



Economy, Transport and Environment Department

Technical Guidance Note TG7 - Adoption of Structures

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Amendments are indicated by a bar in the left hand margin

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1. Introduction

- 1.1 Hampshire County Council (HCC), as the Highway Authority, is responsible for the approval of all structures which are constructed over, under, within or provide engineered support to the public highway.
- 1.2 This guidance applies to structures which form part of S38 works, S278 works or in-house highway schemes. The process shall also be followed for private structures built under licence or structures that are outside the highway boundary where the design, construction, maintenance or demolition of the structure may affect the highway, a highway structure or the safety of a highway user.
- 1.3 These structures are generally considered to be development for the purposes of the Planning Acts and it is therefore vital that the local planning authority is fully involved in any discussions and negotiations on design. Appearance and choice of materials should be in keeping with the character of the locality.
- 1.4 Where the term “Developer” is used within this document, this shall be;
 - the Developer identified in the S278 and/or S38 agreement, or
 - the Developer undertaking the private works which affect the highway, or
 - the HCC scheme Project Manager for internal HCC schemes.

2. Associated Documents / Publications

Hampshire County Council's Technical Guidance Notes (TG's)

CG 300 Technical Approval of Highways Structures (DMRB)

New Roads and Streetworks Act 1991 (NRSWA)

CDM Regulations 2015

CDM Regulations 2015 – Guidance on Regulation

HSE L153 – Managing Health and Safety in Construction

Traffic Management Act 2004

3. Process

3.1. General

- 3.1.1. Hampshire County Council's Technical Guidance Notes describe the policy of Hampshire County Council, as Highway Authority, regarding the design and construction of infrastructure which is to be adopted for maintenance.
- 3.1.2. The policy requires that the Director of Economy, Transport & Environment, (ETE) acting as the Technical Approval Authority (TAA), approves proposals for structures put forward by Developers. In order to gain approval a Developer must comply with a 'Technical Approval Procedure' as set out by the Department of Transport in their Design Manual for Roads and Bridges (DMRB) document CG 300.

<http://www.standardsforhighways.co.uk/ha/standards/dmrb/>

3.2. Approval in Principle

Formal Submission

- 3.2.1 A formal submission, known as the AIP (Approval in Principle), setting out the principles and standards, must be made to the Chief Engineer Structures (who will act on behalf of the Director of ETE). The Developer is strongly advised to discuss their preliminary proposals with the Chief Engineer Structures, before making the formal submission. The submission will indicate who will be responsible for the design; these persons or organisations should be experienced in the design of highway structures and will be subject to the consent of the Chief Engineer Structures. The design check will normally be carried out by the Chief Engineer Structures for Category 1, 2 and 3 structures but, at his discretion, may be allowed to be undertaken by the Developer's Consultant.
- 3.2.2 Once agreed, the Approval in Principle will be signed off by the Chief Engineer Structures on behalf of the Director of ETE and a copy of the endorsed AIP sent to the Developer.

Maintainability

- 3.2.3 In the design of the structure, particular attention must be paid to:
- a) the maintainability of the structure.
 - b) safe access for periodic inspection and maintenance.

This is a requirement of the Construction (Design and Management) Regulations to minimise health and safety risk for maintenance operations.

- 3.2.4 Long culverts (in excess of 20 metres length) and/or low headroom (less than 1.8 metres above invert, which could become classified as a confined space, shall be avoided (to avoid the health and safety risks associated with confined spaces).
- 3.2.5 To enable access for future inspection and maintenance, the Developer shall ensure that an easement of 2 metres minimum width is provided, in addition to the structural footprint to each structure.



3.3. Design and Checking

Category

- 3.3.1 The category of the structure will be confirmed by the TAA prior to the proposal being Approved in Principle. These categories are graded from 0 to 3 depending on complexity of the structure as defined in CG 300.
- 3.3.2 Where doubt on Category exists e.g. if a departure from Standards is proposed which may result in a more complex structure, the Consultant should refer to the Chief Engineer Structures for guidance.

Acceptance Date

- 3.3.3 All structures starting construction must have an AIP with an acceptance date **not more than 3 years old**. If a structure has a date of acceptance greater than 3 years old, it must be re-submitted to the TAA **prior to construction** in order that the TAA may agree that updating or any other amendment is not required. The TAA's agreement or otherwise that the AIP is still acceptable must be recorded and dated at the end of the AIP.

Checking of Designs

- 3.3.4 Designs and Contract Drawings together with bar bending schedules must be checked as specified in CG 300 for the relevant category.

Supporting Documentation

- 3.3.5 Once the design has been completed and independently checked the detailed drawings, specifications, calculations and 2 copies of the Design and Check Certificates with original signatures shall be submitted to the Chief Engineer Structures for acceptance. Design and Check Certificates shall follow the format set out in the Appendices to CG 300 and list the unique numbers and revisions of all drawings and bar bending schedules. Countersigned copies of the Certificates will be returned to the Developer as acceptance.
- 3.3.6 It is strongly recommended that construction is not commenced until countersigned certificates have been received by the Developer and, in the case of a private structure; a licence agreement has been completed. At least two weeks' notice of commencement of construction shall be given to the Chief Engineer Structures.

3.4. Construction

Supervision and Testing

- 3.4.1 During construction the Developer shall supervise the works and shall carry out any necessary testing of materials by an UKAS Accredited Laboratory. All supervision and testing shall be paid for by the Developer. In addition, the Chief Engineer Structures may carry out such inspections as are considered appropriate and any defects or short comings found during inspections shall be made good by the Developer at their cost.

No Departure

- 3.4.2 There shall be no departure from the certified design drawings without the prior consent of the Chief Engineer Structures who may in any case require significant changes to be subjected to the full Technical Approval procedure; i.e. revised Approval in Principle and new Design and Check Certificates.

Construction Completion

- 3.4.3 On completion of the structure the Health and Safety File, including one copy of the "As Constructed" records comprising drawings and a

maintenance report, together with one copy of the final calculations, shall be sent to the Chief Engineer Structures. Additionally, a Certificate of Construction Compliance with original signatures shall be submitted confirming that the structure has been built in accordance with the agreed drawings and specifications. This Certificate shall follow the format set out in the Appendices to CG 300 and list the unique numbers of all "As Constructed" drawings and bar bending schedules. The specific requirements and formats for "As Constructed" records will be supplied, on request, when construction is commenced. The requirements for other information to be included within the Health and Safety File is included in Appendix 4 of "Managing Health and Safety in Construction" CDM Regulations 2015 Guidance on Regulations. Refer also to Technical Guidance Note TG24 – Scheme Handover.

Construction Records

- 3.4.4 The "As Constructed" records shall be provided to the TAA within four weeks of the substantial completion date (as agreed with the TAA) of that structure and not the scheme as a whole. Prior to the issue of either a Substantial or full Certificate of Construction Completion, the Works shall be offered to the Chief Engineer Structures for compliance checks.

3.5. Defects Correction

Constructed to Satisfaction

- 3.5.1 When the Chief Engineer Structures has agreed that the structure has been constructed to his/her satisfaction the Developer will be informed of the commencement of the 12 month defects correction period.

Final Inspection

- 3.5.2 Immediately prior to the end of the defects correction period, the Developer will arrange for a final inspection with the Council. Any remaining defects requiring action by the Developer will be identified at that time; remedials to be carried out at the Developer's expense.

4. Fees and Commuted Sums

4.1. Agreements under either Section 38 or 278

- 4.1.1 The initial approach, following the granting of planning permission, will be to the Highway Development Agreements Design Audit Team. If the development includes a structure, the Design Audit Team will refer the application to the Chief Engineer Structures who will decide whether Technical Approval procedures have to be followed.
- 4.1.2 Where Technical Approval is required, the Developer will pay the County Council for all costs associated with the approval process including administration, AIP review, design & check review and inspection/snagging of the Works.
- a) For S278 schemes, the associated fees will be included within the overall S278 Design Audit and Inspection fees.
 - b) For S38 schemes, the associated fees will be included within the overall 11% fixed S38 Design Audit and Inspection fees.
- 4.1.3 If the structure is to be adopted, a commuted sum to cover future maintenance and replacement, will be payable prior to adoption (Refer to the Commuted Sum Policy). The commuted sum calculation of HCC's will be based upon the principles of the "ADEPT" guidance.
- <http://adeptnet.org.uk/sites/default/files/ADEPT%20Bridges%20Group%20Commuted%20Sums%20guidance%202016.pdf>
- 4.1.4 Agreement under either Section 38 or 278 cannot be drawn up for a structure until the Developer has returned to HCC a countersigned copy of the AIP.
- 4.1.5 When adoption is complete, the Design Audit Team Engineers will notify the Chief Engineer Structures so that the structure may be added to the Councils database and the inspection and maintenance regime commenced.

4.2. Structures supporting the Highway but not being adopted as a Highway Structure

- 4.2.1. Where Technical Approval is required for structures supporting the Highway but not being adopted by the Highways Authority, the required fee for any single structure shall be time-charged or £1000, whichever is greater. The £1000 shall be lodged as a deposit prior to engagement. All outstanding fees shall be paid by the Developer/Owner on completion of the structure works, prior to the signing of the Construction Compliance Certificate.

5. Statutory Undertakers Apparatus

- 5.1 Where Statutory Undertakers wish to place apparatus in bridges their powers are laid down in their respective enabling Acts.
- 5.2 Any proposals to place Statutory Undertaker's apparatus in highway structures shall be indicated in the AIP submission.
- 5.3 The Developer shall comply with the requirements of the New Roads and Streetworks Act 1991 (NRSWA) in all his dealings with Statutory Undertakers.
- 5.4 All consultations that are needed with other Statutory Authorities shall be carried out by the Developer direct.
- 5.5 Unless otherwise agreed with the Structures team, the Developer shall provide four 100mm internal diameter brown UPVC spare ducts in each verge/footway over any new structure. The ducts and their placement shall comply with MCHW – Vol1 – Series 500 – Drainage and Service Ducts and shall be provided with the appropriate draw cords, stoppers and terminations.

6. Further Support

- 6.1 Should you have a specific query or feedback about any of the content of this Technical Guidance Note, please send an email to Technical.Guidance@hants.gov.uk with the start of the email title as “TG7 –”.
- 6.2 Should you have a query about applying this to your particular project, please contact:
- the Design Check Engineer dealing with your S278 or S38 application (if you are a Developer or Developer’s Consultant)
 - the Technical Guidance Note Specialist(s) (if you are a working within Hampshire County Council)

Appendix A - Structures Technical Approval Process Flowchart

