

SUFFOLK HIGHWAYS STRUCTURES TEAM

Works Near Highway Structures

Good Practice Guide (Suffolk County Council)

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Introduction

Whenever a utility company or highway authority (or any other body) is working in a street, work must be carried out with due care and attention. Among other things, consideration needs to be given to the safety and integrity of highway structures.

The majority of highway structures on Suffolk County Council streets are designated as having Special Engineering Difficulty (SED). The purpose of this guide is to detail the powers and responsibilities provided in the New Roads and Street Works Act (NRSWA) for the protection of highway structures. Suffolk County Council's 'Structures Office' acts as the 'Bridge Authority' as specified in Section 88 of NRSWA and notice under this section and Section 63 should be sent to <u>bridges@suffolk.gov.uk</u>.

Identification of Highway Structures

All Suffolk County Council (SCC) maintained highway structures have a unique 4 figure 'bridge code' as well as a 'bridge reference'. The location of the centre point of structures is also recorded as a 12 figure global grid reference. This information is held on the structures register and graphically represented in a MapInfo layer, as well as being recorded as assets within Insight.

Each structure is also recorded as Additional Street Data (ASD) under SED for that relevant street on the Council's street gazetteer. The 'bridge reference', name of the structure and the global grid reference of the start and finish of the structure's 'restricted zone' are recorded in the ASD.

The Approval Process

When works are being planned the first step in avoiding any problems with structures is to identify whether or not the street involved is flagged as SED. Both utilities and highway authorities must always check the ASD to see if a SED is flagged on the street where they are planning to work. This should happen before giving the usual Section 54 notice, and well before any start of works notice; the SED procedures require the works, affecting a structure, to be agreed with the 'Bridge Authority' before works start.

Unless the information on the ASD explicitly makes it clear that a structure would be unaffected by the proposed works (e.g. works at one end of a street and the structure at the other) the utility or highway authority must contact the structures office via e-mail to <u>bridges@suffolk.gov.uk</u> giving the precise location of the works. (12 figure global grid references, road name or number and the parish the works are in) The structures office will then confirm if a structure could be affected by the works and if a section 63 notice is required. To avoid any later uncertainty there should be a positive confirmation either way.

A section 63 notice should be sent to the structures office via e-mail to <u>bridges@suffolk.gov.uk</u> if there is any possibility that a structure could be affected by the proposed works. The structures office should investigate the notice and provide a written response within 20 working days.

The response may confirm that the works can proceed in part or in whole without any further investigation, or request that further details be provided or that a joint site visit takes place. Options for undertaking the works can be discussed and the precise plans and sections or other information to be provided to the structures office can be discussed.

The responsibility is on the utilities or other works promoter to put forward their proposed ways of carrying out the works, but they will need to have appropriate information about the structure. If available structural details are insufficient trail holes supervised by the structures office may be needed before works can be agreed. The structure section will identify the boundaries of what will be acceptable, so influencing the approach taken.

Once the plans and sections (or agreed alternatives) have been settled there will be a positive written sign off. This will take the form of a written agreement between the works promoter and the structures office and will be signed by an appropriate officer.

Works on Site

Once an agreement is reached between the undertaker and the structures office, the undertaker must carry out the works in accordance with that agreement, failure to do so is an offence under sections 63 & 88.

While advice will be given by representative of the structures office on site, any variations to agreed works will need to be notified in writing and plans and sections adjusted accordingly.

Whilst undertaking works, due regard needs to be given to adjacent structures, and if any elements of a structure is exposed during excavation, the structures office needs to be inform immediately, and inspection access provided before works can proceed further.

Emergencies

The principles stated above should still apply, however:

A Section 63 notice should be provided as soon as reasonably practicable after completion of the works.

If structural elements are exposed during works (Concrete, Steelwork or Brickwork), the structures office should be inform immediately via 0845 606 6067 and if supervision is not possible, detailed records of what is exposed and the stages of reinstatement need to be recorded in detail.

Please note that additional planned works may be required to protect exposed structures at the works promoter's expense.

Damage to Structures and Non Compliance with the Act

Damage to structures should be reported immediately to the structures office. If the public or the stability of the structure is at risk, emergency services should be contacted and the incident should be reported via Tel: 0845 606 6067.

Minor damage to structural elements, including waterproofing, could have a long term detrimental effect on a structure, there for all damage, however minor should be recorded and reported through to the structure office.

Any damage will be made good to the satisfaction of the structures office and in accordance with the 'Manual of Contract Documents for Highways Works' (MCHW)

Retention of Records and Identification of Structural Damage

Section 63 notices and any subsequent works agreements will be retained by the structures office for 6 years and will be referred to following inspections where recent damage caused by utility works has been identified.

The structures office will seek compensation and impose fines for damage detected.

APPENDIX A

UNDERGROUND APPARATUS DEPTHS

Underground Apparatus Depths Over SCC Maintained Highway Structures

Suffolk County Council as the 'bridge authority' for the majority of highways in the County is concerned over the potential affect works in the vicinity of highway structures could have on their structural integrity, as well as the ability of authorised vehicles to use the full extent of the highway. We have therefore implemented recommendations contained within the NRWSA ACOP, the procedure for which is outlined on the Councils web site. While recommended minimum depths of underground utilities apparatus is contained within Table 1 of NJUG guidelines, there is no guidance as to how and to what extent these depths can be reduced when crossing structures. Therefore, Table 1 below states the minimum depths in respect to SCC structures. Also note that 5mm thick steel duct or 10mm steel plate above surrounded by concrete to a cover depth of 45mm or within designed service bays with a structural capacity greater than 40T mitigation/protection measures are required as well as 60mm cover (50mm soft sand and 10mm waterproofing) between the structure and the bottom of the apparatus is also required to further protect the structure.

TABLE 1 – Recommended Underground Utilities Apparatus

All depths are from the surface level to the crown of the apparatus

Utility Minimum		linimum Depths	n Depths	
	Footway/Verge	Carriageway	Structure	
Electricity HV (High Voltage)	450-1200mm	750-1200mm	250mm	
Electricity LV (Low Voltage)	450mm	600mm	150mm	
Gas	600mm footway 750mm verge	750mm	250mm	
Water non Potable & Grey Water	600 – 750mm	600 – 750mm	200mm	
Water - Firefighting	600 – 750mm	600 – 750mm	150mm	
Oil / fuel pipelines	900mm All work within 3 metres of oil fuel pipelines must receive prior approval	900mm All work within 3 metres of oil fuel pipelines must receive prior approval	400mm	
Sewerage	Variable	Variable	250mm	
Telecomms	250 – 350mm	450 - 600mm 100mm		
Water	750mm	750mm minimum	200mm	
Water pipes for special purposes (e.g. contaminated ground)	750mm	750mm minimum	200mm	

APPENDIX B

SECTION 63 NOTICE

NEW ROADS AND STREET WORKS ACT 1991 PRELIMINARY CONSULTATION Relating to proposed works in Streets with Special Engineering Difficulty (section 63 & Schedule 4) or in the vicinity of Highway Structures (in the case of bridges section 88)

UNDERTAKER:

To: Structures Office (Suffolk County Council)	From:
Tel No: 0345 606 6171	Tel No:
E-mail address: bridges@suffolk.gov.uk	Fax No:
Contact: Stuart Heald	Contact:
Undertaker's Ref:	
DATE:	

LOCATION:

Plan Attached	(Please attach whenever possible)
Plan No	
Road Name/Number (U3465)	
Parish Name (Claydon)	
12 Figure Global Grid Reference (589201, 255921)	
Bridge Ref (34/02)	

DESCRIPTION OF PROPOSED WORKS:

Proposed depth of excavation	
Proposed depth of cover to service on completion	
Expected start of works	
Expected finish of works	

*Delete as appropriate

BRIDGE AUTHORITY RESPONSE Bridge Authority to respond within 20 working days of receipt

NRSWA Ref	
Please contact	
Tel No	

Consent to proceed granted/not granted subject to*

While I do not have a level survey for the culvert its span is recorded as

Trial Holes required – YES/NO*

Other:

Additional details required (eg Plans, Sections, Method Statements):

CONSENT CERTIFICATE Please respond within 20 working days of completion of works

NRSWA Ref		
Consent to undertake of a highway structur noted above)	nke works in the vicinity Fure (considering points	
Signature		
Date		

We certify that NRSWA works have been undertaken in the vicinity of the following highways structures in accordance with the specifications noted above and these works have been accurately translated into 'as Constructed' drawings;		
Structure Code:	As Constructed Drawings, unique numbers:	
Additional Notes:	I	
Signature		
Name		
Name of Organisation		
Date		

Remedial works required.	
Acceptance of works in the vicinity of a highway structure.	
Signature	
Date	

*Delete as appropriate