

## 1.0 Brief

A new pedestrian bridge is required to link an existing shopping mall, located in London, to a new car park that will be constructed next to the railway lines as it is shown in Figure 1. The footbridge should facilitate both the shopping mall and the transport links.

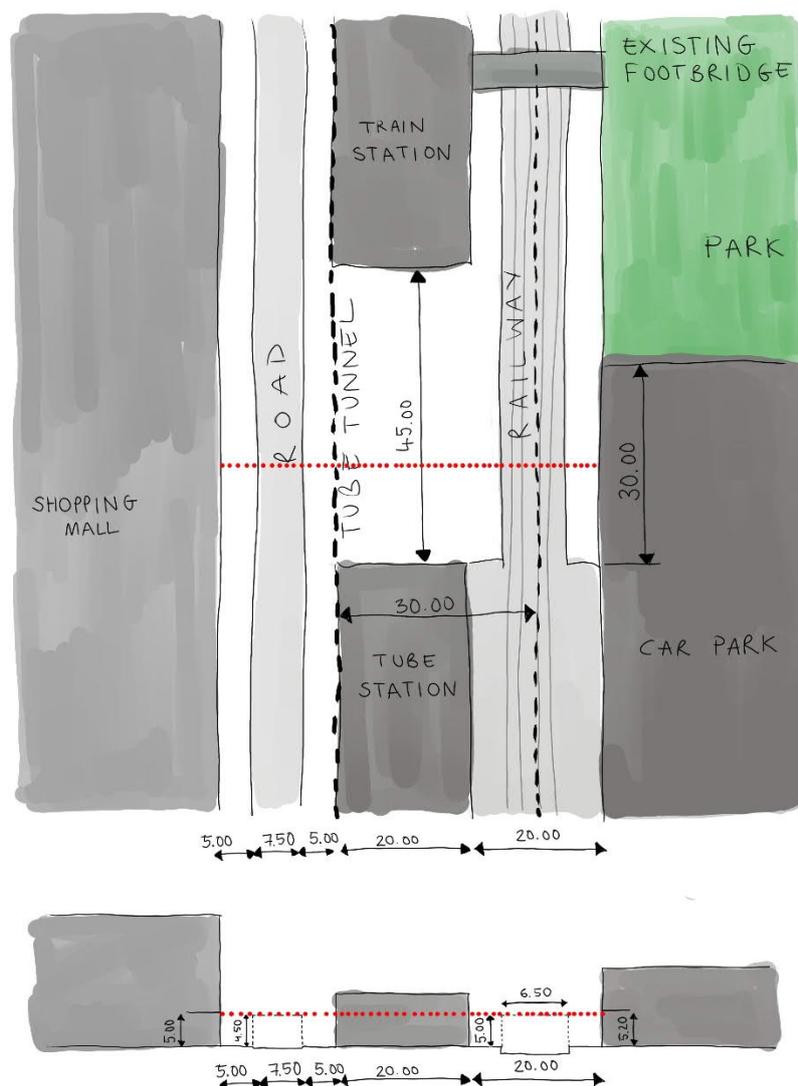


Figure 1 – Sketch of the location of the proposed crossing

Your task is to propose the concept design of a footbridge which will be linking the car park with the shopping mall and the busy railway / tube station. The design of the bridge should be such that social distancing is maintained, and no congestion of pedestrians is happening during the rush hours.

## 2.0 Characteristics of the bridge

The local authority that is responsible for the project has the following requirements on the design of the footbridge:

- Given the location of the footbridge the construction shall be completed within a small window during the summer months. Thus, a construction sequence is required to be presented.
- The bridge should be accessible for disabled users, with the maximum slope limited to 1:20.
- The bridge should be designed such as that social distancing is maintained at all occasions.
- The access level of the car park is at 5.2m above ground level, whilst the first level of the shopping mall is at 5.0m.
- The car park and/or the shopping mall have sufficient capacity to resist the bearing reactions from the footbridge. However, sketches of the proposed connection are required to be presented.
- The minimum headroom of the road is 4.5m above ground level.
- The railway clearance envelope is 5.0m above ground level to account for the OLE cables.
- The tube tunnel passes 10.0m below the ground level and runs parallel to the railway lines having an offset of 30.0m.

## 3.0 Proposal

The submissions will be judged by a jury of engineers and architects on the basis of the following criteria:

- Structural feasibility
- Maintenance of social distancing
- Visual impact and suitability
- Consideration of construction and buildability

It should be noted that the judging criteria focus on the solution to the brief, rather than the mode of presentation. While the quality of the presentation may affect the judges' decision, it is not essential to produce computer rendered images of the scheme; high quality hand sketches are an adequate communication device.

Depending on the number of submissions received, the jury may decide to shortlist three (or more) schemes to be exhibited at the conference.

Prizes will be awarded at the jury's discretion.

## 4.0 Submission details

### 4.1. Format

Submissions are to consist of a single A2 size board, submitted in pdf format by email to [events@iabse.org.uk](mailto:events@iabse.org.uk). Boards should include the team's identification number clearly located in one corner. No other identifying marks (e.g. entrant names, company/organisation names or logos) should be displayed on the boards.

Entries must be submitted before 6 pm on 28<sup>th</sup> August 2020. Entries received later than this time will be rejected.

Entries should be accompanied by the name of a team member who will be attending the conference. Entries will not be considered for shortlisting if none of the team are available to attend.

The organising committee will arrange for the shortlisted schemes to be displayed for public viewing at the day of the event.

Teams may consist of up to four team members. All entrants must be under 35 years of age on the date of the conference. A prize will be awarded to the winning team.

### 4.2. Programme:

15 <sup>th</sup> July 2020	Design Brief issued
6 pm, 7 <sup>th</sup> August 2020	End of questions period. Any questions about the brief or the competition should be sent to <a href="mailto:events@iabse.org.uk">events@iabse.org.uk</a> . Answers will be made available to all competitors and published on the IABSE UK website.
6am, 28 <sup>th</sup> August 2020	Deadline for competition submission
7 <sup>th</sup> September 2020	Shortlisted entries notified
11 <sup>th</sup> September 2020	Display and judging at the IABSE FoD Conference