# Appendix 29: Cambridgeshire County Council's General Principles for Development (GPD)



## Highway Development Management General Principles for Development





### Highway Development Management - General Principles for Development Final v3 1<sup>st</sup> May 2021 Cambridgeshire County Council

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Cover Photo: Eddington Avenue, University of Cambridge Eddington Development, Cambridge.

#### 1. Introduction and Background

- These guidelines have been produced by Cambridgeshire County Council (CCC) as Local Highway Authority (LHA), to set out requirements to applicants, developers, their agents and local authority officers in relation to new highway, access and adoptable infrastructure across Cambridgeshire.
- ii. The document should be read in conjunction with guidance issued by the Transport Assessment Team (TA) in relation to major developments or development requiring supporting information in the form of either a Transport Statement (TS), or Transport Assessment (TA).

Further information in respect of the thresholds and requirements for such technical assessment can be viewed at the following link:

https://www.cambridgeshire.gov.uk/business/planning-and-development/developing-new-communities

Whilst setting out the principles and requirements of the LHA in respect of new or altered development access proposals, this document is neither prescriptive nor exhaustive. The document is fluid, and will evolve in conjunction with best practice and local & national policy. Each proposal will be considered on its own merits in relation to the nature of the use, the history of the site, the street environment from which access is gained and any other material considerations.

#### 2. The Planning Application Process

- i. To secure consent for a development, the developer must gain planning approval from the Local Planning Authority (LPA) the relevant District/ City Council. As set out later within this document.
- ii. The LPA case officer can recommend to refuse planning permission if the development, and indeed its transport impacts are considered to be contrary to the Local Plan, National Planning Policy Framework (NPPF), or otherwise contrary to good strategic planning.
- iii. The County Council is the Local Highway Authority, and a statutory consultee as part of the planning application process. The LHA includes the Transport Assessment (TA) and Highway Development Management (HDM) teams, the roles of which are outlined in the table below:

Transport Assessment Team (TA)	Highways Development Management (HDM
Review TA, TS and Travel Plan documents submitted, assessing the transport impact of the proposed development in terms of its effect on the capacity of the surrounding highway network and providing transport planning advice	Review development planning applications. Negotiate and agree highway improvement proposals as part of Section 278 of the Highways Act 1980 (inclusive of site access junction design and visibility splays)
Review and agree baseline traffic survey data submitted	Review Construction Traffic Management Plan (CTMP) documents submitted



Review and agree Trip Generation figures, Trip Distribution and Assignment	Review and agree development related Traffic Regulation Orders (TROs)		
methodology, and baseline and future Traffic Flow diagrams submitted	Assess highway safety and any likely highway encroachment		
Review and agree Transport Modelling data and outputs submitted	Review and agree parking restrictions and enforcements on the highway		
Negotiate and secure transport mitigation by planning condition i.e. Travel Plan documents	Negotiate and agree new road proposals for adoption as part of Section 38 of the Highways Act 1980		
Negotiate and agree highway mitigation proposals as part of Section 278 of the Highways Act 1980	Provide advice concerning; Reserved Matters, detailed highway design		
Negotiate and secure S106 funding for mitigation measures secured as part of the proposals	Review and agree servicing and delivery details in addition to swept path analysis		

- iv. The LHA will review the proposal within the planning application consultation period, consulting internal departments (highway maintenance, infrastructure teams, public transport, cycling, strategy etc.) and make a recommendation to the LPA case officer dealing with the application. It is for the LPA to consider such comments, and make a balanced planning decision based upon the information available.
- v. CCC recommends that access is not treated as a Reserved Matter but is determined as part of any Outline or Full planning application stage. This enables the development implications to be properly assessed, and also ensures that access can be secured to the site that is safe and meets all the necessary standards. In addition, such an approach provides the developer with a greater degree of certainty of delivery moving forward to the Reserved Matter and implementation stage.
- vi. If the planning submission has deficits, the LHA may request additional information, or amendments to the proposal. In certain circumstances the LHA may place a holding objection, until such a time as the Authority is satisfied that the proposal will not compromise highway safety to an unacceptable degree.
- vii. Note: The County Council officer comments will be provided on an impartial basis, based upon the technical and engineering merits of the proposal, with due regard to the requirements of the NPPF to ensure that:
  - o Para 108 safe and suitable access to the site can be achieved for all users; and
  - Para 108 any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.
  - Para 109 Development should only be prevented or refused on highways grounds if there would be an *unacceptable* impact on highway safety, or the residual cumulative impacts on the road network would be *severe*.
- viii. It should be noted that the County Council's officer comments and requirements may change within the planning process and this will be confirmed in response to any planning application, or other consultation.



- ix. Once the LHA is satisfied with the proposal, a consultation letter will be issued to the planning case officer setting out the recommendation ('objection' / 'no objection) and a summary of any mitigation that should be secured, either by Condition / Section 106.
- x. In the preparation of planning submissions scheme layouts and engineering submissions, a competent designer should be familiar with the principles and practices contained within the following documents and advice notes:
  - DfT & IHT Manual for Streets 1 &2 (MfS);
  - o CCC Housing Estate Road Construction Specification (HERCS);
  - o Department for Transport Traffic Advisory Leaflets and advisory notes;
  - o Department for Transport Design Manual for Roads and Bridges;
  - o Traffic Signs Regulations and General Directions/ Traffic Signs Manual;
  - o Relevant legislation (Highways Act 1980/ Road Traffic Act 1988).

#### 3. Pre-Application Advice

- i. Prospective applicants may obtain pre-application transport advice from the TA and HDM Teams. The County Council operates a system of pre-application charging for such advice. Details can be found at the link below:
  - https://www.cambridgeshire.gov.uk/business/planning-and-development/developing-new-communities/
- ii. Note: All pre-application advice is provided on a 'without prejudice' basis, based on current information. If new information is released or becomes apparent through the application or consultation process, the County Council's officer comments and requirements may change and this will be confirmed in response to any subsequent planning application, or other consultation.



#### 4. General Principles for Development Access

#### 4.1 Access and Junction Visibility Assessment

- i. Vehicle to vehicle inter-visibility splay 'Y' distances will be sought in accordance with the existing speed limit of the respective street.
- ii. Visibility splay 'Y' distances (and potentially 'X' distances) may be reduced in conjunction with the submission of empirical speed survey data. Interpolation of speed survey results is acceptable in accordance with MfS 1 & 2 assessment principles.
- iii. Speed surveys shall comply with the Design Manual for Roads and Bridges (DMRB) document CA185 'Vehicle Speed Measurement'.
- iv. MfS visibility principles will be applied to streets where empirical data demonstrates 85<sup>th</sup>%ile vehicle speeds of up to 37mph (and where less than 10% HGV's are evidenced).
- v. DMRB visibility principles will be applied to streets where 85<sup>th</sup>%ile vehicle speed is 37mph and above.
- vi. A minor road 'X' distance of 2.4m is generally applied; a 4.5m minor road 'X' distance may be required on a case by case basis, and at major junctions.
- vii. A minor road 'X' distance of 2.0m is not generally acceptable.
- viii. Visibility splays should be measured to nearside carriageway edge; an offset from the channel may be considered on an evidence-based site-specific basis, but not on the nearside carriageway where visibility is less than 25m (in the interests of cycle safety).
- ix. Visibility splays are not generally sought on single dwelling accesses in built-up areas subject to a speed limit of 30mph, with due regard to local street conditions.
- x. Vehicle to pedestrian inter-visibility splays of 2.0m x 2.0m will be sought on all new private drive and shared private access at the back of the footway or highway verge as may be appropriate.
- xi. 2.4m x 25m visibility splays will be sought from an access point to the rear of any cycleway.

#### 4.2 Major Junction/ Highway Link Design

- Shall accord with the principles of the Department for Transport Design Manual for Roads and Bridges suite of documents in relation to major junctions i.e. ghost island RTF, roundabouts, signalised junctions etc, or strategic links between such junctions.
- ii. Guidance on signal design within Cambridgeshire can be obtained from:

tmbusinesssupport@cambridgeshire.gov.uk.



#### 4.3 Road Safety Audit

- Stage 1 Road Safety Audit process is required to be completed at planning stage for all new major junction designs, new controlled pedestrian and cycle crossings, and proposals which result in changes to the vertical and horizontal alignment of the existing highway.
- ii. Stage 2, 3 (& Stage 4 as required) Road Safety Audit will be secured as part of any legal agreement to undertake works within the public highway; the audits will be undertaken at detailed design stage and at appropriate milestones through the implementation process.
- iii. Guidance of the Road Safety Audit process can be requested from the Engineer or viewed at the following link:

https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/roads-and-pathways/road-safety

#### 4.4 Adoptable Estate Roads and Access Standards

#### 4.4.1 Adoption Principles

- i. Not all new estate roads are adoptable, or indeed are appropriate for adoption. Early consultation with the LHA is advised. However, in the broader public interest and in accordance with National Government Guidance, the LHA will recommend the application of Conditions on any planning permission requiring that details of the future maintenance of streets are to be submitted for approval by the LPA.
- ii. Construction requirement for adoptable estate roads and alterations to existing streets are provided in the Housing Estate Road Construction Specification (HERCS), located via the following link:
  - https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/roads-and-pathways/highways-development
- iii. The LHA will generally apply the principles of street design contained within Manual for Streets 1 and 2; the key principles for street adoption in Cambridgeshire and exceptions are outlined below:
- iv. The LHA will not adopt estate roads serving new commercial premises/ industrial estates (by Committee resolution) unless they perform a wider public function i.e. a link road between two existing public highways/ a bus route etc.
- v. The LHA will not adopt streets deemed to have insufficient public utility, or broader public areas beyond those necessary for the safe passage of the travelling public.
- vi. The LHA will not adopt street furniture or bus shelters, details of which must be agreed with the respective District, Parish or Town Council. The long-term maintenance of new infrastructure public infrastructure beyond the adoptable highway parameters must be considered at an early stage by the developer in accordance with the provisions of the National Design Guide.



- vii. Grass verges or landscaping will not be accepted within the adoptable highway with the exception of grassed visibility splays, where the preference is for a paved visibility margin.
- viii. The LHA does not adopt SuDS features except for soakaways (with a commuted maintenance sum). Adoptable highway surface water systems may not discharge directly systems to any private SuDS system. Accordingly, the intervening piped system and must be adopted by the local drainage authority enable the adoption of the adjacent streets to be undertaken.
- ix. Adoptable shared surface streets may not be utilised as a conduit for surface water as a flood exceedance route on sites liable to flooding.
- x. The LHA will adopt strategic street trees (with a commuted maintenance sum) provided that adequate area is provided for the tree to thrive, without recourse to complex sub-surface interventions, and respecting the sub-surface highway engineering.
- xi. All adoptable estate roads must be designed in camber, unless expressly agreed with the Engineer.
- xii. Commuted maintenance sums will be sought for non-standard highway infrastructure, if the proposal is considered to align with the LHA's maintenance principles. The LHA is preparing a comprehensive commuted maintenance sum policy, which will be applied across all new developments. Site specific issues should be discussed and agreed with the Engineer.

#### 4.4.2 Generic Adoptable Street Standards

- i. Distributor Road/ Bus Routes: 6.1 7.3m carriageway width with AutoTrack and any necessary widening on bends/ at junctions.
- ii. Major Access Road: 5.5m carriageway width, which may serve 100 300 units.
- iii. Access Road: 5.0m carriageway width which may serve up to 100 dwellings (Note: 4.8m carriageway is not acceptable for adoptable streets).
- iv. Shared surface streets: 6.0m width block paved carriageway with 0.5m paved maintenance strips and no surface delineation; adoptable shared surface streets may serve a maximum of 12 dwellings culs-de-sac. This limitation reflects the LHA's experience of the function of shared space streets, and is considered to accord with government advice, applying shared space principles to "residential streets with very low levels of traffic, such as appropriately designed mews and cul-de-sacs". This approach will be reviewed in the context future national design advice in relation to shared space.
- v. Shared surface streets: a ramp and footway transition is always required at junctions with conventional streets (see HERCS).
- vi. 2 x points of access, one comprising an emergency link will be sought for over 100 dwellings; over 200 dwellings, two full points of access should be provided.



- vii. Unless otherwise agreed with the Engineer, new adoptable streets shall have a design speed of 20mph, and shall incorporate measures to regulate vehicle speeds accordingly to the benefit of both future residents and all users of the highway. Speed cameras or permanent speed indicator devices are not an acceptable means of controlling vehicle speeds on new highway schemes.
- viii. Turning head and link road AutoTrack is required for City/ District Council refuse freighter. The developer should contact the relevant refuse department within the District/ City Councils to ascertain the size of the design vehicle.
- ix. A turning head is required within 20m of the end of any estate road, or in advance of the commencement of a shared surface street within a development.
- x. A maximum extension of any turning head spur is 20m measured from the approach road centreline.

#### 4.4.3 Pedestrian and Cycle Infrastructure

- i. Footways should be 2.0m wide; a reduction to a minimum of 1.5m will be considered at width constraints over a limited length (site specific); reduction in footway width may be agreed on a site by site basis.
- ii. Major new development dedicated cycle ways: shall be 3.0m wide red surfacing should normally be installed on dedicated cycleways; site specific requirements shall be agreed with the Engineer.
- iii. Shared use footways/ cycle ways: minimum 2.5m wide (black surfacing) adjacent existing highways.
- iv. Cycleways and footways adjacent high-speed roads shall be separated from the carriageway by a minimum of 0.5m paved and delineated safety margin.
- v. Generally, new cycleway provision a shall accord with the requirements of LTN 1/20 'Cycle Infrastructure Design'

#### 4.4.4 Junction Radius Kerbs

- i. Junction radius kerbs shall be related to the land use proposed/ the largest vehicle likely to access the site on a regular basis, the nature of the highway from which access is gained and the width of the access within the site. Generically, the following shall apply:
  - 6.0m radius kerbs shall be provided within built up areas (residential/ commercial/ office with primary domestic vehicle use).
  - 6.0m/ 8.0m within built up areas off major roads (A/ B classified), with due regard to the nature of the development.
  - 10m in rural areas or roads with speed limits of 40mph and above.
  - 15m industrial/ commercial considering the need for ingress/ egress tapers (DMRB document CD123).

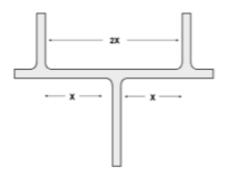


- ii. Consideration shall be given to pedestrian/ cycle priority where any new access crosses existing or proposed pedestrian or cycle infrastructure.
- iii. AutoTrack of access and junction arrangements may be required.
- iv. Radius kerbs are not generally to be provided at shared private drive junctions with the carriageway.

#### 4.4.5 Junction Spacing

- The requirements of DMRB document CD123 are applied in relation to major junction infrastructure, and the advice of the Engineer should be sought in this respect.
- ii. In the case of residential streets, the minimum stagger between junctions on opposite sides of a road is X, where X is determined using the table below.
- iii. Where cells in the table are left blank, no restrictions apply. The normal stagger between junctions on the same side of the street is 2X. (Source: Essex Highway Technical Manual).

Side Road at Junction		Main Road at Junction 'X' Dimension			
		Α	В	С	D
Α	Distributor Road	50m			
В	Major Access Road	50m	30m		
С	Access Road	50m	30m	20m	
D	Shared Surface Street	50m	20m	20m	15m
Ε	Private Drive	30m	20m		



- iv. Side roads joining type A or B roads should have no side-junctions to other roads within 20m of the junction with the major road.
- v. Crossroads to be avoided on the existing public highway but may be considered on a bespoke adoptable street design with measures to manage approach speeds and the potential for vehicle manoeuvring for conflict.



#### 4.4.6 Turning Areas

- i. Turning areas are not generally sought for single dwelling accesses to 30mph streets. Exceptions may apply on a case by case basis i.e. dwellings fronting cycle ways/ or near junctions/ bends.
- ii. Independently workable turning facilities will be sought for multiple dwellings served from shared private drives in all scenarios.
- iii. Turning areas are always sought for adoptable estate roads (see *Generic Adoptable Street Standards*) and private commercial proposals relative to the maximum length vehicle anticipated. The workability of turning areas must be demonstrated by AutoTrack.

#### 4.4.7 Shared Private Drives/ Private Accesses

- Shared private drives to residential developments should generally serve around 5 dwellings.
- ii. Shared private drive width: 5.0m wide for 8m from the highway boundary.
- iii. Internal width: minimum 3.7m (Part B5 Building Regulations), 4.1m desirable, subject to layout.
- iv. Shared turning area is required for a fire tender (Part B5 Building Regulations)/ or a small delivery vehicle where fire service access is not required.
- v. Shared private drives and private accesses shall be hard surfaced and drained away from the carriageway for the first 5.0m from the carriageway edge, or the highway boundary, whichever is the greater distance.
- vi. Surface water from private roads/ driveways areas must not discharge onto the public highway, and appropriate intervention must be provided.
- vii. Refuse collection points are required to be provided clear of highway and driveway.

#### 4.4.8 Siting of Gates

- Domestic accesses: gates should set a minimum of 5m from the carriageway edge, and a minimum of 5m from the back of any cycleway or footways where significant pedestrian/cycle flows are evident.
- ii. Commercial development: the gate set-back distance from the highway should reflect the length of the largest vehicle expected to visit the site.
- iii. Private accesses serving multiple dwellings shall be ungated to maintain unfettered access to shared turning and servicing provision.
- iv. Gates shall be arranged such that they do not open over the public highway, or obstruct any vehicle entering the site or using on-site turning facilities.



#### 4.4.9 Mixed Agricultural/Residential Accesses

- i. Access width minimum of 6m for a length of 20m from the existing carriageway edge, hard surfaced and drained for the first 10m length.
- ii. Junction radius kerbs of 10m shall be provided.

#### 4.4.10 Access Gradients

- Access crossovers within footways: 1:40 towards the carriageway edge and a maximum of 1:20 internally away from the back edge of the proposed adopted public highway.
- ii. Driveways/ shared private drives: 1:40 towards the carriageway edge and a maximum of 1:20 internally away from the back edge of the proposed adopted public highway for a minimum length of 5m.
- iii. New road junctions: Between 1:20 and 1:150 from the carriageway edge from the back edge of the proposed adopted public highway. Gradients of between 1:20 and 1:40 shall have a minimum length of 5m and a maximum length of 20m into the development.

#### 4.4.11 Construction Traffic Management Plan (CTMP)

- i. CTMP including routing agreements/ limited hours of operation etc, will be sought as a pre-commencement condition on all major developments and other sites where a conflict may be perceived i.e. where a site is near a school or where local street constraints exist.
- ii. Guidance on the preparation of CTMP's is available from the Engineer upon request.

#### 4.4.12 Traffic Regulation Orders and Public Consultation

- i. Street features and changes to existing infrastructure (not limited to but including) traffic calming features/ changes of alignment, speed limit reduction, new controlled crossing, changes to parking restrictions upon which any development scheme implementation is reliant should be subject to appropriate public consultation *prior* to determination of the respective planning application;
- ii. Alternatively, the LPA may determine to grant permission subject to a negative Grampian condition preventing commencement of development until the appropriate statutory processes have been undertaken.
- Where the necessary consultation processes lie outside of the provision of the Town and Country Planning Act, the success of such processes cannot be guaranteed, and the successful implementation of the development may be at risk. Accordingly, early commencement of the associated processes is strongly recommended to ensure that any related development is deliverable.
- iv. Further information should be sought from the Engineer and CCC Policy and Regulation Team:



#### 4.4.13 Highway Boundary Data & Public Rights of Way

i. Details of the highway boundary in any location can be obtained from the County Council Asset Management Team via the following link:

https://www.cambridgeshire.gov.uk/business/highway-searches

- ii. Proposals for Stopping up the public highway under the Highways Act 1980 must be addressed to the Asset Management Team who will conduct the appropriate consultation and legal processes.
- iii. Alterations to any public right of way must be agreed with the County council Asset Information Team Public Rights of Way Officer who may be contacted via the following link:

https://www.cambridgeshire.gov.uk/residents/libraries-leisure-culture/arts-green-spaces-activities/definitive-map-and-statement

#### 4.4.14 Ditches and Drains

i. Ditches and drains adjacent to the public highway do not generally from part the highway infrastructure. Any modifications to such features may require permission from the Local Lead Flood Authority or the respective drainage authority. Further information can be obtained from the following link:

https://www.cambridgeshire.gov.uk/business/planning-and-development/flood-and-water/watercourse-management

#### 4.4.15 Highway Structures

i. New structures within the highway require the expressed consent of the LHA, the assessment of which will incur additional charges. To discuss any requirements please contact:

highways@cambridgeshire.gov.uk.

#### 4.4.16 Implementation of Highway Works following Planning Permission

- The expressed consent of the LHA will be required before any works can be undertaken within the public highway.
- ii. Such works may be secured by S184, S278 Agreement (Major Works), Short Form 278 Agreement (Minor works excluding those necessitating Road Safety Audit or land dedication), or S38 Agreement.
- iii. Further information is available via the following link:

https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/roads-and-pathwavs/highwavs-development



**Transport Assessment Team** contacts - To discuss the requirements of a TA in more detail, please contact one of the following in the first instance:

**Highway Development Management** contacts - To discuss the proposed highway design, please contact one of the following in the first instance:

- o General queries and initial advice
  - David Allatt, Transport Assessment Manager
- o HDM Management and Principal Engineers
  - Nigel Eggar, Highway Development Manager
  - Dr Jon Finney, Principal HDM Engineer for Waterbeach New Town, and the Greater Cambridge Shared Planning Area
  - Sue Parsons Principal HDM Engineer for Northstowe, Hunts, East Cambs & Fenland

- Huntingdonshire, East Cambridgeshire, and Fenland
  - Andrew Connolly, Principal Transport Officer
  - Hannah Seymour-Shove, Transport Officer
  - Robbie Arnold, Graduate Transport Planner
- o Cambridge or South Cambridgeshire
  - Tam Parry, Principal Transport Officer
  - Linda Blower, Principal Transport Officer
  - Tomas Bande Sanchez, Graduate Transport Planner

- o Huntingdonshire
  - Robin Hobbs, HDM Engineer
  - Rikki Parsons, HDM Engineer
  - Pending HDM Engineer
- East Cambridgeshire & Fenland
  - Alexander Woolnough, Engineer
  - Andre Chabot, HDM Engineer
  - Shane Luck, HDM Engineer
  - Pending HDM Engineer
- o Greater Cambridge Shared Planning Area
  - · Victoria Keppey, HDM Engineer
  - David Lines, HDM Engineer
  - Pending HDM Engineer

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