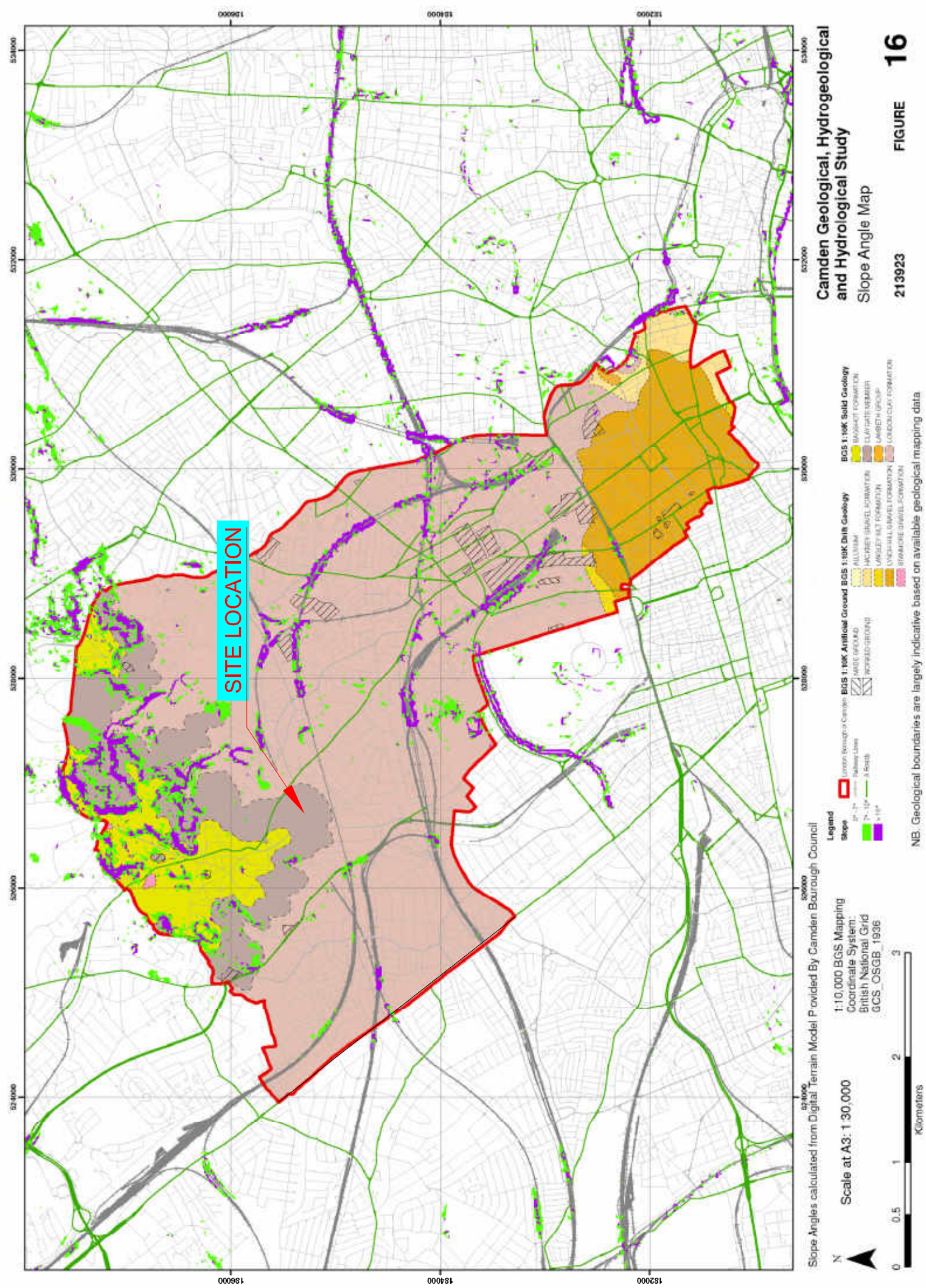




Areas of greatest potential for slope instability

The assessment of the potential for slope instability

Due to a long history of intensive building and urban development it has only been possible to recognize and map, with confidence, a few areas of past landslide activity. However, beyond the north London (shaded), areas of similar bedrock geology and topography contain significant areas of mapped landslides. Therefore, a slope instability assessment has been made to act as a guide to where areas of significant landslide potential are present, but obscured, and where further information regarding their stability are needed before development or major changes in land use are made (Forster et al., 2003).

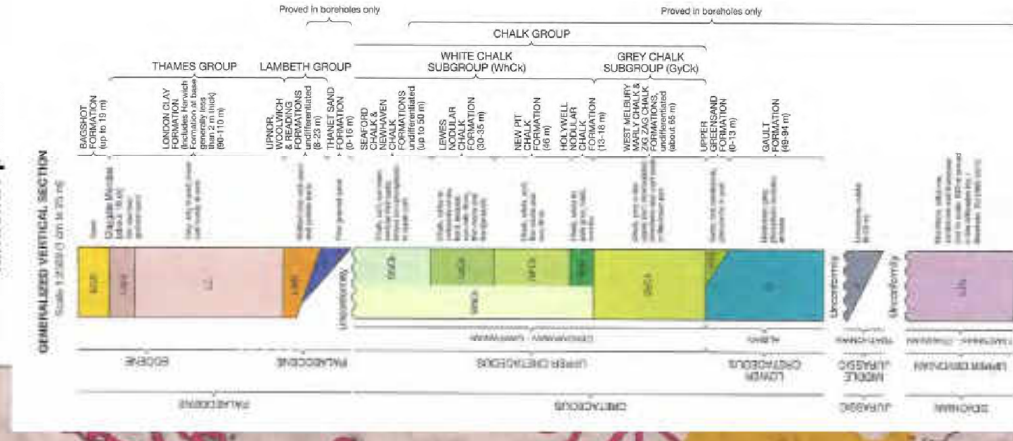
The assessment used a deterministic approach that looks at the presence of a site of landslide causative factors, such as slope angle, lithology and groundwater conditions that increase the susceptibility of a site to landslide activity. The causative factors were weighted according to their relative importance in promoting landslides and combined in a Geographical Information System to produce a computer-generated map of the relative susceptibility to landslide activity across the area. It does not necessarily mean that landslides have happened in the past or will do in the future but if conditions change through natural or artificial means and a causative factor increases, then slope instability may be triggered.

This assessment gave a measure of the potential landslide activity divided into five classes ranging from zero to very high. For clarity the two highest classes, HIGH and VERY HIGH have been combined on this map to give a single rating to indicate the presence of a significant potential. More detailed information about particular locations may be obtained through the B333 Enquiry Service www.b333.co.uk, Telephone 0115 6062 3140.

The shaded relief maps is derived from NEXRADTM Digital Elevation Model (DEM) data gridded at 10 m intervals. Illumination is from the north-west and vertical exaggeration is x10. Artificial features such as buildings have been removed from this dataset using vectoring algorithms. The geology of the district can be related to the topography as revealed by the map. The hill tops capped by the Chalky Marl and Bagshot Formation are clearly identifiable. The watersheds draining the Thames, Lee and Colne river valleys are visible, as are the large roadworks on the floor of the Lea valley.

FORSTER A, WILDMAN G AND POLTON C. 2003. Landslide potential modelling of North London. British Geological Survey Internal Report, IH03/122R.

Areas of significant landslide potential



Source - British Geological Society, 1:50,000 Series
England and Wales Sheet 256 - North London

Camden Geological, Hydrogeological
and Hydrological Study
Areas of landslide potential



Source - London Borough of Camden, January 2010. *Camden Core Strategy Proposed Submission*.

Camden Geological, Hydrogeological and Hydrological Study Transport Infrastructure

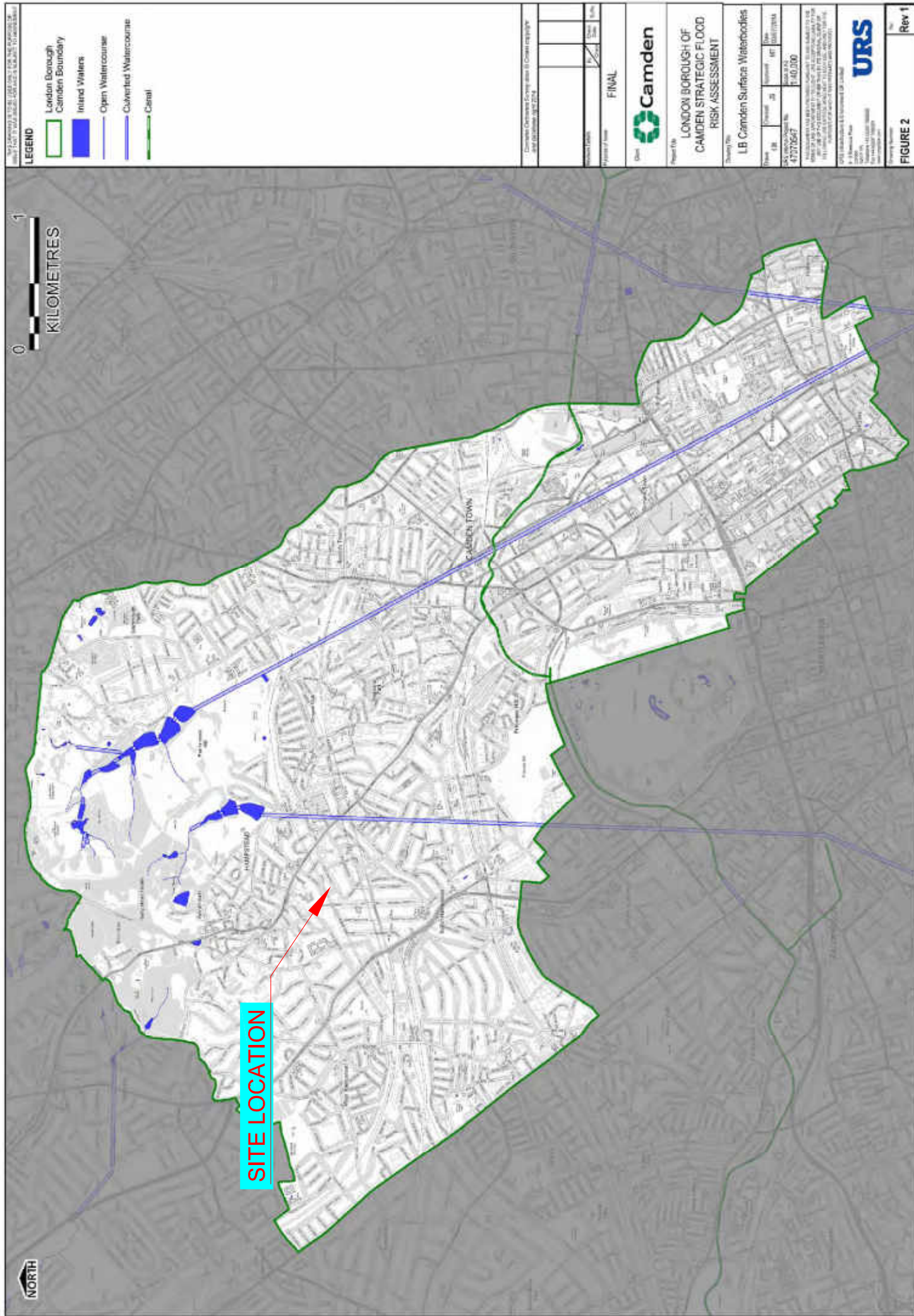


FIGURE 2

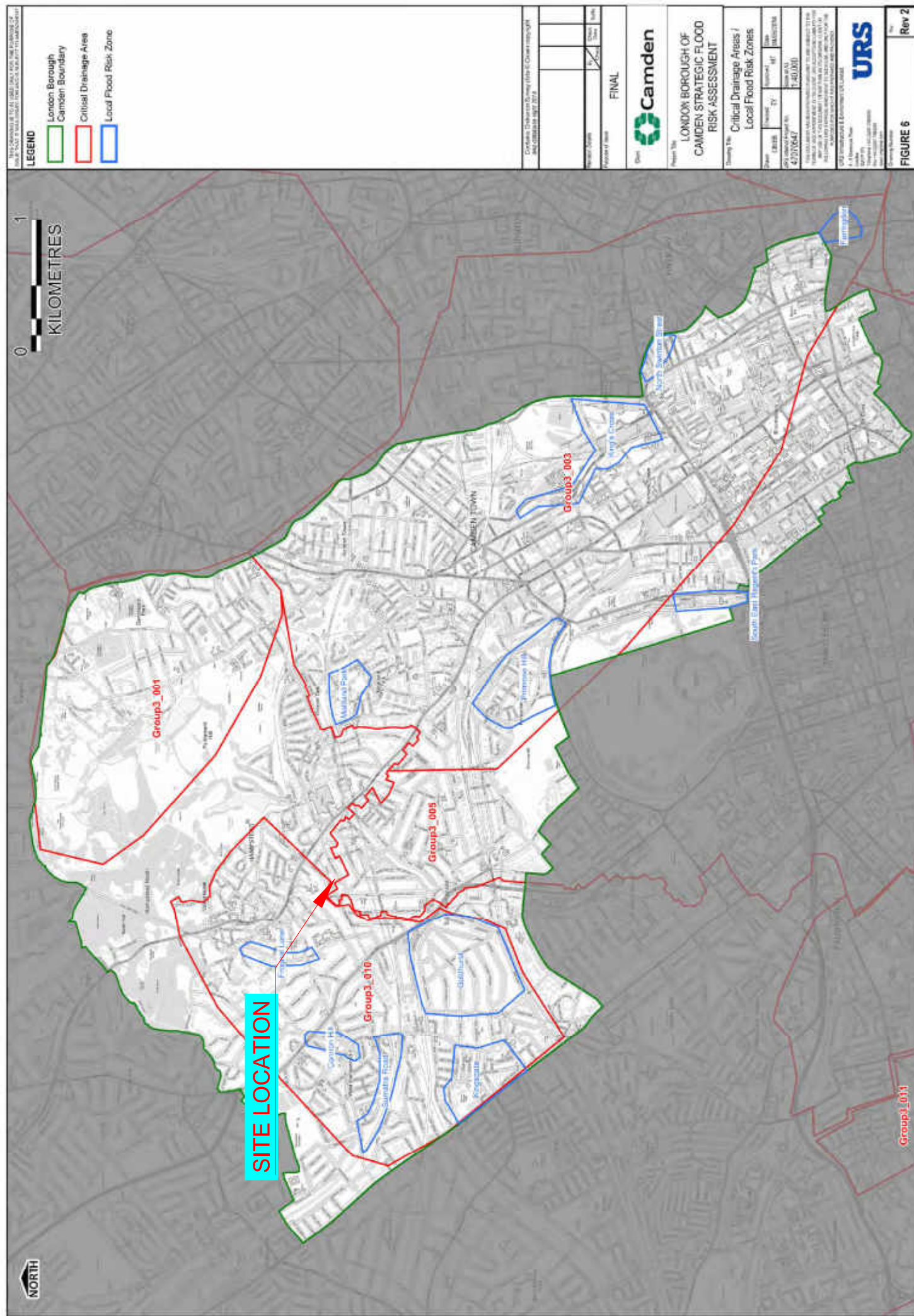


FIGURE 6

27-Mar 16-Apr 06-May 26-May 15-Jun 05-Jul 25-Jul 14-Aug 03-Sep 23-Sep 13-Oct 02-Nov 22-Nov 12-Dec 01-Jan

Start date
Duration

