

Design Manual for Roads and Bridges



General Principles & Scheme Governance

General Information

GG 000

Design Manual for Roads and Bridges index

(formerly GG 000 28-Jan-2021)

25-Feb-2021

Summary

This document contains the current index of Design Manual for Roads and Bridges (DMRB) documents as of the date of publication, superseding the previous version of GG 000. A full summary of changes incorporated is included within the introduction.

Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Highways England team. The email address for all enquiries and feedback is: Standards_Enquiries@highwaysengland.co.uk

This is a controlled document.

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1 RELEASE NOTES

Version	Date	Details of amendments
25-Feb-2021	25-Feb-2021	Amends and supersedes index dated 28-Jan-2021

WITHDRAWN

2 FOREWORD

2.1 Publishing information

This document is published by Highways England.

This document superseded GG 000 28-Jan-2021, which is withdrawn.

2.2 Contractual and legal considerations

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

WITHDRAWN

3 INTRODUCTION

Changes introduced in this revision of the index of DMRB documents.

3.1 Published

1. **CG 300 TAS February 2021** - Generic Technical Approval Schedule (TAS)
Public Notes: February 2021
Supersedes: 1. CG 300 TAS January 2021 - Generic Technical Approval Schedule (TAS)
2. **CS 228 HE Crash Model v1.02** - Highways England Crash Model
Public Notes: As an accessory to CS 228 this is an excel based tool called the CS 228 HE Crash Model.
3. **GG 000 25-Feb-2021** - Design Manual for Roads and Bridges index **0.1.1**
Public Notes: Amends and supersedes index dated 28-Jan-2021
Supersedes: 1. GG 000 28-Jan-2021 - Design Manual for Roads and Bridges index **0.1.1**

3.2 Partially Withdrawn

There were no documents partially withdrawn as part of the publication.

3.3 Withdrawn

1. **CG 300 TAS January 2021** - Generic Technical Approval Schedule (TAS)
Public Notes: No public notes given
Superseded By: 1. CG 300 TAS February 2021 - Generic Technical Approval Schedule (TAS)
2. **GG 000 28-Jan-2021** - Design Manual for Roads and Bridges index **0.1.1**
Public Notes: No public notes given
Superseded By: 1. GG 000 25-Feb-2021 - Design Manual for Roads and Bridges index **0.1.1**

3.4 Amended

There were no documents amended as part of the publication.

4 SCOPE

This document lists, by discipline and asset lifecycle, an index of the documents in the DMRB, their legacy decimal references and date of issue. All information is correct as of February 2021.

Legacy decimal references are expressed with reference to the volume, section and part of the DMRB, which was the format used to structure the DMRB prior to March 2020. This information is included in the short-term to aid the transition to the new DMRB structure and will be phased out in future revisions.

WITHDRAWN

5 INDEX OF DMRB DOCUMENTS

5.1 General Principles & Scheme Governance (G* 101-999)

5.1.1 GG - General Information

Document Reference	Title	Date of Issue	Legacy Decimal Reference
GAMP	General Asbestos Management Plan	May-11	0.2.4
GG 000 25-Feb-2021	Design Manual for Roads and Bridges index	Feb-21	0.1.1
GG 101	Introduction to the Design Manual for Roads and Bridges (DMRB)	Jun-18	0.1.2
GG 102	Quality management systems for highway works	May-19	0.2.1
GG 103	Introduction and general requirements for sustainable development and design	Jul-19	0.2.2
GG 104	Requirements for safety risk assessment	Jun-18	0.2.3
GG 105	Asbestos management	Jan-20	0.2.4
GG 115	Requirements for works on the hard shoulder and road side verges on high speed dual carriageways	Mar-20	0.2.3
GG 116	Requirements and guidance on temporary traffic management short term lane closures for relaxation works, types 0, 1 and 2	Mar-20	0.2.3
GG 119 Revision 2	Road safety audit	Jan-20	5.2.2
GG 128	Requirements for reporting incidents, events and undesirable circumstances: health, safety, wellbeing, structural and environmental	Feb-20	0.2.3
GG 142	Walking, cycling and horse-riding assessment and review	Nov-19	5.2.5
GG 182 Revision 1	Major schemes: Enabling handover into operation and maintenance	Mar-20	0.2.3
GG 184	Specification for the use of Computer Aided Design	Feb-20	0.2.3
GG 903	Customer service standard for diversion routes for unplanned events	Aug-20	

5.1.2 GA - Appraisal

There are no Appraisal documents associated with this discipline.

5.1.3 GD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
GD 300 Revision 2	Requirements for new and upgraded all-purpose trunk roads (expressways)	Apr-20	0.2.5
GD 301	Smart motorways	Oct-20	
GD 302	Smart motorways: Upgrading hard shoulder running to all lane running operation	Oct-20	
GD 304 Revision 2	Designing health and safety into maintenance	Mar-20	0.2.5
GD 368	Infrastructure requirements for emergency access and egress from motorway and all-purpose trunk roads	Mar-20	0.2.5

GD 904	The use of highest safe speed limits including advice on using 60mph at/through road works	Nov-20	
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5.1.4 GC - Construction

There are no Construction documents associated with this discipline.

5.1.5 GM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
GM 701 Revision 1	Asset delivery asset maintenance requirements	Mar-20	0.2.6
GM 702	Operational requirements for network occupancy	Apr-20	
GM 703	Operational requirements for incident management	Apr-20	
GM 704	Operational requirements for severe weather	Apr-20	

5.1.6 GS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
GS 801 Revision 1	Asset delivery asset inspection requirements	Mar-20	0.2.7

5.1.7 GZ - Disposal

There are no Disposal documents associated with this discipline.

5.2 Sustainability & Environment (L* 101-999)

5.2.1 LG - General Information

There are no General Information documents associated with this discipline.

5.2.2 LA - Appraisal

Document Reference	Title	Date of Issue	Legacy Decimal Reference
LA 101	Introduction to environmental assessment	Jul-19	11.1.1
LA 102	Screening projects for Environmental Impact Assessment	Jul-19	11.2.2
LA 103 Revision 1	Scoping projects for environmental assessment	Jan-20	11.2.3
LA 104 Revision 1	Environmental assessment and monitoring	Aug-20	11.2.4
LA 105	Air quality	Nov-19	11.3.1
LA 106 Revision 1	Cultural heritage assessment	Jan-20	11.3.2
LA 107 Revision 2	Landscape and visual effects	Feb-20	11.3.5
LA 108 Revision 1	Biodiversity	Mar-20	11.3.4
LA 109	Geology and soils	Oct-19	11.3.11
LA 110	Material assets and waste	Aug-19	11.3.13
LA 111 Revision 2	Noise and vibration	May-20	11.3.7
LA 112 Revision 1	Population and human health	Jan-20	11.3.6
LA 113 Revision 1	Road drainage and the water environment	Mar-20	11.3.10
LA 114	Climate	Oct-19	11.3.14
LA 115 Revision 1	Habitats Regulations assessment	Jan-20	11.4.1
LA 116	Cultural heritage asset management plans	Sep-19	10.6.2
LA 120 Revision 1	Environmental management plans	Mar-20	11.2.8

5.2.3 LD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
LD 117	Landscape design	Mar-20	10.0.3
LD 118	Biodiversity design	Mar-20	10.4.1
LD 119	Roadside environmental mitigation and enhancement	Mar-20	10.5.1

5.2.4 LC - Construction

There are no Construction documents associated with this discipline.

5.2.5 LM - Maintenance & Operation

There are no Maintenance & Operation documents associated with this discipline.

5.2.6 LS - Inspection & Assessment

There are no Inspection & Assessment documents associated with this discipline.

5.2.7 LZ - Disposal

There are no Disposal documents associated with this discipline.

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5.3 Road Layout (C* 101-199)

5.3.1 CG - General Information

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CG 152	Traffic signs to tourist destinations and leisure facilities	Oct-19	8.2.4
CG 153	Traffic signs to retail destinations and exhibition centres	Oct-19	8.2.6

5.3.2 CA - Appraisal

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CA 185	Vehicle speed measurement	Nov-19	5.1.4

5.3.3 CD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CD 109 Revision 1	Highway link design	Mar-20	6.1.1
CD 116 Revision 2	Geometric design of roundabouts	Apr-20	6.2.3
CD 122 Revision 1	Geometric design of grade separated junctions	Jan-20	6.2.1
CD 123 Revision 2	Geometric design of at-grade priority and signal-controlled junctions	Aug-20	6.2.6
CD 127 Revision 1	Cross-sections and headrooms	Mar-20	6.1.2
CD 143 Revision 2	Designing for walking, cycling and horse-riding	May-20	6.3.5
CD 146 Revision 1	Positioning of signalling and advance direction signs	Mar-20	9.1.1
CD 169 Revision 1	The design of lay-bys, maintenance hardstandings, rest areas, service areas and observation platforms	May-20	6.3.3
CD 192 Revision 1	The design of crossovers and changeovers	Jan-20	8.4.6
CD 193 Revision 2	Driver location signs	Feb-20	8.2.2
CD 195 Revision 1	Designing for cycle traffic	May-20	6.3.1

5.3.4 CC - Construction

There are no Construction documents associated with this discipline.

5.3.5 CM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CM 125 Revision 1	Maintenance of traffic signs	Mar-20	8.2.2

5.3.6 CS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CS 125 Revision 2	Inspection of traffic signs	Mar-20	8.2.2
CS 126	Inspection and assessment of road markings and road studs	Mar-20	8.2.2

5.3.7 CZ - Disposal

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CZ 125 Revision 1	Disposal of traffic signs	Mar-20	8.2.2

5.4 Pavement (C* 201-299)**5.4.1 CG - General Information**

There are no General Information documents associated with this discipline.

5.4.2 CA - Appraisal

There are no Appraisal documents associated with this discipline.

5.4.3 CD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CD 224	Traffic assessment	Mar-20	7.2.1
CD 225 Revision 1	Design for new pavement foundations	Apr-20	7.2.2
CD 226	Design for new pavement construction	Mar-20	7.2.3
CD 227	Design for pavement maintenance	Mar-20	7.3.3
CD 236 Revision 4	Surface course materials for construction	Mar-20	7.5.1
CD 239 Revision 1	Footway and cycleway pavement design	Mar-20	7.2.5

5.4.4 CC - Construction

There are no Construction documents associated with this discipline.

5.4.5 CM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CM 231	Pavement surface repairs	Mar-20	7.4.1

5.4.6 CS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CS 228 Revision 2	Skidding resistance	Jan-21	
CS 228 HE Crash Model v1.02	Highways England Crash Model	Feb-21	
CS 229	Data for pavement assessment	Mar-20	7.3.2
CS 230	Pavement maintenance assessment procedure	Mar-20	7.3.3

5.4.7 CZ - Disposal

There are no Disposal documents associated with this discipline.

5.5 Highway Structures & Bridges (C* 301-499)

5.5.1 CG - General Information

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CG 300	Technical approval of highway structures	Mar-20	1.1.1
CG 300 TAS February 2021	Generic Technical Approval Schedule (TAS)	Feb-21	
CG 302	As-built, operational and maintenance records for highway structures	Mar-20	3.2.1
CG 303	Quality assurance scheme for paints and similar protective coatings	Feb-19	2.4.1
CG 304	Conservation of highway structures	Mar-20	3.2.4
CG 305	Identification marking of highway structures	Mar-20	3.1.1

5.5.2 CA - Appraisal

There are no Appraisal documents associated with this discipline.

5.5.3 CD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CD 350	The design of highway structures	Mar-20	1.3.19
CD 351	The design and appearance of highway structures	Mar-20	1.3.11
CD 352	Design of road tunnels	Mar-20	2.2.9
CD 353	Design criteria for footbridges	Mar-20	2.2.8
CD 354 Revision 1	Design of minor structures	Mar-20	2.2.1
CD 355	Application of whole-life costs for design and maintenance of highway structures	Jul-19	1.2.1
CD 356 Revision 1	Design of highway structures for hydraulic action	Mar-20	1.3.6
CD 357 Revision 1	Bridge expansion joints	Mar-20	2.3.6
CD 358 Revision 2	Waterproofing and surfacing of concrete bridge decks	Jun-20	2.3.4
CD 359	Design requirements for permanent soffit formwork	Mar-20	2.3.7
CD 360 Revision 2	Use of compressive membrane action in bridge decks	Mar-20	3.4.20
CD 361	Weathering steel for highway structures	Sep-19	2.3.8
CD 362 Revision 1	Enclosure of bridges	Mar-20	2.2.7
CD 363	Design rules for aerodynamic effects on bridges	Jan-20	1.3.3
CD 364	Formation of continuity joints in bridge decks	Mar-20	2.3.7
CD 365 Revision 1	Portal and cantilever signs/signals gantries	Mar-20	2.2.4
CD 366	Design criteria for collision protection beams	Mar-20	2.2.5

CD 367	Treatment of existing structures on highways widening schemes	Mar-20	1.2.3
CD 368	Design of fibre reinforced polymer bridges and highway structures	Feb-20	1.3.17
CD 369	Surface protection for concrete highway structures	Mar-20	2.4.3
CD 370 Revision 2	Cathodic protection for use in reinforced concrete highway structures	Apr-20	3.3.3
CD 371	Strengthening highway structures using fibre-reinforced polymers and externally bonded steel plates	Mar-20	1.3.16
CD 372	Design of post-installed anchors and reinforcing bar connections in concrete	Mar-20	2.3.10
CD 373	Impregnation of reinforced and prestressed concrete highway structures using hydrophobic pore-lining impregnants	Mar-20	2.4.2
CD 374	The use of recycled aggregates in structural concrete	Mar-20	2.3.9
CD 375 Revision 1	Design of corrugated steel buried structures	Mar-20	2.2.6
CD 376	Unreinforced masonry arch bridges	Mar-20	2.2.14
CD 377 Revision 4	Requirements for road restraint systems	Jan-21	
CD 378	Impact test and assessment criteria for truck mounted attenuators	Feb-20	8.4.7

5.5.4 CC - Construction

There are no Construction documents associated with this discipline.

5.5.5 CM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CM 430	Maintenance of road tunnels	Mar-20	3.2.3
CM 431	Maintenance painting of steelwork	Dec-19	3.2.2
CM 432 Revision 1	Maintenance of buried concrete box structures	Mar-20	3.3.5

5.5.6 CS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
BD 97/12	The Assessment of Scour and Other Hydraulic Actions at Highway Structures	May-12	3.4.21
CS 432 Revision 1	Inspection of buried concrete box structures	Mar-20	3.3.5
CS 450	Inspection of highway structures	Mar-20	3.1.4
CS 451	Structural review and assessment of highway structures	Mar-20	3.4.22
CS 452	Inspection and records for road tunnel systems	Mar-20	3.1.6
CS 453	The assessment of highway bridge supports	Mar-20	3.4.7
CS 454 Revision 1	Assessment of highway bridges and structures	Mar-20	3.4.3

CS 455 Revision 1	The assessment of concrete highway bridges and structures	Jan-21	
CS 456	The assessment of steel highway bridges and structures	Mar-20	3.4.11
CS 457 Revision 1	The assessment of composite highway bridges and structures	Mar-20	3.4.16
CS 458	The assessment of highway bridges and structures for the effects of special type general order (STGO) and special order (SO) vehicles	Mar-20	3.4.19
CS 459 Revision 1	The assessment of bridge substructures, retaining structures and buried structures	Mar-20	3.4.9
CS 460 Revision 1	Management of corrugated steel buried structures	Mar-20	3.3.4
CS 461	Assessment and upgrading of in-service parapets	Mar-20	2.3.2
CS 462	Repair and management of deteriorated concrete highway structures	Mar-20	3.3.2
CS 463	Load testing for bridge assessment	Jun-19	3.4.8
CS 464 Revision 1	Non-destructive testing of highways structures	Mar-20	3.1.7
CS 465	Management of post-tensioned concrete bridges	Mar-20	3.2.5
CS 466	Risk management and structural assessment of concrete half-joint deck structures	Mar-20	3.4.6
CS 467 Revision 1	Risk management and structural assessment of concrete deck hinge structures	Apr-20	3.1.5
CS 468 Revision 1	Assessment of Freyssinet concrete hinges in highway structures	Mar-20	1.3.20
CS 470	Management of sub-standard highway structures	Mar-20	3.4.18

5.5.7 CZ - Disposal

There are no Disposal documents associated with this discipline.

5.6 Drainage (C* 501-599)**5.6.1 CG - General Information**

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CG 501 Revision 2	Design of highway drainage systems	Mar-20	4.2.3
CG 502	The certification of drainage design	Oct-19	4.2.1

5.6.2 CA - Appraisal

There are no Appraisal documents associated with this discipline.

5.6.3 CD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CD 521 Revision 1	Hydraulic design of road edge surface water channels and outlets	Mar-20	4.2.4
CD 522	Drainage of runoff from natural catchments	Mar-20	4.2.1
CD 523 Revision 1	Determination of pipe roughness and assessment of sediment deposition to aid pipeline design	Mar-20	4.2.4
CD 524	Edge of pavement details	Feb-20	4.2.1
CD 525 Revision 1	Design of combined surface and sub-surface drains and management of stone scatter	Mar-20	4.2.4
CD 526 Revision 3	Spacing of road gullies	Jan-20	4.2.3
CD 527 Revision 1	Sumpleless gullies	Mar-20	4.2.3
CD 528	Vortex separators for use with road drainage systems	Feb-20	4.2.4
CD 529 Revision 1	Design of outfall and culvert details	Mar-20	4.2.7
CD 530 Revision 1	Design of soakaways	Mar-20	4.2.8
CD 531	Reservoir pavements for drainage attenuation	Mar-20	4.2.4
CD 532	Vegetated drainage systems for highway runoff	Mar-20	4.2.1
CD 533 Revision 1	Determination of pipe and bedding combinations for drainage works	Mar-20	4.2.5
CD 534	Chamber tops and gully tops for road drainage and services	Feb-20	4.2.5
CD 535 Revision 1	Drainage asset data and risk management	Jan-20	4.2.4

5.6.4 CC - Construction

There are no Construction documents associated with this discipline.

5.6.5 CM - Maintenance & Operation

There are no Maintenance & Operation documents associated with this discipline.

5.6.6 CS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CS 551	Drainage surveys	Jun-19	4.2.10

5.6.7 CZ - Disposal

There are no Disposal documents associated with this discipline.

5.7 Geotechnics (C* 601-699)**5.7.1 CG - General Information**

There are no General Information documents associated with this discipline.

5.7.2 CA - Appraisal

There are no Appraisal documents associated with this discipline.

5.7.3 CD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CD 622 Revision 1	Managing geotechnical risk	Mar-20	4.1.2

5.7.4 CC - Construction

There are no Construction documents associated with this discipline.

5.7.5 CM - Maintenance & Operation

There are no Maintenance & Operation documents associated with this discipline.

5.7.6 CS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
CS 641	Managing the maintenance of highway geotechnical assets	Mar-20	4.1.3

5.7.7 CZ - Disposal

There are no Disposal documents associated with this discipline.

5.8 Control & Communications Technology (T* 101-499)**5.8.1 TG - General Information**

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TG 411	Electricity supply connections	Mar-20	9.3.2

5.8.2 TA - Appraisal

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TA 101	Traffic signalling systems (appraisal)	Jun-19	8.0.1
TA 121	Ramp metering	Jan-20	9.3.1

5.8.3 TD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TD 101 Revision 1	Traffic signalling systems	Jan-20	8.0.1
TD 121	Ramp metering	Jan-20	9.3.1
TD 131	Roadside technology and communications	Jan-20	9.1.2

5.8.4 TC - Construction

There are no Construction documents associated with this discipline.

5.8.5 TM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TM 101	Traffic signalling systems (maintenance and operation)	Jun-19	8.0.1

5.8.6 TS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TS 101	Traffic signalling systems (inspection and assessment)	Jun-19	8.0.1

5.8.7 TZ - Disposal

There are no Disposal documents associated with this discipline.

5.9 Road Lighting (T* 501-999)**5.9.1 TG - General Information**

There are no General Information documents associated with this discipline.

5.9.2 TA - Appraisal

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TA 501	Road lighting appraisal	Mar-20	8.3.1

5.9.3 TD - Design

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TD 501	Road lighting design	Mar-20	8.3.1

5.9.4 TC - Construction

There are no Construction documents associated with this discipline.

5.9.5 TM - Maintenance & Operation

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TM 501	Road lighting maintenance	Mar-20	8.3.1

5.9.6 TS - Inspection & Assessment

Document Reference	Title	Date of Issue	Legacy Decimal Reference
TS 501	Road lighting inspection	Mar-20	8.3.1

5.9.7 TZ - Disposal

There are no Disposal documents associated with this discipline.

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