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Foreword

Everyone relies on the highway network to provide good access to services. People use the network to get to work, shops, education and healthcare facilities, whilst businesses rely on the network to enable raw materials and finished goods to be transported efficiently to their markets.

All new development requires some new highway infrastructure, ranging from a simple access onto an existing road to new highway and footway layouts serving several hundred houses. It is critical that this new infrastructure supports the Government's Agenda for Change. The application of design and construction principles will provide people with a safe and environmentally sustainable network whatever their mode of travel, and which is also affordable in relation to future maintenance needs.

Manual for Manx Roads (MfMR) provides guidance to developers, their consultants and design engineers, planning authorities, local authorities and the public on how this can be achieved.
Preface

**MfMR** sets out the principles applied by the Department of Infrastructure (the Department) to the design and construction of highway infrastructure associated with new development. It sets out the framework of advice and standards within which alterations and additions to the highway network shall be constructed, and comprises the following elements:

**Part One**  Manx Roads: A Guide to the Design of Roads & Streets, Footpaths, Parking and Services

**Part Two**  A Guide to Road Construction in the Isle of Man

**Part Three**  Legislation and Procedure for the Adoption of Roads in the Isle of Man & Undertaking of Improvement Works within the Highway

It replaces the policies and guidance contained within the two documents: ‘Manx Roads: A Guide to the Design of Residential Roads, footpaths, parking and services’ and ‘Manx Roads 2: Residential Roads Construction Guide’, which were published in April 1993 and January 1997 respectively.

**MfMR** will not be printed in hard copy but will be available online. **MfMR** will be reviewed at regular intervals to ensure that it accurately reflects current guidance and policies as well as changes in working practices, and users are therefore advised not to print out their own hard copies, but to consult the Department’s website to ensure that they are using the most up to date version of the document.

Throughout this document external hyperlinks (highlighted in blue underlined text) are provided for information and convenience only. The Department cannot accept responsibility for contents or reliability of sites linked to, or the information found there. For ease of navigation within **MfMR**, internal links are highlighted in green underlined text.

If you feel that any of the information is inaccurate or out of date, or if you have found a broken link, please contact the Department by emailing infrastructure@gov.im quoting **MfMR** in the subject line.
Overview

Designing for Link and Place

Guidance on designing road and streets for users is given in Part One of MfMR.

The guidance is based on the advice and guidance found in the following publications:

- Manual for Streets MfS
- Manual for Streets 2 MfS2
- Design Manual for Roads and Bridges DMRB

Where appropriate, reference will be made to these and other guidance documents, but their content will not be replicated within MfMR.

Where specific performance or design criteria are to be met which may differ from those in the standards, these will be inserted into MfMR.

Advice on housing layout and design can be sought from the Planning and Building Control Directorate of the Department of Environment, Food and Agriculture. Further advice can be obtained from the MfS.

Construction

Guidance on road construction is given in Part Two of MfMR. This guide provides advice to developers and their designers on the technical design of new roads, and the specification of materials and workmanship. The document makes reference to the following United Kingdom standards:

- Design Manual for Roads and Bridges DMRB
- New Roads and Street Works Act 1991 NRSWA

It is expected that where reference is made to any of the aforementioned documents or to other documents such as British Standards (BSI) or European Standards (EN), the user will reference these. Where possible, links will be provided to the relevant web sites. This information is provided by the UK Government under the Open Government Licence.

Where specific performance or design criteria are to be met which may differ from those in the standards, these will be inserted into MfMR.

Legislation: Road Adoptions and Highway Works

Guidance on the road adoption process is given in Part Three of MfMR.

Even when the Planning procedure has been fully complied with and all Planning Approvals given for a site, for road adoption purposes before any work starts on site it is vital that detailed road construction drawings are approved by the Department.
Guidance on highway improvement works and the construction of vehicle crossings is given in Part Three of MfMR.

It is an offence under the Highways Act 1986 to carry out any works within the public highway without permission of the Department and no construction work affecting the highway can commence until the Section 109A Agreement has been signed.
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Chapter 1 Introduction

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1.1 Aims

1.1.1 MfMR provides guidance to developers, their consultants and design engineers, local authorities, and the public on the ways in which new development can contribute towards the provision of an accessible, safe and sustainable transport network within the Island. MfMR seeks to reflect the advice given in guidance such as MFS, MFS2, and DMRB, as well as a wide range of best practice documents covering different aspects of the transport system.

1.1.2 MfMR also seeks to strike the right balance between allowing the designer the flexibility needed to create distinctive high quality developments, whilst also ensuring that layouts stand the test of time and are cost-effective to maintain.

1.2 Promoting Joint Working

1.2.1 The Department believes that the route to successful development is through a coordinated design process, and supports the establishment of development teams to promote joint working, whereby all necessary stakeholders can be involved at an early stage. Therefore, the Department encourages developers, designers and the local authorities to involve the Department at the earliest opportunity in discussions about any new development proposal.

1.3 Standards and Advice

1.3.1 Design advice describes good practice and represents the standard that the Department would recommend the designer follows. The Department will expect the designer to use
Introduction

the design advice provided in this guide, unless they can demonstrate that a better or more appropriate solution exists.

1.3.2 Some designers may feel that they cannot comply with an identified design standard due to the site characteristics, or that compliance will lead to an inappropriate solution. The Department will consider allowing a departure from the design standard if the designer can show satisfactory need.

1.3.3 It will be the designer’s responsibility to apply to the Department for a departure, and to provide any supporting information necessary to justify this. The Department is not obliged to accept a request for a departure from design standards, but may do so on review of all the circumstances, on the basis such departure will lead to an enhanced design.

1.3.4 Any application for a departure will be considered on its own merits and will be recorded in the appropriate documentation, e.g. road safety audit exception report, planning consultation response, or design file.

1.3.5 **Design standards must be complied with for roads that are to be adopted by the Department, exercising its functions by virtue of section 4 of The Highways Act (1986).**

1.3.6 Where roads incorporated into new developments are to remain as private streets and are not under consideration for adoption by the Department, there is no obligation to meet the design standards or to seek approval for departures from those standards. The scheme promoter should recognise that private streets will form part of the pattern of the development. They will however be required to incorporate similar features (mains servicing, emergency access, environmental services etc.) as required for adopted highways.

1.3.7 It is therefore strongly recommended that roads which are to remain private streets are designed and constructed to the same standards as roads that are to be dedicated as highway. Such an approach is likely to make any adoption at a later stage easier, should this be sought.

1.3.8 **Scheme promoters are strongly advised to inform house buyers served by roads that are not to be adopted by the Department that this is the case. Road name plates should make this clear.**

1.4 **Areas of Responsibility and Contacts**

1.4.1 The Department is charged with fulfilling the statutory duties as set out in the [Highways Act 1986](#) and other relevant legislation.

1.4.2 The Planning and Building Control Directorate consults the Department on all planning applications that have a transport or accessibility impact and take the Department’s views into account when considering those planning applications. The Department does not
have the power to direct refusal of a planning application nor to direct the imposition of conditions; however, it can advise that an application be refused, that certain conditions be imposed or that appropriate planning obligations are required.

1.4.3 All consultations on planning applications relating to highways, rights of way and transport received by the Department are dealt with by the Highway and Asset Management Section of the Highway Services Division of the Department. Contact details are available in Appendix A of this document.

1.5 **Management of the Transport Network**

1.5.1 The Department is responsible for the management of the following elements of the transport network:

1) All public highways
2) Public Rights of Way
3) On-street car parking
4) Some public off-street car parking
5) Bus, train and tram services
6) Ports and harbours

1.6 **Local Authorities**

1.6.1 Within the Isle of Man, the local authorities are responsible for the delivery of a number of services to the local community. Functions relevant to highways and transport are:

1) Off-street car parks
2) Hedge cutting
3) Minor maintenance and repair
4) Waste collection
5) Street lighting

1.7 **Mains Service Providers**

1.7.1 Statutory undertakers hold statutory powers and responsibilities in relation to the supply of water, electricity, telecommunications, gas and waste water disposal. Local authorities hold responsibility for street lighting. Liaison with all the above stakeholders rests with the scheme designer or promoter.

1.7.2 Discussions between designers and statutory undertakers should consider how the future maintenance and repair of utility apparatus will be accommodated. A traffic management plan should be prepared by the designer showing how service repair works can be safely undertaken, and how the movement of local traffic and larger commercial vehicles will be managed.
1.8 Transport Operators

1.8.1 Isle of Man Public Transport operates the bus, stream railway, electric tramway and horse-tram services. Railway level crossings are critical points on the road, rail and Public Rights of Way networks. Isle of Man Public Transport should be consulted when changes to traffic flows or the highway network are proposed in the vicinity of level crossings or trackways.

1.9 Emergency Services

1.9.1 Emergency services should be consulted on any proposed changes to the highway network where a response time is impacted. This includes both permanent and temporary road closures and the introduction of traffic restraint measures.

   1) Isle of Man Constabulary
   2) Isle of Man Fire and Rescue Service
   3) Isle of Man Ambulance Service

1.10 Contacts

1.10.1 Specific contact details for the individuals and departments within authorities and organisations can be subject to frequent change, and are therefore not included within this document. Website addresses for the main organisations are given in Appendix A along with their main telephone contact numbers.

1.10.2 Where new development is concerned, scheme promoters and designers should in the first instance contact the Planning and Building Control Directorate.
Chapter 2 Streets and Roads in Context

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2.1 Place and Movement

2.1.1 The Isle of Man's roads and streets allow people and goods to travel from one location to another supporting the economic and social well-being of the Island. Whilst on parts of the network travel is the main activity, on other parts, notably on local roads, a range of activities can be expected and travel will involve several different modes of transport.

2.1.2 A mixture of people on foot or cycling, and a range of vehicles from motorcycles to lorries will use a typical road. Such roads may also accommodate a range of other social and economic activities, such as markets, eating and drinking, and sightseeing.

2.1.3 When designing new or proposing changes to existing roads and streets layout, it is important that the likely mix of users and activities must be considered and specific priorities relating to the function of the highway identified, and that these issues of place and movement are considered together. The status of a street is dependent on its relative importance within a network in terms of both these considerations, and its status should commonly determine the design approach taken.

2.1.4 It is only by considering both functions that the right balance will be achieved, but the focus of street design should be on creating a positive sense of place that is supported by an appropriate movement pattern. It is seldom appropriate to focus solely on either place or movement functions, even in streets carrying heavier volumes of traffic, such as high streets.

2.1.5 MfS2 emphasises that a street may be made up of a number of sections with different functions and character, and the design principles will also differ depending on the character of each part of a highway. Many variables are involved and it would be inappropriate to have fixed requirements based on pre-conceived street character types. It should also be recognised that largest part of the Island's highway network is historic in nature, and the layout can differ significantly over relatively short sections of road. Therefore, road layout within a new development will need to pay due regard to the historic street pattern to which it connects. It may be inappropriate for example, to have wider roads provided in a development when those roads connect with narrow streets, as this could send inconsistent messages to road users.

2.1.6 Chapter 5 of MfMR provides further guidance on the application of place and movement.
2.2 **Application of Design Guidance**

2.2.1 The Department supports innovative and attractive development within the Isle of Man. MfMR sets out the broad design principles; however, the Department will engage with developers who wish to try something different, as long as it can be demonstrated that what is proposed will result in a safe and sustainable transport system being inherited by the local community. In particular, when proposing innovative designs that are out of the scope of the Manual, developers will need to demonstrate that design considers the safety of all road users.

2.2.2 If developers propose the use of enhanced materials they will need to demonstrate that such use will be financially sustainable in the long term. It is recommended that early consultation with the Department takes place with regard to innovative layouts, and that these principles are established at pre-application stage to avoid prolonged discussion later in the planning process.

2.2.3 Taken together, MfMR, MFS, MFS2 and DMRB give a framework for the design of new transport infrastructure, but it is the Department’s role to determine which design guidance best fits a specific location on the highway network, although in general schemes affecting the highway network outside urban areas will require DMRB to be used. This responsibility will require a judgement to be made, balancing statutory requirements placed upon the Department against the guidance that is in place.
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3.1 **Stage 1: Policy Review**

3.1.1 A number of key documents can inform the design process and, if the policies and processes outlined in these are followed, their use should help to prevent modifications to a scheme being required at a later stage.

**Isle of Man Strategic Plan**

3.1.2 The overall Isle of Man Strategic Plan vision for transport is to secure the provision of a safe and sustainable transport system. In this context, safe means a transport network that people feel safe using whatever their mode of travel, and one that is designed so that where accidents do happen the risk of casualties resulting is minimised. Sustainable means a network that is designed to contribute towards the reduction in carbon and other vehicle emissions, whilst also being financially affordable to operate within the constraints of public sector finances.

**Planning Policy**

3.1.3 Guidance can be obtained from the Department of Environment, Food and Agriculture's Planning and Building Control Division: (DEFA). Developers are recommended to consult this website to ensure that, when preparing proposals, they are using the most up to date Government guidance.

3.2 **Stage 2: Safety and Sustainability**

**Context Appraisal**

3.2.1 When existing or new roads and streets are being designed, it is very important to have a detailed understanding of how they sit within a town, village or rural setting. There is a need to identify opportunities to repair incomplete or poor quality connections.

3.2.2 The Department places great emphasis on the benefits derived from good design and the effective context appraisal, relating a new development to the existing infrastructure. It is recommended that this process is conducted at the earliest possible opportunity, prior to developing a movement framework. Consideration should be given to connecting developments to existing links and possibly upgrading existing footpaths. Cul-de-sacs should be avoided because they tend to result in poor connectivity and do not assist with place-finding. This approach aims to improve the potential connectivity of a new development with the existing locale. Other contextual elements might include, for example: place, landscape, built environment, use and heritage.

**Connectivity and Accessibility**

3.2.3 The accessibility of a development that generates significant amounts of movement is a key contributor to whether or not it is likely to be sustainable and meet the aims of the Isle of Man Strategic Plan. It is desirable that developments are located so as to be easily accessible by various modes of travel. Journeys on foot comprise an element of almost all
journeys; even the most dedicated car user has to walk from parking place to destination. Public transport provides the most viable option for longer journeys. The emphasis in the Isle of Man tends to be on bus rather than rail or tram services due to the limited number of rail and tram routes and stations. However, for such developments in communities with a rail or tram station, rail or tram can provide an attractive option for travel. The bicycle provides another alternative to the private car and over time can make a development accessible to a wider area than by walking.

3.2.4 A fundamental objective of the Isle of Man Strategic Plan is to encourage development to take place in locations that allows people to easily access the services needed for day to day life, such as employment, education and shops. To ensure inclusivity good accessibility should be possible by non-car modes. The concentration of large-scale development in existing built-up areas can result in linked trips, where people can visit several places in one journey, and it is in the larger urban areas where improvements to infrastructure that will benefit users of development in the future are likely to take place. Consideration will also be given to whether other facilities being promoted as part of a development will improve access to services for residents of existing development.

3.2.5 “Designing for Pedestrians” (2007, IHT) states that:

“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes (up to about 800 m) walking distance of residential areas”.

3.2.6 Walking and cycling distances should be measured along routes that are safe for such activity, using simple circular isochrones based on the location of a development being unacceptable. There may be significant barriers to walking or cycling, such as a major road, railway or river that will mean that a walking route from the development to a specific facility is in reality longer than the ‘as the crow flies’ line that the use of circular isochrones implies. Measurements should not be taken from the nearest part of the development to a particular facility, but from the centre of the development, to get the average distance, and from the furthest part of the development from a particular facility to get the maximum distance.

Quality of Routes

3.2.7 The characteristics of the routes to be used by pedestrians and cyclists will also have a bearing on the potential for users of a development to use those modes of travel, and thus also public transport.

3.2.8 Walking alongside a busy main road can be unattractive and inhospitable, especially where pedestrians have to use a narrow footway immediately alongside a carriageway used by large vehicles. Main roads are also rather unpleasant and hazardous for cyclists, especially if motor vehicle speeds are perceived as high. Conversely, pedestrian and cycle routes away from carriageways used by motor vehicles can be perceived as poor in terms of personal security. The gradient, and the existence or not of street lighting and natural surveillance may also significantly influence the success of such routes in terms of encouraging modes of travel other than the car. These factors need to be taken into
account when designing the walking and cycling routes linking a development to the nearest community facilities.

**Supporting Physical Activity**

3.2.9 Increasing levels of physical activity amongst all the population should be an explicit goal of transport planning and investment. Active travel should be prioritised and walking and cycling routes should be safe and form a continuous, accessible network. Planning for active travel will provide ‘triple wins’ – for the economy, health and the environment.

3.2.10 Developers are encouraged to use an appropriate guidance, such as the [Active Planning Toolkit](#), to encourage and support physical activity.

**Creating Child-Friendly Communities**

3.2.11 Playable space and play opportunities should be integrated into new development and the Department would encourage developers to engage with children in the design process. Streets should be created that children feel safe to play in and new development should positively promote sustainable travel and in particular promote walking and cycling amongst children.

### 3.3 Stage 3: Design and Pre-application engagement

**Integrated Street Design – a streamlined approach**

3.3.1 The Department supports a co-ordinated approach to the design of new developments. Previous experience has shown that on those developments where the planning and highway authorities have been involved from an early stage, the proposals progress efficiently through the planning and design stages and ultimately result in high quality developments. Where possible, other infrastructure providers such as the Manx Utilities Authority should be involved in such discussions to ensure that requirements in relation to service pipes, drainage and other infrastructure are built into design.

**Pre-application engagement and front loading**

3.3.2 Early engagement has the significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Prior to submission of a planning application a developer is encouraged to take up the pre-application service offered by the Department. Developers should have regard to encouraging joint working, and may wish to involve the Planning and Building Control Directorate as well as other stakeholders.

3.3.3 To seek pre-application advice, a submission should be made to the Department (see [Contact Details](#)), including the following information:

1) A location plan at 1:1250 scale
2) A layout plan at 1:250 scale (showing proposed carriageway widths, footway/footpath widths, junction radii, junction and forward visibility splays, proposed access width, and parking and manoeuvring areas)
3) A plan showing the relationship of the development to the transport network, and details of access arrangements (for pedestrians as well as vehicles) for the development
4) Any existing uses on the site with associated traffic generation
5) Size of the proposed development (number of dwellings and/or gross floor area of commercial buildings)
6) The intended use class(es) of the development
7) Relevant planning history
8) Plans and/or details showing any proposed modifications to the existing transport network either to accommodate the site access(es) or alterations to the network which mitigate the significant impacts of the development. This could include new or altered junctions, road widening, footpath links to bus stops, public transport services or facilities and/or cycle facilities

3.3.4 Highway and transport advice will be based on the information supplied at the time. The Department reserves the right to change its advice at the planning application stage if material changes are made to the proposed development or if additional information is supplied which was not available at the time pre-application advice was given.

3.3.5 The Department aims to give a written response within 21 calendar days of receiving a pre-application enquiry if all of the required information is included with the submission. It should be noted that currently there is no charge made for the provision of pre-application advice though the position is periodically reviewed.

Master Plans

3.3.6 A master plan is also an essential element of designing larger developments providing an opportunity to ensure that critical connections to existing developments and the surrounding area are given due consideration at an early stage of the process. The site briefs contained within the Area Plans will form the basis of developments master plan.

3.3.7 For larger schemes, an outline master plan should be drawn up showing existing infrastructure and identifying key routes needed through the site to provide the safest and most attractive pedestrian links to existing (and proposed) facilities and bus stops. For smaller schemes, a detailed master plan may suffice, and for any scheme this should address those matters listed below:

1) Connections to the surrounding area and through the site
2) Street layout and dimensions
3) Building lines/heights, routes for utilities
4) Servicing and access for emergency vehicles
5) Details of the sustainable drainage system and sewer routes
User Hierarchy

3.3.8 The user hierarchy below shows the order that should be followed in the design and assessment of all development proposals, and it is essential for that to be considered at an early stage on larger developments if connections for pedestrians and cyclists, and routes for buses, service and emergency vehicles are to be given priority over other motorised traffic. It is of course equally important, particularly on larger developments built in separate phases, that key parts of the infrastructure are in place for all occupants and/or users of a particular phase to use without having to wait for other phases to be completed.

3.3.9 User Hierarchy

1) Pedestrians
2) Cyclists
3) Public transport users
4) Specialist service vehicles (emergency services, refuse collection etc.)
5) Other motor traffic

Design Codes

3.3.10 MfMR contains different street and road character types that are effectively a design code, albeit one that deals only with those matters relevant to the Department. Nevertheless, there is no reason why this should not be incorporated into either a full design code for a larger development or used to guide the design of smaller developments across the Island.

3.4 Stage 4: Planning Application

Planning Application Assessment (Highways and Transport)

3.4.1 Planning legislation requires the Department to be consulted in almost all circumstances before the Planning and Building Control Directorate determines a planning application. The Planning and Building Control Directorate seeks the Department’s advice on the highway safety and transportation matters specific to those applications and this includes where necessary an assessment of accessibility. However, the Department has no power of direction and so can only recommend that the Planning and Building Control Directorate takes on board its advice before coming to a decision. The Department’s advice is essentially non-binding on the Planning and Building Control Directorate although, should the Planning and Building Control Directorate decide to disregard this advice, any future defence of that decision would need to be undertaken by the Planning and Building Control Directorate.

3.4.2 The Department, when assessing a planning application, considers the following:

1) Previous planning decisions (including appeal decisions)
2) Isle of Man Strategic Plan and area/local development plans
3) Adequacy of parking/loading/turning
4) Highway safety, road layout and access
5) Accessibility for disabled persons
6) Traffic flows

3.4.3 Potential objections on highway safety grounds can sometimes be overcome by carrying out works to improve access and/or visibility, and it is useful if planning applications clearly show the extent of land, beyond the application site, that is in the applicant’s control.

**Design Statements**

3.4.4 A Design and Access Statement is a requirement of all planning applications that have an impact on the highway. The Statement needs to include three potential aspects of access:

1) Why the access points for the development have been chosen
2) How the site responds to road layout, road safety, and public transport provision
3) How everyone can move through the place on equal terms regardless of age, disability or social grouping

**Transport Statement or Assessment**

3.4.5 The Isle of Man Strategic Plan requires that all development that generates a significant amount of movements be supported by a Transport Statement or Transport Assessment.

3.4.6 Developers should have regard to that guidance and should submit a Transport Statement or Assessment, as appropriate, with the other information listed above if it is considered that the proposed development falls within those thresholds. However, the thresholds are not absolutes, and the Department may decide that a Transport Statement or Assessment is required in order to better evaluate the effect of a proposal on a specific junction or section of road with safety or capacity issues. The Department will notify the developer if this is the case and, where a Transport Statement or Assessment is required, the developer should agree its scope with the Department.

**General Requirements for Transport Statements / Transport Assessments**

3.4.7 The Isle of Man Strategic Plan aims to ensure that development is assessed to establish whether the effects on the transport system are acceptable and that the access arrangements are constructed to safe and approved safe standards. Whenever possible, improvements to mitigate the effects of the additional travel demand generated by development will be sought.

3.4.8 The traffic and road safety implications of development proposals must also be considered. The development will be assessed against the requirement to reduce the need to travel and therefore should be located so that traffic generation is appropriate for surrounding local roads.

3.4.9 The effect of trips generated by new developments on transportation systems will clearly need to be assessed, in certain circumstances by the Department, to enable them to
comment on an application for planning permission. Early consultation with the Department is recommended in order to identify the appropriate level of assessment.

**Guidance on Transport Statements / Transport Assessments**

3.4.10 In some circumstances a Transport Assessment may be appropriate for a smaller development, while in others, a Transport Statement may be appropriate for a larger development than is suggested by the thresholds. Early pre-application discussions will help establish the level of assessment required.

3.4.11 Having established the need for a Transport Statement or Transport Assessment it is suggested that a scoping study is carried out at an early stage to ascertain:

1. The data required
2. The area over which analysis is required
3. The assessment years and analysis period at which assessment is required
4. Development trip generation, trip distribution, assignment and traffic growth factors to be used
5. The general methodology to be employed

3.4.12 The scheme promoter or designer will be responsible for obtaining the appropriate data on which to base the assessment. The Department maintains a vehicular traffic flow information database. This data is available to developers for a fee. Similarly, the Department can provide road collision data for safety considerations.

3.4.13 The following main headings will be expected to be covered within any Transport Statement or Transport Assessment:

1. Non-technical summary
2. Existing conditions
3. Proposed development
4. Assessment years/analysis period
5. Development trip generation
6. Environmental impact issues
7. Promoting sustainable transport choices
8. Transport impacts and mitigation measures

3.4.14 In all cases where a Transport Assessment or Transport Statement is needed, the Department will require the development to include measures to support sustainable transport choices. This will be secured by either a planning condition or a planning obligation under Section 13 of The Town and Country Planning Act 1999. The measures may assist in reducing the scale of highway improvements required by reducing potential journeys by car associated with the development.

3.4.15 Further detailed guidance on measures to promote sustainable transport choices to developments can be found in Appendix B of Travel Plan Guidance.
Consultation Process

3.4.16 To allow the Department to give a full and prompt response on consultation received from the Planning and Building Control Directorate, full supporting information should be submitted by the developer with the planning application in accordance with the requirements set out by the Planning and Building Control Directorate.

3.4.17 As a minimum, the Department will require the following, in pdf and electronic format:

1) A location plan at 1:1250 scale
2) A layout plan at 1:250 scale (showing proposed carriageway widths, footway/footpath widths, junction radii, junction and forward visibility splays, proposed access width, and parking and manoeuvring areas)
3) A plan showing the relationship of the development to the transport network, and details of access arrangements (for pedestrians as well as vehicles) for the development
4) Any existing uses on the site with associated traffic generation
5) Size of the proposed development (number of dwellings and/or gross floor area of commercial buildings)
6) The intended use class(es) of the development
7) Relevant planning history
8) Plans and/or details showing any proposed modifications to the existing transport network either to accommodate the site access(es) or alterations to the network which mitigate the significant impacts of the development. This could include new or altered junctions, road widening, footpath links to bus stops, public transport services or facilities and/or cycle facilities
9) A transport assessment, transport statement or design statement as required by the nature and location of the development as assessed in accordance with Departmental policy
10) Travel Plan as required by the nature and location of the development as assessed in accordance with Guidance on Transport Assessments and Travel Plan Guidance
11) A road safety audit (stage 1 and 2) as required by the nature and location of the development as assessed in accordance with Departmental policy

3.4.18 In assessing planning applications, the Department will look for solutions rather than problems and will seek to support applications for sustainable development where possible. The Department will work proactively with developers to secure developments that improve the economic, social and environmental conditions of the area.

Highway Mitigation Measures

3.4.19 The information provided in support of a planning application will be reviewed by the Department to determine the type and scope of any mitigation measures needed. This process will be undertaken in conjunction with the Planning and Building Control Directorate.
3.4.20 When reviewing the supporting information, regard will be given to the Isle of Man Strategic Plan and supporting policy and standards documents, as well as the statutory requirements placed upon the Department.

3.4.21 The Development Plan and all material consideration will form the basis for the Department's response to a proposed development and, in particular, the type or level of mitigation that will be required. Mitigation will only be required where the proposed development is likely to have an adverse impact on the transport network. Significant adverse impact on the transport network should be avoided and, wherever possible, alternative options which reduce or eliminate such impact should be pursued. Where adverse impact is unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate. The Department will only recommend refusal of a planning application on transport grounds where the residual cumulative impacts of development are severe.

Mechanisms to Improve Accessibility - Planning Conditions or Obligations

3.4.22 If the transport network can be cost-effectively improved to limit the significant impacts of a development, the Department will give consideration to recommending that a planning condition is attached to the planning permission to secure works being carried out on the public highway or other land in the applicant's control.

3.4.23 Planning obligations will only be sought where it is not possible to address unacceptable impacts through a planning condition; for example, to secure a financial contribution to works or services, or to secure the successful implementation of a Travel Plan. Whether dealt with by a condition or obligation it will be imperative that those works or services are capable of being delivered within the life of the planning permission. Sometimes no amount of work will make a sufficient difference, and/or the cost of works needed cannot be delivered by the value of the development.

3.4.24 Where mitigation or compensatory measures are considered necessary, the Department will seek to recommend that an appropriate condition is attached to any planning permission granted. If it is not possible to secure the necessary measures by way of a condition, the Department will recommend that a planning obligation is secured.

3.4.25 Conditions or obligations should specify the improvements required to make the development acceptable. Conditions or obligations may require that necessary mitigation measures be completed before first occupation of units on the site, or before work on the development site itself commences if construction traffic is a major issue. Obligations may also secure pooled contributions, especially in relation to large scale infrastructure improvements where the cost or effect of the mitigation is greater than could reasonably be secured from a single development site.

3.4.26 The Department is not the determining authority, and ultimately it is for the Planning and Building Control Directorate to decide whether or not the conditions recommended can be validly imposed.
3.4.27 In the event that planning permission is granted contrary to the Department’s recommendation, the Planning and Building Control Directorate may include conditions dealing with highway safety, accessibility and/or transport issues that were not recommended by the Department. Conditions are sometimes imposed requiring further details to be submitted to and agreed in writing by the Planning and Building Control Directorate after the original granting of planning permission. This can create additional work for all concerned and it is preferable therefore for details to be submitted with the planning application, or at least to be submitted prior to the grant of planning permission. An applicant or developer who does not understand the requirements of a condition relating to highway matters is advised firstly to check the Department's recommendation.

3.4.28 Conditions imposed on the basis of the Department’s recommendation may require the submission of further details for approval. This may be through an Application for the Approval of Reserved Matters following the grant of outline planning permission, or it may be by means of an Application for Approval of Details Reserved by Condition imposed on either a full or outline permission (often referred to as Applications for the Discharge of Conditions). An applicant or developer may wish to seek the Department’s advice prior to submission of such details (assuming that the condition is imposed at the Department’s request) in order to reduce the likelihood of the Department making an unfavourable response to the Planning and Building Control Directorate. However, there may be notes attached to the planning permission (decision notice) and these together with the other guidance in this document may be sufficient to avoid having to contact the Department in advance.

3.4.29 Conditions imposed can be formally challenged by making a planning application to vary or remove a condition. Applicants are reminded that there is no requirement for the Department or Planning and Building Control Directorate to seek approval from an applicant before recommending or imposing a condition, and the applicant's endorsement of a condition does not make a condition any more or less reasonable.

Planning Obligations

3.4.30 Planning obligations will only be used where it is not possible to address unacceptable impacts through a planning condition. Planning obligations are agreements negotiated between the Planning and Building Control Directorate and persons with an interest in a piece of land (and/or developer), and are intended to make acceptable development which would otherwise be unacceptable in planning terms. Obligations can also be secured through unilateral undertakings by developers, although by their nature, the content of a unilateral undertaking might not be agreed by all parties including the Planning and Building Control Directorate and the Department. Planning obligations might be used to prescribe the nature of a development (e.g. by requiring that a given proportion of housing is affordable), to secure a contribution from a developer to compensate for loss or damage created by a development (e.g. loss of open space) or to mitigate a development's impact (e.g. through increased public transport provision). The outcome of all three of these example planning obligations should be that the proposed
development concerned is made to accord with the **Isle of Man Strategic Plan** and other material considerations.

3.4.31 Planning obligations are unlikely to be required for all developments but should be used whenever appropriate it is however recommended that planning obligations are only sought where they meet all of the following tests. These are that a planning obligation must be:

1) Necessary to make the proposed development acceptable in planning terms
2) Directly related to the proposed development
3) Fairly and reasonably related in scale and kind to the proposed development

3.4.32 The **Isle of Man Strategic Plan** and all material considerations will form the basis for both the Department’s and Planning and Building Control Directorate’s respective responses to a proposed development and, in particular, the type or level of compensatory or mitigation measures that will be required. Typically, mitigation could be required where the proposed development is likely to have a severe impact on the transport network and/or would result in breaches of statutory environmental limits.

**Appeals**

3.4.33 Procedural guidance is contained on the Department of Environment, Food and Agriculture’s Planning and Building control website.

### 3.5 Stage 5: Implementation

**Detailed Design, Technical Approval, Construction and Adoption**

3.5.1 Where the Department considers that the carrying out of highway works on the existing public highway is appropriate, it will require a Section 109A Agreement under the **Highways Act 1986** to be in place, technical approval to have been issued and its administration and inspection fees to have been paid prior to the commencement of construction. **It is unlawful to undertake works on the public highway without the permission of the Department.**

3.5.2 Where new streets are being constructed, the Department considers it desirable that a Section 4 Agreement under the **Highways Act 1986** is first entered into, technical approval has been issued and its administration and inspection fees paid prior to the commencement of development. If a developer or its contractor starts works prior to the above the Department may require additional material testing and core samples to be taken, at the developer’s expense, to ensure the road has been construction to a suitable standard. Without technical approval, the developer risks constructing a road that is not to an adoptable standard and having to replace this infrastructure before the Department will adopt it as public highway.

3.5.3 MfMR Part Three details the requirements for Section 4 and Section 109A highway works agreements.
3.6 Stage 6: Monitoring

3.6.1 It is important that the Department receives feedback from stakeholders, including occupants of new developments, so that MfMR can be further adapted to take account of examples of good practice. Where a Travel Plan is required as part of the development, this should include surveys of residents or other occupiers of the development concerned to enable feedback on the good and bad points of a development to be identified, informing future reviews of MfMR by providing a robust evidence base.

3.6.2 For some new developments, the installation of Automatic Traffic Count (ATC) sites might be required as part of the monitoring strategy for the Site Travel Plan. Where required, an ATC site should be installed to the specification set by the Department.
Section B: Design Principles
Chapter 4 Link and Place

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4.3 Step 2 - Consider User Groups’ Requirements within Local Conditions/Context ............ 24
4.4 Step 3 - Meeting User Requirements......................................................................... 25

4.1 Introduction

4.1.1 The Department supports the design principles of MfS and MfS2 in integrating Link (movement) and Place (function) of roads and streets to inform design choice. The Department has established a matrix to help designers balance the competing user requirements resulting from place status and link status at locations on the islands highway network.

4.1.2 Designers are encouraged to follow the process outlined below when considering how road and street space should be allocated to best enable a roads and streets to fulfil the requirements of users.

4.2 Step 1 - Consider Road or Street Classification

Identify the role of the road or street as a link

4.2.1 Each link on the Island's road network has been allocated to one of following link status categories. A road hierarchy map is available as a downloadable document on the Highway Services webpage, and shows the status of each road.

<table>
<thead>
<tr>
<th>Link Status</th>
<th>Defining Characteristics</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Multi-modal link. Strategic routes linking urban centres and major routes within built up areas</td>
<td>A1, A3, A5, A18, Peel Road, Douglas</td>
</tr>
<tr>
<td>District</td>
<td>Multi-modal link. Important cross-urban routes, key suburban routes</td>
<td>Victoria Road, Douglas</td>
</tr>
<tr>
<td>Local</td>
<td>Multi-modal Link. Local distributor roads linking district routes to local roads</td>
<td>Athol Street, Douglas</td>
</tr>
<tr>
<td>Local Access</td>
<td>Local access routes with limited through function</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.1 Link Status Category
Identify the role of the road or street as a place

4.2.2 When considering Place designers should apply the following criteria:

<table>
<thead>
<tr>
<th>Place Status</th>
<th>Defining Characteristics</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Centres</td>
<td>Places with a catchment that extends over an urban area which generate high volumes of pedestrian activity</td>
<td>Douglas town centre inner core, Peel, Ramsey, Castletown, Onchan, Port St Erin</td>
</tr>
<tr>
<td>District and Village Centres</td>
<td>Streets/places that serve as shopping areas or commercial centres at a district, neighbourhood or village level</td>
<td>Kirk Michael, Port St Mary, Hailwood Avenue, Douglas</td>
</tr>
<tr>
<td>Residential Roads and Streets</td>
<td>Predominantly residential</td>
<td>Majority of built up areas of towns, villages and settlements</td>
</tr>
</tbody>
</table>

| Non-built up areas | Predominantly rural                                                                         |

Table 4.2 Place Status Category

4.3 Step 2 - Consider User Groups’ Requirements within Local Conditions/ Context

4.3.1 Identify user groups and their requirements for each link and place type:
   1) Identify the design requirements for each user group
   2) Appreciate local context
   3) Identify the locally specific requirements
   4) Define fixed and changeable requirements

4.3.2 Table 4.3 and Table 4.4 show the desired user and user activity hierarchy by link and place types.

<table>
<thead>
<tr>
<th>Link Hierarchy</th>
<th>Desired user hierarchy (from highest to lowest) by link level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Primary</td>
<td>Cars, HGVs/MGVs, LGVs, buses, cyclists, pedestrians</td>
</tr>
<tr>
<td>2 - District</td>
<td>Buses, pedestrians, cyclists, cars/taxis, LGVs, HGVs/MGVs</td>
</tr>
<tr>
<td>3 - Local</td>
<td>Pedestrians, cyclists, buses, cars/taxis, LGVs, HGVs/MGVs</td>
</tr>
<tr>
<td>4 - Local Access</td>
<td>Pedestrians, cyclists, cars/taxis, LGVs, MGVs HGVs</td>
</tr>
</tbody>
</table>

Table 4.3 User Hierarchy by Link
### 4.4 Step 3 - Meeting User Requirements

#### 4.4.1 The final step is to set out all of the user requirements for the selected street section, and take, as a starting point, the desirable design requirement for each. If there is sufficient road space for all the desirable lane designations and street furniture no further guidance is required.

#### 4.4.2 In reality, however, the evolution of street patterns and road networks in the Isle of Man has seldom been conducive to the multi-faceted demands of contemporary Manx society. So in all other cases the Link and Place Matrix Table 4.5 serves to balance the needs of competing user requirements to best achieve the wider objectives of the Department.

<table>
<thead>
<tr>
<th>Place Level</th>
<th>Desired User Activity Hierarchy (from highest to lowest) by Place Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Town Centres</td>
<td>Pedestrians using the place, not travelling, pedestrians resting, passengers waiting, boarding and alighting. Freight loading/unloading, blue badge parking, cycle parking, car parking</td>
</tr>
<tr>
<td>B - District and Village Centres</td>
<td>Pedestrians using the place, not travelling, passengers waiting, boarding and alighting. Freight loading/unloading, blue badge parking, cycle parking, car parking</td>
</tr>
<tr>
<td>C - Residential Roads and Streets</td>
<td>Pedestrians using the place, not travelling, passengers waiting, boarding and alighting, car parking, cycle parking. Freight loading/unloading.</td>
</tr>
<tr>
<td>D - Non-built up areas</td>
<td>Through traffic, passengers waiting, boarding and alighting, walking and cycling leisure activities.</td>
</tr>
</tbody>
</table>

#### Table 4.4 User Hierarchy by Place

<table>
<thead>
<tr>
<th>Town Centres</th>
<th>District/ Village Centres</th>
<th>Residential Roads and Streets</th>
<th>Non built-up areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link/ Space</td>
<td>Link/ Space</td>
<td>Link/ Space</td>
<td>Link/ Space</td>
</tr>
<tr>
<td><strong>Primary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-A</td>
<td>1-B</td>
<td>1-D</td>
<td>1-E</td>
</tr>
<tr>
<td>50-50%</td>
<td>60-40%</td>
<td>70-30%</td>
<td>80-20%</td>
</tr>
<tr>
<td><strong>District</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-A</td>
<td>2-B</td>
<td>2-D</td>
<td>2-E</td>
</tr>
<tr>
<td>40-60%</td>
<td>50-50%</td>
<td>60-40%</td>
<td>70-30%</td>
</tr>
<tr>
<td><strong>Local</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-A</td>
<td>3-B</td>
<td>3-D</td>
<td>3-E</td>
</tr>
<tr>
<td>30-70%</td>
<td>40-60%</td>
<td>50-50%</td>
<td>60-40%</td>
</tr>
<tr>
<td><strong>Local Access</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-A</td>
<td>4-B</td>
<td>4-D</td>
<td>4-E</td>
</tr>
<tr>
<td>20-80%</td>
<td>30-70%</td>
<td>40-60%</td>
<td>50-50%</td>
</tr>
</tbody>
</table>

#### Table 4.5 Link and Place Matrix

#### 4.4.3 The intention is not that the Matrix is applied rigidly but rather that it serve as a guide to inform the nature of designs. In practice what is achievable in design terms within the...
available road space would need to be determined using professional judgement, mindful of the local conditions.

4.4.4 If the minimum design requirements for each competing user requirement cannot be accommodated, the broad options open to the designer are:

1) **Share the space** – deploy schemes or measures to enable scarce street space to fulfil multiple user requirements. In many circumstances with the appropriate design approach, a space can be shared effectively to fulfill multiple user requirements. Effective space sharing schemes can be deployed to good effect, such as on-footway loading bays, shared use cycle-paths, the shared use of dedicated traffic lanes between buses and taxis, buses and cyclists and buses and freight vehicles, though each requires careful consideration based on the specific design characteristics of a site. For instance, the shared use of a cycle path can pose issues to pedestrians in more confined spaces.

2) **Allocate the space by time** – utilise measures to enable road space to fulfil multiple user requirements by time of day. For example; off-peak loading and unloading permits the necessary access for servicing local businesses, whilst encouraging loading outside of peak periods, when the demand for road space it at its most critical, thus better enabling public transport to operate more reliably.

3) **Direction based allocation** – creation of one way streets to reallocate capacity to public transport or active travel.

4) **Prioritising key users where all-inclusive solutions cannot be found** – if, having tested the design options to accommodate the minimum standards, and approaches to sharing space by users, time or direction of travel, it has not been possible to satisfactorily accommodate all user requirements, clearly one or more of the user requirements will have to be prioritised.

4.4.5 The process to determine which modes have priority on a particular street or road section should take into account several factors, including the Link and Place user hierarchies, and the feasibility of shifting provision.

4.4.6 At this stage it is critical that user requirements are prioritised consistently with the wider aspirations of the Department for a sustainable and safe highway network. For this vision to become a reality and bring about real change, it is fundamental that highway and transportation development are delivered completely and coherently.
Chapter 5 Connectivity, Accessibility and Layout

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5.1 Connectivity

Meeting the Needs of Pedestrians and Cyclists

5.1.1 The Department believes that good connectivity between proposed development and existing services and facilities is essential if pedestrian and cycle journeys are to be encouraged. In turn, pedestrians and cyclists will bring vitality to a street and this should create a more secure environment.

5.1.2 Developers should identify key facilities (such as shops, schools and bus stops) in the vicinity of the site and also other facilities such as community centres, public open space, play areas and doctors’ surgeries, which are likely to be frequent destinations for residents of a development or, and to a lesser extent, employees in the case of many commercial developments.

5.1.3 Where practical to do so, priority should be given to pedestrian and cycle movements, and access provided to high quality public transport facilities. The requirements of people with disabilities are a consideration for all modes of transport. In respect of development that will generate significant amounts of movement, and depending on the nature and location of the site, opportunities for sustainable transport modes should be taken up to reduce the need for major transport infrastructure improvements. The following issues may also have a bearing on the degree of permeability that can be achieved.

5.2 Accessibility

A barrier free pedestrian environment

5.2.1 Paragraph 6.3.3 of MfS states:
Connectivity, Accessibility and Layout

"A street design which accommodates the needs of children and disabled people is likely to suit most, if not all, user types".

5.2.2 Thus, if a street is designed to cater for those with mobility impairments, it is also likely to benefit other pedestrians, including people with small children, people carrying heavy shopping or luggage, people with temporary accident injuries and older people. Without a barrier free environment, many of these people will be mobility impaired.

5.2.3 Pedestrians do not just use streets with a high place function for movement, but also for socialising, resting, playing, and other activities. There are many needs to fulfil in good design, and it is important that the many functions of a street are given due consideration.

5.2.4 A monotonous standard footway width is unlikely to fulfil that requirement, and disabled people and the elderly may be deterred from using a street if there are not places to sit at convenient intervals and locations. The inclusion of design features to cater for non-motorised users, including the disabled, can only add to the sense of place, prevent motor vehicles from dominating, and encourage journeys on foot.

5.3 **Layout**

**Crime Prevention**

5.3.1 This section provides additional information for designers building to Section 4.6 of MfS.

5.3.2 Two of the most common forms of crime are burglaries from private dwellings and vehicle crime. These types of crime can be reduced or at least discouraged if the design and layout of new developments incorporate crime prevention into their design criteria.

5.3.3 Guidance on crime prevention can be found in the following documents:

1) [Safer Places](#)
2) [Secured by Design](#)
3) Manual for Streets [MfS](#)

5.3.4 In order to minimise wasted effort and reduce costs it is recommended that the architect/designer/developer consult with the Isle of Man Constabulary from the earliest possible stage in the design process to assess the crime risks of the proposed development.
Chapter 6  Quality Place

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6.1  Introduction

6.1.1  MfS sets out the aspects of the built form that contribute to quality places. Some of these are not directly relevant to highway design but may have implications for the layout of the street.

6.1.2  The issue of most relevance to the Department is probably the need to minimise signs, markings and street furniture. To some extent this is at odds with the expectations of highway users and there has perhaps been a tendency in the past to use signs and markings to rectify design flaws that should have been remedied by other changes to the layout.

6.2  Reducing Clutter

6.2.1  MfS2 covers a range of techniques to help reduce the clutter of unnecessary street furniture and signs on the highway. The Department supports this approach to street design, whereby signage and bollards are excluded from schemes unless circumstances indicate that they are essential. This has to take into account those signs which are compulsory as a result of legislation, for example, notifying of speed or weight restrictions. Guidance on reducing sign clutter can be found in Traffic Advisory Leaflet 01/13.

6.2.2  Where signage is required, it is preferable to utilise existing structures as a surface for mounting, for example street lighting columns or existing sign posts.

6.2.3  When designing new schemes it is crucial that designers carry out an audit of existing signing, road markings and street furniture to ensure that every opportunity is taken to remove any redundant items and then integrate the remaining apparatus with those required as part of the new scheme.
6.3 **Planting and Landscaping**

6.3.1 It is an offence under Section 45(1)(b) of the *Highways Act 1986* to plant a tree, shrub or hedge in a highway, or within 4.5 metres of the centre of a carriageway without lawful authority. The approval of the Department must be obtained before planting is carried out.

6.3.2 Planting can provide shade, shelter, privacy, spatial containment and separation. It can also be used to create buffer or security zones, visual barriers, landmarks or gateway features. Vegetation can also be used to limit forward visibility to help reduce vehicle speeds.

6.3.3 When considering landscape designs it is important to ensure that all planting is sustainable in the long term. This can be achieved by ensuring the provision of:

1) Healthy growing conditions
2) Enough space for new planting to grow to maturity
3) Appropriate species in keeping with the local area and its function

6.3.4 The choice and selection of plant material should be in keeping with the environment in which it is to be placed, i.e. native material should dominate in rural schemes and more ornamental plants may be used in urban areas.

6.3.5 Tree planting should be carried out in accordance with BS 8545:2014 *Trees: from nursery to independence in the landscape – Recommendations*. This standard sets out good practice in the planting of amenity trees under the following headings:

1) Policy and strategy
2) Site evaluation and constraints assessment
3) Species selection
4) Nursery production and procurement
5) Handling and storage
6) Planting

**Existing Features**

6.3.6 The existing landscape features both on and adjacent to a site should be identified and incorporated where appropriate into the scheme.

6.3.7 A decision on whether a tree or group of trees merits retention should be based on the assessment criteria described in Section 4.5 of BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. The TreeABC enhancement of the BS methodology, developed by Barrell Tree Care, should be used.

6.3.8 During construction, the protection of existing landscape features, such as trees and hedges is essential. BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* provides detailed guidance on the protection of trees on construction sites. A tree protection plan should be produced which clearly identifies where a
construction exclusion zone will be implemented around trees and identify the precise location of the protective barriers that will be erected to form its boundary.

6.3.9 On difficult sites, an arboricultural method statement will be required to ensure minimal adverse impact on retained trees.

6.3.10 Section 6.2.2 of BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* provides guidance on the specification for protective barriers.

**New planting**

6.3.11 It is important that a suitably qualified arboriculturist is consulted for professional advice on all landscaping matters relating to trees in new development, and all highway landscaping should be designed to integrate with the proposed streetscape, including the retention, wherever possible, of existing trees.

6.3.12 There are a number of design solutions available which will increase the probability of trees planted into hard landscapes and urbanised environments surviving and achieving “independence in the landscape”. Trench planting, crate systems, irrigation, underground guying and the use of structural growing mediums should be considered. Guidance can be found in the Trees & Design Action Group document *Trees in Hard Landscapes: A Guide for Delivery*.

6.3.13 It is also important that landscape design in, or adjacent to, the highway takes into account any potential impact on the construction of carriageway, footway, structures or subterranean services (for example highway drainage). A tree’s demand for water can drastically alter the surrounding soil conditions. The effects of soil heave and shrinking can have a dramatic effect on the integrity of footways and carriageways, and must be considered when designing a planting scheme.

6.3.14 Pedestrian routes and sight lines should not be obstructed by planting. Whilst it is generally necessary to maintain driver sightlines, vegetation should be used to limit excessive forward visibility in order to limit traffic speeds. In this situation slow-growing tree species with narrow trunks and canopies above 2 metres should be considered.

6.3.15 When trees are to be located adjacent to footways, the species selected should not spread to reduce pedestrian space below the minimum dimensions for width and headroom, as outlined in *DMRB* Volume 6, Section 3, Part 5, Chapters 7 and 8. Low-hanging branches and overgrown shrubs that create a trip hazard are especially dangerous for blind or partially-sighted people.

6.3.16 In general, it is expected that the design of landscaping within the highway will be compliant with the landscaping policies set out by the Planning and Building Control Directorate.

6.3.17 Developers should note that new landscaped areas will not normally form part of the highway to be adopted.
6.4 **Conservation Areas**

6.4.1 The Island has a wide range of towns and villages with a variety of local characteristics in relation to building types, materials used, and general layout of streets. It is recognised that the design and layout of new development needs to reflect this variety and that, whilst in asset management terms it may be desirable, and more cost effective, to restrict the design and use of materials to a limited palette, there will be locations where the need to fit in with the local characteristics takes priority. This will particularly be the case in locations that lie within designated conservation areas, or where a development might affect the setting of buildings of historic importance. In these cases, the Department will consider the use of more specific materials that are better suited to the particular setting.

6.4.2 It should be noted that where enhanced materials are specified, the Department may require the developer to pay a commuted sum to reflect the additional maintenance costs that will be incurred by the Department as a result of such proposals.

6.4.3 The Planning and Building Control Directorate holds details of conservation areas or where other locally important designations are in place, and developers should refer to the [Planning and Building Control](#) website.
Section C: Detailed Design Issues
Chapter 7 Road and Street Type

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7.1 Introduction

7.1.1 The purpose of MfMR is to cover all transport and highway issues that might relate to new development and, therefore, all highways that are maintainable at public expense need to be considered.

7.1.2 For the purposes of this guidance, streets, roads and other highways can be summarised as set out in Table 7.1.

<table>
<thead>
<tr>
<th>Streets Types</th>
<th>Road Types</th>
<th>Industrial Estate Road Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Residential and Commercial Street</td>
<td>Road</td>
<td>Major Industrial Access Road</td>
</tr>
<tr>
<td>Square</td>
<td>Minor Industrial Road</td>
<td></td>
</tr>
<tr>
<td>Street</td>
<td>Private Commercial Road</td>
<td></td>
</tr>
<tr>
<td>Shared Surface Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cul-de-sac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private street</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.1 Street and Road Type Guidance

7.2 Streets

7.2.1 Further details of the criteria that the Department would expect to be followed in terms of proposals incorporating any of those street character types are set out on the following pages.

7.2.2 It should be noted that these criteria are intended for guidance only, and the Department would be willing to consider proposals that depart from them as long as the developer can produce reasoned justification for such departure.
## Mixed Residential and Commercial Street

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>High street target traffic speed</td>
<td>20 mph (32 km/h)</td>
</tr>
<tr>
<td>Maximum dwellings</td>
<td>No limit but subject to modelling</td>
</tr>
<tr>
<td>Frontage access</td>
<td>Restricted at or near junctions</td>
</tr>
<tr>
<td>Carriageway width</td>
<td>6.5 m minimum (6.75 m if a bus route) Subject to swept path analysis</td>
</tr>
<tr>
<td>Footways</td>
<td>Minimum 2 m wide both sides</td>
</tr>
<tr>
<td>Cycleways</td>
<td>See MfMR Section <a href="#">Cyclists</a></td>
</tr>
<tr>
<td>On street parking</td>
<td>1.8 m wide by 6.0 m long on either or both sides. To be provided in addition to carriageway and amount to be determined subject to local requirements</td>
</tr>
<tr>
<td>Gradients</td>
<td>8% maximum, 0.8% minimum</td>
</tr>
<tr>
<td>Horizontal curve radius</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Vertical curve lengths</td>
<td>30 m desirable</td>
</tr>
<tr>
<td>Forward visibility</td>
<td>25 m</td>
</tr>
<tr>
<td>Speed restraint centres</td>
<td>70 m maximum</td>
</tr>
<tr>
<td>Junction radii</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Junction ‘X’ distance</td>
<td>2.4 m</td>
</tr>
<tr>
<td>‘Y’ distance for side roads</td>
<td>22 m</td>
</tr>
<tr>
<td>Absolute minimum junction spacing for side roads</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street. Crossroads permitted in some circumstances dependent on vehicle swept path analysis</td>
</tr>
</tbody>
</table>

Table 7.2 Mixed Residential and Commercial Street
### Square

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square target traffic speed</td>
<td>20 mph (32 km/h)</td>
</tr>
<tr>
<td>Maximum dwellings</td>
<td>No limit but subject to modelling</td>
</tr>
<tr>
<td>Frontage access</td>
<td>Restricted at or near junctions</td>
</tr>
<tr>
<td>Carriageway width</td>
<td>6.5 m minimum (6.75 m if a bus route) Subject to swept path analysis</td>
</tr>
<tr>
<td>Footways</td>
<td>2.0 m wide all sides</td>
</tr>
<tr>
<td>Cycleways</td>
<td>See MfMR Section Cyclists</td>
</tr>
<tr>
<td>On street parking</td>
<td>If parallel, 2 m wide by 6 m long and if perpendicular 6 m long and 2.5 m wide. To be provided in addition to carriageway and amount to be determined subject to local requirements</td>
</tr>
<tr>
<td>Gradients</td>
<td>8% maximum, 0.8% minimum</td>
</tr>
<tr>
<td>Horizontal curve radius</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Vertical curve lengths</td>
<td>30 m desirable</td>
</tr>
<tr>
<td>Forward visibility</td>
<td>25 m</td>
</tr>
<tr>
<td>Speed restraint centres</td>
<td>70 m maximum</td>
</tr>
<tr>
<td>Junction radii</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Junction ‘X’ distance</td>
<td>2.4 m</td>
</tr>
<tr>
<td>‘Y’ distance for side roads</td>
<td>22 m</td>
</tr>
<tr>
<td>Absolute minimum junction spacing for side roads</td>
<td>Crossroads permitted in some circumstances dependent on vehicle swept path analysis</td>
</tr>
</tbody>
</table>

**Table 7.3 Square**
Street target traffic speed | 20 mph (32 km/h)  
Maximum dwellings | No limit but subject to modelling  
Frontage access | Restricted at or near junctions  
Carriageway width | 5.5 m minimum (6.75 m if a bus route) subject to swept path analysis  
Footways | 2.0 m wide all sides  
Cycleways | See MFMR Section Cyclists  
On street parking | If parallel, 2 m wide by 6 m long and if perpendicular 6 m long and 2.5 m wide. To be provided in addition to carriageway and amount to be determined subject to local requirements  
Gradients | 8% maximum, 0.8% minimum  
Horizontal curve radius | To be determined by swept path analysis of vehicles likely to use the proposed street  
Vertical curve lengths | 30 m desirable  
Forward visibility | 25 m  
Speed restraint centres | 70 m maximum  
Junction radii | To be determined by swept path analysis of vehicles likely to use the proposed street  
Junction ‘X’ distance | 2.4 m  
‘Y’ distance for side roads | 22 m  
Absolute minimum junction spacing for side roads | To be determined by swept path analysis of vehicles likely to use the proposed street. Crossroads permitted in some circumstances dependent on vehicle swept path analysis

**Table 7.4 Street**
<table>
<thead>
<tr>
<th>Shared Surface target traffic speed</th>
<th>15 mph (24 km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum dwellings</td>
<td>No limit but subject to modelling</td>
</tr>
<tr>
<td>Frontage access</td>
<td>Restricted at or near junctions</td>
</tr>
<tr>
<td>Carriageway width</td>
<td>Generally 4.8 m minimum but subject to swept path analysis to determine the need for overrun areas on bends. Localised narrowings to 3.7 m for short distances on straight sections but an unobstructed pedestrian corridor must be maintained.</td>
</tr>
<tr>
<td>Pedestrian Corridor</td>
<td>2.0 m minimum continuous and unobstructed.</td>
</tr>
<tr>
<td>Cycleways</td>
<td>See MFMR Section <a href="#">Cyclists</a></td>
</tr>
<tr>
<td>On street parking</td>
<td>If parallel, 2 m wide by 6 m long and if perpendicular 6 m long and 2.5 m wide. To be provided in addition to carriageway and amount to be determined subject to local requirements.</td>
</tr>
<tr>
<td>Gradients</td>
<td>8% maximum, 0.8% minimum</td>
</tr>
<tr>
<td>Horizontal curve radius</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street.</td>
</tr>
<tr>
<td>Vertical curve lengths</td>
<td>30 m desirable</td>
</tr>
<tr>
<td>Forward visibility</td>
<td>18 m</td>
</tr>
<tr>
<td>Speed restraint centres</td>
<td>70 m maximum</td>
</tr>
<tr>
<td>Junction radii</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street.</td>
</tr>
<tr>
<td>Junction ‘X’ distance</td>
<td>2.0 m</td>
</tr>
<tr>
<td>‘Y’ distance for side roads</td>
<td>15 m</td>
</tr>
<tr>
<td>Absolute minimum junction spacing for side roads</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street. Crossroads permitted in some circumstances dependent on vehicle swept path analysis.</td>
</tr>
</tbody>
</table>

**Table 7.5 Shared Surface**
<table>
<thead>
<tr>
<th>Cul-de-Sac</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cul-de-sac target traffic speed</td>
<td>15 mph (24 km/h)</td>
</tr>
<tr>
<td>Maximum dwellings</td>
<td>No limit but subject to modelling</td>
</tr>
<tr>
<td>Frontage access</td>
<td>Restricted at or near junctions</td>
</tr>
<tr>
<td>Carriageway width</td>
<td>4.8 m minimum. Subject to swept path analysis</td>
</tr>
<tr>
<td>Footways</td>
<td>2.0 m wide all sides</td>
</tr>
<tr>
<td>Cycleways</td>
<td>See MfMR Section Cyclists</td>
</tr>
<tr>
<td>On street parking</td>
<td>If parallel, 2 m wide by 6 m long and if perpendicular 6 m long and 2.5 m wide. To be provided in addition to carriageway and amount to be determined subject to local requirements</td>
</tr>
<tr>
<td>Gradients</td>
<td>8% maximum, 0.8% minimum</td>
</tr>
<tr>
<td>Horizontal curve radius</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Vertical curve lengths</td>
<td>30 m minimum</td>
</tr>
<tr>
<td>Forward visibility</td>
<td>18 m</td>
</tr>
<tr>
<td>Speed restraint centres</td>
<td>70 m maximum</td>
</tr>
<tr>
<td>Junction radii</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street</td>
</tr>
<tr>
<td>Junction ‘X’ distance</td>
<td>2.0 m</td>
</tr>
<tr>
<td>‘Y’ distance for side roads</td>
<td>15 m</td>
</tr>
<tr>
<td>Absolute minimum junction spacing for side roads</td>
<td>To be determined by swept path analysis of vehicles likely to use the proposed street. Crossroads permitted in some circumstances dependent on vehicle swept path analysis</td>
</tr>
<tr>
<td>Turning facilities</td>
<td>Turning areas suitable to accommodate a large refuse vehicle must be provided if the adjoining street is a local distributor (or higher classification) or if the length of the cul-de-sac exceeds 20 m. See Standard Construction Details</td>
</tr>
</tbody>
</table>

Table 7.6 Cul-de-Sac
### Private Street

A private street should serve no more than five dwellings. It should be at least 4.1 metres wide when accessed off a local access road and at least 5.0 metres wide when accessed off a district or local distributor road with additional allowance made on a bend. Walls or boundary fences set back a minimum of 0.5 metres either side. Where a shared surface layout is not proposed, 2.0 metre wide footways should be provided. The layout should be designed to achieve a target speed of 10 mph (16 km/h).

| Table 7.7 Private Street |

### 7.3 Roads

7.3.1 Further details of the criteria that the Department would expect to be followed in terms of proposals incorporating any of those road character types are set out on the following pages. It should be noted that these criteria are intended for guidance only, and the Department would be willing to consider proposals that depart from them as long as the developer can produce reasoned justification for such departure.
The status of a highway within the road hierarchy is a strong indicator of its function. Primary and District roads carry large volumes of traffic and freight. In general, the standards set out in DMRB should continue to be used on roads classified as Primary or District routes, and other routes subject to large volumes of traffic. At some locations on Primary or District roads, however, where it can be satisfactorily demonstrated that the place function outweighs the movement function (i.e. the characteristics of the highway and built environment are such as to warrant design considerations from MfS2), it is logical to apply the recommendations of MfS2. MfS2 recommendations should only be used on roads with 37.5 mph (60 km/h) or lower actual (85th percentile) speeds. If the speed on local roads exceeds 37.5 mph (60 km/h), the Department will require DMRB standards unless evidenced local interpretations are agreed as being more appropriate.

### Table 7.8 Road

<table>
<thead>
<tr>
<th>Road Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>The primary road category, designed for high-speed traffic.</td>
</tr>
<tr>
<td>District</td>
<td>The district road category, suitable for moderate-speed traffic.</td>
</tr>
<tr>
<td>Local</td>
<td>The local road category, designed for low-speed traffic.</td>
</tr>
</tbody>
</table>

### 7.4 Industrial Estate Roads

7.4.1 Industrial estate roads must be designed specifically to cater for use by large commercial vehicles.

7.4.2 Mixed use developments, or commercial developments with a high proportion of light goods and/or car movements should be designed in accordance with MfS2 or DMRB as appropriate.
7.4.3 Particular attention will be paid to the following points when assessing industrial development proposals:

1) The manoeuvring characteristics of heavy commercial vehicles
2) Peak hour vehicle flows
3) The minimization of vehicle speeds in the interests of highway safety
4) Operation and requirements with specific reference to the provision of parking, turning, loading, and storage facilities within the site curtilage which shall be identified at the planning application stage
5) Provision of facilities for pedestrians and cyclists and public transport links

7.4.4 In developments likely to generate more than 250 commercial vehicle trips per day, a number of minor industrial roads should feed to the industrial access road which should not provide direct access to individual factory units. A looped arrangement is preferable so as to prevent the possibility of creating a cut-through for main road traffic.

7.4.5 Further details of the criteria that the Department would expect to be followed in terms of proposals incorporating any of those industrial estate road types are set out on the following pages.

7.4.6 It should be noted that these criteria are intended for guidance only, and the Department would be willing to consider proposals that depart from them as long as the developer can produce reasoned justification for such departure.
<table>
<thead>
<tr>
<th>Major Industrial Access Road (MIAR)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industrial Access Road target traffic speed</strong></td>
</tr>
<tr>
<td><strong>Carriageway width</strong></td>
</tr>
<tr>
<td><strong>Maximum carriageway length</strong></td>
</tr>
<tr>
<td><strong>Cycleway</strong></td>
</tr>
<tr>
<td><strong>Footways</strong></td>
</tr>
<tr>
<td><strong>Marginal strips</strong></td>
</tr>
<tr>
<td><strong>Gradients</strong></td>
</tr>
<tr>
<td><strong>Horizontal curve radius</strong></td>
</tr>
<tr>
<td><strong>Vertical curve lengths</strong></td>
</tr>
<tr>
<td><strong>Forward visibility</strong></td>
</tr>
<tr>
<td><strong>Junction radii</strong></td>
</tr>
<tr>
<td><strong>Junction ‘X’ distance</strong></td>
</tr>
<tr>
<td><strong>“Y” distance for side roads</strong></td>
</tr>
<tr>
<td><strong>Absolute minimum junction spacing for side roads</strong></td>
</tr>
<tr>
<td><strong>Carriageway widening on bends</strong></td>
</tr>
</tbody>
</table>

*Table 7.9 Major Industrial Access Road*
## Minor Industrial Road

<table>
<thead>
<tr>
<th>Minor Industrial Road</th>
<th>Through Road</th>
<th>Cul-de-Sac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Access Road target traffic speed</td>
<td>30 mph (48 km/h)</td>
<td>25 mph (40 km/h)</td>
</tr>
<tr>
<td>May take access from</td>
<td>Major industrial access road</td>
<td>Major industrial access road</td>
</tr>
<tr>
<td>Carriageway width</td>
<td>7.3 m</td>
<td>7.3 m</td>
</tr>
<tr>
<td>Maximum carriageway length</td>
<td>Unrestricted</td>
<td>250 m</td>
</tr>
<tr>
<td>Cycleway</td>
<td>See MfMR Section Cyclists</td>
<td>See MfMR Section Cyclists</td>
</tr>
<tr>
<td>Footways</td>
<td>2.0 m minimum</td>
<td>2.0 m minimum</td>
</tr>
<tr>
<td>Marginal strips</td>
<td>1.5 m</td>
<td>1.5 m</td>
</tr>
<tr>
<td>Gradients</td>
<td>0.8% to 4.0%</td>
<td>0.8% to 4.0%</td>
</tr>
<tr>
<td>Horizontal curve radius</td>
<td>60 m minimum</td>
<td>60 m minimum</td>
</tr>
<tr>
<td>Vertical curve lengths</td>
<td>30 m minimum</td>
<td>30 m minimum</td>
</tr>
<tr>
<td>Forward visibility</td>
<td>47 m</td>
<td>36 m</td>
</tr>
<tr>
<td>Junction radii</td>
<td>15 m to MIAR</td>
<td>15 m to MIAR</td>
</tr>
<tr>
<td>Junction radii</td>
<td>12 m to IAR</td>
<td>12 m to IAR</td>
</tr>
<tr>
<td>Junction ‘X’ distance</td>
<td>2.4 m</td>
<td>2.4 m</td>
</tr>
<tr>
<td>‘Y’ distance for side roads</td>
<td>45 m</td>
<td>34 m</td>
</tr>
<tr>
<td>Absolute minimum junction spacing for side roads</td>
<td>90 m [adjacent] 45 m [opposite]</td>
<td>90 m [adjacent] 45 m [opposite]</td>
</tr>
<tr>
<td>Carriageway widening on bends</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 7.10 Minor Industrial Road
Adoption may not be required for small pockets of light industrial units and/or nursery units served by an enclosed courtyard type layout; however, the following design parameters apply:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance radii</td>
<td>7.5 m-15 m (depending on type of development and form/frequency of traffic movement)</td>
</tr>
<tr>
<td>Access width</td>
<td>6.1 m</td>
</tr>
<tr>
<td>Entrance gates</td>
<td>10 m-15 m back from carriageway edge</td>
</tr>
<tr>
<td>Gradient</td>
<td>5% [1:20] max</td>
</tr>
<tr>
<td>Visibility</td>
<td>x – 2.4 m y – refer to MFS and dependent upon target speed</td>
</tr>
</tbody>
</table>

For developments fronting major industrial access roads and most industrial access roads, on-site HGV manoeuvring facilities must be provided. Loading areas away from the highway are required.

Table 7.11 Private Commercial Road
Chapter 8 Highway Geometry

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8.1 Design Geometry for Roads and Streets

8.1.1 All streets should be tracked using a 3-axle refuse vehicle. The swept path should be no closer than 500 mm from any structure, tree, or formal parking space.

8.1.2 Car parking spaces should be tracked using an estate car (1715 mm width x 4223 mm length).

8.2 Carriageway Widening at Bends

8.2.1 The swept path of a vehicle on bends is greater than the width of the vehicle itself. To enable vehicles to pass, curve widening in accordance with the swept path analysis of the vehicles likely to use the proposed street is required.

8.2.2 Widening is required on bends when the sum of the swept paths of passing vehicles is greater than the carriageway. It is better to alter the inner radius of the bend when accommodating this widening.

8.2.3 Table 8.1 gives the required width of the carriageway for bends of varying radii subject to the minimum widths and radii specified for each particular road type:

<table>
<thead>
<tr>
<th>Inner kerb radius (m)</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>110</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 m wide road</td>
<td>9.6</td>
<td>9.3</td>
<td>8.8</td>
<td>8.5</td>
<td>8.2</td>
<td>7.9</td>
<td>7.7</td>
<td>7.3</td>
<td>7.0</td>
<td>6.7</td>
<td>6.5</td>
<td>6.3</td>
<td>6.1</td>
</tr>
<tr>
<td>7.3 m wide road</td>
<td>9.6</td>
<td>9.3</td>
<td>8.8</td>
<td>8.5</td>
<td>8.2</td>
<td>8.0</td>
<td>7.9</td>
<td>7.8</td>
<td>7.7</td>
<td>7.6</td>
<td>7.5</td>
<td>7.4</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Table 8.1 Required Carriageway Width on Bends
8.3 **Vertical Alignment and Visibility Splays**

8.3.1 The vertical alignment of a road or street must provide the minimum stopping sight distances in accordance with the guidance contained in MfS and MfS2. Roads with higher vehicular speeds and low place function/high movement function will utilise the guidance contained within DMRB.

8.3.2 A visibility envelope (as shown in the Standard Construction Details) is to be measured from a driver’s minimum eye height of between 1.05 m and 2.0 m to an object height of between 0.6 m and 2.0 m all above the road surface, and is to be checked in both the vertical and horizontal planes between any two points.

8.4 **Forward Visibility**

8.4.1 At least the minimum visibility defined in MfS and DMRB should always be available to the driver at the design speed of the road. The derived visibility envelope must be kept free of obstruction.

8.5 **Vertical Curves**

8.5.1 Vertical curves should be provided at all changes in gradient to ensure reasonable standards of comfort at sag curves and to provide the appropriate visibility at crests.

8.5.2 Where the design speed is 50 km/h or greater refer to TD 9/93 Highway Link Design.

8.5.3 Where the design speed is less than 50 km/h the vertical curves should be the greater of either:

1) Indicated by the formula \( L = KA \) where
   
   - \( L \) is the curve length in metres
   - \( A \) is the Algebraic difference in gradients (expressed as a percentage)
   - \( K \) has a value selected from Table 8.2 or

2) Shown in the fifth column of Table 8.2

<table>
<thead>
<tr>
<th>Design Speed (km/ h)</th>
<th>Desirable min. Crest K value</th>
<th>Absolute min. Crest K value</th>
<th>Absolute min. Sag value</th>
<th>Min Vertical curve length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;50 km/ h</td>
<td>6.5</td>
<td>6.5</td>
<td>9</td>
<td>30</td>
</tr>
</tbody>
</table>

**Table 8.2 Minimum Vertical Curve Length**
8.6 **Gradient at Junctions**

8.6.1 The maximum longitudinal gradient on a minor road approach to a junction should not exceed 5% (1:20) for the distance specified in Table 8.3, measured from the nearside edge of the major carriageway.

8.6.2 It should be noted that when the minor road approach to the junction is downhill rather than uphill a longer distance with a gradient not exceeding 5% is required. This is intended to reduce the risk of vehicles overshooting ‘Give Way’ or ‘Stop’ markings at the junction.

<table>
<thead>
<tr>
<th>Highway Type of Minor Approach without Priority</th>
<th>Highway Type of Priority Carriageway</th>
<th>Distance along Street measured from nearside edge of Road carriageway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street</td>
<td>Street</td>
<td>Downhill approach: 15 m</td>
</tr>
<tr>
<td>Street</td>
<td>Mixed Commercial/Residential</td>
<td>Downhill approach: 20 m</td>
</tr>
<tr>
<td>Mixed Commercial/Residential</td>
<td>Road</td>
<td>Downhill approach: 30 m</td>
</tr>
</tbody>
</table>

*Table 8.3 Maximum Gradient Distance on Minor Road*
Chapter 9  Road and Street Users’ Needs

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9.1 Pedestrians

9.1.1 The Department recommends that developers consult Section 6.3 of MfS and Section 5 of MfS2, which comprehensively details the methodology for designing footways and footpaths. The starting point should be to look at existing pedestrian routes in the form of footways, footpaths (including public rights of way) as well as informal routes created across highway verge, public open space, or other land due to local demand. Opportunities should be taken to provide any missing links in the network or to upgrade existing facilities. Where appropriate, use of the Pedestrian Environment Review System (PERS) developed by the UK’s Transport Research Laboratory (TRL) is encouraged to undertake such a review. The Department can advise on the use of this system.

9.1.2 The Department requires that where pedestrians are likely to be present in significant numbers, footways should normally be provided along both sides of highways, particularly in urban areas.
9.2 **Footway Widths**

9.2.1 The widths of footways should reflect their likely usage. A minimum unobstructed width of 2 metres is required for footways/footpaths in residential areas. A narrower width may be permitted over a short distance to avoid an important existing feature where there is no simple alternative. However, it is essential that this does not compromise space for utilities apparatus and use of the footway by the mobility impaired, and further guidance on the latter can be found in Inclusive Mobility.

9.2.2 Guidance on the design of a shared cycle links can be found in [Active Travel Design Guidance](#). Where a developer proposes footway or shared use path widths that are below these specified minimums, early discussion with the Department is recommended and a reasoned justification should be provided.

9.2.3 The Department does not stipulate a maximum width for footways or footpaths. Consideration should be given to the provision of additional width when a footway is adjacent to a heavily used or industrial carriageway, or is next to gathering places such as the front of schools and shops.

9.2.4 Footways and footpaths should not have any overhanging elements from adjacent structures below a height of 2.6 metres; for example porch roofs, awnings, garage doors, or windows. A licence (Highways Act 1986) may be required for any permanent or temporary structure such as a window, advertising board, shop sign, banner, crane jib that will impact on the public highway.

9.3 **Footway Gradient**

9.3.1 It is preferable to have footways and footpaths as level as possible along their length. Longitudinal gradients should ideally not be more than 5%; however, when the topography of the site makes it impossible to achieve this, the maximum allowable gradient is 8%.

9.3.2 The cross-fall of the footway or footpath should never exceed 1:40 (2.5%).

9.4 **Pedestrian Crossings**

9.4.1 Pedestrian crossings should be sited to match desire lines as closely as possible. The Assessment Framework in [LTN 1/95](#) should be completed for all proposals for new at-grade pedestrian crossings or when changing an existing type for another.

9.4.2 In addition to ensuring provision for crossing the carriageway at all junctions, designers should consider where pedestrians may want to cross the carriageway at other locations. Paragraph 6.3.9 of [MFS](#) recommends that formal or informal crossings be provided at a frequency of every 100 metres. Footway/verge crossings providing access to private driveways are unsuitable for that purpose.
9.4.3 Every pedestrian crossing should have suitable dropped kerbs with an upstand of 6 mm.

9.4.4 Tactile paving should be provided in accordance with the document Guidance on the Use of Tactile Paving Surfaces.

9.4.5 Gullies should not be positioned adjacent to dropped kerbs at pedestrian crossing points. If this is unavoidable then they should be fitted with pedestrian-friendly grade C250 gratings.

9.5 **Vehicle Crossovers**

9.5.1 If it is necessary to provide a vehicle crossover, for example to allow access to off street parking, the normal cross-fall of the footway should be maintained from the back edging.

9.5.2 Vehicle crossovers should have suitable dropped kerbs with a maximum upstand of 25 mm. They should not be used as pedestrian crossing points.

9.6 **Footway Drainage**

9.6.1 It is important that footways and footpaths have sufficient drainage to prevent standing water. They should not allow water run-off onto private land.

9.7 **Residential Footpath Links**

9.7.1 The Department will generally expect to adopt footpath links that fall into one or both of the following categories:

1) Footpaths that provide the most direct and practicable route for pedestrians and will serve more than two properties, where this function if not fulfilled by a footway. The last portion of a cul-de-sac footpath serving one or two properties will be considered for adoption if it is constructed to the appropriate standard

2) Footpaths that form direct through routes within a development area

9.7.2 Footpaths that will not normally be considered for adoption include:

1) Secondary footpaths located at the rear of dwellings

2) Secondary footpaths that provide inferior alternatives to other footpaths

9.8 **Public Rights of Way (PRoW)**

9.8.1 It is important that the impact of any development on the existing PRoW network is fully considered. Not only will some PRoW need improvements to be properly incorporated into a development, but others may require stopping up or diversion. Developers should take into account the existing function and character of a PRoW and should not assume that it will be acceptable to divert it along a new road.
9.8.2 PRoW are recorded on the Isle of Man’s Definitive Map and Statement, managed by the Department, and are available for viewing at the offices of Highway and Asset Management Section, Highway Services Division, Department of Infrastructure, Sea Terminal, Douglas.

9.8.3 PRoW are highways established in law, albeit usually with more limited public rights than streets and roads, and are protected from being obstructed or diverted without proper authority. The Department will not encourage vehicular use of any PRoW and should also be consulted before any work is carried out that may affect the route or surface of a PRoW.

9.8.4 The granting of planning permission does not entitle a developer to obstruct a PRoW. If a PRoW needs to be diverted or stopped up there are processes under The Town and Country Planning Act 1999 (or under the Highways Act 1986 in the case of development granted planning permission retrospectively), which will need to be followed. There is no guarantee that a legal Order will be confirmed simply because planning permission has been granted.

9.8.5 Until such time as an Order has been made and subsequently confirmed, the legal line of a PRoW remains unaltered. Even where a development does not directly affect a PRoW it may be that ancillary works such as the storage of materials and plant, or vehicle access routes, may do so. Where the route of a PRoW may be temporarily affected by the development, it is possible to apply to the Department for a temporary closure or diversion. When work is complete the path should be fully reinstated to the appropriate condition so that it is fit for public use.

9.8.6 Any development works or building materials on the line of the PRoW could render a developer or contractor liable to prosecution if no legal order has been confirmed for a permanent diversion, or no temporary closure order has been agreed. It is recommended that a developer undertakes the following steps:

1) Investigate the presence of PRoW at the pre-application stage
2) Incorporate PRoW along a dedicated route rather than along new estate roads within a proposed development whenever possible
3) Allow sufficient time for the formal processing of Orders for the closure or diversion of a PRoW, which can take up to six months if unopposed and eighteen months to two years if the Order is opposed
4) Do not start building work until the Order is confirmed
5) Consult the Department’s Public Rights of Way Officer before erecting any new stiles, gates etc., across any PRoW, as any such new structures must be properly authorised
6) Consult with the Department’s Public Rights of Way Officer before undertaking any works on site that affects a PRoW

9.8.7 The developer will be required to meet all costs for providing and erecting signposts as well as any costs related to legal fees associated with any diversions or temporary orders.
9.9 **Cyclists**

9.9.1 As part of the design process, a developer needs to take account of potential new trip makers to the site by cycle and to ensure that existing cycling trips on the highway network are either improved or at least not made worse. Clearly every scheme and location needs to be considered on its own merits. The Department anticipates the following guidance to be followed when identifying the appropriate type and design of cycle facilities and cycle-friendly infrastructure required:

1. **Active Travel Design Guidance**
2. **Local Transport Note 02/08: Cycle Infrastructure Design (DfT)**
3. **TA90/05 (DMRB): The Geometric Design of Pedestrian, Cycle, and Equestrian Routes (DfT)**

9.9.2 A cycle route does not have to comprise specific cycle facilities, as long as it is direct, safe, convenient and easy to use.

9.9.3 In accordance with paragraph 6.4.1 of **MFS**, cyclists should generally be accommodated on the carriageway. In areas with low traffic volumes and speeds, there should not be any need for dedicated cycle lanes on the street. Therefore, it is important and desirable that the speed and volume of traffic is appropriate to encourage cyclists to use the carriageway.

9.9.4 The provision of off-line routes should only be considered if other factors make it impossible to create the right conditions for cyclists to use the carriageway, or a short cycle link provides an advantage in distance terms, or the route is for mainly recreational purposes.

9.9.5 When developing new schemes for cyclists, before and after surveys should be taken to assess what impact they have on levels of cycling in that location.

9.9.6 The **Active Travel Design Guidance** specifies the requirements for Cycle Parking facilities at new developments.

9.9.7 For non-residential development, it is expected that the Travel Plan, where required, will review the potential for cycling and identify the need for on-site cycle facilities in addition to cycle parking and off-site cycle infrastructure. Such on-site cycle facilities will include showers and changing rooms, lockers for the storage of equipment and clothing, and any other identified design features that will encourage cycling as a mode of transport for employees and visitors alike.

9.10 **Public Transport**

9.10.1 Where practical, the Department expects the majority of new development to have access to high quality public transport facilities to ensure that opportunities for the use of sustainable transport modes are protected and exploited. All developments that generate significant amounts of movements should take up opportunities for sustainable transport
modes, depending on the nature and location of the site in question. Such developments will generally be located where the need to travel will be minimised and the use of sustainable transport modes can be maximised.

9.10.2 Where appropriate bus or rail services do not exist, contributions may be sought from the developer to secure their provision or to enhance an inadequate existing provision. Contributions may also be sought for public transport infrastructure, including railway lines, stations and bus facilities.

9.11 Bus Routes

9.11.1 In respect of developments that generate significant amounts of movement, the proposed roads likely to be used by buses should be identified at the outset of the design stage and should be sufficiently extensive to ensure that the entrance to each dwelling is within a reasonable walking distance of a bus stop (when measured along the most appropriate walking route rather than the direct ‘crow flies’ distance).

9.11.2 Large, phased developments should make provision for the earliest phases to be served by buses. Provision and phasing will require detailed consideration at the planning application stage and will need to be incorporated into any legal agreement tied to the planning consent.

9.11.3 Developers should ensure that identified bus routes within a development allow for buses to travel in both directions. It should always be possible to pass two buses along the majority of the proposed route except in agreed localised narrowing.

Bus Stops

9.11.4 The provision and location of bus stops should be planned at an early stage and made the subject of a road safety auditing process to ensure stops are not placed in hazardous areas on the network. Stops must be clearly marked on all plans well in advance of any house-building operations and brought to the attention of potential house buyers to avoid any problems when a service starts at a later date to the occupation taking place.

9.11.5 Stops should be located to give the best penetration into the development site by means of associated footpaths and they need to serve the greatest catchment area possible in terms of convenience. Pedestrian crossing facilities may need to be considered on busier roads to provide safe and convenient access to and from bus stops.

9.11.6 In the exceptional circumstances where a cul-de-sac is unavoidable on a development that is to be served by a bus service, it will be necessary to provide adequate turning facilities at a suitable point within that development. These facilities will usually coincide with the position of a bus stop and the planning of such facilities must be well thought out in respect of any potential frontages, both in terms of possible on-street parking and the nuisance sometimes associated with bus stop facilities. Even along a no through road, attempts should be made to ensure that there is a loop road enabling buses to return along the street without having to reverse back and forth.
9.11.7 Bus stops provided on, or adjacent to existing highway networks should be placed as close as possible to footpaths and footways providing access into the development. The design specification for new bus stops is included within such guidance as TfL Accessible Bus Stop Design Guidance.

Design Issues

9.11.8 The popularity and sustainability of public transport systems relies heavily on the public perception of personal security, anti-social behaviour and vandalism. The operating strategy will be affected by incidents affecting staff safety and security, which occur particularly at night. The design of the overall system and its component parts must take into account all environmental design issues which will help reduce the opportunity for crime and anti-social behaviour.

Bus Priority Measures

9.11.9 Opportunities to provide bus priority measures to improve bus service reliability for existing and enhanced bus services serving the development should be identified as part of the Travel Plan. Measures could include bus lanes, bus priority equipment at signal controlled junctions and bus-only routes connecting the development to the local highway network. The potential for such measures should be discussed with the Department at the earliest possible opportunity.

9.12 Rail and Trams

9.12.1 Where a development is adjacent to a railway or tram line or other rail or tram infrastructure (stations, sidings, freight facilities), the developer should consult, at an early stage, with the Department.

9.13 Service Vehicles

9.13.1 All developments will need to cater for access by service vehicles of varying types, ranging from refuse collection vehicles to large articulated lorries. The developer should give consideration to the number and type of service vehicles likely to enter a development, and to make due provision for such access when designing the road layout. This will largely be dependent on the adoption status of the road under consideration and whether such vehicles would pose an unacceptable hazard.

9.13.2 Where no provision is made for service vehicles to enter a development, communal waste collection points should be provided to the satisfaction of the appropriate local authority, whilst the developer will be required to demonstrate to the Department that delivery vehicles would be able to complete deliveries in a safe and convenient manner.

9.13.3 If a private access is designed to accommodate service vehicles, the road width will need to accommodate the largest vehicle that can reasonably be anticipated. If necessary, this
can be checked by using swept path analysis, and account should be taken of any need to pass other vehicles both along the access and at the nearest junction.

9.13.4 Whenever a turning area is proposed that may need to accommodate service vehicles, vehicle swept path analysis should be carried out utilising, as a minimum, the swept path for a 3-axle refuse vehicle. A developer should be able to justify the grounds for using a particular vehicle category when undertaking the swept path analysis.

9.13.5 Comprehensive guidance on designing layouts to accommodate service vehicles can be found in Section 6.8 of MfS.

9.14 Emergency Vehicles

9.14.1 When designing any highway scheme, it is important that consideration is given to the impact it may have on the ability of the emergency services to respond to incidents and perform their duties. For this reason, it is essential that a developer consults with the following persons during the design and planning stages:

1) Isle of Man Constabulary
2) Isle of Man Fire and Rescue Service
3) Isle of Man Ambulance Service

9.14.2 In general, developments should be designed to enable access to all parts of the development by emergency service vehicles, and the use of cul-de-sac layouts should be kept to a minimum to facilitate such access.
Chapter 10  Frontage Access

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10.1  Introduction

10.1.1  The Department will not normally consider for adoption a private access serving 5
properties or fewer, inclusive of any existing dwellings (see MfMR Adoption Criteria).
However, the Department will apply the Advance Payments Code (APC) to all
development comprising two or more buildings.

10.1.2  Developers are encouraged to create layouts and construct the street to an adoptable
standard regardless of whether the access is to be offered the Department’s adoption.

10.1.3  The Department cannot insist that an access serving a development is adopted, but a
developer should consider the following factors when deciding whether to offer an access
for adoption or whether to retain it as a private access:

   1) The cost of complying with the APC
   2) Responsibility for future maintenance liabilities
   3) Responsibility for street cleaning
   4) The provision, standard and future maintenance of lighting, drainage and related
      infrastructure
   5) The Department would have no powers or responsibilities under the Highways Act
      1986 if the access remains a private road

10.1.4  Poorly maintained private areas can also detract from the quality and visual appearance
of a development. The maintenance of private roads is a very common cause of
neighbour disputes.

10.1.5  Developments served by a private access should be designed to avoid use as a through
route by general traffic, as such use could add to the liabilities and responsibilities of
future owners and residents.

10.1.6  On residential and commercial developments where it is necessary to protect frontagers’
interests, the Department will serve a notice on the person, or his legal representative,
who deposited plans with the Planning and Building Control Directorate in accordance
Frontage Access

with building regulations relating to the erection of buildings. Following an assessment of the cost of the proposed road works under the APC procedure a notice will be issued which will include a sum that is required to be paid/secured by the person named in the notice.

10.1.7 If a developer clearly indicates that the development roads are to remain private, the Department may also require that:

1) Road signs indicating that the roads are unadopted should be erected and maintained by the developer for as long as the road remains private
2) The developer should provide evidence that they have clearly stated to potential purchasers of the dwellings what the implications for purchasing a property fronting a private road are
3) The developer should provide evidence that future maintenance of the roads and associated infrastructure has been secured
4) The developer should indemnify the Department against future petitioning by residents to adopt their road. This should normally be a legal covenant placed on the properties to prevent petitioning. The wording of the covenant must be approved by the Department
5) The boundary between the private access and the publicly maintained highway is clearly marked by a concrete edging, boundary posts or similar

10.2 Frontage Access Design Guidance

10.2.1 If the access to a single dwelling crosses a footway or footpath, minimum levels of pedestrian to driver visibility must be provided and kept clear from obstruction, with no planting within these areas (see Standard Construction Details).

10.2.2 In built up areas it will be more appropriate for the access to a development comprising more than one dwelling to be formed using a vehicle crossover rather than a conventional bell mouth. This arrangement assists with maintaining pedestrian priority along the front of the development and reduces speeds of vehicles entering the development (see Standard Construction Details).

10.2.3 In non-built-up areas the frontage access to a development comprising of more than one dwelling should be formed using a bell mouth junction (see Standard Construction Details).

10.2.4 The Department requires that a private access is surfaced in a bound material over at least the first 5 metres adjacent to the public highway to minimise the risk of loose material being carried onto the highway.

10.2.5 The gradient of a private access must not be steeper than 7% (1:14) within at least 6 metres where it adjoins the public highway.

10.2.6 If the access is gated, the gates must only open away from the public highway onto the private land being accessed. Gates should normally be set back at least 5 metres from the
carriageway edge to allow vehicles to pull off the highway in order to open the gates without causing disruption to the flow of traffic.

10.2.7 The Department may allow the distance the gates are set back to be reduced to 2.4 metres in lightly trafficked urban environments (for example, where peak hour traffic flows are less than 300 vehicles per hour) where highway safety is not considered to be compromised.

10.2.8 A private access should not be located closer than 20 metres from any junction.

10.3 **Private Access where one or more Dwellings are Remote from the Highway**

10.3.1 The minimum width for access should be at least 5.0 metres (with additional allowance on a bend, and with walls or boundary fences set back a further 0.5 metres on each side) and fire vehicles should not have to reverse more than 20 metres. The development must be in line with British Standard BS 5906:2005 *Waste management in buildings* and Building Regulations Approved Document B.

10.3.2 Where a development of more than one dwelling is situated off a primary or distributor highway subject to a speed limit greater than 30 mph (48 km/h), the access and any turning areas should be constructed to cater for emergency, commercial or service vehicles.

10.4 **Agricultural and Commercial Vehicular Frontage Access**

10.4.1 The Department requires that an agricultural and commercial access is surfaced in a bound material over at least the first 6 metres adjacent to the public highway to minimise the risk of loose material being carried onto the highway (see Standard Construction Details).

10.4.2 The gradient of an agricultural and commercial access must not be steeper than 5% (1:20) within at least 6 metres where it adjoins the highway (see Standard Construction Details).

10.4.3 If the access is gated, the gates must only open away from the highway onto the private land being accessed. Gates should normally be set back at least 6 metres from the carriageway edge to allow vehicles to pull off the highway in order to open the gates without causing disruption to the flow of traffic (see Standard Construction Details).

10.4.4 An agricultural and commercial access should not be located closer than 20 metres from any junction.
10.5 **Construction Standards for a Vehicular Access**

10.5.1 Regardless of whether or not planning permission is required for a new vehicular access, the developer will need authorisation from the Department before a private vehicular access can be constructed from the highway into a private property, or before carrying out works to an existing access. Before approval can be given for a new access, or for alterations to an existing access, the Department will need to ensure that the site does not detrimentally affect the safety of other highway users.

10.5.2 The construction of a vehicular access is governed by the [Highways Act 1986](https://www.legislation.gov.uk). Such construction is controlled and approved by the Department. Planning permission may also be required from the Planning and Building Control Directorate.

10.6 **Turning Areas**

10.6.1 If a private access serves more than one dwelling, and adjoins a local road with a speed limit greater than 30 mph (48 km/h), or adjoins a primary or distributor road, a vehicular turning area must be provided which enables any vehicle likely to use the access to leave and enter the highway in a forward gear. If a developer proposes not to provide a turning area where the above criteria are met, early discussion with the Department is recommended and the reasoned justification for the proposal should be supplied, as a road safety audit may be required.

10.6.2 If an adoptable cul-de-sac is accessed from a primary, district or local highway or is greater in length than 20 m, a vehicular turning area must be provided suitable to accommodate a large refuse vehicle. Where a turning area is required, a tracking assessment should be provided indicating the largest type of vehicle that will be making a three point turn manoeuvre.

10.6.3 Turning heads that are to be adopted should cater for refuse vehicles. Developers should consult the relevant local authority to establish their requirements for refuse, and recyclables, collection and the sizes of vehicle used.

10.6.4 The layout of the development should include measures to ensure that parked vehicles do not prevent the proper use of any turning areas.
11.1 Introduction

11.1.1 This Chapter provides guidance on the provision of parking at new developments for cars, cycles, motorcycles and, where appropriate, coaches and lorries. The policy and guidance framework for such provision is provided by the Isle of Man Strategic Plan.

11.1.2 The Department’s guiding principle towards parking provision is that sufficient and well-designed parking should be available within a development to ensure that environmental and safety problems do not occur in the surrounding area as a result of overflow parking generated from the development. Parking facilities should be integrated within the overall design of the development so that they are easy, safe and attractive to use, and so that parking in inappropriate locations is discouraged.

11.2 The Issues Surrounding Parking

11.2.1 Parking can be a contentious issue and is commonly raised as a significant problem during transport and local scheme-related consultations.
11.2.2 Unmanaged parking in residential and commercial environments can cause a whole host of issues, such as:

1) Access issues to properties
2) Road safety
3) Difficult driving conditions
4) Blocked paths
5) Obscured visibility
6) Congestion

11.2.3 A lack of adequate parking provision can lead to overspill on to residential streets and footways, causing resident concerns and highway safety issues.

11.2.4 The document: Residential Car Parking Research identifies the following factors as having a significant influence on car ownership and car parking demand:

1) Dwelling size, type and tenure
2) Dwelling location
3) Availability of allocated and unallocated parking spaces
4) Availability of on-street and off-street parking
5) Availability of visitor parking
6) Availability of garage parking

11.2.5 Further guidance on parking provision in new developments is provided in the document: Space to Park.

11.3 Car Parking Standards

11.3.1 Car parking standards can be found in Appendix 7 of the Isle of Man Strategic Plan.

11.4 Allocated and Unallocated Parking

11.4.1 The allocation of spaces to individual dwellings can have an adverse impact upon the efficiency of car parking provision. Allocated parking spaces include any spaces within the curtilage of a property (e.g. garage or driveway parking) and any spaces in communal areas where the space is reserved for one particular property.

11.4.2 On-street spaces upon public highways are always unallocated. However they can be reserved for a particular purpose such as disabled persons or residents’ parking through the making of relevant Traffic Regulation Orders. The costs associated with making such Orders will need to be funded by the developer.
11.5 **Parking Bays**

*Adoptable Parking Bays*

11.5.1 Parking bays adjacent to the adoptable highway are the only type of parking area considered by the department as adoptable. The number of bays will be dependent upon the overall parking requirements and layout for the development and the developer will need to provide reasoned justification to the Department for its proposed provision. The bays should be designed to fit well within the development layout, and consideration should be given to the sub-division of parking bays into smaller clusters using build-outs with hard or soft landscaping.

11.5.2 Parking bays should have the following dimensions:

1) When parallel and adjacent to a footway, they should be 6.0 m long and 2.0 m wide
2) When parallel and adjacent to a boundary structure set back at least 1.8 m, they should be 6.0 m long and 2.0 m wide
3) When parallel but adjacent to a boundary structure set back less than 1.8 m, they should be 6.0 m long and 3.2 m wide
4) 45 degree splayed ends should be incorporated
5) When at right angles to and contiguous with carriageways they should be at least 6.0 m long and 2.5 m wide
6) Larger parking spaces should be provided for use by disabled people (see MfMR Parking for Disabled Users)

11.5.3 For bays at right angles to the carriageway there should be 6.0 m of vehicular use road surface in front of the parking space to allow for access movement. An additional 800 mm paved strip should be added to the width of any footway that abuts the back edge of a parking space, to allow for vehicular overhang.

**Car Parks - Parking Bay Dimensions**

11.5.4 The Department recommends that standard parking bays in car parks should be 5.0 m x 2.5 m to accommodate modern larger SUV’s and MPV’s. The bay size will facilitate easier parking and faster parking for all types of passage vehicles, therefore reducing the likelihood of overspill parking on to the adjacent highway.

11.6 **Driveways**

11.6.1 A simple driveway hard standing without a turning area should be laid out so as to:

1) Enable any entrance gates to be opened inwards whilst a car is parked on the hard standing
2) Enable any garage door in front of the hard standing to be opened and/or a car to be parked without the car projecting on to the highway
3) Enable pedestrian movement past the car if the driveway provides the sole means of pedestrian access to the dwelling

11.6.2 The minimum recommended distance between the front of a garage and entrance gates is 7.0 m. Where entrance gates are not to be erected this distance can be reduced to 6.0 m. The minimum recommended length of any parking space within the curtilage is 5.5 m. These requirements should be regarded as essential on primary routes and classified roads, as these routes tend to be busier and, on occasion, high speed, meaning that any vehicle parking in the carriageway whilst gates or garage doors are opened would potentially conflict with moving traffic. Where a development is located on the unclassified road network, lower distances will be considered.

11.6.3 If the driveway is to be used as both vehicular and pedestrian access to the dwelling, the parking area should have a minimum width of 3.4 m; otherwise the width can be reduced to a recommended minimum of 2.5 m, unless adjacent to boundaries when the recommended minimum width is 3.0 m.

11.6.4 Where a property is to be divided into several residential units, which increases parking requirements, a communal parking area may be provided.

11.7 Garages

11.7.1 Garages located on plots for individual properties should be sited so that:
   - Vehicles can park in front of the garage without obstructing the highway (including the footway)
   - The garage doors can be opened without the car being moved

11.7.2 Experience from the UK indicates that approximately 75% of garages are not used to store vehicles. When calculating parking provision, therefore, unless use of a proposed garage can be conditioned to be retained for the storage of a motor car, the garage will not count towards the overall provision of car parking. In addition, a proposed garage must meet the following minimum internal dimensions:
   1) Standard single = 6.0 m x 3.0 m with minimum door width of 2.4 m
   2) Use by disabled = 6.0 m x 3.3 m with minimum door width of 2.8 m
   3) Double = 6.0 m x 6.0 m with minimum door width of 4.2 m

11.7.3 If a dwelling has no separate parking for cycles, this may affect the decision as to whether or not the garage should count towards car parking provision. Consideration should also be given to the installation of an electricity supply suitable for use for charging electric vehicles.
11.8 Parking for Disabled Users

11.8.1 The minimum acceptable dimension for a single widened bay should be 3.6 m wide by 6.6 m long. In most cases this will provide sufficient room for the car door to be fully opened, enabling easier access.

11.8.2 Where the parking bay is located at a right angle to a street with high vehicular usage, the bay should be 6.6 m long to enable sufficient room to access the boot of the car and remove/replace a wheelchair.

11.8.3 In areas where there is the requirement for multiple widened bays the use of shared transfer zones helps to reduce the total land area required.

11.8.4 For buildings where it is necessary to make provision for a mini bus; for example a sports centre or care home, the minimum dimensions of the parking bay should be 6.0 m wide by 11.0 m long, to allow for the operation of a ramp to the rear or side of the mini bus.

11.9 Parking for Heavy Goods Vehicles

11.9.1 Changes to driver regulations in recent years have placed a greater emphasis upon the provision of suitable lorry parking facilities. At commercial developments, as well as designing for the access and manoeuvring of service vehicles, it may be that additional provision is required for lorries parking for a period of time whilst a driver is, for example, on a rest break. Increasingly, lorry parking takes place on industrial access roads or in lay-bys, and to ensure that it does not take place in environmentally unsuitable locations, it is important that developments that will generate trips by HGVs make some provision for lorry parking within their design.

11.9.2 Accordingly, on industrial and warehousing/distribution developments, appropriate provision should be made for HGV parking as required for the specific operation of the site. Provision should be assessed on a site-by-site basis, taking into account the proposed operations at the site and the space required. The following factors should be taken into account when designing lorry parking facilities as part of a development:

1) Lorry parking should not obstruct the highway
2) Facilities should have a safe access from the highway
3) The construction of the lorry parking area should be capable of taking the axle, steering and braking loads
4) The parking area must be of a sufficient size and shape to minimise manoeuvring to park
5) The parking area should be located so as to minimise noise and other nuisance and hazards to neighbouring development
6) There must be sufficient capacity to cater for maximum demand generated by the development, with no overspill parking onto the adjacent highway
7) Drainage systems should be designed so as to minimise the risk of pollutants entering the public drainage system
8) Clear signage to direct drivers to the parking area
11.9.3 The Department will not set prescribed standards for lorry parking provision, but will expect developers to produce a reasoned justification for their proposed provision based on the factors listed above.

11.10 **Cycle Parking**

**Non-Residential**

11.10.1 The Department encourages the safe use of cycles and therefore secure, convenient parking for cycles should be included within all new developments. [Active Travel Design Guidance](#) sets out advice for non-residential cycle parking provision. If a developer proposes to use different standards or designs for cycle parking, early contact with the Department is recommended.

11.10.2 Parking for staff and other long-stay users may need to be different from that for short-stay users. Ease of access needs to be balanced with security. Cycle parking provision should be at a level to ensure that the opportunities for cycling are both protected and exploited.

11.10.3 Staff and other long-stay parking should ideally be located within the main building. If this is not possible then it should be located close to entrances and must be closer than any corresponding car parking. It must be secure, covered, well-lit and easily observed. Employers should provide lockers, showers and changing facilities.

11.10.4 Short-stay parking must be close to the appropriate building entrances and closer than car parking. It must be secure, clearly visible, well-signed and easily accessible. It will preferably be covered but not so as to compromise safety and security.

11.10.5 For convenience, and to encourage cycling, it may be preferable on a larger site to have clusters of cycle parking facilities rather than one central point.

11.10.6 Guidance on cycle parking specification can be found in [Active Travel Design Guidance](#).

**Residential**

11.10.7 A minimum provision of one cycle parking space per dwelling is recommended for residential developments. It is anticipated that, in the majority of cases, cycle parking can be adequately accommodated within garages, sheds or other secure storage areas, subject to sufficient internal space being provided.

11.10.8 For developments of flats, communal parking facilities should be provided as an integral part of the development. They should be well lit, fully covered, and secure. Where the developer proposes cycle parking provision that does not comply with these requirements, early discussion with the Department is recommended, with reasoned justification for the approach proposed by the developer.
11.11 Motorcycle Parking

11.11.1 The number and location of motorcycle parking spaces proposed will vary with the nature of the development and whether likely use of the spaces will be for short or long stays. As a broad guide, motorcycle parking at non-residential development should be provided for in the range of 5–10% of the total car parking (i.e. for a 100 space car park, between 5 and 10 motorcycle parking spaces should be provided). The developer should provide reasoned justification for the proposed level of provision within the Traffic Assessment or Traffic Statement, or as part of the planning application submission.

11.11.2 Motorcycle parking should be designed so that riders can adequately secure their vehicle, and the guidance documents referred to above provide advice on this. At developments where long-stay parking is likely, such as employment sites, motorcycle parking should be covered.

11.11.3 Motorcycle parking bays should allow for an effective distance of 2.3 metres and an effective width of 0.9 metres.

11.12 Coach Parking

11.12.1 Some types of development, such as schools and colleges, sports facilities and stadia, and tourist attractions, will require dedicated coach parking to be provided. The Department will not specify standards for the provision of coach parking, but will review requirements on a case by case basis. Early discussion between the developer and the Department is recommended to discuss the methodology to be used to identify the appropriate coach parking requirement.

11.12.2 Where coach parking cannot, due to limitations of the site, be provided at the development itself, then suitable, safe and convenient drop off and pick up points will be required, and coach parking provided at an off-site location. Where this off-site location is not within the developer’s control, financial contribution may be required to secure the provision and operation of the coach parking facilities.

11.13 Refuse Bins

11.13.1 Adequate provision should be made to accommodate storage facilities for refuse bins off the adoptable highway.
12.1 Introduction

12.1.1 Traffic management systems include traffic signals, pedestrian crossings, and other traffic control systems such as variable message signs, closed circuit television (CCTV) cameras, and camera-based vehicle monitoring systems. These systems are maintained and managed by the Department, and are intended to ensure sound traffic management to reduce traffic congestion and improve road safety for all road users.

12.2 Traffic Signals

12.2.1 Where signal control is the preferred option for any junction related to a development, the developer will be required to provide evidence to justify the use of signals, including comparison with alternative junction types.

12.2.2 Contact with the Department at the earliest possible opportunity (pre-planning application submission) is recommended to discuss the implications of the proposals on the highway network.

12.2.3 The current requirement for signal aspects is that they should all be of the LED type. Signal controllers and installation cables will be extra low voltage (ELV) unless otherwise agreed by the Department. Only equipment approved by the Department will be permitted for use on the highway.

12.2.4 Developers should contact the Department to confirm the standards and requirements for the supply, installation and maintenance of traffic signal equipment and associated minor civil engineering works.

12.2.5 One of the aims is to ensure that any new type of junction proposed for the installation on the highway network is the most appropriate type of junction or combinations of
junction type both in the short and long term. Developers and their design
consultants/contractors are encouraged to contact the Department to discuss proposals at
the earliest possible opportunity, ideally prior to the submission of any planning
application.

12.3 **Variable Message Signs (VMS)**

12.3.1 Variable message signs are often used to inform drivers of traffic conditions, car parking
availability or other useful information that might assist them with their journey. On the
local highway network, two main forms of VMS are currently in use:

1) Mobile VMS, generally mounted on trailers, are often used to provide driver
information at the roadside, generally where major roadworks are taking place.
Where a development requires significant roadworks on the existing highway
network, the Department may require the use of mobile VMS to pass information
to drivers in advance of the works taking place. Such a requirement would be
agreed as part of the traffic management plan for the highway works

2) Vehicle Activated Signs (VAS) are used to tackle local traffic management issues,
such as speeding, by seeking to amend driver behaviour through the use of
informative messages. Where such signs are proposed as part of a development,
the type and location of the signs should be agreed with the Department, and a
commuted sum is likely to be required to offset future operational costs associated
with the equipment. Early discussion with the Department is recommended

12.4 **Traffic Signs**

12.4.1 Traffic signs play an important role in assisting road users by:

1) Providing warnings of potential hazards (e.g. a tight bend or steep gradient)
2) Providing instructions that need to be followed (e.g. speed limits or one-way
   streets)
3) Providing clear directions to specific destinations (route signing to villages, towns
   or specific attractions)

12.4.2 The developer will be expected to identify what signs are required as part of the design
process, in accordance with the *Traffic Signs Regulations 2003*. The following documents
will also be useful: *Traffic Signs Regulations and General Directions (HMSO, 2002)* and
Traffic Signs Manual (TSM) published by the *UK Department of Transport*.

12.4.3 The Department is committed to reducing signage clutter. The over-provision of traffic
signs can have a detrimental impact on the environment and can dilute more important
messages. *Traffic Advisory Leaflet 01/13* gives practical advice on reducing sign clutter. It
emphasises that designers should use their engineering judgement and local knowledge
to ensure signing solutions are effective.

12.4.4 The Department will expect that traffic signs will only be specified where the need is
absolute to fulfil the requirements of TSM.
12.4.5 Where works are required on the existing local road network, the Department will expect the design process to include a review of existing signing, and will expect the developer to remove, replace or upgrade road signs as appropriate to accommodate the requirements of the new development.

12.5 **Road Markings**

12.5.1 Road markings provide road users with the following:

1) Warnings of potential hazards (e.g. notifying drivers where it is safe to overtake)
2) Instructions that need to be followed (e.g. indicating where drivers should remain in a specific lane)
3) Clear directions on which lane drivers should use to reach specific destinations, especially on the approach to junctions

12.5.2 The developer will be expected to identify what road markings are required as part of the design process, in accordance with TSM.

12.5.3 The Department will expect road markings to be provided on major roads, notably the primary and distributor route network. On minor roads it may be that certain road markings, such as centre line markings, will not be required. The Department should be consulted on these requirements at an early stage of the design process.

12.6 **Street Furniture and other Roadside Equipment**

12.6.1 A wide range of street furniture and roadside equipment might be required to address specific issues in relation to traffic management. These include:

1) Pedestrian barriers and railings
2) Safety barriers
3) Bollards
4) Verge marker posts
5) Grit bins
6) Cattle grids

12.6.2 Where the need for such street furniture is identified, design should be in accordance with guidance within DMRB and any other appropriate guidance.

12.7 **Road Unadopted Signs**

12.7.1 Once a new road is open so that the public can access it freely, the developer must ensure that contact signs are prominently displayed in locations to be agreed with the Department, generally where the extent of public highway terminates.

12.7.2 The signs must be in accordance with the following specification and include the following:
1. Signs shall be 600 mm x 600 mm
2. The developer’s corporate logo
3. The statement: “The roads on this development have not been adopted and remain the responsibility of (developer’s name). Your initial enquiry should be made to:
   - Company name
   - Address of local office
   - Telephone number/email
   - Contact name
   - Site telephone number/email

12.8 Traffic Calming

12.8.1 Traffic calming can be defined as reducing the adverse effects of vehicular traffic on other road users in the area under consideration, by adapting the speed, volume and behaviour of vehicular traffic using the road or street. This is done by altering the character of the road or street in a way that changes driver behaviour. Suitable guidance on the design of traffic calming measures can be found in MfS and MfS2 as well as in Local Transport Note 1/07 – Traffic Calming.
PART TWO

A Guide to Road Construction in the Isle of Man
13.1 Information

13.1.1 The following information should be submitted by the developer to the Department of Infrastructure. (This information may be included in the developer's application for Planning Permission).

1) A layout plan of the proposed development, showing the extent of the development site, site contours levels at 0.5 m intervals, the location of boundaries and structures within the site and the location and levels of existing utilities, including those within the site as well as those external to the site, that would be affected by the development

2) A plan showing the layout of roads, footpaths, and footways

3) Site investigation details, including California Bearing Ratio (CBR) test results

4) Details of capping and subbase construction

5) Longitudinal sections and cross-sections of roads, indicating the proposed road construction, levels and gradients

6) A plan showing the details of all highway drainage, together with all relevant details required for the design of the drainage system, including drainage design calculations demonstrating the capacity of the proposed pipe networks to discharge the design flows and run-off from the development. If the water table is known or predicted to come within 600 mm of the road surface, details of sub-soil drainage must also be included

7) A plan showing the layout of all public sewers and drains, including sewer and drain sizes and positions of manholes and gullies

8) Proposals for the treatment of existing surface and underground water-courses, boundaries and structures, within the development

9) A plan showing the layout of proposed water mains, including pipe sizes and positions of hydrants and valves

10) Longitudinal sections of proposed sewers and drains, showing levels, gradients, sizes, types and classes of pipe, types of joint, bedding, haunch and surround

11) Longitudinal sections of proposed water mains, showing sizes, types and classes of pipe and positions of valves and hydrants

12) A layout plan with sections of the proposed public lighting system, showing the location of lighting columns, auxiliary micro pillars and ducting and specifying the types of equipment to be provided

13) Where trees have been incorporated into the hard landscaping, detailed plans and sectional drawings of tree pits
13.1.2 Layout plans should be to a scale of not less than 1:500. Sections and elevations should be to a scale of not less than 1:100. All levels shown should be related to Ordnance Data.
Chapter 14   Road Hierarchy

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14.3  New Roads and Street Works Act 1991 ................................................................. 75

14.1  Introduction

14.1.1 The Department has designated each adopted road into a hierarchy based on the following criteria:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Defining Characteristics</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Multi-modal link. Strategic routes linking urban centres and major routes within built up areas</td>
<td>A1, A3, A5, A18, Circular Road, Douglas</td>
</tr>
<tr>
<td>District</td>
<td>Multi-modal link. Important cross-urban routes, key suburban routes</td>
<td>Victoria Road, Douglas</td>
</tr>
<tr>
<td>Local</td>
<td>Multi-modal Link. Local distributor roads linking district routes to local roads</td>
<td>Athol Street, Douglas</td>
</tr>
<tr>
<td>Local Access</td>
<td>Local access routes with limited through function</td>
<td>Majority of network</td>
</tr>
</tbody>
</table>

Table 14.1 Defining Characteristics

14.2  Hierarchy Map

14.2.1 A road hierarchy map is available as a downloadable document on the Highway Services webpage.

14.3  New Roads and Street Works Act 1991

14.3.1 Within the UK, road hierarchy is laid out in Table S1.1 The New Roads and Street Works Act 1991 – Specification for the Reinstatement of Openings in Highways 2012. This document categorises roads on the basis of volume of HGV traffic, expressed in terms of million standard axles (msa). A standard axle is defined as an axle exerting or applying a force of 80 kN. The fourth power law is used to equate the wear caused by each vehicle type to the number of equivalent standard axles, to give the structural wear factor of that vehicle.
14.3.2 Table S1.1 from The New Roads and Street Works Act 1991 – Specification for the Reinstatement of Openings in Highways 2012 is reproduced as Table 14.2.

<table>
<thead>
<tr>
<th>Road Categories</th>
<th>Traffic Capacity (20 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 0</td>
<td>Roads carrying 30 to 125 msa</td>
</tr>
<tr>
<td>Type 1</td>
<td>Roads carrying 10 to 30 msa</td>
</tr>
<tr>
<td>Type 2</td>
<td>Roads carrying 2.5 to 10 msa</td>
</tr>
<tr>
<td>Type 3</td>
<td>Roads carrying 0.5 to 2.5 msa</td>
</tr>
<tr>
<td>Type 4</td>
<td>Roads carrying up to 0.5 msa</td>
</tr>
</tbody>
</table>

Table 14.2 NRSWA Road Categories

14.3.3 For Isle of Man highway purposes the equivalents in Table 14.3 are to be used. The table considers the worst case scenario across the Island in terms of traffic flows:

<table>
<thead>
<tr>
<th>Isle of Man Designation</th>
<th>NRSWA Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Type 2</td>
</tr>
<tr>
<td>District</td>
<td>Type 2</td>
</tr>
<tr>
<td>Local</td>
<td>Type 2/3*</td>
</tr>
<tr>
<td>Local Access</td>
<td>Type 4</td>
</tr>
</tbody>
</table>

Table 14.3 IOM-NRSWA Equivalents

*Type 2 is to be assumed unless a formal agreement for adoption is already in place.

14.3.4 For design and construction purposes, industrial estate roads should be classed as District/Type 2 roads.
15.1 **Introduction**

15.1.1 The structural design of carriageways should be carried out in accordance with the Design Manual for Roads and Bridges (DMRB).

15.1.2 **The design life is to be taken as forty years, unless formally agreed otherwise.**

15.1.3 Structural design has two main elements

1) Foundation design

2) Carriageway design

15.2 **Foundation Design**

15.2.1 Guidance can be found in Interim Advice Note 73/06 Revision 1: Design Guidance For Road Pavement Foundations – Vol 7 Section 1 Part 2: [IAN 73/06](https://example.com/ian7306)

15.2.2 The thickness of subbase and capping layer required is dependent upon the bearing capacity and stiffness of the subgrade as measured by the CBR. Unless the CBR value has been determined by approved laboratory tests, developers will be required to provide the maximum depth of subbase and capping layer, i.e. that corresponding to a CBR value of less than 2%.

15.2.3 Table 5.1 of [IAN 73/06](https://example.com/ian7306) shows a table of estimated CBR values based on soil identification in order to assist developers in deciding whether or not laboratory testing will be worthwhile.
15.2.4 Tests to evaluate CBR values must be carried out within the guidelines set out in IAN 73/06.

15.2.5 The Department will require copies of the test results certified by the testing laboratory.

15.2.6 In order that the finished road should not be damaged by penetrating frost action, it is essential that all materials within 450 mm of the road surface be non-frost susceptible. If the total construction depth is less than 450 mm, then unless the developer proves that the subgrade is non-frost susceptible, the construction depth must be increased to 450 mm, all in non-frost susceptible materials.

15.2.7 The surface of the subbase material, prior to laying the bituminous material, must not have any ruts exceeding 10 mm in depth, measured using a 3 m straight edge.

15.2.8 The capping layer shall consist of Class 6 F2 material in accordance with Clause 613 MCHW Vol 1 Series 600 or recycled material to the satisfaction of the Department.

15.3 Carriageway Design

**Standard Construction Details**

15.3.1 Typical standard construction details can be found on the Department’s website [Standard Construction Details](#).

**Pavement design**

15.3.2 Developers should refer to DMRB Vol 7 Section 2 Part 3 – HD 26/06: Pavement Design and Construction (HD26/06).

15.3.3 Standard cross sections of the various carriageway options are shown in the [Standard Construction Details](#).

**Modular Paving**

15.3.4 Modular paving (block paving) other than in localised areas such as traffic-calming table-tops will not normally be permitted for Type 2 or Type 3 roads.

15.3.5 Areas of modular paving should be designed in accordance with BSEN 7533: Pavements constructed with clay, natural stone or concrete pavers.

15.3.6 Developers should note that the use of sand derived from the processing of china clay is not permitted, nor is the laying of paving blocks direct onto subbase within the carriageway.

**Skidding Resistance and Polished Stone Value (PSV)**

15.3.7 The skidding resistance of the finished surface of a carriageway surfaced with asphaltic materials is governed by the aggregate used in the surface course. The tables contained
in the links below set out the minimum skid resistance and PSV requirements in the respective locations. Guidance on skid resistance can be found in DMRB Vol 7 Section 3 – HD 28/15: Skidding Resistance (HD28/15).

15.3.8 Guidance for PSV can be found in DMRB Vol 7 Section 5 – HD 36/06: Surfacing Materials for New and Maintenance Construction (HD36/06).

Kerbing, Channels, and Ramps

15.3.9 Kerb upstand is dependent on the type of road, as follows:

1) All roads: 125 mm
2) Table top junctions and road humps: 50 mm
3) Shared surface roads and Mews Courts: 40 mm
4) Vehicle crossovers: 25 mm
5) Pedestrian crossing points without tactile paving: 6 mm
6) Pedestrian crossing points with tactile paving: 0 mm

15.3.10 Where numerous vehicle crossing points are to be provided in a shared surface over a small area, the kerb upstand may be reduced to 25 mm over its whole length.

15.3.11 Kerbs to shared surfaces can either be formed with a bullnose kerb or with proprietary block kerbs.

Footways and Vehicle Footway Crossings

15.3.12 The construction of vehicle crossing points over footways for residential use will be different than the standard footway construction as shown in the Standard Construction Details.

15.3.13 For industrial or commercial usage the footway crossover construction will be the same as that for the adjacent carriageway.

15.3.14 Wherever link footpaths intersect with carriageways, dropped crossings shall be constructed as shown on the Standard Construction Details.

15.3.15 Should it be deemed necessary, the Department will require intersecting barriers to be provided on link footpaths to prevent nuisance and danger by cyclists and motorcyclists.

15.3.16 Attention is drawn to requirements regarding safety and visibility where walls and boundary fences exceed 0.6 m high. For the purpose of road adoption, areas within a visibility splay are regarded as part of a private garden and will not be adopted.

15.3.17 More stringent standards may be needed where verge or footway widths are limited and/or where crossings are located on the insides of sharp bends.

15.3.18 For vehicle footway crossings on low-speed roads and in conservation areas, the use of materials which are more sympathetic to the physical environment is encouraged.
Suitable materials are stone flags, natural stone kerbs and channels, concrete blocks or clay paviours.

15.3.19 Developers are reminded of the need to consult the various public utilities regarding their protection requirements in footway and verge crossings. All ducts under such crossings shall be regarded as pipes for highway purposes.

**Statutory Undertaker Services**

15.3.20 Valuable advice can be found in the UK National Joint Utilities Group Guidelines on the positioning of underground utilities apparatus for new development sites at:

http://www.njug.org.uk/publications/

15.3.21 The approved locations of the various services beneath a footway and a service verge, as agreed by the Manx Joint Utilities Group, are shown in the [Standard Construction Details](#).

**Bus Stops**

15.3.22 Where bus stops are required, design guidance has been supplied by Isle of Man Transport and can be found in [Standard Construction Details](#).
Chapter 16  Highway Drainage

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16.1 General

16.1.1 Surface water drainage and foul sewerage are to be designed as separate systems.

16.1.2 There are potentially two adoption authorities for drain and sewer systems:

   1) Manx Utilities Authority (MUA) adopts public sewers
   2) Department of Infrastructure adopts highway drainage systems

16.1.3 Public sewers are to be designed and constructed in accordance with the requirements of the MUA. The developer must enter into an agreement with the MUA, in accordance with Manx utilities legislation and procedures. The Department is not party to this agreement but must be notified by the developer that an agreement is in place.

16.1.4 Highway drains only carry water running off adopted highways and must discharge to either:

   1) A dedicated highway drainage system
   2) A public sewer
   3) A watercourse under The Flood Risk Management Act 2013

16.1.5 It is not permissible to connect property drainage into a highway drain, or to connect highway drainage into a property drainage system.

16.1.6 Gullies for the purposes of collecting surface water run-off from the highway should be positioned within the highway boundary. Layouts with gullies positioned in adjacent parking areas will not be accepted.

16.1.7 Any necessary negotiations regarding discharge of water into private watercourses, or existing piped drainage systems, need to take due regard of riparian issues and the permission of the owners of the water courses or piped systems, and needs to be determined to the satisfaction of the adopting authority before work starts on site.
16.2 **Highway Drainage Design Principles**

16.2.1 There is no requirement in Manx legislation to provide sustainable drainage systems (SuDS), as there is in UK law. Some SuDS may be considered for adoption, but due to their potentially high maintenance costs there may also be a requirement for commuted sums to be provided by the developer. Discussions should be held at a very early stage with the Department if there are proposals to use SuDS in the highway drainage systems.

16.2.2 The Department will not normally adopt soakaways as part of highway drainage. This is due to the anticipated higher maintenance costs, and potential capacity issues with unpredictable weather patterns in the future.

16.2.3 When considering highway drainage, the design should consider the following principles:

   1) Stormwater run-off rates and volumes discharged from highway drainage systems into existing drainage systems, whether watercourses or existing formal systems, should approximate to the site greenfield response over a range of storm frequencies of occurrence (return periods)
   2) Managed run-off on site for extreme events

   This may require:

   1) The peak rate of stormwater run-off to be limited
   2) The volume of run-off to be limited
   3) The assessment of overland flows and temporary flood storage across the site

16.2.4 Rainwater falling on to highway areas must be collected into a highway road gully or approved surface water proprietary system, and must not be allowed to discharge onto private areas. Similarly, private areas (forecourts, parking bays etc.) must not allow water to run off onto the adopted highway areas, but should be collected within private drainage systems, and subsequently discharge into a private or public sewer, subject to agreement with MUA.

16.2.5 Under no circumstances will it be acceptable for a highway or surface water drain or sewer to be connected to a foul sewer system. All development must be constructed using separate foul and surface water drainage systems.

16.2.6 Highway drains carry only water running off adopted highways. They are to be designed in accordance with the DMRB Volume 4, and the latest design manuals and guidance notes published by the Construction Industry Research and Information Association (CIRIA), notably, “Designing for exceedance in urban drainage – good practice (C635)”.

16.2.7 **The design of any highway drainage which the developer intends to be adopted by the Department must be approved by the Department before work proceeds.**
16.3 **Hydraulic Design**

16.3.1 An appropriate flow simulation method based on the Wallingford Procedure should be used for hydraulic design unless otherwise agreed with the Department, e.g. in the case of small developments.

16.3.2 The system should be designed under pipe full conditions to accept the following design storm, i.e. without surcharging above pipe soffit.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites with average ground slopes greater than 1%</td>
<td>1 year</td>
</tr>
<tr>
<td>Sites with average ground slopes 1% or less</td>
<td>2 year</td>
</tr>
<tr>
<td>Sites where consequences of flooding are severe, e.g. existing basements or properties adjacent to new development</td>
<td>5 year</td>
</tr>
<tr>
<td>Impermeability</td>
<td>100%</td>
</tr>
<tr>
<td>Minimum velocity at pipe full flow</td>
<td>1 m/sec</td>
</tr>
<tr>
<td>Roughness value (Ks)</td>
<td>0.6 mm</td>
</tr>
</tbody>
</table>

*Table 16.1 Drainage Design Parameters*

16.4 **Protection Against Flooding**

16.4.1 A system should be designed not to flood any part of the site in a 1:30 year return period design storm.

16.4.2 Any underground storage to be constructed to attenuate the 1:30 event should be sited within the system being offered for adoption. Developers proposing to provide storage over and above the 1:30 year event should enter into early discussions with the Department.

16.4.3 All sewers are designed to not flood in a 1:30 year event, but they will be surcharged. Therefore, when calculating the 1:30 year storage volume for a site, the developer should consider the location of the storage tank for a free flowing discharge.

16.4.4 During extremely wet weather, the capacity of the surface water sewers may be inadequate, even though they have been designed in accordance with *MfMR*. Under such conditions, sewers may surcharge and surface water may escape from those manhole covers and gullies which lie below the hydraulic gradient. Checks should be made to ensure that an adequate level of protection against the flooding of properties internally is achieved and the design adjusted where the required flooding protection is not achieved. This is particularly important on undulating or steeply sloping catchments.

16.4.5 In designing the drainage system, designers should also demonstrate flow paths and the potential effects of flooding resulting from storm events exceeding the design criteria.

16.4.6 Where there are flood risks associated with the site, it is the responsibility of the developer to liaise with the Department and the Land Drainage Authority (the MUA) to...
ensure that all necessary measures are included in the design to prevent flooding of the development, as well as any situation downstream of the development which may have an increased flood risk due to the development. The developer will be required to prove that the measures incorporated in the design are effective, thereby ensuring that the development does not aggravate existing flood problems or create new flooding problems on or off the site.

### 16.5 Climate Change

16.5.1 Climate change is to be accounted for through the precautionary principles recommended in the National Strategy on Sea Defences, Flooding and Coastal Erosion. An additional allowance of 30% over and above present day rainfall figures is required to account for long term climate change.

### 16.6 Drainage Construction Details

16.6.1 Construction details for drainage should comply with Highway Construction Details in the MCHW Vol 3 F Series and the Standard Construction Details.
Chapter 17  General Clauses

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17.1 Testing

Materials and Workmanship

17.1.1 All materials and workmanship shall comply generally with the requirements of the DMRB and MCHW except where otherwise indicated in the MfMR.

Sampling and Inspection

17.1.2 Where directed by the Department, the developer will be required to submit properly representative samples of materials and these will be subject to any tests considered
necessary to prove their suitability. The Department may also take appropriate samples of materials for testing to ensure that they comply with this specification. Any necessary testing carried out will be at the cost of the developer.

**Non-Standard Methods and Materials**

17.1.3 The Isle of Man Government operates a policy of encouraging local industry, and in pursuit of this policy the Department may accept the use of certain materials which do not comply with an approved standard. The Department may require testing, sampling and supplementary evidence to ensure compliance where non-standard methods or materials are to be introduced.

**17.2 Order of Works**

17.2.1 The programme for construction is set out below:

1) All work within the area of carriageway construction below formation level such as drainage, installing statutory undertakers’ mains and service cross connections, manholes for future cabling and street lighting cross connections are to be complete before the construction of carriageway and footway commences
2) Preparation of formation, gully connections, laying of subbase, kerbs* and channels*, base course and binder course
3) Service connections and building works
4) Street lighting installation
5) Remedial works to binder course, kerbs and channels
6) Lay surfacing course to carriageway and footways

*Unless it has been previously agreed that kerbing and channels can be deferred until building work has finished. In any event, kerbs and channels must be installed prior to surface courses being laid

**17.3 Inspection of Works**

17.3.1 The developer, or their appointed representative, is responsible for the day-to-day supervision of the agreed works. Inspections will be carried out by the Department’s representatives as work progresses to check that the works are being constructed in accordance with the agreed drawings and adoption requirements.

17.3.2 The Department representatives must be given access to the works at all times but these visits do not reduce the developers/contractor’s responsibility for supervising the work and making sure that it is carried out in a safe and proper manner to the agreed specification. Developers must not regard the visiting Department’s representatives as their unpaid Clerk of Works.

17.3.3 The Department should be notified at least five working days prior to the commencement of the following stages of work:
General Clauses

1) Entry to site
2) Commencement of highway drainage
3) Preparation of carriageway formation
4) Kerb construction
5) Carriageway base course
6) Carriageway binder course
7) Carriageway surfacing course
8) Preparation of footway formation
9) Footway surfacing course

17.3.4 If, as the result of failure to give adequate notice, the Department representative is unable to inspect construction of the works at any stage, the developer will be required to carry out tests at his own expense to prove to the Department's satisfaction that the works comply with the appropriate standard. Otherwise, on completion the work may not be considered for adoption.

17.3.5 If problems arise with the proposed works, the Department's representatives may discuss possible solutions, but it will remain the responsibility of the developer's representatives to ensure that the works are completed in accordance with the terms of the Section 4 Agreement.

17.4 Maintenance Period

17.4.1 Upon completion of the works, the developer must inform the Department in order that an inspection of the works may be made with a view to commencement of the maintenance period.

17.4.2 A maintenance period (usually twelve months) is required and this will not commence until the whole of the works put forward have been brought into a condition suitable for adoption.

17.4.3 A further inspection of the works will be made prior to the expiration of the maintenance period and the developer will be notified of any remedial works required before adoption can proceed.

17.4.4 Prior to the end of the maintenance period and date of adoption the developer is required to ensure the following actions have taken place:

1) All channels have been mechanically swept to the satisfaction of the Department
2) All roads, footways and cycleways have been swept clean, and are free from dust, mud and foreign material
3) All gully pots have been cleaned, and trapped gullies filled with clean water
4) The developer has provided one copy of a CCTV recording to the Department of each highway drain run, accompanied by a detailed report showing the location, chainage, prevailing weather conditions, date and time of survey
5) All weeds within the hard areas of adopted highway have been removed
17.5 **Final Acceptance**

17.5.1 The surface course to carriageways and footways should not be laid until all building works on the site are substantially complete.

17.5.2 If the binder course has been trafficked by site vehicles, any surface imperfections must be rectified prior to the placement of the surface course. If damage to the binder course exceeds 20% of the surfaced area, the complete binder course layer is to be removed and relaid. On larger, multi-routed developments, the 20% standard will be applied to each individual road, path footway or cycleway and not to the site as a whole.

17.5.3 The Department will not accept scarring of any form, including patching, within the surface course to any highway surface.

17.5.4 In the event that such scarring does occur the Department reserves the right to have the faulty surface type within the whole development resurfaced.

17.5.5 If the scarring has occurred on a side road from a main road within the larger development the Department may, at its discretion, allow the resurfacing to stop at the next joint in the surface course.

17.5.6 If scarring is limited, the Department may at its discretion allow the developer to patch the surface course as required.

17.5.7 Damaged kerbs, channels and edgings shall be removed and replaced. If this results in damage to the carriageway or footway surface this shall be patched to the satisfaction of the Department.

17.6 **Site Works**

**Temporary Diversion of Traffic**

17.6.1 The developer is required to construct temporary diversion ways wherever the works will interfere with existing public or private roads or other ways over which there is a public or private right of way for any traffic, to the approval of the Department. Diversions must be constructed in advance and should be regularly maintained.

**Cleaning of Public Highways**

17.6.2 The developer will be responsible for ensuring that all public highways adjacent to the development site are kept free of dust, mud and foreign material.

**Site Clearance**

17.6.3 Site clearance works are to comply with [MCHW Vol 1 Series 200](#).
General Clauses

Earthworks

17.6.4 Earthworks are to comply with the requirements of MCHW Vol 1 Series 600

Site Strip

17.6.5 All top soil and turf to a depth of not less than 300 mm should be stripped from beneath the whole area of the carriageway and footways, and any of this material which may be required for soiling verges, cuttings or embankments is to be stacked for re-use.

Surface Dressing

17.6.6 Where a surface dressing is required either as a temporary running surface on base course material or as part of the finished surfacing to the surface course, it is to be laid in accordance with Road Note 39 7th Edition and the requirements of the Department.

Use of Pavement Surfaces by Construction Traffic

17.6.7 Construction plant used on pavements under construction should be suitable for the material, conditions and thickness of the courses it traverses so that damage is not caused to the subgrade or pavement courses already constructed.

17.6.8 In the case of concrete blocks and clay paviours, developers should defer block laying until the end of building work. In these circumstances, the procedure is to construct the carriageway up to binder course level, such that a viable running surface is provided for construction traffic.

Concrete and Roadworks

17.6.9 Developers should refer to MCHW Vol 1 Series 1000

Concrete Block Paving and Clay Paving - Sand for Laying Course

17.6.10 Guidance can be found at MCHW Vol 1 Series 1100

Kerbs, Footways, and Verges

17.6.11 The design of footways should be in line DMRB Vol 7 Section 2 Pt 5 HD 39/16 Footway and Cycleway Design.

17.6.12 Construction and installation should be in accordance with MCHW Vol 1 Series 1100: Kerbs Footways and Paved Areas.

17.6.13 Further information can be found in the Department’s Standard Construction Details
General Clauses

Tolerance

17.6.14 The finished surface must be within +/- 6 mm of true surface profile and must be 6 mm above any kerb or channel block or gully frame. Notwithstanding this tolerance, the developer must ensure that no water stands on footpaths or carriageway.

Soiling, Seeding and Turfing of Verges

17.6.15 Guidance for developers is available in MCHW Vol 1 Series 3000

Protection to existing trees

17.6.16 Where there are existing trees on site which are to be retained, all tree protection measures described in the tree protection plan (see MfMR 6.3.8) should be implemented before there is any construction activity on site, including site clearance work.

Protection to existing infrastructure

17.6.17 Where the proposed work impacts on the existing roads and other infrastructure, the developer will be required to undertake a joint inspection prior to work commencing, and will be deemed responsible for any damage caused to the surrounding infrastructure as a result of their failure to protect the Departments assets (see MfMR 22.1.21).
Chapter 18  Highway Structures and Structures over the Highway

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18.1 Technical Approval

18.1.1 Structures which in any way may affect the highway, or the users of the highway, require the Department’s technical approval.

18.1.2 All such proposed structures shall be subject to technical approval as set out in DMRB Vol 1 – Highway Structures: Approval Procedures and General Design Section 1 – Approval Procedures: BD2/12 (BD2/12).

18.1.3 This may include structures proposed for adoption and also those associated with private developments which in any way may affect the highway.

18.1.4 Structures which require technical approval include:

1) Bridges carrying the highway over or under another feature
2) Bridges and culverts crossing the highway with a span greater than 0.9 metres
3) Culverts running along a highway where the culvert has a span greater than 0.9 metres
4) Footbridges and subways carrying pedestrian or cycle routes over or under another feature
5) Tunnels, culverts, walls and embankments where they meet the criteria for adoption set out below
6) All retaining walls, whether retaining the highway or not, which are within 3.5 metres of a highway, and which are, at any point, of a greater height than 1.0 metres above the level of the ground at the boundary or the highway nearest that point, in accordance with the Highways Act 1986 s63

18.1.5 All highway structures must be:
   1) Safe and serviceable in use
   2) Fit for their intended function
   3) Built to an appropriate standard
   4) Constructed so that future maintenance requirements are kept to a minimum, by ensuring this is given full consideration at the earliest possible stage and then throughout the design process

18.1.6 The following are structures which may be adopted by the Department:
   1) Road bridges and culverts with a span greater than 0.9 m
   2) Walls and reinforced earth structures that support the highway and the retained height is greater than 1.5 m, are within a 1:1.5 slope from the edge of the highway, and are built upon the Department’s land
   3) Embankments supporting the highway and any toe walls at their bases

18.1.7 The following would not generally be adopted, but the approval process will need to be followed:
   1) Walls and similar structures above the highway
   2) Walls that support the highway but also form part of a building

18.1.8 All structures supporting the highway, whether they are to be adopted or not, are subject to the technical approval process and procedures.

18.2 Technical Approval Procedure

18.2.1 The technical approval procedure is contained within BD2/12 Technical Approval of Highway Structures. This document forms part of the DMRB.

18.2.2 Technical approval will only be issued after all the procedures and standards have been met.

18.3 Design Requirements

18.3.1 Technical requirements for the design of highway structures will generally comply with the relevant standards and advice notes in DMRB and shall be constructed in accordance with the Specification for Highway Works SHW.
18.3.2 The design life for structures is to be taken as 120 years, unless formally agreed otherwise.

18.4 **Categories and Proposals**

18.4.1 Proposed Structures will be placed in one of four categories according to the criteria detailed within **DMRB Volume 1 Section 1 Part 1 BD2/12** Technical Approval of Highway Structures.

1) Category 0 and 1 structures will require a combined design and check certificate
2) Category 2 and 3 structures will require separate design and check certificates
3) Category 1, 2 and 3 structures will require a full Approval In Principle (AIP) submission
4) Category 0 structures that have departures from Standards may not require a full AIP submission. Developers must engage with the Department if the structure may fall within this criterion

18.4.2 Copies of relevant blank certificates can be obtained from found at Annex C of **BD2/12**.

18.5 **Loading Standards**

18.5.1 The design loading of the structures must be in accordance with the current Highways England standards.

18.6 **Departures from Standards**

18.6.1 Sometimes it is not appropriate or practical to install systems that are fully compliant with the Standards explained within **MfMR**. This is particularly applicable to parapets. Departures from Standards will be considered, providing they are justified and backed with clear evidence. This may include:

1) Road Restraints Risk Assessment (RRRAP)
2) Road Safety Audits
3) Review of accident history

18.7 **Detailing**

18.7.1 Cladding materials should be durable and tied in to the structure.

18.8 **Consents**

18.8.1 If consent is required from a Government or other public body and relevant owners and licensees, this must be received prior to technical approval for any highway structures being granted. Written evidence of relevant consents is a pre-requisite to approval being given.
18.9 **Future Maintenance - Whole Life Costing**

18.9.1 Payment of a commuted sum may be required for any highway structure that is to be adopted. Therefore it is recommended that the developer considers the whole life cost of the proposed structure.

18.9.2 The following should be considered as soon as possible during the design process:

1) The use of integral structures (i.e. without bearings or expansion joints)
2) The use of durable materials such as weathering steel
3) Steel parapets, which can be galvanised and then painted
4) If bearings are required, their life span and how they will be replaced
5) Scaffolding fixing points on larger steel structures to facilitate future inspection and painting
6) Maintenance of confined drainage systems, where proposed
7) Weep holes, which should not drain onto footways causing slip hazard
8) To help deter graffiti, the use of textured concrete finishes, anti-graffiti treatments

18.10 **Access for Inspection and Maintenance**

18.10.1 It is crucial that all structures are easily accessible to enable a comprehensive inspection.

18.10.2 Long culverts are categorised as confined spaces and these should have sufficient ventilation points within the construction. Highway retaining walls will require a 3 metre maintenance strip between the wall and land outside the ownership of the Department.

18.11 **Construction**

18.11.1 The developer should not start construction on any highway structure until technical approval specifically relating to it has been obtained.

18.11.2 The level of supervision and inspection required throughout construction will vary dependent on what is to be built, and so will be determined on a case-by-case basis. This is entirely separate, and additional to, the supervision that the developer should undertake on the works.

18.11.3 Prior to adoption of a structure it is necessary for the developer to supply the Department with a copy of the Construction Compliance Certificate.

18.12 **Health and Safety**

18.12.1 It is important that all structures are compliant with the current CDM Regulations. This includes provision of a full health and safety files and as-built drawings. The developer must supply the Department with copies of the design calculations in an agreed format.
18.13 **Structures over the Highway**

18.13.1 When it is proposed to erect a building (including a bridge or gantry) or part thereof, which overhangs or bridges the adopted or adoptable highway, the Department’s approval must be sought prior to Planning Approval being obtained.

18.13.2 Structures over the highway require a licence under section 69 of the *Highways Act 1986*. The licence will cover requirements for technical approval, structural inspection and maintenance, indemnities and removal of the structure at expiry of the licence. The licence must be in place before any works in the highway or on the structure (including foundations) commence.

18.13.3 On public highways, headrooms and lateral clearances shall conform to DMRB Volume 6 Section 1 Part 2 **TD27/05** Cross-Sections and Headrooms unless formally agreed otherwise.

18.13.4 Where the road is semi-public, such as a shared residents’ parking area, criteria for such approval will be the headroom required for the highest vehicle likely to pass under the building. For most layouts, this will be a fire service vehicle. A realistic figure would be 4.5 m, although the height would be to some extent dependent on the nature and size of the building.

18.13.5 Headroom over footways not subject to vehicle overriding may be reduced to 2.5 metres. There will also be a requirement for any such structure to be set back from the edge of the carriageway. The following constraints may affect the extent of setback or vertical clearance:

1) Traffic visibility (forward visibility, access etc.)
2) Traffic signals and signage
3) Street lighting
4) Maintenance of, and future provision for highway infrastructure and drainage, public utility apparatus and vehicular or pedestrian restraint barriers
19.1 **Street Lighting**

19.1.1 Street lighting of public highways is the responsibility of local authorities. Any proposed lighting scheme must have the relevant local authority's approval before installation.

19.1.2 With the exception of Douglas Borough Council (DBC) and Onchan Commissioners, all local authorities' street lighting systems are managed by MUA, and street lighting systems should be designed in accordance with the MUA requirements.

The standards currently in use by MUA are:

1) BS EN 13201-2: 2015 *Road lighting – Performance requirements*
2) BS 7671: 2008+A3:2015 *Requirements for Electrical Installations. IET Wiring Regulations*

19.1.3 Within the Borough of Douglas, DBC is the public lighting statutory authority. All public lighting designs must comply with DBC current specification in accordance with:

1) BS 5489-1:2013 *Code of practice for the design of road lighting*
2) BS EN 13201-2: 2015 *Road lighting – Performance requirements*
3) BS 7671: 2008+A3:2015 *Requirements for Electrical Installations. IET Wiring Regulations*

19.1.4 Any planned public lighting designs or installations within the Borough of Douglas must be approved by DBC prior to work commencing.

19.1.5 A design service along with a full design and materials specification for public lighting is available from DBC Electrical Section.
PART THREE

Legislation and Procedure for the Adoption of Roads in the Isle of Man & Undertaking of Improvement Works within the Highway
Chapter 20  Adoption

20.1  Introduction

20.1.1 Most roads in the Isle of Man are maintained at the public expense. Those that are not are known as unadopted roads, and there are two main types; those on new developments such as housing estates, and those which have existed for a long time.

20.1.2 Statutory provision does exist for unadopted roads to be adopted, enabling a road in private ownership to become a public road, ensuring it will be managed and maintained by the Department in perpetuity, as part of the public highway network.

20.1.3 New estate roads have long been considered for adoption via the Highways Act 1986, most commonly through agreements made under section 4 of the Act. A new road will be considered by the Department for adoption provided that it meets the necessary criteria.

20.1.4 The Highways Act 1986 also empowers the Department to make up a private street to a standard required for the road to be adopted. The cost of the work is apportioned to the property owners fronting, adjoining or abutting the road, although the Department may make a contribution.
20.2 Adoption Criteria

20.2.1 Generally, the Department will adopt and maintain at the public expense all highway infrastructure that is deemed to offer sufficient benefit to the general travelling public, and has been designed and constructed to appropriate standards in accordance with a previously approved layout.

20.2.2 Criteria for consideration include, but are not limited to:

1) The proposed design and use of the highway
2) The type and number of properties served by the highway
3) The anticipated type and volume of traffic that will use the highway
4) Any future potential for the highway to be used as a through route for the public to access any subsequent adjacent development, and the suitability of the design to serve that purpose

20.2.3 The Department does not adopt all new roads and will not normally consider for adoption:

1) A road that serves 5 properties or fewer
2) A road where the highway drainage is connected to soakaways
3) Land that is used to attenuate surface water run-off
4) Areas landscaped for amenity purposes
5) A road that serves non-residential properties, such as industrial units

20.3 The Adoption Process

20.3.1 Where the criteria for adoption are met and a suitable layout and design can be agreed, developers will be invited to enter into an appropriate adoption agreement. The Highways Act 1986 details a number of methods by which the adoption of new roads, footways and paths may be secured, which are described below.

Section 4 Agreement

20.3.2 This is the preferred method of securing adoption of new highways. Prior to the start of a development, the developer may enter into a legal agreement with the Department under section 4 of the Highways Act 1986. This is usually referred to as a Section 4 Agreement.

20.3.3 The developer agrees to construct the road to a specified standard and dedicate the road as a highway. The Department agrees to adopt the highway to be maintainable at public expense.

20.3.4 The Section 4 Agreement is supported by a Bond, typically provided by a bank, building society, insurance company or the National House Building Council (NHBC). The Bond would be used by the Department to fund the completion of all outstanding road works in the event of the developers failing to complete the road themselves.
20.3.5 The value of the Bond is calculated by the Department based on the estimated road construction costs. On larger developments, consideration will be given to splitting the work and associated Bond into discrete stages.

20.3.6 The proposed design, technical details and specifications must be in accordance with the Department’s requirements, and must be agreed prior to any work commencing on site. See MfMR Section 4 Agreement Guidance.

20.3.7 Throughout the process of road construction, the materials and workmanship will be regularly inspected for compliance with the drawings and specification. A fee is charged to cover the Department’s legal costs and expenses in undertaking inspection of the works.

20.3.8 Following completion of the work, the road is offered up for a final inspection. If the work is satisfactory, a twelve month maintenance period will be commenced, and the value of the Bond can be reduced to reflect the decreased level of risk. The developer remains responsible for the roads during this period, including their maintenance and repair. The roads will be subject to a final inspection at the end of the maintenance period and, if they remain in a satisfactory condition, they will be formally adopted as highways maintainable at the public expense, and the Bond will be released.

20.3.9 The existence of a Section 4 Agreement is revealed on the Department’s Highway Search form which makes prospective property purchasers aware that a Road Bond exists. This provides a level of certainty to buyers that the road will be completed.

**Sections 94 to 98 - Private Street Works Code**

20.3.10 Part VII of the Highways Act 1986 makes provision for the Department to carry out street works to make up an unadopted road. In this situation the associated cost of the work is apportioned to each owner of a property that fronts, adjoins or abuts such a road. In certain circumstances, some cost may be apportioned to properties which, whilst not directly fronting the road, have access to it and are thus likely to benefit from the works.

20.3.11 The Department will not normally consider street works unless at least 50% of the property owners agree to have the work undertaken, and the road adopted on completion.

20.3.12 The Department is empowered to bear a proportion of the expenses of street works, up to a maximum of 50% of the total cost, which results in a proportionate reduction in the liability of individual frontagers.

20.3.13 The procedure for carrying out street works is prescribed in the Act. After the works have been completed, the road becomes a highway maintainable at the public expense under section 3(2)(c) of the Act.

20.3.14 The Department’s leaflet: Street Works A Guide gives further information.
20.4 **Section 4 Agreement Guidance**

20.4.1 The following guidance sets out the key elements for developers and their consultants for reference when making a formal submission for a Section 4 Agreement.

20.4.2 The Department encourages developers to undertake early discussions with all interested parties prior to submission of a planning application. See [MfMR Stage 3: Design and Pre-application engagement](#).

**General Requirements**

20.4.3 Before entering into a Section 4 Agreement, the developer must:

1) Obtain full planning permission for the development, including approval of any reserved matters relating to the works. Confirmation will be required that the submitted layout has planning approval and conforms to all planning requirements.

2) Be able to prove title to any and all land to be dedicated as highway, or the owner of the land must be willing to be party to the Section 4 Agreement for the purpose of dedication.

3) Confirm that there are no restrictive covenants assigned to the land relating to construction of a road.

4) Provide evidence of all necessary easements. For example, any section of highway drain that is not positioned within the existing or proposed highway.

5) Confirm that the drainage proposals are acceptable to the Manx Utilities Authority, and that the necessary agreements have been entered into. Only drains laid for the sole purpose of discharging surface water from the highway will be adopted. Where private surface water run-off (e.g. roof or yard water) discharges into the highway surface water system, the status of the system changes from that of a highway drain to a public surface water sewer.

6) Submit their proposals for technical review by the Department.

20.5 **Technical Review**

20.5.1 The technical review process involves the developer or their agent submitting drawings, calculations, road safety audits and other relevant information to the Department for acceptance. The review is an iterative process, and can typically take several months to complete. The timescale is dependent on the quality of the proposed design and the nature of the works.

20.5.2 Information should be submitted in both electronic and hard copy format.

20.5.3 All works should be prepared and designed in accordance with the following, as appropriate:

1) Design Manual for Roads and Bridges [DMRB](#)


3) [MfMR](#)
20.5.4 The following information should be submitted along with any other relevant supportive drawings, documentation and information to assess the proposed design:

1) Information Schedule
   - A 1:1250 scale Site Location Plan showing scheme extents, existing road network and north point (Note that the scale of the plan may need to be revised to suit the size/nature of the scheme)
   - A topographical survey

2) Detailed Design – Carriageway:
   - Stage 1 and stage 2 road safety audits carried out by an accredited safety audit team that is independent from the designers
   - 1:250 scale geometrical design plans, including a contoured plot of the carriageway surfaces to assist drainage check
   - Longitudinal sections – scale 1:500 horizontal, 1:50 vertical with proposed levels, existing levels and chainage
   - Cross-sections – scale 1:100 horizontal, 1:100 vertical with proposed levels, existing levels and chainage
   - Typical construction details – scale 1:20 typically
   - Carriageway construction thickness design calculations using current and predicted traffic data contained in the Design and Access Statement or the Transport Assessment/Statement
   - Footway surface finishes including tactile paving layouts – scale 1:500 with 1:100 insets where required
   - Details of unusual or bespoke materials
   - Landscape drawings if applicable

3) Detailed Design – Drainage:
   - Proposed surface water drainage layout showing road gully and manhole locations, and intended outfall location
   - Longitudinal section of main drain runs – scale 1:500 horizontal, 1:50 vertical with proposed and existing invert levels, proposed and existing ground levels, pipe diameters, gradients and offsets/chainage
   - Drainage design calculations showing assumptions for impervious areas, rainfall intensities and design return period for design and surcharge checks
   - Ground investigation data and existing groundwater regime along proposed drain runs
   - Manx Utility Authority approvals for drainage outfalls

4) Traffic Signs, Carriageway Markings and Traffic Signals:
• Traffic signs plan and associated sign schedules
• Carriageway markings plan and associated schedule
• Electrical equipment/cabling plan (for bollards, lit signs, etc.) and power supplies
• Traffic signals layout plan showing pole locations, cable and ducting routes, chamber locations, detector loop locations, controller/feeder pillar positions, power supplies

5) Statutory Undertakers Services:
• Existing Statutory Undertakers apparatus locations
• Proposed Statutory Undertakers apparatus diversion and/or protections

6) Geotechnical Information:
• Initial ground investigation proposals
• Desk study information including preliminary borehole work ground investigation including detailed proposals with borehole locations, long sections and laboratory testing philosophy
• Factual report Interpretative report including calculations
• Earthworks design including drawings and specification and structural foundation design
• Specification and scheme specific appendices
• Any other information that Department may reasonably require

20.5.5 If appropriate soils data is not submitted with the application, a California Bearing Ratio (CBR) design value of <2% must be assumed in order to determine the required subbase depth.

20.5.6 CBR testing will be required to be undertaken on site as work progresses to confirm results of initial ground investigation work.

20.6 The Section 4 Agreement

20.6.1 The Section 4 Agreement will be drafted by the Department.

20.6.2 The following information should be submitted by the developer for inclusion with the Section 4 Agreement:

1) A schedule of plans pertaining to the proposed works
2) An A3 plan to the layout with planning approval showing the extent of the proposed highway to be adopted with:

• Carriageways, footways or shared surfaces coloured yellow
• Highway verges coloured light green
• Public open spaces (which will not be adopted by the Department) coloured dark green
• Highway only drainage coloured blue
20.6.3 Once the Section 4 Agreement has been compiled, the Department will normally send three copies to the developer for signature by the developer and the surety. All three signed copies should be returned to the Department for signature by an authorised person. The Department will retain one signed copy, and return two signed copies to the developer; one for retention by him and one for onward distribution to the surety.

20.7 **Construction Work**

20.7.1 The Department must be notified, in writing, at least five days prior to the commencement of any construction work.

20.7.2 Construction work should not commence until the Section 4 Agreement has been signed by all parties, and all fees and payments have been received by the Department.

20.7.3 Any work required to be carried out on the existing highway will require a separate Section 109A Agreement. See MfMR [Section 109A Guidance](#).

20.7.4 The developer should construct the works strictly in accordance with the agreed drawings and specification. Any proposed changes must be submitted in writing and agreed with the Department before they are commenced.

**Timescale**

20.7.5 The works must be completed within the timescale specified in the Section 4 Agreement.

20.7.6 If the developer does not complete the works within the specified time limit, the Department may agree an extension of time of up to three years. This may require additional administration and inspection fees, and could necessitate an increase in the level of Bond in support of the agreement.

**Base course certificate**

20.7.7 The base course certificate will be issued once the following works have been satisfactorily completed:
Adoption

1) All highway only drainage
2) All other drainage within the highway
3) All kerb foundations
4) Carriageway subbase
5) Carriageway base course

Provisional certificate

20.7.8 The provisional certificate will be issued at the commencement of the maintenance period once:

1) The works have been substantially completed and found to be satisfactory
2) Any planted, grassed or landscaped areas that are to be adopted have been fully planted
3) Any variations to the areas originally dedicated as highway maintainable at public expense have been included in a supplemental agreement
4) A stage 3 road safety audit has been completed and all recommendations addressed

20.7.9 On issue of the provisional certificate, the amount of Bond may be reduced to 10% of the bond value.

20.7.10 The developer is responsible for maintaining the road works for the maintenance period specified in the Section 4 Agreement (usually a minimum of 12 months).

Final certificate

20.7.11 The final certificate will be issued once the following actions have taken place:

1) Any remedial works identified have been completed
2) Any commuted sums due have been paid
3) A stage 4 road safety audit has been completed and all recommendations addressed
4) Suitable as-built drawings have been provided preferably in an electronic form on CD
5) The Health and Safety File, produced in accordance with the Construction (Design and Management) Regulations 2003, has been provided in an electronic format

20.7.12 On issue of the final certificate, the Department will:

1) Adopt all areas dedicated within the Section 4 Agreement to be maintainable at public expense
2) Write to the developer and the surety confirming that the Bond may be cancelled

20.7.13 If at the time of issue of the Final Certificate any plots of land remain undeveloped or any buildings remain uncompleted, the developer shall pay to the Department a sum estimated to be the cost of any remedial works likely to be needed following completion.
As-built drawings and information

20.7.14 Following construction of the works, drawings must be provided to confirm the ‘as-built’ layout. The drawings should accurately reflect what has been constructed on site and show gully locations, surface boxes and street furniture positions, and include any alterations to the road agreed layout.

20.7.15 Manhole record cards should be provided for all highway only drain runs.

Fees

20.7.16 The Department makes a charge for the work involved in:

1) Assessing the proposals submitted for technical review
2) Preparing and managing the Section 4 Agreement
3) Inspecting the works on site as construction proceeds

20.7.17 The charge is normally a fixed percentage of the estimated cost of the total roadworks, as calculated by the Department. An additional fee may be charged for any supplemental agreement, or if the works are not completed with the agreed time limit.

Commuted Sums

20.7.18 The Department wishes to give developers flexibility in their choice of materials and layouts, and promote innovative design solutions, without placing undue burden on taxpayers. The Department may therefore require commuted sums to cover maintenance of such items as:

1) Highway structures
2) Traffic signals
3) Non-standard materials
4) Additional areas which are not required for the safe functioning of the highway
5) Non-usual or additional street furniture
6) Traffic calming features

20.7.19 The above list is not exhaustive.
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21.1 Introduction

21.1.1 Where developments require the alteration of the existing public highway, an agreement under Section 109A of the Highways Act 1986 will be required. Such an agreement provides a structured procedure for the technical approval and inspection of the works, and ensures that the integrity of the Department’s existing assets is not compromised.

21.1.2 Where the scope of the works is small in nature and involves minimal disruption of the highway, the use of a minor agreement may be considered sufficient to minimise cost and streamline the process. Where works are of a more substantial nature and there is an associated Section 4 Agreement, or where the scope of the proposed work is extensive and potentially disruptive to the expeditious movement of traffic, a full Section 109A Agreement will be required.

21.2 Technical Review

21.2.1 The following guidance provides details of Department requirements in respect of the construction of highway works and the technical details to enable the Department to accept the proposed highway works and for the Section 109A Agreement to be progressed.

21.2.2 All works should be prepared and designed in accordance with the following, as appropriate:

   1) Design Manual for Roads and Bridges DMRB
Section 109A Guidance

3) MfMR
4) The Traffic Signs (Application) Regulations 2003
5) Construction (Design and Management) Regulations 2003
6) Manx Sewers for Adoption

21.2.3 The following information should be submitted along with any other relevant supportive drawings, documentation and information to assess the proposed design:

1) Information Schedule
   - A 1:1250 scale Site Location Plan showing scheme extents, existing road network and north point (Note that the scale of the plan may need to be revised to suit the size/nature of the scheme)
   - A topographical survey

2) Detailed Design - Carriageway:
   - Stage 1 and stage 2 road safety audits
   - 1:250 scale geometrical design plans, including a contoured plot of the carriageway surfaces to assist drainage check
   - Longitudinal sections – scale 1:500 horizontal, 1:50 vertical with proposed levels, existing levels and chainage
   - Cross-sections – scale 1:100 horizontal, 1:100 vertical with proposed levels, existing levels and chainage
   - Typical construction details – scale 1:20 typically
   - Carriageway construction thickness design calculations using current and predicted traffic data contained in the Design and Access Statement or the Transport Assessment/Statement
   - Footway treatments including tactile paving layouts – scale 1:500 with 1:100 insets where required
   - Surface finishes drawing – scale 1:500 or larger
   - Landscape drawings if applicable

3) Detailed Design - Drainage:
   - Proposed surface water drainage layout showing road gully and manhole locations, and intended outfall location
   - Longitudinal section of main drain runs – scale 1:500 horizontal, 1:50 vertical with proposed and existing invert levels, proposed and existing ground levels, pipe diameters, gradients and offsets/chainage
   - Drainage design calculations showing assumptions for impervious areas, rainfall intensities and design return period for design and surcharge checks
   - Ground investigation data and existing groundwater regime along proposed drain runs
   - Manx Utility Authority approvals for drainage outfalls

4) Traffic Signs, Carriageway Markings and Traffic Signals:
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- Traffic signs and carriageway markings plan and associated sign schedules
- Electrical equipment/cabling plan (for bollards, lit signs, etc.) and power supplies
- Traffic signals layout plan showing pole locations, cable and ducting routes, chamber locations, detector loop locations, controller/feeder pillar positions, power supplies

5) Statutory Undertakers Services:
- Existing Statutory Undertakers apparatus locations
- Proposed Statutory Undertakers apparatus diversion and/or protections
- Provision for Statutory Undertakers apparatus if site is to be developed

6) Geotechnical Information:
- Initial ground investigation proposals
- Desk study information including preliminary borehole work ground investigation including detailed proposals with borehole locations, long sections and laboratory testing philosophy
- Factual report Interpretative report including calculations
- Earthworks design including drawings and specification and structural foundation design
- Specification and scheme specific appendices
- Any other information that Department may reasonably require

21.3 Construction of the Highway Works

Commencement

21.3.1 No construction work affecting the highway should commence until:

1) The Section 109A Agreement is in place
2) Written confirmation has been received by the Department that the Health and Safety at Work Inspectorate have been notified that the developer is the client for the works for the purposes of the Construction (Design and Management) Regulations 2003
3) Notice in writing to the Department of the intention to commence construction, or begin it again, in accordance with the following:

- Works on the highway of ten or more days duration – three months’ notice required
- Works on the highway of less than ten days duration – three weeks’ notice required
- Temporary Traffic Regulation Orders (road closures etc.) - six weeks’ notice required
Contractor Approval

21.3.2 Any works must be constructed by a government registered contractor (including sub-contractors) who has relevant experience and capabilities.

Contractor Insurance Indemnity

21.3.3 The Department must be indemnified against any claims by third parties arising from the highway works. The contractor must provide the Department with written evidence that they have a minimum of £10 million public liability insurance with no limit on the number of claims.

Pre-start meeting

21.3.4 A pre-start meeting should take place between representatives of the developer the contractor and the Department prior to any works taking place.

Timescale

21.3.5 Once work is commenced it is the responsibility of the developer to complete the works to the Department’s satisfaction within a reasonable period in order to minimise any disruption to highway users.

Site Inspection

21.3.6 The developer/contractor is responsible for the day-to-day supervision of the highway works. The Department will only inspect the works to check that they are being constructed in accordance with the approved details, and the Department’s requirements.

21.3.7 The Department representatives must be given access to the works at all times but these visits do not reduce the developers/contractor’s responsibility for supervising the work and making sure that it is carried out in a safe and proper manner.

Health and Safety

21.3.8 All aspects of the Construction (Design and Management) Regulations 2003 must be complied with and the Department must be indemnified against all claims, liabilities and actions if they are not.

21.3.9 Full details of any traffic management proposals for the construction of the works should be submitted to the Department for approval. Submission date should be at least 6 weeks prior to date if temporary traffic regulation orders are required.

21.4 Completion of the Highway Works

21.4.1 When the works have been completed the developer should give notice to the Department and a provisional certificate of completion will be issued subject to the following:
Section 109A Guidance

1) A stage 3 road safety audit has been submitted
2) The works have been substantially completed to the Department’s satisfaction
3) Landscaped areas, grassed areas, trees, shrubs etc. in visibility splays that are intended to be adopted by the Department have been fully planted and established
4) A joint inspection between representatives of the developer, the contractor and the Department has been carried out and no significant defects have been identified; or any defects identified have been agreed in writing to be rectified to the Department’s satisfaction

21.4.2 Upon issue of the provisional certificate of completion the Department will write to the Planning and Building Control Directorate confirming the highway works have been completed.

21.4.3 The developer will be responsible for maintaining the highway works for twelve months to allow for any defects in the works to become apparent after they are brought into use.

21.4.4 A final certificate of completion will be issued after the maintenance period has expired subject to the following:

1) A joint inspection between representatives of the developer, the contractor and the Department has been carried out and any defects identified will be issued by the Department as a list of remedial works which then must be completed to the Department’s satisfaction within an agreed time period
2) The highway works and any new adoptable areas have been maintained to the Department’s satisfaction during the maintenance period
3) As-built drawings have been provided, preferably in an electronic form on CD
4) The health and safety file, produced in line with the Construction (Design and Management) Regulations 2003, has been provided in an electronic form on CD
5) A stage 4 road safety audit has been submitted
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22.1 Introduction

22.1.1 It is an offence under the Highways Act 1986 to carry out any works within the public highway without permission of the Department and no construction work affecting the highway can commence until the Section 109A Agreement has been signed.

22.1.2 The following are a list of conditions and informative notes that must be adhered to when carrying out work on the highway:

Approval to work within existing highway

22.1.3 Planning consent is not consent to work in the highway. To carry out any form of work in the public highway, approval must first be obtained from the Department.

Notice periods

22.1.4 Notwithstanding any discussions that take place with representatives of the Planning or the Department, the following notice periods for works affecting the highway should be borne in mind:
Working on the Highway

1) Works on the highway of ten or more days duration – three months’ notice required
2) Works on the highway of less than ten days duration – three weeks’ notice required
3) Temporary Traffic Regulation Orders (road closures etc.) – four weeks’ notice required

Inspection of the works

22.1.5 The Department representatives shall have unrestricted access to the site at all times whilst works are proceeding for the purpose of inspecting the works, and in accordance with site rules. Such visits do not absolve the developer from his responsibility for supervising the works and making sure that they are carried out in a safe and proper manner. Any unreasonable restrictions placed on the Department representatives may delay or even preclude certain roads from adoption.

22.1.6 Any works carried out and/or covered up without approval will be considered suspect and the developer may be required to open up the works, take cores or dig trial holes at his own expense to determine the quality of the work to the Department’s satisfaction.

Temporary access

22.1.7 No access to the site, other than that shown on the approved drawings, shall be provided from an existing highway without the Department’s prior written approval and the agreement of any necessary temporary signing and the routing of heavy construction traffic to the site.

Notice boards and signs

22.1.8 No advertising/direction signs are to be erected on the public highway or within visibility splays or affixed to highway street furniture.

Scaffolding/hoarding

22.1.9 Any hoarding to be erected on public highway will require a hoarding permit and a minimum of seven days’ notice is required.

Occupation of the Highway

22.1.10 Occupation of the highway will require a permit and a minimum of seven days’ notice.

22.1.11 The Department may charge for occupation of the highway.

Road closures and other Temporary Traffic Regulation Orders

22.1.12 A minimum of 6 weeks’ notice is required by the Department to implement temporary Traffic Regulation Orders.
22.1.13 Where a road is to be closed, advance notification signs should be placed at the closure location at least one week before commencement of the closure.

Residents/ businesses affected by the works

22.1.14 Any residents and/or businesses that are in close proximity or are likely to be affected by the construction works should be notified in advance by way of a letter drop. The content of the letter and extent of distribution shall be agreed with the Department prior to delivery.

Traffic safety and management

22.1.15 Where the works involve any form of temporary traffic management it must be agreed in consultation with the Department and meet the requirements of Chapter 8 of the Traffic Signs Manual.

22.1.16 The costs of the provision of all temporary traffic management including roads signs, temporary traffic signals, and temporary Traffic Regulation Orders shall be borne by the developer.

22.1.17 Contact details of the nominated representative of the developer, who must be available at all times in case of emergency, must be provided to Department and the Police.

Private and publicly owned apparatus, service or supplies

22.1.18 The developer should be satisfied as to the exact position of any Statutory Undertakers, other statutory bodies and other publicly and privately owned apparatus, services and supplies affected by the works and take all measures required for the management and protection of such apparatus.

22.1.19 The developer is responsible for all costs and arrangements for protecting, altering, removing or adding to any privately or publicly owned apparatus, service or supplies affected by the work.

22.1.20 The Department has the right to dictate the route to be taken when placing apparatus in the highway.

Damage to existing highway

22.1.21 Prior to commencement of any works a joint inspection between representatives of the developer and the Department of the condition the existing footways/carriageways within the vicinity of the site should be carried out.

22.1.22 The developer is responsible for any damage to existing roads, footways, footpaths, public rights of way, verges, drains and apparatus caused by traffic conditions that have arisen from the transport of workers, materials or plant to or from the works, or because of the diversion of traffic from their customary routes as a result of the construction of
Working on the Highway

the highway works. The Department is empowered to recover expenses incurred in repairing such damage under Section 7A of the **Highways Act 1986**.

22.1.23 The developer should temporarily sign and guard and/or repair and make good without delay all resulting damage to the satisfaction of the Department; or shall pay for the signing and guarding and/or repairs carried out on the instructions of the Department.

**Cleaning of vehicles and site maintenance**

22.1.24 The developer must ensure that the site is maintained in a clean and safe condition and that all roads, footways etc. used by the public or for access to occupied dwellings are free from mud, filth and debris.

22.1.25 The developer must ensure that vehicles leaving the site do not deposit mud or debris on to the highway and should provide such materials, labour and equipment to ensure compliance.

**Skips or material deposited on the highway**

22.1.26 The placing of a skip or any materials on the highway will require a permit from the Department.

**Road Openings**

22.1.27 The term road opening refers to a situation where the public highway must be opened, or excavated, for the installation of a utility service such as water, drainage, telecoms, gas, etc.

22.1.28 The utility companies have a statutory right to install their services within the public highway, but they must inform and seek the approval of the Department before doing so (**Highways Act 1986** s56 Road Works Code and Schedule 4).

22.1.29 The Department may also allow private services to be installed within the highway (**Highways Act 1986**, s75 Placing etc., of certain apparatus in or under highways, and Schedule 4).
Glossary

**Advance Payments Code** (APC) – a legal requirement under the [Highways Act 1986](https://www.gov.uk/government/publications/highways-acts), the APC is a requirement for security (generally in the form of a Bond or a cash payment) to protect purchasers of property within a development from having to fund the completion of development roads and footpaths to adoptable standard in the event that a developer fails to complete these works. APC applies to all residential or commercial developments as soon as a developer receives Building Regulations Approval or an Initial Notice is issued.

**Conservation Area** – a statutory designation that can be applied to an area within a town or village that is of special importance due to the grouping of historic buildings within a particular setting.

**Department of Infrastructure (the Department)** – a department of the Isle of Man Government with statutory duties under various legislation for the management of the local transport network and for ensuring the safety of the public when using the network.

**Developer** – for the purposes of this document, the term developer is used to refer to any person or organisation proposing to undertake development, considering submitting a planning application, or implementing the development for which a planning approval has been obtained.

**Development Plan** – consists of a Strategic Plan and one or more Area Plans. It is the Department’s intention to prepare four Area Plans for the South, East, North and West of the Island. Strategic, Area and Local Plans can be found in the [Planning and Building Control Library](https://example.library.gov.uk).

**Highway Services Division** – a division of the Department of Infrastructure.

**Planning and Building Control Directorate** – the authority with statutory responsibility for the management of the planning process, including the determination of planning applications submitted for new development.

**Area Plan** – the plan for the future development of the local area, drawn up by the Planning and Building Control Directorate in consultation with the community.

**Movement status** – can be expressed in terms of traffic volume and the importance of the street, or section of street, within a network. Movement status should be considered in terms of all modes of movement, including vehicle traffic, pedestrian and cycle flows, and public transport. Movement status can vary along the length of a route.

**National Heritage Area** – any protected areas considered to be of national importance, further information on which can be found in the [Conservation Policy](https://example.gov.uk/conservation-policies).

**Place status** – denotes the relative significance of a street, junction or section of a street in human terms. The most important places will usually be near the centre of any
settlement or built-up area, but important places will also exist along arterial routes, in
district centres, local centres and within neighbourhoods. In new developments, locations
with a relatively high place function would be those where people are likely to gather and
interact with each other, such as outside schools, in local town and district centres and
near parades of shops.

Road – a thoroughfare whose main function is to facilitate the movement of motor
vehicles.

Road Safety Audit – an evaluation of a highway improvement scheme during design, at
the end of construction, and post-construction, to identify road safety problems and to
suggest measures to eliminate or mitigate any concerns. Road safety audits are
undertaken by teams of specialists trained in the skills of collision investigation and/or
road safety engineering.

Section 4 Agreement – an agreement entered into by the Department with a land
owner and/or developer that sets out the obligations in relation to the adoption of
highway and transport infrastructure resulting in the Department taking on future
management responsibilities for the infrastructure.

Section 13 Agreement – an agreement entered into by the Planning and Building
Control Directorate with a land owner and/or developer that sets out the obligations upon
the parties in relation to a development that has secured planning permission. The
obligations could involve physical works or financial contributions, depending upon the
nature of the development, and the associated measures required to make that
development acceptable to the Planning and Building Control Directorate and the
Department.

Section 109A Agreement – is a legally binding agreement between the Department and
the developer to ensure that the work to be carried out on the highway is completed
to the standards and satisfaction of the Department.

Street – Streets have an important public realm beyond those functions related to motor
traffic. They are typically lined with buildings and public spaces and, whilst facilitation of
movement is still a key function, they normally support a range of social, leisure, retail
and commercial functions.

Sustainable Drainage Systems (SUDS) – drainage systems designed to minimise the
amount of water that leaves the area being drained through a range of techniques in
order to retain water within a development site. This includes design and construction of
sufficient storage capacity through the use of balancing ponds and wetland areas to
reduce the impact of flooding.

Transport Assessment – a comprehensive and systematic process that sets out
transport issues relating to a proposed development. It identifies what measures will be
taken to deal with the anticipated transport impacts of the scheme, as well as measures
to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport.

**Unilateral Undertaking** - a commitment by a landowner and/or developer to meet specific obligations in relation to a development that has secured planning permission. As with a section 13 Agreement, these obligations could involve physical works or financial contributions, depending upon the nature of the development and the associated measures required to be taken.
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Contact Details

Department of Infrastructure
Highway and Asset Management, Sea Terminal, IM1 2RF ...................... 01624 850000
Email ................................................................. highwaysdevelopmentcontrol@gov.im
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Email ................................................................. enquiries@highways.gov.im

Department of Environment Food and Agriculture
Murray House, Mount Havelock, Douglas IM1 2QF
Planning ........................................................... 01624 685950
Email ................................................................. planning@gov.im
Building Control .................................................. 01624 686446
Email ................................................................. buildingcontrol@gov.im

Isle of Man Fire and Rescue Service
Fire Brigade Headquarters, Tromode Road, Douglas IM2 5PA .............. 01624 647300

Douglas Borough Council
Town Hall, Ridgeway Street, Douglas IM1 1EP .................................. 01624 696300
Email ................................................................. enquiries@douglas.gov.im

Manx Utilities
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Email ................................................................. enquiries@manxutilities.im

Manx Telecom
IoM Business Park, Cooil Road, Braddan IM99 1HX ......................... 01624 624624
Email ................................................................. CSA@manxtelecom.com

Manx Gas
Murdoch House, South Quay, Douglas IM1 5PA .............................. 01624 644444
Email ................................................................. service@ieg.local