Guidance for the Design of Structures

Identification of a structure within a scheme

A Highway Structure is defined within DMRB document CG 300, "Technical Approval of Highway Structures", section 3. However, in broad terms for the average development a Highway Structure is defined as, but not limited to:

a) Bridge, buried structure, subway, underpass, culvert, and any other structure supporting the highway with clear span or internal diameter of 0.9m or greater. This also includes any drainage pipes, attenuation tanks, petrol/oil interceptors, hydro-brakes, etc. anywhere within the highway boundary.

b) Any retaining wall (including pipe headwalls) with a retained height of greater than 1.0m.

c) Reinforced/strengthened soil/fill.

d) Mass gabion steep slope/retaining structure, face slope not greater than 70° to the horizontal where the effective retained height is 1.0m or greater.

e) Environmental barriers (e.g., acoustic fences).

Is the structure to be adopted?

Even if a proposed structure is not to be adopted the WSCC Structures team must still be consulted with to ensure that all Developer and WSCC liabilities are met.

It should be noted that retrospective requests for the adoption of a structure either during or post construction will only be considered in exceptional circumstances.

A commuted sum will be payable on all adoptable structures. WSCC use the ADEPT National Bridges Group Guidance to calculate commuted sums for structures. ADEPT has freely available spreadsheets which can be used to calculate commuted sums.

The designer should be mindful of commuted sum requirements when considering the most cost-effective design solution.

Design approval process

For the design of highway structures WSCC uses the processes defined within the DMRB document CG 300 "Technical Approval of Highway Structures".

The appointed designer must be familiar with the procedures defined within as a lack of experience in the use of CG 300 will lead to a protracted approval process.

In broad terms the process is as follows:

a) Initial consultation with the WSCC Structures team (to be contacted by via the leading officer within the WSCC Implementation Team (S278/S38 Team).

b) Submission of an AIP.

c) Review of the AIP and any subsequent submissions until WSCC approval is obtained.

d) Submission of a detailed design package including all necessary construction stage drawings and Design and Check certificates.

e) Review of the detailed design package and any subsequent submissions until WSCC approval is obtained.

f) Submission of a construction stage programme (in advance of commencement) to enable identification of suitable hold points/inspection of the works throughout the process.

g) Post construction, a timely submission of the construction certificates, including the Health and Safety File.

h) Inspection of the work after the defined Defects Liability Period, followed by any remedial works as identified.

It should be noted that should construction proceed without the consent of the WSCC Structures team WSCC reserves the right to refuse to adopt the structure and the adjoining highway infrastructure.

Timeframes

Our standard period of reply is 4 weeks. However, we will always endeavour to reply in less.

With the above period of reply and due process in mind, it is strongly recommended that the Developer (and/or their designer) engages with the WSCC Structures team at the earliest convenience.