Dated: 05 September 2024

A28 Sturry Link Road, Canterbury, Kent
Compulsory Purchase Order

Summary Proof of Evidence

Jonathan East BSc MSc CEng MICE

1. <u>Introduction (Section 1)</u>

- 1.1 I am a master's degree qualified chartered civil engineer and have been a member of the Institution of Civil Engineers since 2010. During my career I have predominately worked for engineering consultancies specialising in highways design.
- 1.2 I am currently employed as an Associate Engineer by Project Centre Ltd (PCL) who are a consultant on Kent County Council's (KCC) engineering consultancy framework. PCL has been commissioned by KCC to provide technical assurance and CPO support on the Sturry Link Road Project.
- 1.3 My main proof of evidence covers the engineering aspects of the A28 Sturry Link Road scheme including; traffic modelling, highways geometry, earthworks, structures, flood risk and lighting as well as detailing the improvement to the highway that will be delivered by the CPO.

2. Scheme Background (Section 2)

2.1 In section 2 of my main proof of evidence I explain the background of the scheme. As a result of strategic allocations in the Canterbury Local Plan the requirement for the Sturry Link Road was identified within the adopted local plan with Policy T14 – Sturry Relief Road in which it was identified that the A28 through Sturry suffers from congestion due to the high levels of traffic and operation of the level crossing at Sturry.

3. Traffic and the need for the Link Road (Section 3)

- 3.1 In section 3 of my main proof of evidence I explain the traffic modelling undertaken to support the Link Road and wider Relief Road as well as explaining the need for the Link Road and consequences for the local road network if the Link Road is not delivered.
- 3.2 The traffic modelling has shown that without the Sturry Link Road scheme by the 2031 forecast year with the planned developments included in the Local Plan there would be significant network congestion with journey times increasing significantly. The Sturry level crossing provides a significant constraint on network capacity which the scheme addresses by reducing traffic over the level crossing. The scheme provides benefits of reduced journey times, safety, and better routes for sustainable and active modes.
- 3.3 The widening of Shalloak Road which also forms part of the CPO has been developed to mitigate against the increase in traffic flows at Broad Oak level

- crossing that are predicted to occur as a result of the Relief Road and Link Road Viaduct.
- 3.4 The Relief Road alone without the Link Road Viaduct would not be able to accommodate the future forecast growth resulting from planned housing developments without severe impact on the network. The Link Road Viaduct is therefore considered critical infrastructure to support the Local Plan growth.
- 3.5 The scheme therefore provides the required improvement to the highway.

4. Highways Design (Section 4)

- 4.1 In section 4 of my main proof of evidence I explain the highways design elements of the Sturry Link Road that will be delivered by the CPO.
- 4.2 The Sturry Link Road between the proposed roundabout on the A28 and the roundabout in the Land at Sturry Development has been designed as a single carriageway road with an additional Bus Lane in the southbound direction. There is also a shared path for cyclists and pedestrians proposed. The road has been designed to meet the Design Manual for Roads and Bridges (DMRB) and Kent Design Guide standards.
- 4.3 The scheme also includes widening of Shalloak Road to the north of Broad Oak level crossing which will allow larger vehicles to pass side by side reducing the risk of blocking back on the Broad Oak level crossing.
- 4.4 The scheme requires the stopping up of two existing accesses as shown on the Side Roads Order Plan. These are the existing accesses for Perryfield Farm and a field access located between Perryfield Farm and the existing Mercedes garage at number 371 A28 Sturry Road.
- 4.5 Both of these existing accesses are located on the existing A28 Sturry Road and conflict with the new roundabout position and therefore an alternative means of access for the properties will be provided by the scheme.

5. Impact on Operational Railway (Section 5)

- 5.1 In section 5 of my main proof of evidence I explain the impact on the operational railway addressing the objection raised by Network Rail that the CPO will adversely affect the operational railway.
- 5.2 In the operational phase of the Link Road (i.e. post construction) there is not anticipated to be any impact on the operational railway.
- 5.3 During the construction phase a number of possessions of the railway will be required to enable construction of the viaduct. It is therefore anticipated that a minimal impact on the operational railway would occur during construction.

6. Earthworks Design (Section 6)

- 6.1 In section 6 of my main proof of evidence I explain the earthworks design for the scheme and rationale for the selected side slopes.
- 6.2 The embankments across the scheme have been designed with a 1 in 2.5 Slope (21.8 degrees / 40%). The 1 in 2.5 embankment slope has been designed to provide a balance between land take, requirements for construction, future maintenance, flexibility of material selection and slope stability of the embankment.

7. Access for Maintenance (Section 7)

- 7.1 In section 7 of my main proof of evidence I explain the requirements for future access to the Viaduct for maintenance and the rights of access included in the CPO.
- 7.2 The Viaduct has been designed with a 120 year design life in accordance with DMRB standards, however replaceable parts of the structure including expansion joints, bearings, waterproofing and parapets will have a design life of 50 years and so will require replacement in the life of the structure.
- 7.3 The permanent maintenance access included in the CPO includes a 5m access route to provide access for vehicles underneath the viaduct structure both for inspection and then for maintenance as required, for example to replace the bearings.

8. <u>Drainage Design (Section 8)</u>

- 8.1 In section 8 of my main proof of evidence I explain the drainage strategy for the scheme and how the required attenuation for the scheme is being provided.
- 8.2 The overriding principles of the scheme are that the scheme should not increase flood risk and also the road should not be subject to flooding whilst also considering climate change which the current scheme achieves.

9. Lighting (Section 9)

- 9.1 In section 9 of my main proof of evidence I explain rationale for the proposed lighting for the scheme.
- 9.2 Both the southern roundabout, the northern roundabout and the east west relief road will be lit in accordance with Kent County Council and British standards. The viaduct itself will not be lit due to environmental constraints.

10. Scheme Construction (Section 10)

10.1 In section 10 of my main proof of evidence I detail the contents of the Construction Environmental Management Plan (CEMP) which the scheme will prepare for planning authority approval..

11. Conclusion (Section 11)

In section 11 of my main proof of evidence I explain that the scheme will bring significant benefits to the public and is required for the improvement of the highway.

I also confirm in section 12 of my main proof of evidence that my evidence is true, complete, and provided impartially as required of an expert witness.

Signed: **J.East**

5 September 2024