

Exploring Issues of Aesthetics in a Railway Environment: the Infrastructure of Stratford City, London

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Summary

Stratford, in the east of London, is undergoing major redevelopment to become the main venue for the 2012 Olympic and Paralympic Games and to create Stratford City: a 73-hectare mixed-use new city quarter including retail, residential and commercial uses.

The area includes multiple railway lines providing local, national and international passenger and 24-hour freight services. There are rigorous planning controls to create high quality new infrastructure combined with strict rail safety and approval requirements.

Engineering criteria vary considerably across the site and between different bridges and structures. The design of the bridges and structures covered in the paper reflects their diverse engineering requirements while the architectural appearance of them shows a high aesthetic quality and a coordinated family resemblance, based on the careful use of pattern and materials.

Keywords: architecture; aesthetics; parapets; precast concrete; weathering steel; pattern; materiality

1. Introduction

The area nowadays known as Stratford has been populated since before Roman times. The district to the Northeast of the old town used to be marsh lands until its development as rail yards and depots in the early 19th century. It became degenerated from the 1960s onwards although the rail infrastructure remained. Plans were approved in 2004 for the redevelopment of the Stratford railway lands to provide a huge mixed-use development combining retail, commercial, recreational and residential buildings, centred on Stratford International and Regional Stations. However, it was the award of the 2012 Olympic and Paralympic Games to London in July 2005 which provided the political and funding catalyst for the development to progress at speed.

The infrastructure for the entire development had to be built from scratch and needs to fulfill several purposes: During the construction of the shopping centre, stadia and Athletes' Village the infrastructure must mainly provide access for construction vehicles as access for the general public is very limited. Access to Westfield Stratford City retail will be open in advance of summer 2012, when the site will need to sustain very high amounts of traffic, and pedestrians will walk from train and underground stations situated around the area to the different sport facilities. The infrastructure has also been designed with the post-Olympic Games legacy in mind – to create a major long-term improvement to a large area of the capital city.

2. The use of Pattern and Materiality

The subject of this paper is the coordinated use of pattern and materiality in the design of the multiple bridges and retaining walls which form part of the Stratford City infrastructure.