STATEMENTS OF COMMON GROUND CHURCH END BRIDGE, GREAT DUNMOW, ESSEX

1) Introduction

Ove Arup & Partners Ltd (Arup) has been engaged to undertake an assessment of Church End Bridge, Great Dunmow. As the Overseeing Organisation responsible for Church End Bridge (ECC structure ref. 0023), Essex County Council requires that Arup undertake the assessment in accordance with the procedures set out in the Design Manual for Roads and Bridges (DMRB) Standard CG 300 – Technical Approval of Highway Structures.

This Statement of Common Ground sets out the status of the assessment and explains the procedures being followed, as well as the timeline to completion of the assessment.

2) Description of Church End Bridge and B1057

Church End Bridge is a two-span highway bridge which spans over the River Chelmer and carries the B1057, a single carriageway rural B-road which connects Great Dunmow to Haverhill. At the location of Church End Bridge, the carriageway is 5.25m wide with a 1.0m wide footway on the upstream side and a narrow verge on the downstream side.

Each span comprises six longitudinal cast iron girders spaced at 1.3m centres apart with brick jack arches spanning transversely between the bottom flange of the longitudinal girders. The cast iron girders have a clear skew span of 4.4m between brickwork abutments, a brickwork central pier and concrete padstones.

Following a structural assessment performed in 1994, the load rating of the structure was identified as 7.5 tonnes assessment live loading expressed as 7.5 tonnes maximum gross vehicle weight.

3) Areas of Agreement

- i. In accordance with the procedures set out within DMRB Standard CG 300, Arup has submitted an Approval in Principle report for the assessment to Essex County Council. The Approval in Principle records the agreed basis and criteria for the assessment which has been accepted by Essex County Council as the Technical Approval Authority and the Overseeing Organisation for the bridge.
- ii. Arup is undertaking the assessment of the bridge and upon completion, will submit to Essex County Council, an assessment report, an assessment certificate and a check certificate. The assessment and check certificates will be signed following the structure of the pro-forma templates provided within DMRB Standard CG 300.
- iii. Essex County Council will review the assessment report and certificates. Upon acceptance of the assessment report, Essex County Council will sign the certificates as a record of acceptance.
- iv. The timeline for Arup to submit the assessment report, the assessment and check certificates to Essex County Council is 6th June 2025. At that time, the

Provisional load rating of the bridge in accordance with current bridge assessment standards will be identified. This will subject to review and approval by Essex County Council before the load rating is formally updated (if applicable).

- v. Essex County Council has advised that the requirement for the bridge is to have a load rating of 40 tonnes maximum gross vehicle weight. If necessary, following the conclusion of the assessment, the bridge shall be strengthened or replaced to achieve a load rating of 40 tonnes maximum gross vehicle weight and any Special Vehicle (SV) loading requirements associated with construction vehicles for the development.
- vi. Essex County Council has advised that in principle if the cast iron girders need to be strengthened, the proposed solution of adhering ultra-high modulus carbon fibre plates to the soffit of the girders would be acceptable, subject to following the procedures outlined in DMRB Standard CG 300 for the design of any necessary strengthening works.

4) Areas of Disagreement

There are no areas of disagreement between Arup and Essex County Council. Due process in accordance with DMRB Standard CG 300 is being followed to its conclusion by both parties.

5) Signatures

Signed Name Conor Lavery Position Associate Director, Ove Arup & Partners Ltd **Engineering Qualifications** MEng CEng MICE MIEI Member IABSE Name of Organisation Ove Arup & Partners Ltd 02/06/2025 Date Signed Clive Woodruff Name Position Structures Manager For and on behalf of Essex County Council Name of Organisation Date 02/06/2025