but all lorries calling at a site are unlikely to be in the control of the operator and planning conditions are not an appropriate means of controlling the right of passage over the public highway”.

2.8 **Development Plans**: Staffordshire and Stoke-on-Trent’s Minerals Local Plan 1994-2006 and Staffordshire and Stoke-on-Trent’s Waste Local Plan 1998-2011 include details relating to waste and mineral transportation. The Minerals Local Plan indicates that mineral proposals will be permitted provided adverse traffic effects can be controlled by planning conditions or legal agreements. The Waste Local Plan aims to ensure that proposed waste facilities are located, designed and operated, insofar as is practicable, so that they will have the least adverse impact on people, transportation systems and the environment.

2.9 Policies 30 and 31 of the Mineral Local Plan states that:

“Planning Applications for mineral development will, where appropriate, be accompanied by a Traffic Impact Appraisal (now call Transport Assessments) and should ensure that:-

- the engineering and structural integrity of approach roads will not be prejudiced by the development;

- the development does not have an unacceptable adverse impact on public and highway safety;

- suitable designed access(es) can be provided with on-site facilities for washing wheels before leaving the site;

- the traffic generated by the development can be satisfactorily absorbed into the highway network without causing unacceptable adverse impacts upon people or the environment through, inter alia, noise, vibration, fumes or dust.

- any adverse impacts caused by the proposed development can be mitigated to the satisfaction of the Mineral Planning Authority and that such mitigation may be secured by a legal agreement and/or planning conditions.

Where legal agreements are sought by the Mineral Planning Authority to mitigate adverse off-site effects, they will be used to secure one or more of the following:-

- road and traffic management measures;
- measures to secure any required maintenance and/or reinstatement of the public highway during the life and at the end of the operations respectively;

- measures to regulate traffic levels in particularly sensitive areas;

- funding or contributions to improve roads or other traffic facilities the need for which arises solely or mainly from the proposed development;

In addition to the above the Mineral Planning Authority will seek through legal agreements a commitment from the applicant to use their best endeavours to route mineral related traffic away from shopping streets and residential streets where such traffic can be adequately accommodated by alternative routes.’

Policy 3 in the Waste Local Plan and advice in the accompanying Code of Practice refers to the need to discuss the traffic implications of waste developments (see para. 4.50 in the Waste Local Plan and Code of Practice paras. 4.17 to 4.20).

**Regulatory Framework**

2.10 There are a number of regulatory provisions available to the County Council that assist in reducing or avoiding the effects of HCV traffic associated with mineral and waste workings. These are described in more detail below.

2.11 **Development Control:** When determining the form of management control for HCV’s it has be recognised that neither planning conditions nor planning obligations can lawfully control the right of passage over a public highway. Nevertheless, it is possible to deter the use of unsafe or environmentally sensitive routes by HCV’s through the planning legislative framework although the following issues need to be borne in mind:

- Neither planning conditions nor planning obligations in themselves can lawfully control the right of passage over a public highway. However, it is possible to seek the introduction of Traffic Regulation Orders through a Section 106 Agreement to impose prohibitions and restrictions on the use of HCV’s on particular routes.

- The General Permitted Development Order (GPDO) grants permitted development rights for the formation, laying out and construction of an access to any highway which is not a trunk road or a classified road, where that access is required in connection with any development permitted by Schedule 2 of the GPDO.

2.12 **Conditions:** Section 70 of the Town and Country Planning Act 1990 enables Mineral Planning Authorities (MPA) to impose conditions on a grant of permission. Such conditions need to satisfy the tests for the validity of conditions laid down by the Governments Circular 11/95 “Use of Conditions” and by the courts over the years.

2.13 Some traffic controls can be afforded by planning conditions but they would normally relate to the direction of vehicles as they leave the site entrance. A sign
may be erected at the site entrance defining the approved route(s) for vehicular traffic. Control of incoming traffic, particularly from outside suppliers and sources of waste materials is more difficult to control.

2.14 Where works to the transport network are required outside the limits of the application site the County Council can impose a “Grampian” condition that requires development not to be commenced until some constraint to the development has been surmounted. These are generally used to secure off-site works that might be considered necessary to ensure that roads between the site and the Strategic Highway Network (SHN) are of a suitable design. They can also be used to improve roads so as to either encourage or discourage movement by HCV’s along particular routes. Such conditions require a separate Agreement with the County Council usually under S111 of the Local government Act 1972 or S278 of the Highways Act 1980.

2.15 **Obligations:** Planning objections can be overcome through the use of planning obligations, under Section 106 of the Town and Country Planning Act 1990 (as substituted by Section 12 of the Planning Compensation Act 1991). The obligations sought or offered should, however, be relevant to planning and be directly related to the proposed development. Planning permission cannot be made conditional on a legal agreement being served. Obligations need to satisfy the tests set in the Governments Circular 1/97 on “Planning Obligations” which ensures that any requirements are:

- necessary;
- relevant to planning;
- directly related to the proposed development;
- fairly and reasonably related in scale and kind to the proposed development;
- reasonable in all other respects.

2.16 Obligations are generally used to secure:

- **Traffic Regulation Orders:** The administrative and legal costs associated with processing a Traffic Regulation Order (TRO). It should be noted that where a TRO is considered to be a fundamental pre-requisite to the granting of a consent the County Council would the Order to be secured, at the developers expense, prior to planning consent being granted.

- repairs to the highway and maintenance of the highway;
- to limit the annual output

**Environmental Protection**

2.17 **Air Quality** - The Environmental Protection Act 1990 provides for pollution control by the Environment Agency and by local authorities. The County Council
and the District Environmental Health Officers have set up a Staffordshire Air Quality Forum to address ideas of joint working and consultation as required by the 1995 Environment Act. The forum has yet to identify the air quality ‘hot spots’ and so it will be some time before local strategies are developed.

2.18 **Traffic Noise** – The 1997 Road Traffic Reduction Act and 1995 Environment Act requires the County Council to develop an environmental strategy which takes a co-ordinated look at global warming, local air quality and traffic noise. The evolution of a strategy for Staffordshire is in its infancy.

2.19 When the work referred to above is complete a further review of the Code will be required.

**Licensing of Goods Vehicle Operators**

2.20 Under the “Goods Vehicles (Licensing of Operators) Act 1995 operators of goods vehicles must hold a license granted by the Traffic Commissioners. In determining applications for licenses, the traffic commissioners will consider a number of matters of relevance to the environment including the availability of an adequate operating centre for the vehicles.

2.21 A proposal for a new operating centre in Staffordshire would require approval from the Traffic Commissioner at the Traffic Area Office in Birmingham and planning permission, where necessary, from the local planning authority. Objections can be made by the County Council, as highway authority, to any proposals for new operating centres; extending an existing one; and applications to the Traffic Commissioner for new operator’s licences. The following factors must be taken into account in the assessment of the suitability of proposals for operating centres and operator’s licences:

- the nature and use of any other land in the vicinity of the operating centre, and the likely effect of granting the application on the environment of that land;

- how much harm would be done to the environment of the land in the vicinity, by granting an application which is materially to change the use of an existing (or previously used) operating centre;

- local authority planning applications and decisions relating to the operating centre or the land in its vicinity;

- the number, type and size of the authorised vehicles which will use the operating centre;

- the parking arrangements for the authorised vehicles which will use the operating centre;

- the nature and times of use of the operating centre;

- the nature and times of use of the equipment at the operating centre; and
• how many vehicles would be entering and leaving the operating centre, and how often.

**Highways and Road Traffic Acts**

2.22 Many matters concerning the highway and their use are dealt with under the Highways Act and Road Traffic Acts. In the context of this report the key provisions are:

**Section 59 of the Highways Act 1980:** This provides for the recovery of any extraordinary expenses which have been, or will be, incurred by the Highway Authority on maintenance due to damage caused by development traffic.

**Section 278 of the Highways Act 1980:** This permits the Highway Authority to enter into agreements with others that would especially benefit from such road works. These are used in association with “Grampian” conditions and can be used to secure road and junction improvements, passing places and maintenance payments.

**Sections 148/149 of the Highways Act 1980:** These enable the Highway Authority to deal with problems associated with debris deposited on roads by traffic.

**Road Traffic Regulation Act 1984:** This enables local authorities to prohibit, or restrict the use of HCV’s in specified areas, or on specified roads, subject to any exceptions contained in the traffic regulation order.

**Traffic Regulation Orders**

2.23 Highway authorities have powers under the Road Traffic Regulation Act 1984 to make traffic regulation orders to prevent the use of certain roads by unsuitable types of traffic e.g. heavy commercial vehicles. But such orders, which might restrict by weight or size, would apply to all traffic in [the] prohibited class irrespective of its origin or destination since it would be impracticable to distinguish vehicles visiting a particular site.

2.24 **Weight Restriction Orders:** These are used to control the movement of heavy commercial vehicles anywhere on the road network. They are normally used to control existing movements but there are instances where they have been introduced in association with new development. Such instances might arise where development traffic, having reached the main road, then uses other minor roads to reach more distant parts of the main road network. It is difficult to condition a planning approval on the introduction of a Weight Restriction Order (or on any other Traffic Order) which is subject to a separate statutory consultation procedure. However if a Weight Restriction Order is considered to be a fundamental element of the control of HCV movements the Order should be secured prior to a Section 106 Agreement being signed.
2.25 Weight Restriction Orders fall into one of two categories and the circumstances in which each would be appropriate are described below.

(a) **Structural Weight Restriction Orders:**

These follow on from a bridge or carriageway strength assessment, which shows the route to be incapable of carrying vehicles up to the maximum permitted size. A structural weight restriction allows no exemptions for access traffic. If the alternative routes are unsuitable it is often necessary to strengthen the bridge or carriageway so that the route can be used. These Orders are normally introduced as and when necessary independent of any development.

(b) **Amenity Weight Restriction Orders:**

These are intended to prohibit vehicles over a certain size from using routes that are inappropriate for environmental or amenity reasons. They are normally imposed at the 7.5 tonne maximum gross weight level. Such vehicles are readily identifiable by the chevrons on the rear of the vehicle making enforcement more straightforward. Amenity Orders may be introduced on single links in the network or over a wide area and can contain an exemption for access traffic.

2.26 Before an Amenity Order is introduced it is necessary to assess a number of features, including the volume and type of traffic likely to be affected, the availability and suitability of an alternative route etc.

2.27 Weight restrictions may be introduced on single links in the network or over a wider area or zone that is bounded by strategic roads. An Order designed to prohibit one movement will inevitably lead to a reassignment of HCV traffic resulting in potential adverse effects on other traffic movements. Clearly, there is little sense in imposing control over one route only to have the problem displaced to a route that is equally unsuitable.

**Voluntary Arrangements**

2.28 **Routing agreements:** these are sometimes made by mineral operators to restrict their lorries to particular routes. These generally cover the route between the access to the site and the Strategic Highway Network (SHN). They can identify the most appropriate routes for HCV traffic and define roads/areas not to be used by HCV’s. Such schemes have sometimes proved successful particularly when the operator depends on the goodwill of the MPA. However, not all lorries calling at a site are likely to be in the control of the operator and, as already stated, in law a planning condition cannot control the right of passage over public highways. Whilst Government guidance advises against the use of S106 Agreements for this purpose, it is possible for one person to agree with another not to carry out a particular activity.

2.29 Routeing agreements are generally more effective where they are used in conjunction with traffic regulation orders, signs and a site access/egress that influences lorries to approach and leave the site in a specific direction. In such
cases a voluntary agreement between the operator and the MPA would generally suffice.

2.30 **Driver Training**: this can help support the package of measures required to provide control, or influence, over the routine of lorries. It can be general in nature or orientated towards the routes used most often and include the following measures:

- training drivers to adjust their driving to suit the area which they are passing;
- information to drivers on avoiding environmental impacts

3. **TRANSPORT ASSESSMENT**

3.1 A Transport Assessment (TA) will be required to support any planning application involving mineral and waste operations likely to involve an increase in HCV traffic.

**Scoping Study**

3.2 The required detail and method of assessment applicable will depend on the type and scale of the development and the likely impact on the highway network and the surrounding environment. Development proposals will initially be assessed by way of a Scoping Study to determine and agree the scope and content of the TA.

3.3 The Scoping Study shall initially assess the following:

- Estimated daily traffic generation and daily traffic flow profile from the proposed development by all vehicles and also by vehicle class;
- Traffic distribution;
- Traffic assignment;
- An appraisal of other committed development that may need to be included within the assessment. This may need to include estimated daily traffic flows and peak hour flows depending on how the latter interacts with the proposed development flow profile;
- Percentage impact assessment on the surrounding highway network including links and junctions by turning movement. The development should be expressed as a percentage of traffic flows at the anticipated year of opening of development both on its own and, where applicable, as part of a cumulative percentage impact where other committed development is involved. The percentages should be expressed by all vehicles and also by vehicle class.
- An analysis if available traffic and accident data over a five year period within the proposed ‘Area of Assessment’ to simply identify peak traffic
flow periods and safety issues to be taken into account in any Transport Assessment.

3.4 The analysis of the above which shall relate to all development forming part of the proposals including reclamation and other remediation activity should then be used as a basis for proposing the scope and content of the TA which shall be agreed with the local planning authority.

3.5 The TA should be clear and concise. It’s structure should include:

- An introduction section explaining in broad terms the nature of the operations;
- Details of the proposed development:-

  Minerals:
  - Mineral yield and consequent void volume;
  - Rate of extraction;
  - Working life;
  - Daily time period of operations;
  - Likely afteruse.

  Waste: (Landfill and Land raising)
  - Void volume;
  - Rate of fill;
  - Life of operation
  - Daily time period of operations;

- Details of other committed development that may need to be taken into account;
- Average daily traffic generations by vehicle class;
- Traffic distribution and routeing;
- A statement on likely daily/seasonal traffic generation/distribution variations;

3.6 The TA should aim to assess in objective terms the impact of traffic and in particular the impact of HCV’s on:

- Highway capacity and safety;
- The structural integrity of the public highway;
• The environment.

**Assessment of Highway Capacity and Safety**

3.7 In assessing the impact of additional HCV movements in capacity and safety terms the critical locations for assessment include:

• The site access/egress point;

• The road network in the vicinity of the site and in particular the network of roads between the site and the Strategic Highway Network (SHN) and occasionally the markets and the SHN;

• The junction between the local roads and the SHN;

• Further afield if a specific problem or accident site is identified within the area of assessment.

3.8 Design of Site Entrances: these can be designed to minimise the impacts of vehicles, particularly lorries, turning into and out of mines, quarries and premises. The design of the entrance is very much dependant upon:

• the speed and volume of traffic on the highway;

• the width and function of the highway;

• the presence of other junctions;

• whether pedestrians, cyclists and other sensitive road users are present;

• the volume and composition of site traffic and the direction of turning movements.

3.9 The particular characteristics of the road, the traffic and the context will determine the most appropriate form of junction, which should always aim to achieve the optimum balance between capacity and safety but one, which does not lead to environmental factors being ignored. All junctions should consider incorporating the following features to aid control over lorries and to reduce environmental impact:

• Traffic calming measures on the highway to reduce traffic speeds where appropriate;

• The installation of a pedestrian refuge at the site access;

• Maintaining the continuity of footways and cycle routes along the highway;

• Advance road signs warning motorists on the highway of the site access;
• Advance signs warning exiting vehicles of the approach to the egress onto the highway; and

• The installation of street lighting at the site entrance and on the highway.

3.10 **The Network:** Heavy lorries are limited to 2.5 metres in width, not including wing mirrors. In general, the standard carriageway width for a public road carrying significant volumes of heavy lorries is 7.3 metres. On straight alignments the desirable minimum carriageway width is 6.0 metres, and the absolute minimum is 5.5 metres also requiring hard shoulder treatments. In practice, widths less than this, with passing bays, have been tolerated. If the carriageway alignment is curved, it is likely to require further widening, dependent on the combination of:

• Road width;

• Radius of curvature;

• Edge clearance;

• Edge treatment (hard or soft shoulder, or footpath, and kerbing);

• Visibility distances, related to design speed.

3.11 Where it is not feasible to provide the absolute minimum width within public highway limits a solution involving passing places will only generally be acceptable when there is inter-visibility between the passing places and where the road is lightly trafficked.

3.12 The TA should include an examination of historical data for accident factors, trends and group; for example the regular occurrence of one type of accident or involvement of one type of road user. An analysis of the three years prior to the date of the preparation of the TA is usually sufficient.

3.13 Where proposals involve an intensification of routes where there are high levels of pedestrian, cycling, rambling and equestrian activity consideration needs to be given to potential implications and, if necessary, mitigating measures.

3.14 Where the alteration of any existing junctions are required or where the alteration to the alignment of carriageways are concerned the County Council will reserve the right to seek an independent road safety audit.

**Structural Integrity of the Highway**

3.15 Mineral and waste proposals generally give rise to an increase in HCV movements which have the effect of shortening the life of existing highway infrastructure. To ensure that highway infrastructure is retained in a safe and durable condition, developers may be required to provide a commuted maintenance payment, to be secured via a Section 106 Agreement.
3.16 Payments made by the developers in respect of commuted maintenance sums, will be determined by the specific nature of the proposals in question and could relate to physical damage to roads, kerb edging and verges. The determining factor in calculating the appropriate sum will be the cost of maintaining the infrastructure, which is over and above that which would have been incurred by the highway authority in any event. The sum is determined and secured by one of two methods:

1. A site inspection is carried out by representatives of the developer and the County Council. Both parties agree on a maintenance sum that is reasonable and which relates in scale and kind to the development. The sum is secured by a Section 106 Agreement and paid at an agreed time.

2. An inspection of the highways, considered to be affected by HCV traffic, is carried out by representatives of the developer and the County Council prior to the commencement of development. A joint statement is agreed setting out the condition of the highway infrastructure prior to the commencement of operations. A Section 106 Agreement is used to secure the terms of monitoring damage by HCV’s and a bonding arrangement which is called upon should maintenance works be required.

Environmental Impact

3.17 The environmental impact of HCV traffic is due to:

- Fugitive material i.e. mineral or waste deposits onto the highway or into the atmosphere;

- Vehicle operation i.e. direct emissions (traffic noise, exhaust fumes, vibration) from vehicles, including community related impacts (e.g. community severance, congestion, safety, amenity, intimidation).

3.18 **Fugitive Material:** the environmental impact associated with fugitive material can be controlled by sheeting of lorries and by the provision of vehicle wheel and body cleaning facilities:

- **Sheeting:** Unless there are very specific reasons loaded road vehicles must be sheeted to reduce the risk of spillage on the road. This is particularly appropriate for fine dry materials. This form of control will need to be secured through the Mineral Transport Plan which will need to form an obligation secured through a S106 Agreement. Other mineral or waste products that are wet and are likely to remain wet throughout the journey and where the load level is below the top of the bodywork is less likely to require sheeting. Other exceptions to the need for sheeting is where all the stone is above the 75mm size.

- **Vehicle Wheel and Body Cleaning:** Facilities must be provided to remove fugitive material from road vehicles before they leave the site. The need for cleaning can generally be avoided where highway use vehicles are kept on hard surfaced roads and spillage to the bodywork is avoided. In practice the industry has not always been able to achieve this and so developers will need
to install effective measures to deal with situations where operational working results in vehicles depositing material and water onto the highway to the detriment of safety and amenity considerations of the road users. The TA will need to set out a clear explanation for the consideration given to the need for, and form of, vehicle wheel and body cleaning facilities. The Mineral Transport Plan (see later) will provide details of the form of the facilities, its location and provide details of the arrangements for maintenance.

3.19 **Vehicle Operation:** The Institute of Environmental Assessment (IEA) Guidelines recommend that an environmental assessment should be carried out if the heavy goods vehicle traffic is estimated to increase by more than 30% in the opening year due to development traffic, or 10% in sensitive areas.

3.20 It has been standard practice for the County Council to consider the introduction of an environmental weight restriction order on the minor road network where the number of HCVs using a road exceeds the countywide average for that class of road. The ‘average number’ thresholds were derived from a countywide survey of HCVs carried out in 1976 following the introduction of the Heavy Commercial Vehicles Act 1973. The thresholds were used initially to prioritise the areas for further investigation, with priority being given to those roads carrying over 100% above average numbers of HCVs.

3.21 In view of the age of the study, it is considered appropriate to make an allowance for traffic growth (i.e. 1976 – 2000). HCV traffic associated with mineral and waste operations fall into the ‘Other Goods Vehicles’ classes (i.e. OGV1 and OGV2). The high growth forecasts, generally acceptable for rural situations for OGV1 and OGV2, are 1.291 and 3.088 respectively. If these forecasts are averaged then a factor of 2.19 should be applied. It is recommended that the average threshold be used as a means for determining the need to consider imposing control over HCV movements for environmental reasons.

**Table 1:** Usage ranges by road class per 12 hour (7 am – 7 pm) Day Heavy Commercial Vehicles over 3T U.L.W.

<table>
<thead>
<tr>
<th>ROAD CLASS</th>
<th>HCV over 3T ULW Flow (2-way) Compared with Road Class Average (2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class B</td>
<td>425</td>
</tr>
<tr>
<td>Class C</td>
<td>115</td>
</tr>
<tr>
<td>Unclassified</td>
<td>75</td>
</tr>
</tbody>
</table>

3.22 Table 1 show the freight usage ranges and averages by road class. At the time of the survey, HCVs were measured as over 3 tons unladen weight (ULW) which is equivalent to the current 7.5 tonnes GVW.

3.23 For the purpose of determining whether a proposed development will require more detailed environmental assessment the developer shall use both the IEA approach and the County Council’s approach described above. In undertaking this analysis, due allowance has to be made for development that is already committed by planning permission or by allocation in a Local Plan, but which has yet to be implemented.
3.24 If the threshold is exceeded, the developer will also need to set out in a Transport Assessment the extent to which the roads affected might be considered suitable or unsuitable for carrying heavy lorries. In particular, the following issues should be taken into account when considering the level of significance:

- The number of frontages of houses, schools, hospitals, offices and retail uses that are less than 5 metres from the carriageway edge.

- Where the roads affected by the threshold increase adjoin areas of:
  - special architectural or historic interest;
  - a conservation area;
  - a country park or recreation area;
  - market gardening centres for which air quality is important.

- The frequency of HCV traffic – is it continuous or sporadic?;

- The duration of the impact – how long does it last?;

- The timing of the impact – does it occur at sensitive times?

- The spread of the impact?

3.25 This information should then be used to consider the following environmental effects:

- Traffic noise
- Vibration
- Air quality
- Community severance
- Pedestrian intimidation
- Visual intrusion

Consideration of Alternative Routes

3.27 If a TA reveals the need to impose some control over HCV movement by imposing regulations on some routes to encourage use of alternative routes the following criteria should be satisfied:

- the road should be of a higher or equal standard and class;
- land use(s) should be less sensitive;
- the number of people/properties affected should be reduced;
- travel costs should not be increased disproportionately.

4. MITIGATING MEASURES

4.1 A more holistic approach to control is considered the most appropriate way of achieving control over HCV movements. Individual initiatives in themselves are generally insufficient and a package of measures complementing each other provides more effective control.

4.2 PPG13 para. 47 encourages Mineral Planning Authorities to establish voluntary mineral site transport plans in consultation with local communities.

4.3 The issues to be addressed in a MTP, which are considered in more detail below, include:

- general approach of the plan,
- contents of the plan, and
- arrangements for submission and approval of the plan.

4.4 The general approach of the plan ought to deal with all transport related issues both now and in the future as described above. These may vary over the years as markets change and while it may be possible to anticipate the future to some extent there will be instances where the changes are fundamental enough to require amendments to the plan.

4.5 The contents of the plan should address all issues that are likely to affect the traffic using the road network. If the initial plan is sufficiently detailed regarding permitted activities, frequency of movement, hours of operation etc. it should be fairly simple to set down thresholds, which must not be exceeded.
4.6 Insofar as the control of HCV’s are concerned the MTP will need to include details of all the transport-related activities at the site together with a plan of the site showing the location of plant, workshops etc. In addition, it will need to include:

- Details of all the activities carried out on the site;
- Traffic movements associated with each activity;
- Tonnage of materials to be moved;
- Number and size of vehicles;
- Average hourly volume of HCV traffic entering and leaving the site;
- Hours of operation;
- Agreed routes where applicable;
- Access arrangements;
- Provision for vehicle cleaning;
- Arrangements to provide sheeting of road vehicles;
- Arrangements for parking vehicles within the site;
- Arrangements to achieve agreed limits on noise levels;
- Traffic management/highway improvement measures required;
- Positive and prohibitive signing;
- Arrangements for notification of variation of, and agreement to, any of the above issues;
- A Haulage Code to promote good practice (Reference may be made to any haulage codes approved by an appropriate trade association);
- Provision for the monitoring of all vehicles entering and leaving a development including details of the type of vehicles; nature and size of load; times of entry/exit of site so that data can easily be examined by the County Council;
- Provision for vehicle maintenance;
- Provision for driver training if considered necessary.
5. **ENFORCEMENT**

5.1 The implementation of development land use requires vigilance by the operator/developer, the local planning authority (problems occur with District approved developments); the local community and the County Council, to ensure that there is compliance with agreed requirements.

5.2 Monitoring developing and responding to complaints from the public provides the opportunity to ensure that operators comply with their planning and legal requirements. Where operators do not comply with the requirements of planning permissions issued by the County Council then action, including legal action, will be taken commensurate with the terms of the County Council’s Enforcement Policy. The site liaison committees in the County provide a forum for community concerns to be addressed by all parties and understanding and action taken on the issues raised. Close monitoring of small scale (waste) developments, particularly “restoration” schemes is essential. This is due to the temporary nature/ small scale of these schemes not warranting a full scale wheel/ chassis cleaning facilities. Planning conditions limited the time of year over which importation of materials can occur may go some way to alleviating this. There are also increasing numbers of companies providing short term rental of wheel cleaning facilities, although these often require a water and or electricity supply.