2.18 Structures

Structures which are to be built under or adjacent to the highway by a private individual will require structural Approval in Principle by the Highway Authority, Herefordshire Council. The exception to this will be when the structure is under or adjacent to roads managed by the Highways Agency (Trunk Roads and motorways).

Adoption of Structures by the Council
The Council may adopt certain structures adjacent to, under or over the highway. In normal circumstances, the only structures that will be considered for adoption are those upon which the Highway relies for support and are constructed on Highway land.

All structures to be adopted should have received Structural approval in accordance with the procedures overleaf.

Approval of Structures not to be adopted by the Council
The following structures although not necessarily to be adopted by the Council require Structural Approval in accordance with the procedure detailed overleaf.

- Any wall or basement constructed on private land by an individual or developer that affects the support of the highway;
- Bridges crossing the Highway where there is no public access to the bridge;
- Retaining walls where any part of the retaining wall is 1.20m above the boundary of the highway nearest that point; and
- Structures over 0.9m span (diameter) carrying sewage.

Assessment of Existing Structures
Any existing structure to be modified for the purposes of the development or to be subjected to increased magnitude or frequency of loading shall be assessed according to BD21/01.

Approval submissions
- General arrangement showing location and extent of all structures and in the case of walls detailing lengths to be adopted and/or over 1.20m high if applicable;
- Designers Risk Assessment;
- Sufficient to determine wall heights, giving ground levels, behind and in front of wall and any features affecting loadings such as cover to culverts;
- Clearances to deck soffit and piers/abutments shall be submitted for bridges;
- Site investigation details and geotechnical assumptions on which the design has been based. This must be given in sufficient detail on the drawing to allow the designers assumptions to be compared with the conditions actually found on site by those responsible for construction;
- Construction details and material specifications;
- Design calculations with full reference to the design standards used; and
- For structures that are to be adopted or for structures upon which the Highway relies for support: Design and Construction Certificates and ‘As Built’ Drawings for the CDM Health and Safety File.

Design and Construction Certificates (see Appendix C)
Design and Construction Certificates are required if the structure is to be adopted or for structures upon which the Highway relies for support. These certificates must be in the form given in these notes and must be submitted at the appropriate stage. The positions in the organisation of the signatories and their qualifications must be stated. If a section of the work is to be undertaken by another party, such as a precast concrete supplier, then it would be appropriate for that party to take responsibility for their section of the work and complete a separate Certificate.

Bridge Maintenance Manual/Health and Safety File
On completion of the work the Developer must provide a Bridge Maintenance Manual containing:
- Details of the materials used in construction and the supplier;
- Requirements for future maintenance;
- Any survey and geotechnical details undertaken on the site of the Structure;
- Details of problems encountered during construction that may have a long-term effect on the structure;
- Any access arrangements for future maintenance;
- As built drawings as electronic TIF, DXF or AutoCAD files;
- Design calculations; and
- Special arrangements required for demolition.

The above information will comprise the documentation you have to legally provide under the CDM Regulations.
2. DESIGN CRITERIA

Is the Structure to be Adopted?
- NO

Does the Structure support the Highway?
- NO

Is the Structure a retaining wall over 1.20m high?
- NO

- No action required

Approval required from Herefordshire Council

Bridge over 5m span or retaining wall greater than 3m in height

- YES

Submit 'Approval in Principle' form detailing design standards to be used

- NO

Herefordshire Council approve and sign 'Approval in Principle' form

- YES

Submit drawings, design calculations and, if appropriate, Design Certificate

- NO

Herefordshire Council approve design in writing

- YES

Construction

Submit Construction Certificate, Bridge Maintenance Manual and 'As Built' Drawings