

Nationally Significant Infrastructure Projects (NSIPs)

Aims & Guidance from Essex County Council as the Local Highway Authority

Contents

Background	2
Purpose	3
Planning Requirements	3
General Aims for Transport	4
Assessment of Traffic and Transport	5
Public Rights of Way	6
Construction Traffic Management Plan (CTMP)	7
Access & Access Routes	7
Highway Boundary Search	8
Highway Works	9
Information for Technical Review.....	9
Delivery of Works	10
Consultation with different parties	11
Streetworks	12
Contact us	13

Background

A Nationally Significant Infrastructure Project (NSIP) is a major project considered by the Planning Inspectorate at Hearing prior to their recommendation on the Scheme by Central Government and the relevant Secretary of State, who will ultimately consider whether Consent for the scheme can be granted.

NSIPs are major infrastructure developments that are taken forward in line with the 2008 Planning Act. The types of projects include, but are not limited to, electricity transmission projects, energy projects with an output in excess of 50 MW (solar farms, wind farms and new nuclear), new road building proposal, new railways and water related development, ports and harbours, and airport extensions. The acceptability or otherwise of such proposals depends on existing national and local policies, site specific issues, the assessment of impact on the environment and whether any adverse impacts can be correctly mitigated and the scheme's ability to provide a long lasting local and national legacy.

Essex County Council (ECC) is currently considering a raft of NSIP proposals and has seen a massive increase in NSIP projects in recent years. These include works to upgrade and part re-align the strategic road network, electricity transmission projects, solar and offshore wind proposals.

ECC expects other projects to come forward in the near future relating to energy production, improvements to the infrastructure network, and others as Essex will see significant levels of growth.

All NSIP proposals have a significant impact on the local highway network either during their construction, operation, or during both.

ECC is not the determining body for NSIPs, but a consultant within the pre-examination and Hearing process, who along with aligned Local Authorities, play an important and effective role as a consultee in what is currently a discretionary and unfunded role of the Council:

- (a) During the DCO consenting process ECC are statutory consultees and able to influence the final outcome of the proposed project through responses made at the various consultation stages, and in prior discussion with the applicant and their consultants, having the ability to seek to mould the development into one which has the least environmental impact. This may involve multiple topics but could and is highly likely to include suggested alterations to the end scheme and/or detailed points around construction travel management; and
- (b) Post Consent – Local Authorities will often be directly involved in the discharge of Planning Requirements (akin to Planning Conditions) once the application is consented to become a Development Consent Order (DCO).

Purpose

This document contains aims and guidance notes intended to act as best practice and provide general guidance for use primarily by ECC Highways and Transportation Department (i.e. its officers, contractors, and elected members), but to also act as a clear signpost document for developers and their team of designers, highway engineers and other professional teams. The document can also be used by the local community affected or likely to be affected by NSIPs in their area.

The County Council has also published its own NSIP Policy Guidance document, which should be read in conjunction with this advice, and as can be found here: <https://www.essex.gov.uk/planning-land-and-recycling/planning-and-development/growth-development-and-nationally-significant>. Both these published guidance notes should be read together.

Planning Requirements

Considered under the 2008 Planning Act as part of any Development Consent Order (DCO) as may ultimately be granted by the Secretary of State there will typically be a suite of Planning Requirements similar to planning conditions, requiring the development to be brought forward in a certain way. For ECC as the Highway Authority the intention is to ensure sufficient consideration of the proposals is given both on the basis of the impact of the proposal in isolation and its impacts in combination with other projects, as well as to ensure good safe design is achieved and any works carried out on the local highway network is to the standard ECC requires.

Different NSIPs will have different requirements in relation to the impact on the local highway network. For example, offshore windfarms tend to require underground cabling routes which have different infrastructure needs to a major road scheme, or a new overhead power line. However, each NSIP proposal relies at either construction phase, or operation, or both, on the expert advice as given by ECC as the Highway Authority, which is paramount to considering how to avoid or ultimately mitigate against impacts on highway safety, capacity and amenity.

All NSIPs will require the applicant to provide some basic information such as a Construction Traffic Management Plan, a Transport Assessment details of new access points (permanent and temporary) to any new infrastructure or temporary work compounds, and routeing arrangements of HGVs and abnormal loads for the highway authority to undertake an appropriate review.

The above Planning Requirements will normally be discharged by the Local Planning Authority or the Secretary of State in consultation with the Highway Authority. The County Council, as Highway Authority, would expect the developer to submit draft applications for any discharge ahead of a formal discharge, and there would need to be some form of cost recovery agreed ahead of any assessment by the both the LPA and the Highway Authority. This would usually be in the form of Planning

Performance Agreement (PPA) or a separate agreement between the scheme promoter and the Highway Authority.

The following sections provide detail on the information that is required.

General Aims for Transport

Proposals will be required to demonstrate that the local and strategic highway network will be able to accommodate the type and number of vehicle movements during the construction and operation phases of the site. In addition, proposals will need to demonstrate that both the site access and vehicle movements to and from the site will have no adverse impacts on highway safety, including cyclists and pedestrians. Offsite mitigation may be required to improve the highway network to accommodate trips by cycling, walking and public transport and to ensure that the network is suitable for the expected level of construction traffic. As such, applications should be accompanied by a detailed Transport Assessment and CTMP. Applicants are also encouraged to engage with Essex Highways as part of their pre-application discussions. The site should be located to enable trips to be made by cycling, walking and public transport, particularly during the construction period. A Travel Plan will also be required to promote the use of sustainable modes of travel and monitor the effectiveness of the Travel Plan measures and incentives. Any proposed temporary construction compound should be carefully located in order to minimise environmental or amenity impact. Site access tracks should be minimised to better enable the site to be restored at the end of the project.

Any Public Right of Way (PRoW) through or surrounding the site should remain usable, retain their recreational amenity and character, and be integrated as part of the development proposal. Applicants will need to demonstrate to the Highway Authority that all PRoW impacted upon by a development will remain accessible by the general public and the public's rights and ease of passage over public footpaths / bridleways / byways should be maintained free and unobstructed at all times to ensure the continued safe passage of the public on the definitive right of way. If a PROW has to be temporarily or permanently diverted then no development should commence on site until an Order securing the diversion of the existing definitive right of way to a route has been agreed and has been confirmed with ECC and the LPA; and the new route has been constructed. Mitigation and enhancement measures such as consequential improvements to the PROW network through improving connectivity or the installation of interpretation boards or visitor facilities that give benefit to users of PROW should be sought by developers of renewable energy schemes, there may also be further opportunities for public engagement and education in renewable energy. The importance of PROW as amenities for local communities to improve their mental and physical health and wellbeing should be recognised, protected and enhanced.

In summary proposals should:

- deliver safe access into the development, whilst minimising impacts on biodiversity (e.g. loss of hedgerows etc).
- minimise the use of unsuitable roads to access the development.

- minimise the carbon footprint of the development e.g. by local procurement and minimising transport of materials, particularly by road.
- minimise construction traffic travelling during peak periods.
- minimise impacts of HGV movements on residents by controlling routeing and numbers.
- minimise disruption to the transport network as a result of closures and traffic management.
- minimise disruption to the public rights of way network, particularly avoiding closures.
- identify enhancement to the public rights of way network.
- transport high proportions of construction workforce through sustainable modes, taking into consideration the development's location.
- provide mitigation in the form of enhancements to the sustainable transport network as a result of construction impacts.
- if necessary, provide mitigation in the form of improvements to the capacity of the highway network.

The following sections provide detail on the information that is required.

Assessment of Traffic and Transport

Unless otherwise scoped out through discussions, the DCO will require an assessment of the traffic and transport impacts of the scheme. The assessment is normally split into two documents: the Transport Assessment and a separate Chapter within the Environmental Statement. There is often crossover between the information provided within the two documents and it is expected that they would include the following, with the level of detail provided commensurate with the scale of development and impacts:

- Baseline transport network description.
- Sustainable transport routes.
- Assessment of road safety.
- Traffic generation for construction and operation (including methodology and profile across construction). Including:
 - Worker numbers
 - Worker shift patterns
 - Light vehicles numbers
 - HGV numbers
 - AIL numbers
- Traffic distribution (including methodology) and construction traffic routeing.
- Committed development.
- Traffic and multimodal survey data.
- Junction assessments.
- Opportunities for transporting construction traffic by sustainable modes.
- Mitigation, including enhancement for sustainable transport.
- Methodology for assessing environmental impacts, including:
 - Consideration of Institute of Environmental Management and Assessment Guidelines.

- Consideration of Design Manual for Roads and Bridges document LA112 – Population and Human Health.
- Assessment timeframes (i.e. daily and hourly).
- Impact criteria.
- Link sensitivities.
- Cumulative effects.

When considering the assessment of environmental impacts of traffic and transport, Applicant's should be mindful that any thresholds being applied are starting points for considering impacts, often based on limited evidence, and should be treated very cautiously. The rationale for impact criteria, thresholds and link sensitivities should be well-evidenced and reflect the specific considerations of each location.

It is considered sensible that the Applicant undertakes scoping discussions with ECC to identify and agree the appropriate assessment methodology.

Public Rights of Way

The clear preference is that Public Rights of Way and amenity should be dealt with in their own chapter of the Environmental Impact Assessment, in order that the impact of a scheme on the rights of way network and its receptors can be properly understood, including the interactions between different parts of the scheme, both temporally and spatially.

Public Rights of Way have unique additional characteristics. They make a significant contribution to a local community's sense of place, mental health, physical health, and overall well-being. In addition, the contribution that Public Rights of Way makes to community access and sense of place have an important relationship to the offer and function of the visitor economy.

Therefore, whilst Public Rights of Way do form part of the whole transport network, they have a unique function and relationship to people and place, which should be effectively evaluated. This will ensure the impacts are properly understood and weighed in the planning balance, and effective mitigation measures can be designed and delivered to maintain, and where appropriate enhance, these unique characteristics.

The effective evaluation of impacts, both temporary and permanent, on the Public Rights of Way network and its users, is particularly important for very large projects such as, but not limited to, solar or wind energy schemes, and transmission infrastructure, as these projects are likely to have widespread impacts across the Public Rights of Way network, during both their operation and construction.

The submission should also include a Public Rights of Way Access Management Plan that should include:

- Project description.
- Project team roles and responsibilities (including training).
- Processes for community engagement.
- Affected routes, including information on how they will be affected (e.g. length of closure).

- Survey information (e.g. route usage).
- Management measures for the affected routes (e.g. standards and guidance, active management, signage, reinstatement of PRow).
- Implementation, monitoring and reporting of the Plan (including site checks, non-compliance procedure, complaints procedures).
- Proposed mitigation strategy.

Construction Traffic Management Plan (CTMP)

During the DCO process the CTMP is an important document that sets out how the applicant will access the highway network for delivery of materials and for construction associated with the NSIP. Importantly it sets out the process for managing construction traffic, which can ensure the environmental impacts do not exceed those assessed, that it complies with the sustainable transport objectives of policy and helps to reduce impacts on the local community.

The type of information the highway authority would expect to receive as a minimum would include:

- The elements of the works that will be subject to the CTMP.
- Information on the site's access arrangements.
- Ecological mitigation and any enabling works.
- Construction phasing.
- Construction traffic numbers.
- Construction traffic routeing.
- AIL routeing.
- Staff sustainable travel initiatives.
- Controls, monitoring and reporting mechanisms, reflecting assessed impacts.
- Responsibilities.
- Traffic management measures and the duration of traffic management
- Safety measures.
- Closures of any carriageway or footways.
- Temporary Traffic Regulation Orders.

This information should be accompanied with drawings showing Temporary Traffic Management proposals, Traffic Management phasing plans and any speed reduction extents. It is considered sensible that a Draft CTMP is discussed with ECC prior to submission.

Access & Access Routes

The CTMP should also set out the access requirements and the routeing required for the works to be undertaken. The highway authority will also need to determine whether a safe and appropriate access can be delivered at the specified location. The following information is required to be submitted in order that the highway authority can assess the appropriateness of the proposed route and if necessary secure any maintenance agreements where it is considered that the extraneous construction traffic will bring additional degradation to the highway. The DCO will require a mechanism for recovering the costs as a result of the extraneous traffic.

The routing information should include a description of the route (including plans at an appropriate scale and incorporating swept path assessments where relevant).

In addition, the following information will be required to support the proposed access/access route:

- Details of any staff/traffic movements/access routes.
- Detailed plans of site access/es and haul road crossing points including the following:
 - Visibility splays within the redline or public highway based on the road speed limit or surveyed speed data.
 - Highway boundary information.
 - Data on the relative use of the access.
 - A Stage 1 Road Safety Audit with designer's response
 - Forward visibility splays for turning construction traffic to see approaching traffic on the major road and for major road traffic to see construction traffic waiting to turn off the major road.
- A review of the highway structures on the route and confirmation of any weight restrictions applicable on the route together with details of contact with the relevant Structures Engineer.
- Presence of statutory undertakers overhead/underground equipment.
- Details of any road signs or other street furniture along each route that may need to be temporarily removed/relocated.
- Evidence of engagement with the appropriate authorities regarding the above including District Councils, Parish or Town Councils and the highway authority.

Where a DCO results in a large number of accesses (most likely temporary) and often associated with the delivery of cable corridors, it is considered preferential that an Access Management Plan should be submitted, as a report setting out the outlined information above.

Highway Boundary Search

NSIPs can result in exceptionally large requests for highway boundary information, as a result advanced notice and consultation with Essex County Council is recommended to reduce any potential delay.

Any access required to facilitate development has to be either within highway or on land within the applicant's control. The highway authority will not accept a scheme for an access which does not evidence land ownership. Land with the control of the highway authority can be established by obtaining a highway boundary search. This will determine the existing highway extents to the best available knowledge. A plan to confirm the extents of highway land, including public rights of way should be submitted with any scheme as detailed above. The highway boundary information can be obtained from the highway boundary team at HighwayRecords@essexhighways.org.

The highway authority cannot accept a scheme for an access or any other works without evidence that it can be constructed either within the highway and/or within land in the control of the applicant (i.e. within the redline of the DCO).

Highway Works

Any access or works relating to the construction/delivery of infrastructure that take place within or below the highway will need approval from the highway authority.

It is important to note that different roads fulfil different functions, and accordingly the design and delivery of highway infrastructure including accesses should not be approached on the basis that 'one size fits all'.

When considering the delivery of NSIP associated infrastructure, account should be taken of the function of the route on which a planned access or other improvement is to be delivered. This function is defined in the Essex Route Hierarchy.

The intention is to ensure that highway works are carried out that are 'fit for purpose' and consider the function and nature of the route within the context of the duties imposed by the Traffic Management Act, which places a duty on Local Authorities to keep traffic (including pedestrians) moving. There is particular concern about the operation of the Strategic Route Hierarchy Road network and Primary Routes, which will need to be managed during the delivery of schemes.

Where appropriate all physical works must be compliant with the Equality Act 2010 and the guidance given in the DfT document Inclusive Mobility.

Information for Technical Review

An NSIP may require works to be undertaken to the highway and these may be temporary or permanent.

The applicant should prepare detailed design drawings for the highway works associated with the development. These proposals should be submitted to the highway authority for technical review and must include the following:

- Detailed Engineering Layout Plans to an appropriate scale (ideally either 1:250 or 1:500) on a detailed topographical survey base model.
- The topographical survey must be of a standard suitable for detailed design and construction (not just for planning permission or preliminary design).
- The package of detailed design plans may include (where applicable):
 - General Arrangement.
 - Site Clearance.
 - Safety Fencing and Vehicle Restraint System (VRS).
 - Drainage.
 - Levels Layout (including contours plan).
 - Earthworks.
 - Pavement Construction/Carriageway Surfacing.

- Kerbs, Footways and Cycleways.
- Traffic Signs and Road Markings (including Signage Schedule).
- Traffic Signals.
- Street Lighting and Electrical Works.
- Existing Utilities and details of proposed diversions.
- Landscaping.
- Swept path analysis (Auto track runs).
- Visibility splays at junctions.
- Extents of proposed Traffic or Temporary Regulation Orders (TRO / TTRO).

Delivery of Works

The highway works shall be delivered by a Highway Works Agreement (HWA) (i.e. a Section 278 agreement or, at the discretion of ECC, a Minor Works Authorisation). The agreement will be needed over and above the granted DCO and should be referenced in the appropriate chapters of the DCO/and or the Statement of Common Ground as the appropriate mechanism for the delivery of highway works. Alternative delivery mechanisms should be avoided since they will depart from ECCs standard operating procedure and lead to delay.

As part of the delivery of works a Project Engineer will be assigned. They will act as the focal point for all responses and coordination within ECC across the highways service. All communication between the developer and ECC should be through the assigned Project Engineer so that they can maintain a holistic view of the project.

Minor Works Authorisation Agreement

In some instances, for minor works the Project Engineer may consider a minor works authorisation in lieu of a Section 278 Agreement. A minor works authorisation does not require the involvement of legal teams and is an agreement that is signed by the Developer and includes a list of Terms and Conditions.

Section 278 Agreement

Section 278 Agreements, as a minimum, will require:

- Securing of a bond to ensure that third party funds are available to complete the highway works to the satisfaction of the County Council.
- Payment of the County Council's works inspection fees, maintenance fees, special order fees, supervision fees and any other such fees as the County Council shall require.
- Payment of the County Council's legal, administrative and other fees and disbursements associated with the drafting and completion of the HWA.
- Preparation and advance approval of works drawings and traffic management measures.
- Certification and maintenance of the highway works.

- Regulating of the issue of the Works Licence to enable the Highway Works to be carried out.
- The securing of a bond relating to both Land Compensation Act 1973 matters and Noise Insulation Regulations 1975 as amended by the Noise Insulation (amendment) Regulations 1988 (SI 1988/2000) and any other indemnity and bonds for liability issues as the County Council shall require.
- The dedication of land as public highway (where required).
- The standards and procedures for carrying out the Highway Works; and
- Traffic regulation orders and statutory processes.

The applicant will be expected to prepare the detailed design for the works. The design will need to be checked by the highway authority and may require alterations to achieve technical approval. The technical approval process normally has a minimum timescale of 6 months.

Safe methods of construction and traffic management must be considered by the designer, and the Construction (Design & Management) Regulations 2007 complied with where applicable. Early contractor involvement in the design process is strongly recommended.

For most schemes, the applicant will arrange construction of the works, which should be undertaken by an Essex County Council approved contractor in accordance with the approved drawings and under the supervision of Essex County Council staff.

Full details on the elements required for a HWA submission, including design requirements, processes, and timescales, are set out in the: [Development Construction Manual](#).

Consultation with different parties

The applicant is also required to liaise with other consultees in order that a coordinated approach can be taken. It is recommended that the applicant liaise with bodies such as the Lead Local Flood Authority, the County Council's Environment Team (including Historic Environment), the Environment Agency, the relevant District Council etc. This co-ordination will help identify:

- details of any long-term highway impact e.g., will trees and hedgerows need additional trimming to allow access for service vehicles.
- position of structures relative to public highways and/or public rights of way
- assessment of any impact on adjacent/affected public rights of way e.g., horses and pedestrians – e.g. are the blades from a wind turbine in close proximity to bridleways such that movement may startle horses.

Streetworks

It is not possible to work in the highway unless authorised to do so by the Local Highway Authority. The Traffic Management Act (2004) places a network management duty on ECC to keep traffic, including pedestrian traffic, moving. The Act provides a regulatory framework within which utility companies (gas, electricity, water and telecoms) are permitted to dig up local roads and has significant implications for the way in which development is constructed or serviced.

The applicant will be required to give notice of proposed works within the highway. Details of the process can be found here: [Development Management Road Opening Notice | Essex County Council \(essexhighways.org\)](https://www.essexhighways.org/development-management-road-opening-notice), and should be discussed with the Project Engineer.

Please note that road closures require local consultation, particularly with the local business community and public transport co-ordinators. Applications for road closures take a minimum of 12 weeks to process from receipt by the highway authority of the completed application. More information, including fees, is available at [Temporary Traffic Regulation Order | Essex County Council \(essexhighways.org\)](https://www.essexhighways.org/temporary-traffic-regulation-order).

Under Section 58 of New Roads and Street Works Act (NRSWA) (1991), Essex County Council, as Street Authority, has powers to restrict works following substantial highway works, such as resurfacing, for prescribed periods.

If, as part of the off-site works, private apparatus (including drainage) is to be laid within the highway then a Section 50 Licence will be required. This may take up to 12 weeks to be issued. Further information, including details on fees, is available at [Section 50 Street Works Licences | Essex County Council \(essexhighways.org\)](https://www.essexhighways.org/section-50-street-works-licences).

Conversations will be required with the Project Engineer who will coordinate with the permitting team to discuss:

- Permits for all construction works to be carried out.
- Contact for discussion on the proposed haul routes.
- The Streetworks Team will be able to confirm if any works are proposed on the network by other parties, such as utility companies, other highway works etc.
- They will be able to confirm if Temporary or Traffic Regulation Orders are required for any road closures, parking restrictions, bus stop relocations, speed limits etc.
- Side Road Orders.
- Stopping up Order

This information is issued by:
Essex County Council

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The information contained in this document can be translated, and/or made available in alternative formats, on request.

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