

INTERIM ADVICE NOTE 173/13

IMPLEMENTATION OF BD 97/12 THE ASSESSMENT OF SCOUR AND OTHER HYDRAULIC ACTIONS AT HIGHWAY STRUCTURES

Summary

This Interim Advice Note provides the requirements for the implementation of BD 97/12 on Highways Agency structures.

Instructions for Use

This Interim Advice Note is supplementary to BD 97/12 and is applicable to Highways Agency structures only.

1. Introduction

This Interim Advice Note provides the requirements for the implementation of BD 97/12 on Highways Agency structures.

2. Background

BA 74/06 "Assessment of Scour at Highway Structures" has been replaced by BD 97/12 and this Interim Advice Note details how BD 97/12 is to be implemented.

3. Action Required

Structures already assessed to BA 74/06

Some Service Providers have already carried out scour assessments to BA 74/06. There is no need to repeat these to the new standard as the assessment methods and risk ratings in BA 74/06 and BD 97/12 are compatible.

Completed scour assessment reports to BA 74/06 must be uploaded to SMIS (structure file/assessment reports folder). The "Scour Susceptible" box on SMIS should be checked or unchecked as appropriate to the assessed Priority Rating. The BA 74/06 Priority Rating is equivalent to the BD 97/12 Scour Risk Rating (see BD 97/12 – structures with Scour Risk Ratings 1-4 are designated "Scour Susceptible").

Structures not assessed to BA 74/06

There is a need to complete scour assessments for those eligible structures that have not yet been assessed to BA 74/06. In accordance with BD 97/12 para 2.1(i) The Highways Agency is advising its Service Providers that these assessments must be completed within 2 years of the date of this IAN. Service Providers may find it convenient to arrange for scour assessments to BD 97/12 to be carried out with the next scheduled Principal or General Inspection for relevant structures that have not been assessed to BA 74/06.

Completed scour assessment reports to BD 97/12 must be uploaded to SMIS (structure file/assessment reports folder) or successor asset management information systems. The "Scour Susceptible" box on SMIS should be checked or unchecked as appropriate to the assessed scour risk rating (see BD 97/12 – structures with Scour Risk Ratings 1-4 are designated "Scour Susceptible").

Periodic reassessment

In accordance with BD 97/12 para 2.1(ii) The Highways Agency is specifying a frequency of 12 years for periodic reassessment. Variations on this frequency, for example to allow coordination with Principal Inspection frequencies, may be permitted with the agreement of the TAA.

Other flood effects

BD 97/12 also introduces assessment of vulnerability to other flood effects (Chapter 6). This new type of assessment was not previously covered by DMRB. It is not at present intended to start a general programme of this type of assessment on Highways Agency structures. However BD 97/12 provides the necessary advice should the need arise for such an assessment. It is only likely to be needed if flood water is predicted to reach within 0.6m of the soffit level of a bridge. Where Service Providers consider there may be a need for such an assessment a structural review in accordance with BD 101 (Structural Review and Assessment) should be proposed for the agreement of the Service Manager.

Risk management measures

Chapter 7 of BD 97/12 contains advice on risk management measures for scour susceptible structures, including the development of management strategies, further investigations and refined assessments. Flood emergency plans may need to be developed, and monitoring and scour protection measures considered. In such cases the advice of specialist hydraulic and river engineers should be sought.

4. Contacts:

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5. References:

Design Manual for Roads and Bridges BD 97/12 The Assessment of Scour and Other Hydraulic Actions at Highway Structures. The Stationery Office Ltd, 2012.