

HS2 Euston Station HS2 Ltd.

Location: London, UK

Date: 2022 ongoing

Structure: Underground Railway Station

Length: 500 meters (0.3 miles) C&C structure,
Several hundred meters of mined tunnels

Cross-Section: Varying

Geology: Made Ground, River Terrasse
Sediments, London Clay, cohesive and
granular Lambeth Group sediments

Cost: Est. \$ 3.5billion

Client: Ove Arup & Partners

Owner: HS2 Ltd.



Figure 1. Rendering of Euston Station Platforms
(Courtesy HS2 Ltd.).

Category III Checks of Main Tunnels:

A new underground railway terminal station for the High Speed 2 (HS2) railway line is under construction. The complex structure encompasses the construction of an approximately 500 meter long and 90 meter wide cut and cover box, access tunnels, connection tunnels to the existing London Underground station and shafts to provide room for the new railway platforms, passenger access and interchange, station ventilation and auxiliary/mechanical rooms.

Gall Zeidler Consultants' (GZ) services include the independent design check (CAT III) of the detailed design developed for the station tunnels. This independent check includes an independent assessment of the ground conditions based on the geotechnical investigation data, independent numerical analyses, calculations, independent safety assessments of intermediate construction stages and drawing checks to assess whether the checker's design agrees with the designers' design and whether the design is correctly reflected in the detailed design drawings. The check includes geotechnical design, analyses of construction staging and structural design including reinforcement and the structural integrity of the proposed structures.

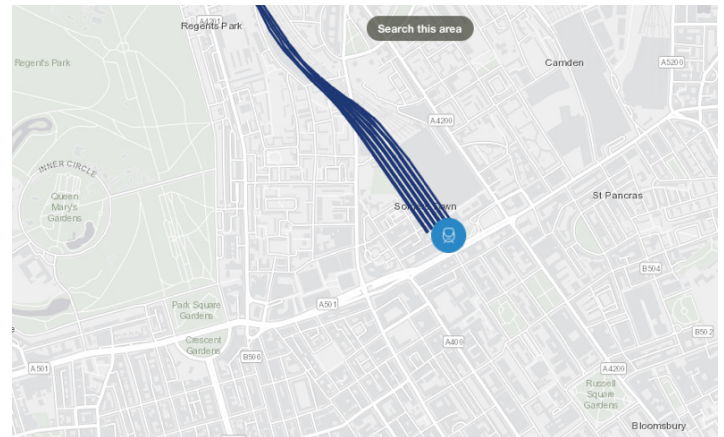


Figure 2. Map cut out at Euston Station (Courtesy HS2 Ltd.)