

Reference	NR/L3/CIV/140/123C
Issue	3
Publication date	1 st June 2008
Compliance date	1 st September 2008

MODEL CLAUSES FOR CIVIL ENGINEERING WORKS

SECTION 123 BRIDGE INSTALLATION USING SELF PROPELLED LIFTING VEHICLES

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SECTION 123

BRIDGE INSTALLATION USING SELF PROPELLED LIFTING VEHICLES

- Definition** **123.001** “Self Propelled Lifting Vehicle (SPLV)” shall mean a set of rubber tyred wheels, all under computerised control and capable, by hydraulic means, of being:
- (i) rotated about a horizontal axis to give traction on a horizontal or near-horizontal plane,
 - (ii) jacked up or down vertically under heavy loads,
 - (iii) rotated about a vertical axis individually or as a group.
- Method statement to be submitted with the Tender** **123.002** Further to NR/SP/CPR/008, an outline method statement for the bridge installation shall be submitted with the Tender. The outline method statement shall include the following:
- (i) an outline description of the proposed method of bridge installation including identifying the SPLVs proposed to be used and their means of control,
 - (ii) details of the specialist Contractor proposed to carry out the bridge installation, including relevant experience and successful usage of the proposed SPLVs,
 - (iii) proposals for lifting the new structure to the correct level for the SPLVs to manoeuvre under and pick up,
 - (iv) proposals to ensure that the bridge design parameters listed in Section 120: General Requirements for Bridge Installation Methods and Temporary Works are not exceeded,
 - (v) details of how the SPLVs will be steered and the structure maintained in a stable position at all stages of the bridge installation,
 - (vi) proposals for the support and holding down arrangements including strops, spreader beams, etc., required to hold and secure the structures to the SPLVs, and any other Temporary Works associated with the bridge installation,
 - (vii) details of the organisations proposed to be used to carry out the design and design check,
 - (viii) any work proposed to be carried out to the Permanent Works and the proposed method of making good,

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- (ix) proposals for a trial lift and movement of the new structure to demonstrate that all elements of the SPLVs are fully operational and capable of the tasks required during the bridge installation,
- (x) contingency plans in the event of mechanical failure of the SPLV.

Detailed method statement

123.003

Further to Clause 123.002, a detailed method statement for the bridge installation shall be submitted to the Employer's Representative for acceptance not less than six weeks before the programmed start of the relevant work. The detailed method statement shall include, but not be limited to further details of the information submitted in accordance with Clause 123.002 as necessary, and the following additional information:

- (i) calculations, drawings and design and design check certification in accordance with NR/SP/CIV/003, for the Temporary Works and any amendments to the Permanent Works associated with the bridge installation, plus the effect of the installation of the new bridge on the Permanent Works,
- (ii) proposed detailed programme for the bridge installation,
- (iii) proposals for a trial lift to demonstrate the adequacy of the SPLVs to lift and manoeuvre the bridge,
- (iv) calculations to prove the stability of the SPLVs whilst carrying the structures in high winds, taking into account any slopes to be encountered and wind pressure from passing vehicles,
- (v) a drawing illustrating the arcs described by the extremities of the bridge structure during the installation,
- (vi) proposals for maintaining communications between Contractor's personnel during the bridge installation, taking into account the proximity of transmitter stations, transmission lines, Overhead line traction supply equipment etc,
- (vii) for each SPLV to be used, a copy of the current certificate required under the Lifting Appliances Regulations,
- (viii) details of the maintenance schedule for the SPLVs and associated equipment and provision of evidence that the SPLV has been maintained in accordance with the maintenance schedule prior to being brought to Site,