Maintain and repair permanent structures for the water environment



Overview

This standard is about the maintenance and repair of permanent structures within the water environment. Structures may include bridges, culverts, weirs, revetments, concrete fencing and coastal defences. It may be undertaken to maintain the effectiveness of the structure, to increase its lifespan or for safety purposes. Repairs may be temporary or long-term.

You must carry out your work in a way which minimises any impact on the natural environment, and enhances the nature, conservation, recreational and economic value of the natural environment.

Where you are required to use machinery you must hold the relevant qualification.

This standard is designed for those employees and volunteers working on the maintenance and repair of permanent structures applicable to rivers, coastal areas and waterways.

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Performance	P1	assess the risk associated with the operation
criteria	P2	confirm the planned work is relevant to the condition of the structure
You must be able to:	P3	recognise any circumstances which affect the planned operations and take the appropriate action
	P4	access the site in accordance with instructions, specifications and legal requirements
	P5	select, prepare and use tools, equipment and materials that are appropriate to the work safely and effectively
	P6	ensure the appropriate quantity and type of materials are available and ready for use
	P7	carry out consultation where relevant, with agencies, advisors and documents related to historic structures
	P8	prepare the site in a way which is appropriate for the maintenance and repair to be carried out
	P9	place warning signs and barriers in the appropriate locations
	P10	ensure temporary works comply with design specifications and statutory requirements and are safe, secure and ready for use
	P11	prepare the structure in accordance with the specifications
	P12	where accidental damage occurs to the environment take the appropriate action
	P13	report any unexpected findings to the relevant body or person
	P14	keep accurate and up-to-date records as required by relevant legislation and the organisation
	P15	maintain environmental and health and safety legislation and codes of practice
	P16	recognise opportunities to minimise impact to wildlife and habitats through modifications to working procedures, and discuss these with your line manager
	P17	maintain and repair the structure in accordance with the specifications and within the appropriate timescales
	P18	ensure the structure is maintained and repaired to meet line and level tolerances
	P19	ensure your work takes into account relevant statutory requirements for the structure
	P20	ensure your use of methods, materials and equipment causes minimal disturbance to the site's environment
	P21	ensure the structure meets the specifications when you have finished the work
	P22	restore the site to safe conditions which are consistent with the surrounding environment, clear of unwanted materials and maintains the appropriate access
	P23	dispose of waste and excess materials safely to minimise environmental risk and in accordance with legal requirements

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Performance criteria

P24 communicate completion of site operations clearly and accurately to the appropriate person

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Knowledge and understanding

You need to know and understand:

K1	how to interpret plans and specifications for the maintenance and repair of structures
K2	the indications that maintenance is required
K3	circumstances which may impact on the operation: site hazards, working conditions, plant break downs, wildlife habitats and the recreational and economic use of the water environment and historical features
K4	the correct action to take in response to unforeseen circumstances
K5	how to prepare the site and the structure for maintenance
K6	your responsibilities under current environmental and health and safety legislation and codes of practice
K7	how to interpret risk assessments
K8	the importance of identifying underground and overhead services and how to do this
K9	how to select, prepare and use tools, equipment and materials relevant to the agreed specifications
K10	the types and quantity of materials which are needed and the methods for preparing such materials
K11	the methods and statutory requirements for setting up and using temporary works
K12	the implications for your work of relevant legislation and organisational requirements
K13	how to acquire related historic reference material
K14	the procedures for recording and reporting information
K15	the procedures for reporting discoveries of historic interest
K16	the correct ways to access the site
K17	how to maintain environmental good practice during work activities
K18	the opportunities which may arise to minimise impact and/or enhance wildlife habitat and to whom these should be reported
K19	the instructions and specifications for maintenance and repair
K20	the methods and techniques for maintaining and repairing structures
K21	the safe use of temporary works
K22	the necessary condition of the site and equipment on completion of work activities
K23	correct methods of disposing of waste and excess material
K24	the ways in which temporary works must be safely and correctly dismantled

K25 the procedures for communicating and recording the completion of work activities

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Knowledge and understanding

K26 how to protect and conserve habitats and historic features during clearing-up activities

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