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**VOLUME 0 MODEL CONTRACT  
DOCUMENT FOR MAJOR  
WORKS AND  
IMPLEMENTATION  
REQUIREMENTS**

**SECTION 2 IMPLEMENTING  
STANDARDS**

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**PART 1**

**SD 1/98**

**IMPLEMENTATION OF SPECIFICATION  
FOR HIGHWAY WORKS AND NOTES  
FOR GUIDANCE**

**INTRODUCTION**

This Standard introduces the March 1998 edition of the Specification for Highway Works and Notes for Guidance and gives implementation requirements for their use in trunk road contracts in the UK. The Standard also sets out approval procedures to be followed by manufacturers and suppliers of goods and materials. It supersedes SD 1/92.

**INSTRUCTIONS FOR USE**

This is a revised document to be incorporated into the Manual.

1. Remove SD 1/92 from Volume 0, Section 2 and archive as appropriate.
2. Insert SD 1/98 into Volume 0, Section 2.
3. Remove the contents page dated November 1997 and insert contents page dated March 1998.
4. Archive this sheet as appropriate.

Note: A quarterly index with a full set of Volume Contents Pages is available separately from The Stationery Office Ltd.



**THE HIGHWAYS AGENCY**



**THE SCOTTISH OFFICE DEVELOPMENT DEPARTMENT**



**THE WELSH OFFICE  
Y SWYDDFA GYMREIG**



**THE DEPARTMENT OF THE ENVIRONMENT FOR  
NORTHERN IRELAND**

# **Implementation of Specification for Highway Works and Notes for Guidance**

**Summary:** This Standard introduces the March 1998 edition of the Specification for Highway Works and Notes for Guidance and gives implementation requirements for their use in trunk road contracts in the UK. The Standard also sets out approval procedures to be followed by manufacturers and suppliers of goods and materials.

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**REGISTRATION OF AMENDMENTS**

Amend No	Page No	Signature & Date of incorporation of amendments	Amend No	Page No	Signature & Date of incorporation of amendments

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**Contents**

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1. Introduction and Implementation
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## 1998 Edition

In addition to technical changes since the 1991 edition (with amendments), the text has been revised to suit any form of contract.

The compiler's attention is drawn to the Notes for Guidance (MCHW 2) Preamble to the Specification.

# 1. INTRODUCTION AND IMPLEMENTATION

1.1 This standard is the first in the SD series and introduces the March 1998 Edition of the Specification for Highway Works (SHW) and the Notes for Guidance on the Specification for Highway Works (NG), which form Volumes 1 and 2 respectively of the Manual of Contract Documents for Highway Works (MCHW). These documents are to be used in the preparation of contracts for the construction, improvement or maintenance of trunk roads including motorways in England, Scotland, Wales and Northern Ireland (in Northern Ireland, the Documents will be applicable to those roads designated by the Overseeing Organisation).

## Scope

1.2 The March 1998 edition of the SHW comprises:

Series 000 Introduction  
Series 100 Preliminaries  
Series 200 Site Clearance  
Series 300 Fencing  
Series 400 Safety Fences, Safety Barriers and Pedestrian Guardrails  
Series 500 Drainage and Service Ducts  
Series 600 Earthworks  
Series 700 Road Pavements - General  
Series 800 Road Pavements - Unbound Materials  
Series 900 Road Pavements - Bituminous Bound Materials  
Series 1000 Road Pavements - Concrete and Cement Bound Materials  
Series 1100 Kerbs, Footways and Paved Areas  
Series 1200 Traffic Signs  
Series 1300 Road Lighting Columns and Brackets  
Series 1400 Electrical Work for Road Lighting and Traffic Signs  
Series 1500 Motorway Communications  
Series 1600 Piling and Embedded Retaining Walls  
Series 1700 Structural Concrete  
Series 1800 Structural Steelwork  
Series 1900 Protection of Steelwork Against Corrosion  
Series 2000 Waterproofing for Concrete Structures  
Series 2100 Bridge Bearings  
Series 2200 Parapets  
Series 2300 Bridge Expansion Joints and Sealing of Gaps  
Series 2400 Brickwork, Blockwork and Stonework  
Series 2500 Special Structures  
Series 2600 Miscellaneous

Lettered Appendices

A Quality Management Schemes  
B Product Certification Schemes  
C British Board of Agrément Certificates  
D Statutory Type Approval  
E Type Approval/Registration  
F Publications referred to in the Specification  
G Petrographical Examination of Aggregates for Alkali - Silica Reaction  
H Quality Records

1.3 The March 1998 edition of the NG advises on clauses in the SHW and gives details of the compilation of numbered appendices. It comprises the same Series as those in the SHW but with the numbers prefixed NG.

## Related Documents

1.4 The documents contained in Volumes 0, 3 and 4 of the Manual of Contract Documents for Highway Works shall be used where applicable when preparing contracts incorporating Volume 1 (SHW).

## Implementation

1.5 Contracts for the construction, improvement or maintenance of trunk roads (except for the maintenance painting of steel highway structures) shall be prepared using the documents contained in the Manual of Contract Documents for Highway Works Volumes 0 to 4 except where the preparation of a contract has reached a stage at which, in the opinion of the Overseeing Organisation, their use would result in significant additional expense or delay progress. Notwithstanding the above, all contracts for which tenders are to be invited after 1 September 1998 shall be based on this Standard unless specific approval has been obtained from the Overseeing Organisation to use other documents.

## Superseded Documents

1.6 All previous editions of the documents now contained in the Manual of Contract Documents for Highway Works Volumes 1 and 2 including amendments, supplements and alterations are hereby superseded, except where used for schemes for which the Contract has been awarded using earlier editions or for schemes covered by paragraph 1.5 above.

## 2. PROCEDURES FOR MANUFACTURERS AND SUPPLIERS

### Work, Goods or Materials

2.1 Wherever possible, the performance requirements and/or approval procedures for work, goods or materials are given or are referred to in the SHW (MCHW Volume 1).

2.2 Well attested and documented evidence that work, goods or materials comply with the specified requirements will be required and the SHW describes or refers to the particular form(s) such proof shall take. The forms of evidence in use are categorised below:

- A Certificate of conformity with a quality management scheme;
- B Certificate of conformity with a product certification scheme where the product is not marked;
- C Prescribed Certification Mark;
- D British Board of Agrément (BBA) Certificate;
- E Statutory type approval;
- F Type approval/registration;
- G Technical approval;
- H Aesthetic approval;
- I Manufacturer's or supplier's test certificate;
- J Testing at the place of manufacture or supply;
- K Sampling and testing on the site.

The acceptance criteria for work, goods or materials to conform to A, B, C, D, and J above shall be satisfied by equivalent acceptance criteria as given in Clause 104 and 105 of the SHW (MCHW 1.104 and MCHW 1.105).

2.3 Annex A summarises the requirement for the approvals listed in E, F, G and H above, associated with the design and use of various types of work, goods or materials, together with an indication of the timescales before approval may be granted. The timescales given include a period during which tests or road trials are undertaken where appropriate.

2.4 Requirements for the certification procedures listed in A, B, C and D of paragraph 2.2 are contained in Appendices A, B and C of the SHW.

2.5 Details of specific sampling and testing requirements and provision of samples (items J and K above) will be given in Appendices 1/5 and 1/6 of the Specification on a contract-specific basis.

2.6 A current list of work, goods or materials meeting the requirements of E and F of paragraph 2.2 is published in SA 1 (MCHW 0.3.1). This list is subject to updating on a regular basis.

2.7 Submissions to the Overseeing Organisations for the approval of work, goods or materials may be made in any of the official languages of the European Communities if the supplier or manufacturer is unable to supply this in English. However, where the submission is not in English, or not accompanied by an English translation, the timescales for approval may be extended from those given at Annex A.

2.8 Goods and materials of an innovative nature may have difficulty in meeting the criteria in Clause 104 of the SHW (MCHW 1.104) for consideration of equivalence, pending the availability of European Technical Approvals issued in accordance with the Construction Products Directive. Manufacturers or suppliers may request Overseeing Organisations to assess their products and supporting tests and information prior to their being offered for use in a contract, in order to ensure that the possible use of such innovative goods and materials in contracts described in paragraph 1.1 is properly and fully considered. This applies regardless of whether or not the goods or materials would require statutory type approval or type approval/registration. Overseeing Organisations will then issue advice to the manufacturer or supplier and to others as appropriate to the circumstances.

### Statutory Type Approval

2.9 Statutory type approval is granted by the Secretary of State for certain types of goods or materials listed at Annex A. Application for statutory type approval shall be made to the Overseeing Organisation as shown at Annex A. In Northern Ireland, type approval applies in place of statutory type approval but the technical requirements remain the same.

2.10 Attention is drawn to the need to allow adequate time to obtain a certificate granting such approval.

### Type Approval/Registration

2.11 The Overseeing Organisations operate type approval/registration procedures for certain work, goods or materials listed at Annex A. Application for type approval/registration shall be made as shown at

Annex A. Unless otherwise indicated in the lists at Annexes B and C to SA 1 (MCHW 0.3.1), type approval/registration granted by the Highways Agency as Overseeing Organisation is valid throughout the UK.

2.12 Attention is drawn to the need to allow adequate time to obtain a certificate granting such approval/registration.

### **Technical Approval**

2.13 Technical approval is granted by the Overseeing Organisations for the design of certain types of structures listed at Annex A in accordance with the procedures given in BD 2 (DMRB 1) except for Northern Ireland where applications should be made through the DoE (NI) technical approval scheme. Application for technical approval of lighting columns and brackets shall be made to the Overseeing Organisation as shown at Annex A. Application for technical approval of the other structures listed at Annex A will be made to the Overseeing Organisation by the Contractor following the award of the Contract.

### **Aesthetic Requirements**

2.14 Agreement on aesthetic requirements is needed for certain types of structures listed at Annex A. Requirements for each structure will be stated in the Contract. Application for aesthetic approval will be made to the Overseeing Organisation by the Contractor, following the award of the Contract.

## 3. REFERENCES

### 3.1 Manual of Contract Documents for Highway Works

Volume 0: Model Contract Document for Major Works and Implementation Requirements  
Section 2: Implementing Standards  
SD 2 Implementation of Highway Construction Details (MCHW 0.2.2)  
SD 3 Preparation of Bills of Quantities for Highway Works (MCHW 0.2.3)  
Section 3: Advice Notes  
SA 1 Lists of Approved/Registered Products (MCHW 0.3.1)

Volume 1 : Specification for Highway Works (March 1998): (MCHW 1)

Volume 2 : Notes for Guidance on the Specification for Highway Works (March 1998): (MCHW 2)

Volume 3 : Highway Construction Details (December 1991/April 1992 with amendments August 1993, August 1994 and March 1998): (MCHW 3)

Volume 4 : Bills of Quantities for Highway Works (March 1998): (MCHW 4)

### 3.2 Design Manual for Roads and Bridges

Volume 1: Section 1 Approval Procedures  
BD 2 Procedures for Geotechnical Certification and the Design and Certification of Highway Structures

### 3.3 European Council Directive 89/106/EEC: (known as the “Construction Products Directive”): OJEC: February 1989

### 3.4 DOE (NI) Technical Approval Scheme

#### Decimal Cross References

3.5 Decimal cross references have been used in this document. A hierarchical system is used in which the first number refers to the volume in the manual, the second to the section or clause ( as appropriate) and the third to the part.

eg MCHW 0.2.3 refers to the Manual of Contract Documents for Highway Works, Volume 0, Section 2, Part 3;  
MCHW 1.104 refers to the Manual of Contract Documents for Highway Works, Volume 1, Clause 104; and  
DMRB 1.1 refers to the Design Manual for Roads and Bridges, Volume 1, Section 1.

## 4. ENQUIRIES

Approval of the document for publication is given by the undersigned:

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Chief Highway Engineer

The Deputy Chief Engineer  
The Scottish Office Development Department  
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The Director of Highways  
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K THOMAS  
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V CRAWFORD  
Technical Director

All technical enquiries or comments on this document should be sent in writing as appropriate to the above.

# ANNEX A

The table below sets out a summary of Statutory and Overseeing Organisations' requirements. For the Overseeing Organisations of Scotland, Wales and Northern Ireland, all applications should be directed to the addresses given in the Enquiries section at Chapter 4 of this Standard. The letters a. to f. in the table identify the contact HA Divisions listed overleaf where the Overseeing Organisation is the Highways Agency.

## SUMMARY OF STATUTORY AND OTHER REQUIREMENTS

WORK, GOODS AND MATERIALS	SHW SERIES	STATUTORY TYPE APPROVAL See NOTE 2	TYPE APPROVAL/ REGISTRATION	TECHNICAL APPROVAL	AESTHETIC REQUIREMENTS	INDICATION OF TIMESCALE, MONTHS
Safety fences	400		** a			up to 12
Safety Barriers	400		** a			up to 12
Crib walls	600			* f		up to 9
Variable message signs	1200	* b				up to 6
Reflecting road studs						
i) temporary	1200	* c				up to 15
ii) permanent	1200	* c				up to 24
Traffic signals and control equipment	1200	* b				12
Prefabricated temporary road marking materials	1200		* c			up to 15
Lighting columns and brackets	1300			* d	* e See NOTE 1	6
Luminaires	1400				* e See NOTE 1	2
Paint formulations	1900		* a			3 to 60
Concrete bridge deck waterproofing	2000		* a			6++
Metal bridge parapets	2200				* e	2
Metal parapet anchorages	2200		* a			2
Bridge deck expansion joints	2300		* a			up to 15
Materials for corrugated steel buried structures except coatings and inverts	2500		* a			6
Corrugated steel buried structures	2500			* f		up to 9
Reinforced soil structures	2500			* f		up to 9
Environmental barriers	2500			* f	* e	up to 9
Bridges					See NOTE 3	up to 6

Key: \* indicates a requirements stated in the SHW  
 \*\* indicates a performance requirement stated in the SHW for alternatives to those listed in Clause 401 of the SHW  
 ++ excluding time for manufacturer to obtain BBA Roads and Bridges Certificate

**Annex A**

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Where the Highways Agency is the Overseeing Organisation, the Divisions given below should be contacted as indicated.

- a. Quality Services, Traffic Safety and Environment  
St Christopher House  
Southwark Street  
London SE1 0TE
- b. Quality Services, Traffic Control Systems  
Tollgate House  
Bristol BS2 9DJ
- d. Regional Landscape Architect  
Quality Services, Traffic Safety and Environment  
St Christopher House  
Southwark Street  
London SE1 0TE
- e. Regional Bridge Engineer  
Quality Services, Civil Engineering  
St Christopher House  
Southwark Street  
London SE1 0TE
- f. Principal Architect Planner  
Quality Services, Civil Engineering  
St Christopher House  
Southwark Street  
London SE1 0TE

For \*c the following Department of Environment, Transport and the Regions (DETR) office should be contacted as indicated.

- c. Driver Information and Traffic Management  
Zone 3/21 Great Minster House  
76 Marsham Street  
London SW1P 4DR

- NOTE:
- 1. Details need to be submitted of each combination of lighting column, bracket and luminaire.
  - 2. In Northern Ireland, type approval applies in place of statutory type approval.
  - 3. Bridges in England, Wales and Northern Ireland may need to be submitted to the Royal Fine Art Commission for comment on aesthetics. In England, the Highways Agency Principal Architect Planner will advise on this. In Scotland, the Royal Fine Art Commission for Scotland should be contacted via The Scottish Office.